ARID WAYS

Cultural Understandings of Insecurity in Fulbe Society, Central Mali

Mirjam de Bruijn & Han van Dijk



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to our parents

'Solla waratаa bii jawngal'

CERES-series no. 1.

This publication has been prepared as a part of
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Preface

'*Solla warataa bii jawngal*', dust does not kill a little guinea fowl. This saying in Fulfulde was explained to us by an old lady in Serma, a group of cattle camps, somewhere on the border of the Seeno-Manngo in Central Mali, where most of our field research was conducted. The meaning of this saying is telling about the way these people perceive their own situation, which is sometimes very hard in the dry climate of the Sahel. Dust is an ever present phenomenon in this environment, and a small guinea fowl is a very weak animal. Nevertheless the guinea fowl manages to survive all the vagaries of the environment. Dust makes its life much harder, but it cannot defeat him. Dust is a metaphor for the recurrent difficulties, the times of scarcity, the Fulbe in Central Mali have to endure. The guinea fowl symbolizes the Fulbe themselves. They will not be defeated by all these difficulties, and will simply endure the hardship. The woman who explained this saying to us, said: 'It does not matter that we have nothing to eat at times, that will not kill us'. The saying also symbolizes the main theme of this book, namely the 'ways' in which people in arid lands cope with their harsh political, economic and ecological environment. A number of aspects of these 'Arid Ways' of the Fulbe in Central Mali are described in this book. It attempts to show how these people deal with the various insecurities in their environment with the cultural and material means they have at their disposal. However, at times, we, as the authors of this book, are somewhat less optimistic as the saying about the outcome, and the resilience of the 'Arid Ways' of the Fulbe. Sometimes the dynamics of the political, economic and ecological environment seem too hard to handle for the Fulbe. Hopefully this will be a temporary situation, and probably the good rains in the rainy season of 1994, have helped them already on their way to recovery, and maybe a phase of more prosperity than we encountered in the period between March 1990 and February 1992.

This stretch of almost two years began with a trip through the Sahara, in which we got the feel of life in arid conditions. After this trip we spent a month in Bamako, the capital of Mali, to arrange permits, and to consult the National Archives of Mali, on the region in which we planned to do fieldwork. By the end of May we arrived in Douentza, where we rented a house, which served as our rest place till the end of our stay in Mali. June was spent on the making of contact with Fulbe society in the Hayre. When some misunderstandings were cleared up; the Weheebe of Dalla thought that we belonged to the Norwegian Lutheran mission, which was active in the region, and that we had come to convert them to Christianity; the chief of Dalla, Hamidu Yerowal Dikko, did not see any objection to our prolonged stay in the Hayre. As he is the 'elder brother' of the chief of Booni, permission was soon obtained to make camp in Serma, which belonged to the 'realm' of the latter. In Serma, the counsellor of the Seedoobe lineage was willing to act as our host, as long as our research would last.

When we first visited the Hayre, the research area in 1987, it was clear that the region was not very rich. The problems of the people to survive we encountered during the fieldwork, were bigger than we could have imagined. Despite this situation we were warmly welcomed by the people of Douentza, Dalla, Booni and Serma, where we spent most of the time. The term 'fieldwork' does not cover what we have experienced during this time. What is a field? And what is work? It was a very emotional period for us, but also for all the people who have become our friends. The distance in time and in space between us nowadays makes this emotion more intense. This book is a result of these emotions, of the interaction with many people, of the sharing of life together, but always a little apart. We have tried to understand each other, such strange species as we were for each other in the beginning of our stay. Some men told us afterwards they thought us a kind of monkeys, so ugly they found us. Our white skin frightened the children. We perceived them as an unorganized bunch of individualistic and impertinent people. Gradually we became human for each other. The prejudices about each other were transformed into relations of friendship and mutual understanding, though not with all people under all conditions.

However, the distance between us as people from the North and people from the South never disappeared completely. This resulted partly from the way we organized our research. We wanted to obtain an overview of the whole region and of the different social layers of Fulbe society, and therefore were not always present on the same location. In fact we adopted a transhumant, almost nomadic, lifestyle. From July to March 1991, and again after a short stay in the Netherlands, from May 1991 to February 1992 we spent our time alternately among the political elite of Fulbe society in Dalla, among the pastoralists, and former slaves in Serma, and among civil servants, some white people and ecological refugees in Douentza, in town. In between we paid visits ranging from a couple of hours to a number of days to a number of other villages and camps, which were relevant for our understanding of the situation in the area. So we never integrated completely into one of these social groups, though eventually we spent most of our time among the pastoralists and in the end we were mostly integrated into and associated with their community, of which some families of former-slaves were also part. Another element of our presence which distanced us from the people was liquid, water and milk, both very scarce in the area. We could not drink 'their' water from open pools and cisterns, in which parasites, bacteria and viruses had free access, without risking to become very ill. An experience we had in former 'fieldwork'. Thus we always took water with us when we went into the 'bush' where the cattle camps were situated. For the people who lived there this posed no insurmountable problems, because they also had experienced that water in places where they were visitors caused illness, for instance when they were on transhumance. It made us strangers, still. That we cooked their fresh milk was not difficult to understand, because of their knowledge about illnesses in the milk, but they abhorred it; it spoiled the milk. The taste of fresh milk is so good, and by cooking it this taste is wasted totally and milk becomes something different. Nevertheless, they accepted our habits.

Without our all-terrain vehicle the research could not have been carried out, especially not the broad set-up as we had chosen. Yet it was the third element which distanced us from the people. It made us different, but at the same time interesting. The car was the

symbol of the North. It was labelled 'our cow' and it was ascribed a *yonki* (soul) and almost human characteristics, especially because it used to stop in their village and their camps, whereas cars of development agencies and expert missions hardly ever did so. It also brought the people many advantages: carrying millet, rice, people, ill people, etc. The fourth element of distance was the fact that our stay in the Hayre was 'work', for them it was 'life', though this sense of working in the field disappeared in the course of time, as we immersed ourselves in the lives and worries of the inhabitants of the Hayre. Despite these reasons for reserve we think that we learned to accept each other as we were, including the reciprocal peculiarities. In Wuro Boggo, the camp of Serma, where we were based, the tea brewing parties we held around sunset were a point of rest after a tiring day, for ourselves as well as for those who joined us.

Before we express our thanks to all people who helped us, there are three more technical points to be made. For the spelling of Fulfulde we followed the advise of Anneke Breedveld, who is a linguist specialized in Fulfulde. However, because of the readability of the text, and possibility to cite it correctly we did not use the special symbols for the implosives ('b, 'd, 'n). We are aware of the fact that this is not correct. Besides it was very difficult to make these symbols with a normal word processing computer programme. This book is entirely inspired by the people of the Hayre. To protect their privacy we have changed the names of the actors in the stories.

A thing we would almost forget after such a long period of close cooperation, is who is responsible for which chapter. Of course most ideas in the book cannot be related to just one of us. However in the process of writing each of us concentrated on specific subjects. The chapters 1, 2 and 15 are the responsibility of both Mirjam and Han. The chapters 4, 5, 6, 11, 12 and 13 are written by Mirjam de Bruijn. The chapters 3, 7, 8, 9, 10 and 14 are written by Han van Dijk.

In the 'field' we 'worked' intensively together with Bura Yero Cissé, Aisata Maliki Tambura, Muusa Yerowal Dikko, Usmaane Alu Dikko and Aamadu Ba Digi Yattara. Their contributions as co-workers in this research project have been crucial in helping us to understand the 'ways' of their people. Aamadu Ba Digi was a member of a caste group, of the bards or *griots*, as they are called in French. His stories about the past opened our eyes for the dynamics of politics and ecology in the Hayre. In April 1993 he died, much too young. We think our grief about his untimely death is shared by all inhabitants of the Hayre. Muusa Yerowal as a member of the political elite and son of the former chief of Dalla, who introduced us to the Fulbe in the Hayre helped us to understand the difficult relation between life in the bush, and the wider society of the Fulbe in the Hayre. Muusa as former director of the school in Douentza was also our Fulfulde teacher. Usmaane was a sensitive guide and translator in the first months of our work in Serma, and learned us how to live in the bush. Aisata and Bura were both of the former slave groups and they were not hampered by feelings of shame or restraint towards the other social categories in society. They accompanied us everywhere, even when this meant they were away from their own family for most of the time. In some instances they were as shocked, emotional, and enjoying life as we were. Aisata especially showed us how much the hardness of life has become internalized by the people and has become part of their relationships, activities and

emotions. Bura showed us how to behave as a Pullo. His *munyal* (patience) and tact with us and the people helped us very much to deal with life in the bush, and to establish good relations with everybody. They were our assistants in a very broad way. They helped us to understand what people said, they did research on their own, and they left us alone when we needed it, and our proficiency in Fulfulde increased.

The gradual mastering of the language made contact with our neighbours, villagers, but also with our assistants much deeper. We became increasingly involved in each others' lives. The openness of Bura, Aisata, Muusa, Aamadu and Usmaane, has been very important for us to understand the culture and insecurities of the 'Arid Ways' of the Fulbe in the Hayre.

Apart from those who were directly involved in the fieldwork which led to this book, there are many institutions and people who contributed in a direct or indirect way to the finalization of this work. The Netherlands Foundation for the Advancement of Tropical Research (WOTRO) provided a grant (grant number W 52-494), which enabled us to do the fieldwork, and a subsistence. The University of Utrecht took care of Mirjam's subsistence in the first three years of her assignment. In Bamako the Institut des Sciences Humaines helped us getting the project going in Mali. For this we thank its director Dr. Kleena Sanogo and the then vice-director Dr. So. Thanks to the administration at the level of the Cercle of Douentza, especially the Commandant and his right-hand Hassan Ongoiba who facilitated our stay. Further the director of the elementary school Deidy ould Mohammed, and his family who provided us with a lodging in Douentza. In Bamako Dr. Samuel Sidibé and his crew of the National Museum in Mali helped us in many respects to carry out our collection efforts of Fulbe material culture. In the Netherlands Dr. Rogier Bedaux, head conservator of the National Museum of Ethnology in Leiden, managed to obtain the fundings to carry out the collection of Fulbe material culture, and provided us with slide and black and white films to make a visual representation of the life of the Fulbe in the Hayre. Further he opened his personal library for us and commented on the historical part of the book.

Gerbrand Stip of GERAN Auto's BV helped us to buy a solid second-hand all-terrain vehicle, and sponsored the necessary equipment for Sahara Travel. Thanks to Piet de Joode and Paul van der Vegt who dared to undertake this trip through the Sahara with us. We are also grateful to our hosts throughout the region, Saidu Yerowal Dikko in Dalla, Ba Lobbo Yattara in Booni, Alu Umaru Dikko and his family in Booni, who guided us on our first trips in the Hayre in 1987 as well as 1990, Allaaye Yobbi in Duwari, Duure in Petegudu, Sana in Fetesambo, Rebecca Mclain and Doug Steinbarger in Sevare, Paul van Wijk and Conny Hoitink in San, Ted Schrader and Irene Plieger in Segou, Tom Ponsioen in Bandiagara who managed our fundings in Mali, and helped us to find a garage for our car. They formed a fine network of hosts (*njaatigi's*) which helped us to feel at home everywhere we went in Mali. In Douentza the crew of the Near East Foundation, Mike Winters, Duncan Fulton, Sara Randall and Bob were always willing to share experiences in the field.

In the initial stages of the project Professor Peter Kloos' and Wouter van Beek's help and support were crucial. Professor John Markakis and Professor Martin Doornbos encouraged

us to continue our research in pastoral societies by inviting us to the seminar on conflict and the decline of pastoralism in 1989. This was for us the first contact with pastoral studies. A special word of thanks to Professor Jean Gallais. He preceded us in the research area, and wrote the first monograph on the region. He has encouraged us from the beginning, always maintained contact, and welcomed us at his house to search through his personal library.

Back home in the Netherlands numerous people contributed with their time, creativity and ideas to this work. First of all we want to thank our colleagues of the Department of Cultural Anthropology of the University of Utrecht, especially Geert Mommersteeg, Mirjam's neighbour also Mali-addict. Marianne de Laet, Wendy Pompe and Erna Kerkhof who were willing to share a room with Mirjam, and to Jan de Wolf for his literature suggestions. Paula van Duivenboode, Petra Nesselaar, Hetty Nguema-Asangono, Kootje Willemse and Jan Withagen for all their support during the 5 years of work on this book. Paula helped us with the typing of data and final corrections and Petra managed the lay-out of the book in the last months when time is always too short. Also thanks to the CERES secretariat, especially Lolita van Toledo and Agniet Cools, who supported Mirjam in many ways. At the Wageningen Agricultural University, the members of the department of Agrarian Law at Wageningen Agricultural University, especially Roland Brouwer, who shared a room with Han, for the good atmosphere, Willemien Brooijmans, John van der Ven and Jacqueline Vel, for commenting on chapters or papers at various stages of the writing process. Thanks to Lida Menkman and Ellen Wegkamp, who manage the office of the department, for all those small things, which are together a lot of work. At the Forestry department many thanks to the members of the section Forest Management, especially Freerk Wiersum, whose constant support with literature and comments on the drafts of this book were a continuous source of worry, but helped greatly to improve the parts on land use, and those people who read drafts of chapters, Jan-Joost Kessler and Jim van Laar. Ella from the Africa Studies Centre Library in Leiden helped us to find many books and articles. Arie de Bruijn, expert on nomadic material culture read parts of the book and discussed the contents with us over numerous glasses of wine.

Martin Southwold did a splendid job editing the manuscript, and was so kind to do this at high speed: many thanks. Babs ten Hagen made the excellent drawings, maps and figures. This is work for a specialist, which she is indeed. Also thanks to all the staff and Ph.D students, who regularly meet at the house of Franz and Keebet von Benda-Beckmann to discuss their proceedings. They shared their ideas on various chapters and outlines of the book with us. The West Africa club, especially Anneke, Caroline, Geert, Jan, Josée, Kees, and Wouter, acted as our critical regional consciousness and feed-back.

Thanks to Roger Botte, Jean Boutrais and Jean Schmitz, the triumvirate of GREFUL an agora in which students of the Fulbe can exchange their ideas. They offered us the opportunity to take part in their discussions, and to consult the National Archives and various libraries in Paris. Also thanks to Etienne Landais who opened the opportunity for us to file through the library of IEMVT, which was officially closed.

Wouter van Beek, Franz von Benda-Beckmann, and Aad van Maaren occupied a special place in this project. They formed the core of the supervising committee, and did so in the most pleasant way, and were always prepared to read endless drafts. The discussions we

had with them on our work over the years were of crucial importance. Their contribution is visible on every page, while they gave us all the freedom to find our own 'way'. Wouter van Beek also visited us in the field, which helped us to appreciate each others work. Also thanks to Arie de Ruijter for the continuous institutional support. We are glad he was prepared to step in the supervising committee in the final stage of the project.

A special word to Anneke Breedveld and Caroline Angenent. Anneke taught us the basics of Fulfulde, and together we studied the Fulfulde recitals and texts we gathered in Mali. Caroline thoroughly read and commented upon most of the chapters. But, more important their continuous friendship was a constant source of support. Thanks also to all our friends and family who had to bear with our lack of time and attention.

Many thanks to our parents, brothers and sisters, Arie, Anneke, Jan, Riet, Gijsbert, Marie-José, Ada, Wienand, René. They were a supportive family because of all the time and energy they, especially the grandmothers, devoted to Annigje and us. We dedicate this book to our parents, especially to Jan van Dijk who is not with us any more.

For the people of the Hayre we have just one sentence to say: '*Min keppi moodon sanne*'. We hope to join you again as soon as possible.

A last word is for Annigje, who joined the project half way. It would not have been half as much fun without you.

Mirjam de Bruijn
Han van Dijk
Utrecht, April 1995

Table of Contents

	Preface	vii
	Table of Contents	xiii
	List of Maps	xvii
	List of Tables	xvii
	List of Figures	xvii
	List of Plates	xviii
1	**Introduction: Insecurity and the Study of Pastoralism**	1
	Hamma Aljumaa	1
	The fieldwork setting	4
	Insecurity	8
	Cultural understandings	10
	Central question	13
	The pastoral way of life and insecurity	14
	Hazard and natural resource management	20
	Property and tenure regimes	23
	Poverty and social (in)security	26
	Synopsis of the book	30
	Notes to chapter 1	32
Part I	The Past	
2	**The History of Natural Resource Management and Ideologies in the Hayre, 1400-1985**	37
	History and ideology	37
	Geography	41
	The establishment of Fulbe hegemony, 15th-18th century	47
	The Hayre and the Diina, 19th century	52
	The Futanke: back to anarchy	63
	Pastoralism and pre-colonial statehood: a balance sheet	68
	French colonialism and indigenous rulers	71
	Interventions in natural resource management under the French	81
	Independence, modernization and drought	90
	Conclusion	96
	Notes to chapter 2	98

Part II The Past in the Present

3	**Serma: Environment, Organization of the village, and Drought**	111
	The occupation of the Daande-Seeno	111
	The ecological environment	113
	Social and economic infrastructure	117
	Division of labour	124
	Land use and mode of subsistence	127
	The Sahel droughts	131
	Notes to chapter 3	134
4	**The Pastoral Community: Sharing Milk**	137
	The importance of people	137
	The organization of society, social categories, and the lineage	138
	The individual in society	145
	Units of residence	151
	A flexible society	164
	Notes to chapter 4	166
5	**The Muslim Community: *Alsilaame'en***	169
	Religion and social organization	169
	The history of the organization of Islam in the bush	170
	The symbolic capital of moodibaabe	174
	Moodibaabe in Serma	178
	Moodibaabe and insecurity	183
	Islam and local political and legal organization	186
	Rituals	189
	Religion of the Fulbe	193
	Notes to chapter 5	194
6	**What it Takes to be a Pullo, *Al'aada* and *Juulde***	197
	Loss of custom?	197
	Pulaaku, the study of Fulbe identity	199
	Fulbe custom: al'aada	202
	Islamic values: juulde	214
	Fulbe identity, a dialectic relation between al'aada and juulde	219
	Notes to chapter 6	219

Part III The Present: Dealing with Ecological Insecurity

7	**Farming and Herding Practices and the Role of Hazard**	223
	Insecurity and the Use of Natural Resources	223
	Two cases of natural resource use strategies	224
	The rainy season (ndunngu) of 1990	230
	The post-harvest season (yaawnde) of 1990	240
	The cold dry season (dabbunde) of 1991	246
	The hot dry season (ceedu) of 1991	250
	The rainy season (ndunngu) of 1991	251

Discussion 254
Notes to chapter 7 256

8 The Dynamics of Agricultural and Pastoral Production 259
The analysis of agricultural production 259
Crop production 265
Livestock production 278
How to make ends meet 288
Conclusion 297
Notes to chapter 8 298

9 The Circulation of Property at the Level of the *Wuro* 301
Introduction 301
The organization of work 302
Agricultural land 309
Water reservoirs 313
The circulation of livestock 315
Discussion 328
Notes to chapter 9 330

10 The Tenure of Land and Control over Pastures 333
Tenure and territoriality 333
Land tenure and grazing rights in dryland Central Mali 336
Local dynamics of land tenure 338
Local dynamics of territoriality 350
Discussion 358
Notes to chapter 10 361

Part IV The Present: Dealing with Social Insecurity

11 Women Between Kin and Affines 367
Women and marriage 367
Marriage contracts 370
The marriage gifts ('dowry') 374
Choice of marriage partners 379
Divorce 387
The dwindling base of the fayannde 391
Ghost meals 392
Notes to chapter 11 395

12 Nobility and Survival: Coping with Poverty and Identity 399
Poverty and society 399
Jallube society and the poor 400
Poverty and al'aada 407
Poverty and juulde 418
Culture, an asset and a constraint for survival 425
Notes to chapter 12 427

13 The Politics of Care: Coping with Illness 431
Illness as insecurity 431
Aisatu, a case of illness 433
Illness in the context of al'aada and juulde 443
The importance of 'yimbe am' 450
Death and juulde 455
Illness and the social order 458
Notes to chapter 13 459

Part V The Present: Dealing with Political Insecurity

14 The State, Development and Natural Resource Management 465
The state and development 465
The organization of ODEM 468
Pasture management and pastoral associations 474
Own observations in the field 479
Mysterious fires 489
Notes to chapter 14 493

15 Conclusion: Cultural Understandings of Insecurity 497
Marginalization 497
The pastoral way of life reconsidered 501
The dialectics between flexibility and control 503
Scientific and policy understandings 506

Glossary 511
References 517
Samenvatting 539
Curriculum Vitae 549

Maps

1.1 Administrative division of Mali 5
1.2 Location of the research area, Hayre in Central Mali 7
2.1 Historical map of the Hayre, and surrounding areas 43
3.1 Sketch map of Serma and surroundings 112

Tables

3.1 Cattle ownership before and after the drought of 1968-73 in Lennga, a village in the neighbourhood of Serma (Diallo 1977) 133
7.1 Overview of possible field types and their actual use 231
8.1 Mean area (ha) cultivated per worker and per capita for Jallube and Riimaybe in Serma and their coefficients of variance (CV in %) (pooled data 1990 and 1991) 270
8.2 Mean crop production (kg), per worker and per capita in 1990 and 1991, and their coefficients of variance (CV in %) 270
8.3 Area cultivated per family, per worker and per family member (ha) for Fulbe and other ethnic groups in West Africa 271
8.4 Mean field size ($\underline{x}$ in ha), production per field ($\underline{x}$ in kg), per ha ($\underline{p}/\underline{x}$ in kg), and productivity in $\underline{p}$' in $kg.ha^{-1}$, and its coefficient of variance (CV in %) of millet fields in Serma in 1990 and 1991 273
8.5 Mean field size ($\underline{x}$ in ha) production per field ($\underline{p}$ in kg), per ha ($\underline{p}/\underline{x}$ in kg), and productivity in $\underline{p}$' in kg. ha^{-1} and its coefficient of variance (CV in %) of millet fields at different cultivation sites in 1990 and 1991 273
8.6 Tree numbers # and tree densities (ha^{-1}) on agricultural land for different size classes, and location in Serma (with and without *Calotropis procera*). 276
8.7 Number of trees per size class (#) and percentage of total (%) on fields in Serma, for various tree species 277
8.8 Number of fields on which natural regrowth was noted (n) in Serma for different species and different locations, compared to total number of fields surveyed (N). 277
8.9 Distribution of cattle over ownership categories in Serma 279
8.10 Summary of data on milk (sour milk and butter) marketing 280
8.11 Rainfall (P), total primary production (TPP) ha^{-1} for various vegetation types at ILCA's test sites, and estimated carrying capacity per ha (TLU), and for the pastures of Serma, and their coefficients of variance (CV in %) 284
8.12 Millet and livestock prices and exchange rate of millet and livestock for various seasons in 1990 and 1991 289
9.1 Field size and family structure of a Jallube extended family in Wuro Boggo 312
10.1 Kin and non-kin relations between spouses, by type of marriage and sex 383
10.2 *Cabbugal* - relations between spouses, by generation and sex 383
10.3 *Dewgal* - relations between spouses by generation and sex 383

Figures

4.1 Overview of kinship terminology 147
4.2a Overview of Wuro Kaaral, and its inhabitants 155
4.2b Kinship relations between the inhabitants of Wuro Kaaral 155

4.3a Overview of Wuro Boggo, and its inhabitants 159
4.3b Kinship relations between the inhabitants of Wuro Boggo 159
4.4 Overview of Debere and its inhabitants 162

Plates

Mountains (*hayre*) seen from the Seeno 36
Dalla at the foot of the escarpment 36
Milking cows is men's work 110
Ferro, degraded tiger bush 115
Debere, the Riimaybe hamlet of Serma 119
Riimaybe men making mud-bricks 126
Jallube women marketing milk in Debere 132
Jallube children playing herd 136
Plan of a hut 152
The communal prayer at the occasion of *layya* 168
Studying the Koran 176
Feeling shame 196
A Jallo woman 205
Sowing millet 222
La'e, wooden milk recipients 257
Milking the goats 258
Binding the harvest 258
View on a rainy season camp 300
Drawing water from a deep well near Duwari 332
Drawing a sick bull from the pond near Debere 357
Preparing sour milk and butter 366
A bed, important part of the bridewealth of a Fulbe woman 375
Making camp on a cultivator's field 398
Young Jallube women 412
90 years old but still going strong 419
Mbedi, calabash covers 429
A *moodibo*, Islamic scholar and healer 430
Bunndu Naange, the well of the sun 464

1

Introduction: Insecurity and the Study of Pastoralism

Hamma Aljumaa

In December 1990 we pitched our tent in Duwari, a village of Hummbeebe cultivators 40 kilometres south of Serma, where we did our fieldwork among Fulbe pastoralists. We settled on a field where Hamma Aljumaa with his family, who were our neighbours in Serma, were living. The hut they inhabited had no roof and was virtually open, so that the cold wind had free access. We brought blankets and offered one of these to the family to cover themselves at night. Hamma refused. He did not want to get used to this luxury. In the morning we made coffee with powdered milk and lots of sugar, which we gave to Hamma, his wife and children. Allaaye, his youngest son, cold to the bone, would huddle against his father for his warmth and the coffee. Aged seven he looked like four. Their herd, consisting of seven head of cattle, did not produce any milk. Although we gave plenty of millet to Jeneba, Hamma's wife, to prepare our meals we got very little to eat. She added lots of extra water to the boiling dough to make it look more and to fill the bellies. We are sure she saved from our millet for the period when we left again. The tea we prepared at night, Hamma and his sons accepted reluctantly. Hamma often said that we were causing him trouble. He would get used to having tea at night, while he was too poor to afford it.

In the recent past Hamma lived with his three younger brothers in a cattle camp on the Seeno, a Sahelian region in Central Mali. Life was far more prosperous than at present. They had enough cattle and worked sufficient land to survive fairly well. Together they jointly managed a herd, in which also cows of their wives were included. As real agro-pastoralists they rotated cropping over the fields, and used the manure of their animals to maintain the fertility of the land. Furthermore, they were an important and influential family in the camp and the larger village to which they belonged. Of course, the past was also marked by difficult periods in which there was temporary scarcity, and there were times they could hardly manage to survive. But it was the drought which lasted from 1983-1985 and about which they still talk regularly that finished them off. This drought changed people's lives completely and turned their world-view upside down. The herd of Hamma and his brothers was wiped out, and they were forced to go each their own way. One of his brothers, with great knowledge of the Koran, left for Banamba, a town north of Bamako,

the capital of Mali, 900 kilometres from the cattle camp. In Banamba this brother works as an Islamic teacher, healer and magician. He had no other choice than to leave because all his cattle had died. The youngest brother literally fled after a conflict with his sons. His relatives say he went mad, and nobody knows exactly where he is and how he survives, if he is still alive at all. His eldest brother left to settle near Duwari, where they used to spend the dry season. He herds the goats and sheep of a local cultivator, which enables him and his family to survive this difficult period. His only surviving cow he left with Hamma, who was then about 60 years old and the only one who stayed behind in Serma. He was 'lucky' because of his cattle two head survived, and therefore he decided to stay where he was in order to rebuild the herd.

So within a few years Hamma's was the only family left of their lineage. This forced them to assimilate into the newly dominant lineage in the camp. Hamma and his brothers were the first settlers in this camp, which gave them some control over decision making. All the newcomers in the 1970s and 1980s had to accept their authority in 'their' camp. Hamma on his own could no longer keep this social position, but had to leave it to the new settlers. Other families of his lineage who lived in camps nearby were also struck by the drought and many of them left the area. From his brothers he meets only his eldest brother regularly, the others vanished. From them he could expect no support whatsoever.

For Jeneba it is also a hard time. In 1984 she gave birth to her eighth child. It was very difficult for her to recover, given her age of more than 40 and the bad conditions they lived in. In the course of the years her condition worsened and now she is no longer able to work. Besides, she suffers from depressions and is considered slightly mad.

Despite the fact that Hamma and Jeneba had eight children together, and Hamma even two more by another wife, they are not taken care of by their children. The two eldest sons left after 1985, desolate and mad. They never returned and Hamma does not know where they are. Their third son had polio at a young age and is crippled so that he cannot work very well. He is over 30 now but has not found a wife so far. His work is studying the Koran, but he is not very successful in it. The fourth son was 15 at the time of the drought, he now works the family field and herds the remaining cattle. The other two sons were then too young to work, but nowadays the eldest of the two is 14, works a little in cultivation, and takes care of a few goats. The three eldest daughters are married: the eldest to a Fulbe herdsman in Yaale a cattle camp 25 kilometres from Serma, the next to an Islamic scholar and the third to a Kummbeejo, a tradesman, after her first husband, a Pullo (sg. of Fulbe), migrated and left her behind. The youngest two daughters do all the household work. So the workforce consists of children and labour is relatively scarce. Their youth is also wasted by the food deficit. The two youngest girls are retarded in their growth to womanhood. The youngest son is too small for his age. The girls who are married are best off. They are considered beautiful and have married wealthy husbands. The fourth son eventually decided to leave the family in the rainy season in order to earn some money for his family, and to look for his older brothers who were probably herding cattle in the Inner Delta of the Niger. He returned empty handed, however, a little wiser about the world, carrying a radio on his back and talking in a dialect foreign to his people.

Thus Hamma, although it was his time for retirement, was forced to work even harder in his old age in cultivation and herding. Until 1991 the family just survived. The herd did not increase, all growth had successively to be sold to acquire food. Harvests had not been good since 1985, the crop being attacked by several unpredictable plagues. Hamma, then 66, still worked as a 'horse' on his field. When his cows were wandering over the Seeno too long he went after them. His food consisted of some tobacco, a few pep pills and some water. He had become a very skinny, old and sick man. The only thing that kept him alive was his endurance. In this way he managed to keep his family going and he gained the respect of others, so that there was always some help from neighbours, family and his sons-in-law, when things went really wrong. However, life for them was a subsistence on the margins, without clothes, or covers for the cold season, without tea or sugar, without sufficient food, without enough milk, without a life as a herdsman. Hamma worked as the slaves did in the past. He lost control over his own life. He was dictated to by the help of friends, rainfall, food prices and Allah. Hamma realized very well that life had reached a point of impoverishment from which there was hardly any return, it had changed his body, his mind and his social life.

Hamma Aljumaa is just one of the many inhabitants of the Sahel who has to fight for his survival in this way. We learned to know him during our stay of almost two years in the Hayre, a region in Central Mali. After a short fieldwork period on the Bandiagara plateau in 1987-88 in which we were confronted with impoverished Fulbe (see de Bruijn & van Dijk 1988, 1993) we became curious about what had happened to those pastoral people who have been pictured in the literature as proud, heroic and powerful. We did not find much resembling this sketch with the pastoral Fulbe on the Bandiagara plateau. Instead they were impoverished and powerless. They had no milk to receive guests and owned only a few head of cattle, if any at all. The origin of a number of Fulbe villages on the plateau was the Hayre (which means rock in Fulfulde), a region between the Seeno and Hommbori in the Central Gurma. There we hoped to find more information that would enable us to gain insight into the situation of these people. We also hoped to meet some richer members of this society. Instead we were again confronted with impoverished groups of Fulbe. This situation was partly the result of the droughts of the 1970s and 1980s that struck the Sahel very hard. The years after the droughts were characterized by scarcity in many fields. In this situation of hardship all kinds of inherent conflicts, competition for resources, inequality, neglect of sick and infirm people, were expressed more clearly than in a normal situation. As Vaughan (1987) stated such situations of scarcity and poverty, i.e. in her case famine and crisis, may open a window on society, on social relations and probably also on the core of society, that is hidden from the outsider in more prosperous times. The window we got on Fulbe society during our stay in the Hayre was not always easy to accept as anthropologists from the North. Though not everyone was as poor as Hamma Aljumaa, some were poorer, some were richer, the shared experience of the people was one of deterioration, of impoverishment. And people said about themselves that this had changed their character, 'we are no people any more, we have become beasts'. Some informants questioned this perception, the scarcity was very bad now, but had the Hayre ever been

prosperous for a long period in the past? The situation made us wonder about hidden assumptions in the descriptions in literature on pastoral societies, it touched the issue of relations between culture and ecology in a special way, and it led us into a search for new concepts to describe this situation.

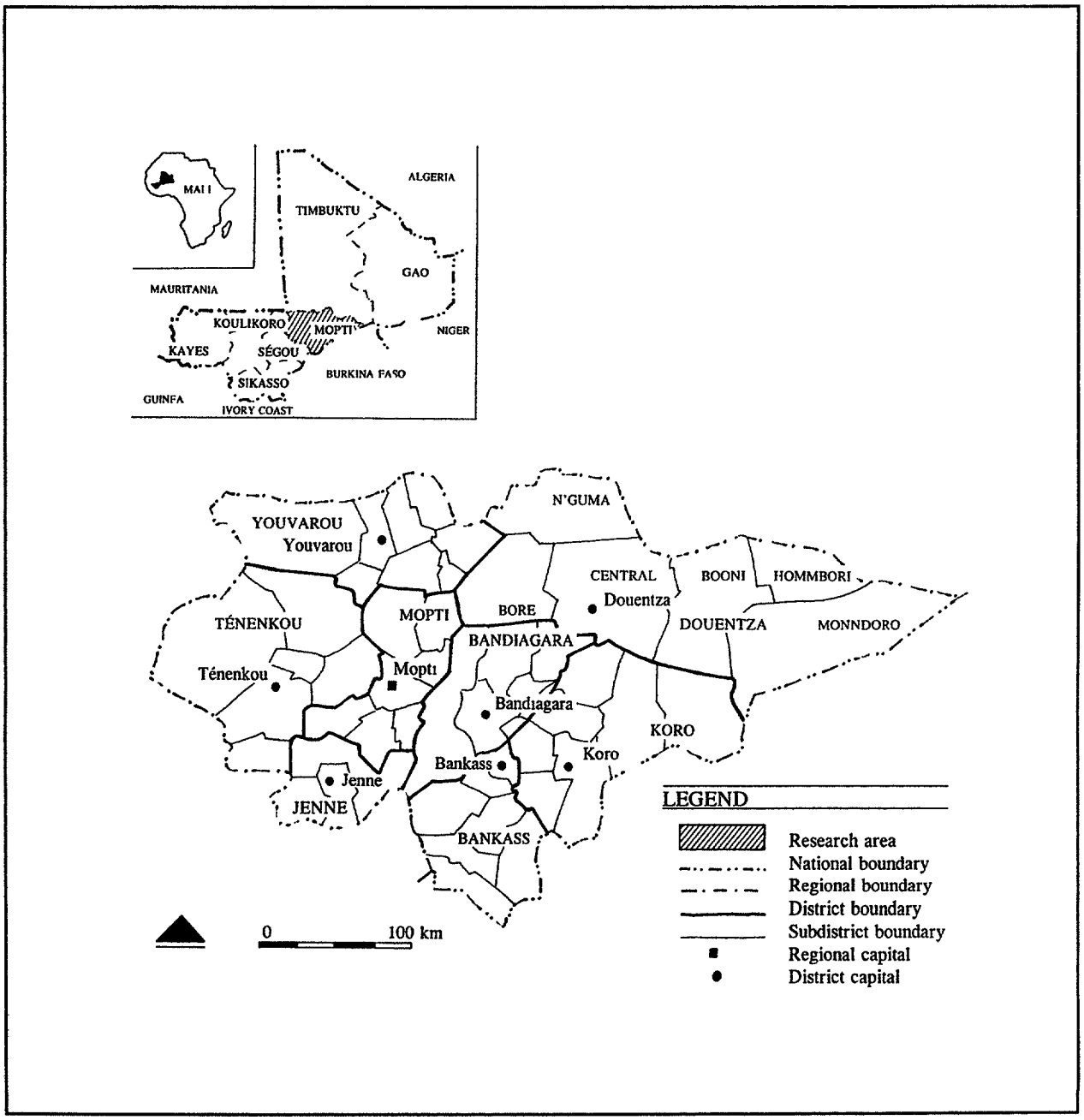
For us daily practice often seemed not to refer to any sort of order, organization or history. Only gradually new patterns of behaviour and new ways of ordering life in Fulbe society began to emerge. This book is an attempt to describe these patterns. The persistent insecurity in virtually every aspect of life for the Fulbe will, paradoxically, be taken as the main ordering principle, not only as an empirical fact but also as common denominator for all the subjects and disciplines involved in the description of this situation. By taking insecurity, scarcity and poverty as central issues we will open a new window on (Fulbe) society in the Sahel.

The fieldwork setting

The Fulbe, also called Fulani (Hausa, English), Peul (French), Fellata (Kanuri) and a host of other similar names, can be found all over West Africa, but mainly in the Sahelian and Sudanic zone. Though a large number of Fulbe have settled in towns, they are known as expert cattle herdsmen. The Fulbe in the Hayre are of the clan Jallube, one of the four major Fulbe clans in this part of the Sahel. They founded their hegemony in the Hayre in the 17th century and formed chiefdoms. The social hierarchy as it was established in these chiefdoms still defines part of the social organization of the Hayre. The Fulbe are still considered as the rulers by the other peoples, Dogon, Sonrai, Hummbeebe. And within Fulbe society the political elite, called Weheebe, are still respected as such. Other social categories in Fulbe society are: the Islamic elite (Moodibaabe), merchants (Jawaambe), artisans (Nyeeybe), pastoralists (Jallube), and the former slaves (Riimaybe).[1] Our research concentrated on the two elite groups (Moodibaabe, Weheebe), the pastoralists (Jallube) and the Riimaybe. The latter two are most prominent in this book. Because these groups live in geographically separate areas, we did the research in three locations.[2] In town, Douentza[3], where we were confronted with problems of the market, town Fulbe, and 'ecological refugees'. Though 'town' was meant to be a place of rest and contemplation for us, it turned to be as much field as the other two places where we conducted 'fieldwork', Dalla and Serma. Dalla is the village where the court of the oldest chiefly dynasty of the Hayre is located. The scene in the village is dominated by the Islamic and political elites, though the majority of the population is of Riimaybe origin. Serma is a village in the countryside. It consists of a hamlet of Riimaybe and eight cattle camps of pastoralists. All groups had different ways of coping with the scarcity of today and this contrast often led us to new insights into their situation.

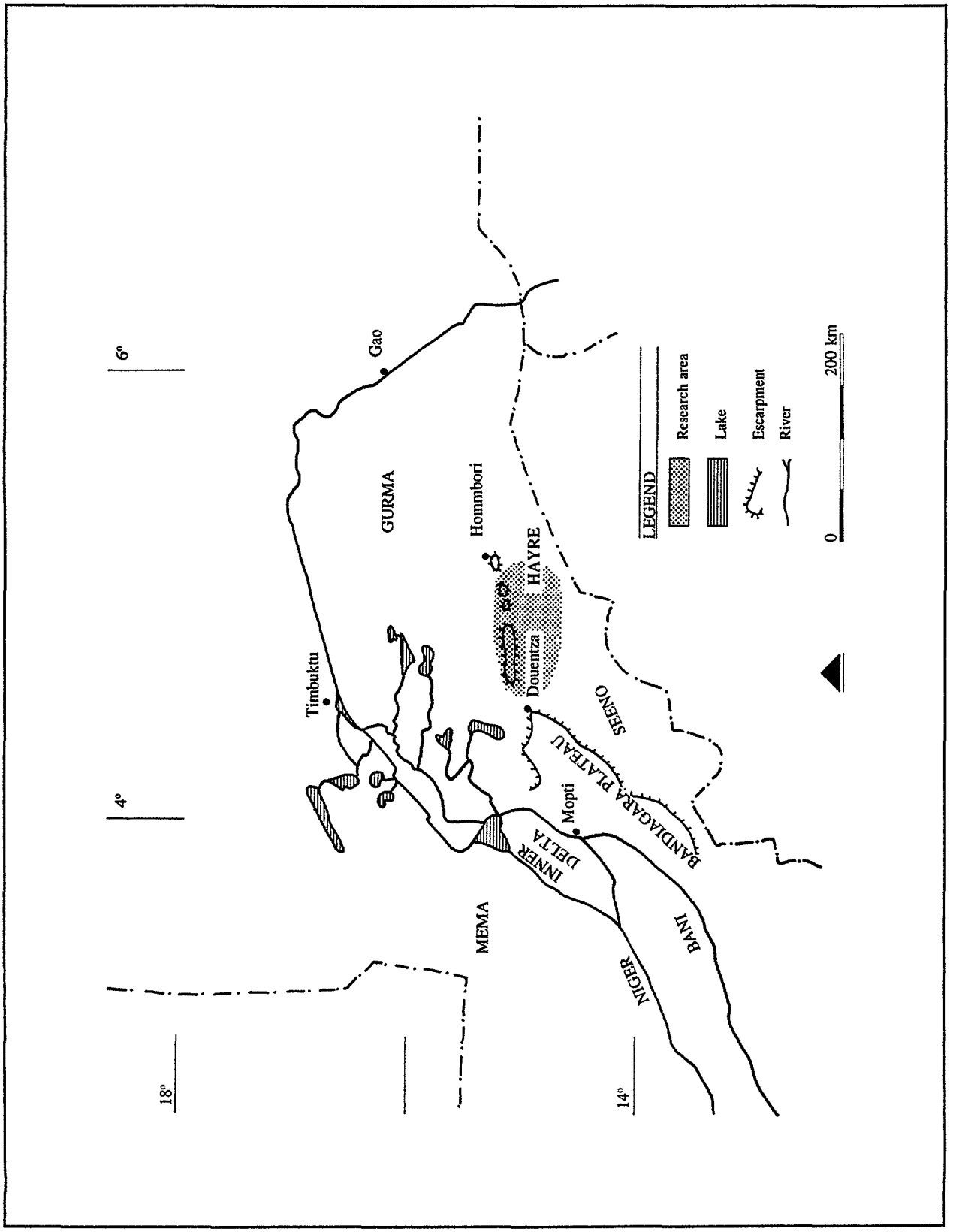
The Sahel in which this study was conducted is a semi-arid zone, defined by a mean annual precipitation between 300 and 600 mm, stretching from the Atlantic Coast to the Indian Ocean across the African continent. Rainfall is low and is concentrated in three to four months of the year, and it is extremely variable in both the temporal and spatial sense.

Map 1.1: *Administrative division of Mali.*



As a result biological production and species composition of the vegetation on which human and animal populations subsist varies enormously from one year to another, but also from one region to another. This has important consequences for the people who are trying to make a living in these areas. Decades of gain may be destroyed by a one year drought. Of course the population of the Sahel has developed strategies to cope with this insecure climate, but every calamity is of a different nature and needs to be tackled in a different way. For them a short-term ecological equilibrium does not exist. The production of staple crops like millet and sorghum as well as the biomass on the pastures for their animals oscillates wildly depending on the climate, pests, and diseases.

Map 1.2: *Location of the research area, Hayre, in Central Mali.*



Climatological instability is not a recent phenomenon. Archaeological records show that the Sahel and the Sahara too have experienced a sequence of drier and wetter periods over the past two millennia, with a tendency towards desiccation in the long run (Nicholson 1979, Grainger 1982, Smith 1992). The 19th century was in general characterized by sufficient rainfall and some prosperity. The 20th century started badly, with the drought of 1913-1914, which is remembered as the worst drought in human memory. The 1950s and 1960s, however, were marked by higher than average rainfall. After 1968 the amount of rainfall diminished, which culminated in the droughts of 1971-73 and then 1983-85. For many inhabitants of the Sahel, pastoralists as well as cultivators, the last drought was an enormous blow. They migrated to small towns, refugee camps, or sought refuge in more southern areas endowed with more rainfall to carve out a new existence among the inhabitants of the Sudanic zone.

Normally people in the Sahel live on the cropping of millet and sorghum, the herding of livestock, the gathering of wild grains, or some combination of these activities. The cultivation of cereals is confined to the southern part of the Sahel (down to 300 mm rainfall), mostly millet on sandy and loamy soils. In lower-lying areas and on heavier soils that retain a lot of moisture sometimes sorghum is cultivated. Without exception the cultivated varieties are fast-maturing with a maximal growing period of two and a half months. The more one moves to the north, the more important livestock keeping is for the survival of the population. In addition to these activities there is a large variety of bush products that may be gathered in the form of fruits of trees, wild grasses, leaves of trees, desert melons, and so on. Wild fauna has become extinct because of the illegal hunting practices of members of the Saudi nobility (Newby 1990), and of course the droughts.

In addition to this climatological and ecological insecurity, most Sahelian countries have been ruled by weak, corrupt governments, who lack the means, skills and resources to tackle this situation. In modern Mali, two successive regimes headed by Moodibo Keita (1960-1968) and Moussa Traoré (1968-1991) depleted the meagre base of existence. During the Keita regime much money was wasted in inefficient state-run companies and far too ambitious development schemes. Under the Traoré regime corruption and misuse of public funds was rampant. The population was oppressed and given no voice over its own destiny in the difficult ecological situation. Development initiatives and aid money have had a very limited impact on this situation. Much aid money was wasted on ill-conceived interventions. Eventually most money was channelled to the educated urban elite, in the form of salaries and per diems, not to mention the amount of money expatriate experts took home. In 1991 the Traoré regime collapsed after student protests. The new democratic government, headed by Alpha Konaré, has not been able to change much for the better yet. In addition a rebellion of the Tuareg in the north has contributed to the political insecurity in the form of increased military activity, more tight control on the population and interruption in the transport of basic food to the arid areas.

For millions of people life has turned into a burden, because of the increasing amount of insecurity in daily life, not only penetrating the material and social conditions of people, but also raising existential questions. They have no control over the climate, and are losing control over daily affairs, over the future, over each other and over natural resources.

Doing research in a situation of scarcity among people who are frequently migrating and moving, and feel themselves marginal, is not easy to structure. Interviews, measurements of crop and livestock production often ended in confusion, because of the preoccupations of people with their own bad situation and the memory of a more prosperous past, which inevitably surfaced in almost any interview. After half a year or so we largely gave up our attempts to do 'systematic' research, with the exceptions of the domains of land use and marriage. The only thing left was to participate in the lives of people, to join people, but at the same time to keep some distance. We were forced into a methodology which is the core of the method of anthropology: participant observation, and to use ourselves as the main measuring device, as the only way to cope with our methodological insecurities. It was the only way to understand the role of insecurities in the life of the Fulbe in the Hayre. Many of the observations we made, conversations we had, and our own reflections and reactions on the situation we encountered, proved to contain valuable information and data which form the core of this book. Eventually we ended up investigating situations such as that of Hamma Aljumaa, where one can speak of an existential crisis in which the lives of his family members are in danger. This basic problem, which gradually became the main theme of this book, will be approached from two angles: from the perspective of insecurity in the various domains of existence; and the ways in which people try to control and conceptualize insecurity in their existence, which will be labelled cultural understandings. These concepts will be discussed in the following two sections.

Insecurity

In such an ecological environment and political context it is very difficult to survive, as is for example illustrated by the low income, high child mortality, and low life expectancy in most countries located in (semi-)arid climatic zones. Still most people succeed in doing so. Hamma Aljumaa, with whose story this chapter opened, hardly succeeds however. He encounters many difficulties on both an individual and family level. The natural environment is so poor, and there are so many plagues and diseases that attack his crops and animals, that he must be constantly alert to scarcity and even famine. Neither can he rely on the market to buy food. While he was in Duwari cereal prices started to rise because of the bad harvest. There were no grain transports to this area because of lack of supplies and the rebellion of the Tuareg in the north. Another insecurity he is facing is of a social nature. His sons, who should take care of him and his wife at their age, have left the Hayre or migrate temporarily, so that only the disabled, and the younger sons and daughters are present to help their parents to labour in the fields and to herd the cattle and small ruminants. Hamma's immediate social environment seems to have eroded. So, it is not only ecological insecurity which lies at the roots of his problem. There are many more contingencies of a social, economic or political nature limiting the means of coping with drought. This bad situation is a relatively novel experience for him, because, as we may conclude from his life-history, he and his wife once lived a prosperous life. They possessed many more cattle than today, were part of a large family group with the brothers of

Hamma, and they managed to keep all their children alive, which is quite extraordinary in the Sahel. This indicates that the insecurities of life have a different content over time and a different impact on various individuals and society.

At another level of society, the Fulbe (Riimaybe included) have to cope with the scarcity as a group. The insecurities which Fulbe society had to face were many. First of course there was the ecological insecurity, which threatened the subsistence of all its members and consequently the continuity of the group as a whole. The meagre returns from cultivation and herding activities induced many young men to migrate. Further the material basis of society has become so small that social support almost ceased to exist. The community also faces political instability. In the nation state of today (République du Mali) the pastoralists especially have a marginal position and cannot influence national or regional policies, such as, for instance, development interventions. This weakness in bargaining power makes them rather vulnerable as a group. The Jallube were forced to cede control over their own pasture land to the government and development agencies. In the past they were protected by their own elite, but in the course of history this contact between elite and pastoralists has changed radically. The Riimaybe face other problems. For them the production of cereals is more important, though they are also dependent on the wealth of the Jallube, who provide them with temporary employment. When food production and distribution and social care fail the most vulnerable people will suffer most. The question of how society contends with these people and this situation is an economic, as well as a political and moral issue.

The effects of ecological and political insecurities were certainly not evenly distributed over society. This distribution was intimately linked with political hierarchies and networks of power. Access to productive natural resources, labour, the appropriation of products, but also access to social resources, help networks, and command over redistributional networks is a privilege of the powerful. Especially in a situation where resources are scarce, power structures are a principal means for survival. While dealing with contingencies, power is manipulated, just as social relations, rules, norms and values pertaining to social and natural resources. This may lead to differential effects of insecurities for various social categories and individuals, based on gender, age, status and wealth, and growing inequalities within society. For instance data from Senegal (Sutter 1987), Niger (Starr 1987), Kenya (Grandin 1983, Talle 1988), demonstrate that livestock ownership in pastoral societies has polarized and that the class of middle pastoralists has disappeared (Hogg 1985, Baxter & Hogg 1990, Little 1992). Due to the increase in insecurities and the erosion of the material base of societies, the population of the Sahel, and pastoral societies in particular, have experienced a severe decline in living standards (Scott & Gormley 1980, White 1984, 1990, Downs et al. 1991, de Bruijn & van Dijk 1992, 1994). Women and children are in many societies the first who suffer from deprivation (Dahl 1987).

At both levels, those of the individual and of the group, we must make a difference between the short-term insecurities an individual has to face daily, and long-term insecurities that are inherent to the region in which people live and the land-use systems they have. Hamma himself mainly discussed the short term insecurities he faces, for example concerning the cultivation of millet that specific year, or the seasonal migration of his sons. Though he knows that his future is very difficult as is the future of his children,

he defined past and future securities in terms derived from Islamic and Jallube customary ideologies. We often had the impression that he did not want to see his unpredictable future. This attitude was shared by almost all other Jallube. On the one hand they were very well aware of the facts of their existence, the enormous migration over the last decade, their powerless position vis-à-vis the national government, the extremely difficult ecological and economic situation. This made many people feel depressed and anxious. Most people, on the other hand, hoped for a better future, because the climate may change and turn for the better. They imagined a future with a large herd and a more prominent political position at regional level. This vision of the future is probably also a discourse people use to hold on their identity, to be able to define themselves as pastoralists and Pullo, and not to lose themselves in an existential crisis. This discourse certainly helps people and society to keep going.

Insecurity is part of the historical experience of Fulbe society in the Hayre. As we may conclude from the history of the Sahel ecological insecurities were also present in the past. Political unrest and famine were not a vicious invention of colonialism, but have been part of life for many centuries. In the 17th and 18th centuries the population of Timbuktu was constantly beset by disasters (Cissoko 1968). In nearby Walata the population suffered from the same calamities (Tymowsky 1978). The rinderpest epidemic that ravaged the herds of African pastoralists at the end of the 19th century caused enormous hardship (Johnson 1991). Poverty and regular impoverishment were part of life in the Sahel for centuries (Iliffe 1987). Those who were dispossessed took up other activities and returned to the pastoral economy after some time. Politically the region was also insecure in the past as the formation of different Savanna states reveals. The sharing of these insecurities was then also a question of power. Pastoralists survived these years better than they do nowadays. The difficulties of life were shifted onto the groups who were the lowest in the political hierarchy (Tymowsky 1978, Meillassoux 1991).

Cultural understandings

The cultural means which people employ to deal with insecurity will be labelled cultural understandings. They give people a frame of reference and tools with which they encounter their situation. The concept was originally coined by Croll and Parkin (1992), in order to close the conceptual gap between culture and environment, to denote both 'the experimental and provisional nature of peoples' coping strategies and their changing interpretations of what constitutes work and resources' as well as the fact that 'they can only proceed step by step on the basis of distinctions of some sort (...)'. 'People (...) do not just adapt to environments, they make them, shaping them from both materials and the possibilities they see in the habitat and surrounding life forms' (Croll & Parkin 1992:16). Within the framework of this research the concept will be used in a somewhat wider sense. All the cultural means people employ to encounter insecurities of every sort will be labelled cultural understandings. They are instruments to survive. Recently van Beek and Blakely (1994), for example, have drawn attention to this aspect of religion, in the sense that religion may be

used to define institutions, and to develop technologies to cope with the vagaries of life, or to monitor processes and give them meaning for the actors involved. '..defining religion from its belief systems is putting it upside down. Religion is usually not thought out in the agora of theology, but lived out in the market place of Africa. Thus it is everyday religion [and mutatis mutandis everyday culture] that must be the focus of research (van Beek & Blakely 1994:17). At the same time cultural understandings may of course obscure parts of reality and constrain peoples' behaviour.

Cultural understandings of insecurity provide the inhabitants of the Hayre with the means to tackle their problems, with a sense of purpose, with a frame indeed to understand the 'hostile' world around them, and a sense of identity. They provide discourses which people use to talk about social and material reality, and ways to cope with the vagaries of everyday life. They may even be principally regarded as a means to reduce insecurity and uncertainties about all kinds of external conditions. In highly variable circumstances there can never be a one-to-one functional relation between the ecological, economic and political conditions, human behaviour and the cultural understandings of people. Nor can it be so that people can totally rely on their cultural repertoire to cope with the calamities of life. They constantly have to respond in a creative manner to new circumstances, or perish. They do so, as individuals and as members of a group in daily interaction with each other and with outsiders.

The ways in which Hamma Aljumaa and his family perceived and dealt with scarcity when they camped near Duwari may serve as an example of the practical relevance of the concept. Hamma's son studied the Koran. Hamma prayed at the mosque where he also took his afternoon nap. Their devotion to Islam was for them a way to cope with and to explain the vagaries of daily life. Hamma's wife regularly visited her daughter, who had married a Kummbeejo from Duwari and lived there, and her daughter gave her millet for the family. Hamma also secretly asked his son-in-law for credits and for food. The Kummbeejo on whose field they stayed gave them a meal now and then, as part of his obligation as host for the family, and as compensation for the manure deposited by the family's animals. This was in fact the basis for the survival of Hamma and his family, based on obligations of son-in-law, daughter, and Kummbeejo host versus the Jallo family, and on the mental satisfaction originating from Islam; and all accepted in the cultural frame of Fulbe society.

Another instance in which insecurity is expressed in cultural understandings is the case of illness. Illness is often a consequence of poverty and famine (Chambers 1987, Shipton 1990) and may be seen as an expression of scarcity. Gibbal, for example, in his descriptions of possession ceremonies among the Sonrai in the northern part of the Inner Delta of the Niger, argues that this ceremony is a way for people to cope with their misery (Gibbal 1994:102-103). Scheper-Hughes gives religion and emotions also an instrumental role in the way people in Northeast Brazil encounter poverty, child mortality and illness (Scheper-Hughes 1992). People in these poverty-stricken areas have all kinds of cultural means to cope with the insecurities of daily life, and this enables them to survive and to define themselves as part of a society, to have an individual and social identity.

Cultural understandings form at the same time an ongoing chain of social and cultural phenomena. Their nature is essentially historical. People change in the course of time,

because they have to face different sets of circumstances in the course of their lifetimes. This change takes place in a process of coping with the insecurities of life in interaction with each other, and in interaction with society. Society as a whole changes with the people. In times of crisis this process of change may be accelerated. However, the idiom in which people express themselves may remain the same (cf. Bourdieu 1977:21). As we will try to explain, this frame of reference is very flexible, people continuously rephrase, reinterpret and reformulate the rules, social organization, normative complexes, and even religion. These frameworks do not form fixed systems, but instead fluid, flexible sets of rules that people may use to encounter ecological, political, and economic insecurities. They are time and space bounded (von Benda-Beckmann 1992). However, flexible as they are, they exist. After the crisis these 'structures' have become very visible as these normative systems are the people's own windows on reality.

The political hierarchies of Fulbe society, the utilization and management of natural resources, rules for distribution and redistribution of resources and production, custom and Islam are rooted in the history of the Hayre, and were shaped by various political and economic changes. These historical products contain rules and values concerning the behaviour of different social groups, gender distinctions, the outside world, and so on. These normative complexes also define the way social networks and relations are formed and used and how distribution and access to social and natural resources is regulated. They form the Fulbe's cultural understandings of their reality.

The messages oral traditions contain about the social order exemplify how cultural understandings may also constrain people in their behaviour. Historical accounts, oral traditions, are a means to reinforce certain elements of these ideologies, and ideas about behaviour and social systems in the present. Historical records are as much recitals about the past as about the present (Chapman et al. 1989:1). And as Vansina (1985:94) states, '.. all [historical] messages are social products', and the oral traditions' primary goal is 'to stress group consciousness, (...), they relate the group to the overall worldview of the community' (ibid:92). If these traditions are still kept alive, which they are in the research area, they will also direct and restrict the range of possibilities for behaviour to a certain degree (see de Bruijn & van Dijk 1994). Social hierarchies, rules and norms in relation to access to resources as explained in oral traditions may no longer faithfully reflect reality (if they ever did). They may mirror an ideal type society as conceptualized by the dominant groups of people, because they reflect the position of power they held in the past which in those days helped them to survive, and which today helps them to assert this position of power and the privileges that are linked to it. Historical accounts and oral traditions are tools to help people to maintain their values over time, at least the values of the dominant group (Vansina 1985, cf. von Benda-Beckmann 1993). Practice in times of crisis or shortage is, however, not a mere copy of the past, but a 'new' interpretation that fits the actual situation. Oral traditions and ideologies do not literally contain information and techniques for people to survive a crisis or harsh times, nor do they have adaptative values which are recoverable in times of need as was argued by Salzman (1978).

This may be illustrated by Hamma Aljumaa's strong adherence to a (semi-)nomadic subsistence. Seven animals are not enough to survive on, and Hamma is occupied most of

the year by the quest for cereals. He labours on his fields, he 'begs' in Duwari for grains. Consequently the work with the animals has become secondary in his family. They have no milk to barter, so his wife does not really feel herself a Jallo woman. Still they keep to the pastoral ideology of the Jallube and refuse to accept a sedentary life as cultivators. Another domain induced by history is the connection of the Jallube with Islam. Instead of sending his son to work for a Kummbeejo, Hamma let him go to study the Koran. Islam seemed to be more important for him than money or food. These constraints embedded in these cultural understandings become visible in ideas about labour, division between men and women and social categories, division of land, rules regarding access to natural and social resources and the use of techniques, as they are framed in oral traditions.

Central question

The initial aim of this research project was defined as the assessment of the consequences of ecological and political changes on land use and ideological systems in Fulbe society in dry land Central Mali. An assumption behind this research aim was that society, land use and ideology could be conceptualized as if consisting of distinguishable systems which may be studied in isolation over time in variable sets of circumstances or contexts. The historical dimension was to be brought in by an assessment of how these systems performed under the impact of drought, colonialism and so on. Over the years that this research project extended this notion of system as an entity in ecology as well as in society, or at the level of culture, was gradually abandoned. It became increasingly clear that culture and ecology cannot be separated, and have to be merged into one comprehensive framework (cf. Shipton 1994). As is shown by the case of Hamma Aljumaa all these themes come together in the life experience of one person. If we had adhered to the concept of system our conclusions after two years of fieldwork could only have been that the societal system as defined by ourselves and by the Fulbe broke down and that Fulbe society in the Hayre did not exist any more. Yet, this is not the case, as this book will testify. The people are there, they are alive and define themselves as Fulbe.

A notion of system moreover implies regularity, normality, some sort of fixed form, a correct way of doing things. Yet, this was hard to discover in the situation in the Hayre. Paradoxically insecurity and uncertainty were the only 'certainties'. Instead we choose to concentrate on the dynamics of the situation we encountered, and not to look at history as a set of changing systems but as a perception of the past, a perception which is inevitably coloured by the present for them as well as for us. A perception that will change in accordance with the situation people are in. In this line of reasoning the insecurity we observed during the fieldwork situation is a result of the dynamics of ecological and political circumstances leading to constant changes in how people use and manage natural as well as social resources, accompanied by a continuous reinterpretation of the cultural understandings they have of their own situation and related normative complexes.

So the focus of this study is the dynamic interplay between the various ecological and historical realities, in which ecological, economical and political insecurities take shape, and

the ways people cope with these insecurities in the use and management of natural and social resources, and the cultural understandings of these contexts and strategies they develop to deal with these insecurities. Throughout the book the problem of the relations between insecurity and control and understanding, context and event, permanency and change, system and variability, norm and practical reality, actor and structure will constantly re-appear. In essence these are all historical issues, because they are always acted out in contexts that are time and space-bounded. It is for this reason that the central question of this book is a historical one and that the sub-questions which will be addressed in the various parts can be organized around the relation between the past and the present.

The central focus of the book will be worked out in three ways. In a practical sense an attempt will be made to assess the role of various insecurities in the lives of (agro-) pastoralists in the Sahel, and to investigate the ways they cope with these insecurities, and their cultural understandings of the situation. As a starting point we take the practical realities and dilemmas[4] people and social groups face when trying to work out solutions for the various insecurities in their lives. These practical realities and dilemmas will be placed in a historical context, which is the second way in which the focus of the book is worked out. In a thematic sense the subject matter of the book will be covered by four themes. In all these themes insecurity, cultural understandings, the past, the past in the present, and the present converge. One of the aims of the book is to show how the separate layers of reality interact, and influence each other. In some instances events of the past will re-appear in the present, and the reverse. The specific arguments developed in the chapters of the book were born in many instances from a critical dialogue with a selection of the literature on the Fulbe, pastoralism, societies in (semi-)arid ecological environments, developmentalism, Sahelian land use, and property and tenure regimes. The stress placed on the inherent insecurity and the dealing with contingencies raised a number of theoretical questions, which could not so readily be answered from literature.

All these issues concern in fact methodological reflections on the phenomenon of insecurity in relation to the particular form and shape the various aspects of pastoral societies have taken in the course of history. These reflections define an approach to societies in hazardous environments rather than theoretical statements on the nature and content, and connections between different theoretical fields. In the next four sections the four research themes will be developed. In the first section a general perspective on the role of insecurity in the pastoral pursuit will be developed. In the three sections that follow this will be applied to three themes: the role of hazard in the management of natural resources and the provision with basic food; property and tenure regimes; and social (in-)security. Just as with the historical thread running through the book, the themes are not so neatly separated as they are presented here for the sake of the sub-arguments.

The pastoral way of life and insecurity

The first problem to tackle is how to define Fulbe society. The Fulbe of the Hayre cannot be labelled 'pure' pastoralists. Various social categories of society have different strategies

to survive, varying from exploitation of people (the historical role of the elite) to the exploitation of cattle or land. Still the elite and the pastoralists, but also the artisans and merchants, refer to themselves as pastoralists, which they define as their main occupation and attribute of their identity. Only the former slaves define themselves as cultivators, which they are indeed, though they also possess livestock in most cases. Furthermore, in the course of history these 'strategies' may change completely. As the people presented it to us the boundaries between occupational strata were more rigidly observed in the past. Nowadays everyone may occupy him/herself with various strategies (with some exceptions of course). This situation made us wonder how to attach labels to them. Should we call them pastoralists, rulers, cultivators, as they themselves do; or should we analyze their land use and label them according to our standards? Another problem for us was to figure out if their strategies to manage the environment were the best to cope with all the ecological insecurities or political insecurities they encountered. How were these strategies formed and continuously reformed in view of the ecological and political insecurities inherent to their environment?

Most authors regard the accumulation of livestock, and the adaptation of herd management to the harsh environments pastoralists inhabit, as central elements in the pastoral pursuit (see for example Dyson-Hudson N & R 1980, Salzmann 1980, Khazanov 1984, Horowitz 1986). Pastoral animals are 'engaged' by the structure of relations of the human community. 'What is essential to pastoralism (...) is the *social appropriation* by persons or groups of successive generations of living animals' (Ingold 1980:133, italics in original). The problems pastoralists had to face in the 1970s and 1980s as a result of drought and war have led to a reassessment of the concept of pastoralism. A high degree of diversity in the strategies of pastoralists was recognized. Numerous studies were published on what went wrong in pastoral societies: increase in inequality based on class (Baxter & Hogg 1990) and gender (Joekes and Pointing 1991, Horowitz and Jowkar 1992, Talle 1988), large scale migration to adjacent regions, rural centres, and towns (Hogg 1985, Bernardet 1984, Salih 1989, Bovin 1990) unwanted cultural change and social disintegration[5] (Maliki 1988, Bovin & Manger 1990, Baxter 1991, Downset al. 1991) or even refugee camps as the final resort (Chambers 1982). This doom scenario culminated in a redefinition of the pastoralist who is living in a Hobbesian world of insecurity, war, famine, and drought (Hogg 1986, Baxter 1993).

Adaptation[6] is an important conceptual tool in these studies of crisis situations. It is argued that pastoralists in crisis situations (such as drought, famine or civil war) may resort to numerous adaptive strategies to cope with these hazards, such as herd diversification, adjustment of herd-size, increase of mobility, splitting up into small groups (herds and people), temporary sedentarization.[7] 'The outcome of adaptation is expected to be a balanced set of relationships, meaning that the carrying capacity of the environment is not exceeded and the system is capable of self-replication over time' (Henderson 1987:257). The pastoral way of life is regarded as the natural state of being for all those who label themselves pastoralists. All other engagement is regarded as a deviation from the norm, a cultural repertoire designed for crisis management only. Pastoralists seem so well equipped to counter the forces of nature that it does not seem necessary to help them at all. In the

words of Jeremy Swift cited by Stephen Bass 'they are the world's experts of drought' (Bass 1990:162). In fact it is merely the event of the crisis that is analyzed, how it was brought about, and not the structure of the crisis. And even in the description of the event the question how to return to 'normality' is more central than how the crisis itself is lived through. However, these 'normal' conditions are not likely to occur very often in highly variable environments, and we run the danger of focusing research on a set of conditions which are irrelevant to the residents of an area and to the understanding of hazard (Henderson 1987:255). This bias of course reflects the preoccupations of the people themselves. They only relate to the researchers what they would like to regain, how they regard themselves. They also have a perception of what is normal, and of the situation they would like to regain, and the elements which give permanency to their lives.

Crisis studies in general reflect this position too. Historical studies depict societies in crisis as deviating from the norm (e.g. Watts 1983, Vaughan 1987, Mortimore 1989). In anthropological studies of crisis situations it is stressed that the observed phenomena are temporary incidents (e.g. Firth 1959, Watts 1983, White 1984, de Waal 1989, Bovin 1990, Rahmato 1991, Spittler 1992). It is very rare that scholars point out that the return to normal is difficult, and that crisis conditions are a permanent feature of life even leading to situations which may be taken as indicative of social disintegration (Turnbull 1978, 1989 Scheper-Hughes 1992). This is due to the fact that in anthropology in general the study of the normal has priority over the study of the abnormal, the study of change over the study of disruption (Hastrup 1994). This has led to the relative neglect of the study of crisis and famine (Dirks 1980, Shipton 1990, Torry 1979).[8]

In this book it will be argued that insecurities are a permanent feature of life for Fulbe pastoralists in Central Mali, and that instability is an inherent characteristic of the pastoral way of life. Pastoralism may be seen as an adaptation to harsh climatic circumstances, of which the central element is mobility. The herds have to be moved from scarce to more abundant regions. Nomadic pastoralism is most suitable for the management of the insecurities of the semi-arid lands. This is however a risky affair because a herdsman cannot predict rainfall and pasture quality. The animals of pastoralists are threatened by predators, animal diseases, lack of pasture. The latter two may even wipe out (large parts of) the herds in a short span of time. The management of more animals than are needed for the immediate survival of the pastoralists acts as an insurance against disasters (Horowitz 1986). In order to accumulate livestock the reproductive capacity of the animals has to be controlled and they need to be protected from all kinds of natural hazards. The task of the herdsman and his kin is to establish the conditions for the appropriation of this increase; in other words to prevent its seizure by predatory competitors, both animal and human. The economically productive work on which herd growth ultimately depends is performed by the animals and not by their human guardians. From this it follows that herding labour must be regarded not as productive but as appropriative (Ingold 1980:222). '[The] reason for accumulating stock lies not in a desire to increase yield beyond a fixed domestic target, but in the need to provide [the] his household with some security against environmental fluctuations, given a system of productive relations, which places the burden of the future on the herdsman's own shoulders' (Ingold 1980:134).

The accumulation of herbivores by the pastoralist introduces yet a new element of instability. In comparison with natural conditions in which the pressure of predators tends to dampen herbivore-pasture oscillations, livestock numbers may be pushed beyond the limits of natural pasture production, because of the protective measures effected by the pastoralist. Inevitably this will lead to some corrective disaster, a drought or animal disease, in which a major part of the livestock population will perish, leading to wild oscillations in animal numbers (Ingold 1980:48). So, not only is the pastoral enterprise inherently unstable because of mobility and climate fluctuations, but its precariousness is even enhanced by the very management decisions that enable humans to exploit the animals. In this perspective the dictum that 'disaster always looms over the pastoral enterprise' (Ingold 1980:80) must be understood.

The second inherent source of instability of the pastoral way of life is the necessity for pastoralists to maintain contact with the outside world (Khazanov 1984). Often pastoralists cannot subsist on livestock products alone, and need to obtain cereals to supplement their diet.[9] They may obtain cereals by trading livestock products for grains, or they may subjugate cultivating populations, or incorporate cropping in their own way of life (Khazanov 1984). Political and military control over water and pasture is a second requirement for the pastoral way of life for which contact with or control over the outside world is essential. Often water and feed are in short supply in the arid zones inhabited by pastoralists, and cultivators may seek to settle near these sources of water, blocking access for the herds. State formation by pastoralists is one of the solutions to these problems. However, as Khazanov argues, this leads either to the marginalization of nomads (pastoralists), or to the collapse of the state because of pastoral rebellions on the fringes of the empire. The causes for these strained relations are located in the incompatibility of the need for taxation and bureaucratic control by states over their subjects with pastoralism, which requires mobility and flexibility. Elites of such states will become alienated from their former fellow pastoralists, leading to marginalization of the pastoralists in the state bureaucracy (Khazanov 1984).

Although Khazanov bases his reasoning on a historical review of Asian nomadism, the same processes can be found in Africa (Azarya 1979, 1988, de Bruijn & van Dijk 1993). The dynamics of this process are very important for understanding the development of pastoralism in the Hayre also, as we will sketch in the historical account of the region. There is a host of evidence that the increasing incorporation of pastoralists into modern states in Africa leads to a progressive political, economic and social marginalization (see Hogg 1985, Horowitz 1986, Lane 1992, Doornbos 1993, Markakis 1993). From the colonial period on, land was nationalized and the pastoral areas were pacified so that intruders from outside occupied the pastures of many pastoral groups (Swift 1982, Cissé 1986, Schmitz 1986, Lane 1992). In other areas pastoral land was privatized so that the poor gradually lost access to pasture and grazing areas (Rutten 1992). Pastoralists were obliged to seek refuge in more marginal areas when cash-cropping expanded, where they were more vulnerable to drought (Franke & Chasin 1980, 1981). Traditional chiefs were incorporated in the modern governmental apparatus and alienated from their subjects (Doornbos 1993). In these states also co-operative relationships developed between

pastoralists and cultivators. Fulbe herdsmen, for example, were incorporated into 19th century savanna empires, to herd the animals of the king (Dupire 1962, Grayzel 1990). Pastoralists also developed co-operative relations with cultivators in West Africa (Galloy et al. 1963), within or without a common political framework.

Normally a pastoral herdsman and his family are conceived of as moving from one area to another in a more or less regular pattern, in order to ensure the best pasture and the best growth conditions for his herd. Cultivation, i.e. the production of cereals, on the other hand has a connotation of sedentarity. A cultivator works on his fields that are fixed in space, so that he cannot move. However, on closer inspection of the literature it can be seen that pastoralists have always used the cropping of cereals as a temporary or opportunistic strategy to overcome periods of hardship (Salzman 1980, Thebaud 1988, Maliki 1988, 1990). According to Smith (1992:163) '... the Fulani [Fulbe] were not tied to central *loci* until the *jihad* of Ousman dan Fodio in the nineteenth century. They appear to have interspersed their herds among the sedentary cultivators of the Sahel and Savanna quite successfully (...)'. There are no reasons to believe that these Fulbe did not engage in occasional farming, nor that these so-called sedentary cultivators did not have herds of domesticated animals.[10] Only with the establishment of the Islamic Fulbe empires were these sedentary cultivators enslaved, or they retreated into the mountains to abandon the plains to the pastoralists. There are however many examples of what we would call Fulbe pastoralists who have an almost sedentary way of life (Bernadet 1984, Waters-Bayer 1988). Most Fulbe pastoral populations do not exclusively rely on livestock for their livelihood, but cultivate and keep animals at the same time (see e.g. Dupire 1970, Delgado 1979, Marchal 1983, Grayzel 1990). Conversely a lot of neighbouring cultivators possess and manage domestic animals and sometimes even move with their animals (see e.g. Thebaud 1988, Toulmin 1992). So the distinction between cultivators and pastoralists is only gradual and every group in the Sahel has to find its own mixture of mobility/sedentarity and pastoralism versus cultivation. This is what Gallais labels '*la condition Sahélienne*' (Gallais 1975:165), the innate necessity embedded in the ecological circumstances of the Sahel to shift from mobility to sedentarity and from cultivation to pastoralism. In the (post-)colonial era even cultivators became mobile on a long term basis, as they began to move from one site to another, selecting the most fertile plots, when their old fields were exhausted (bush fallowing) or when overpopulation necessitated migration to new cultivation sites (Gallais 1975, Riesman 1977).

There are indications that the tendency for pastoralists and cultivators to grow more alike and to become both engaged in various forms of agro-pastoralism has been promoted by specific politico-economic conditions. Pre-colonial forms of natural resource management, and the concomitant division of labour and authority structures over resources and labour, were decisively changed by, for example, the abolition of slavery, and the seizure of authority over common resources by the colonial state. The liberation of slaves deprived pastoralists of an important labour force and of their capacity for agricultural production. Pastoralists had to work their fields by themselves from then on. In this way they were forced to give up part of their mobility, needed to cope with the unpredictable ecological environment. In many areas intensification of cereal cropping took place, where pastoralists

began to use the manure of their animals to promote productivity of the land. Cultivators began to accumulate cattle for the same reason. Production failures in one of these domains were cushioned by reliance on the other. In an increasingly commercialized economy cultivators were able to mobilize their capital resources in the form of livestock to overcome crop failure. Pastoralists used the cropping of cereals to decrease their dependence on the market for their food, and to be able to accumulate more livestock. So the pendulum has swung back to agro-pastoralism.

This dialectical relation between herding and cropping is also exemplified by the fact that there is a minimum number of hectares of bush, needed to pasture the animals, in order to sustain production on one hectare of crop land (see Toulmin 1992), and by the important ecological buffering role of bush land against ecological degradation (Kessler & Wiersum 1993:8). When the proportion of cultivated land is approaching this limit, the relation between cropping and herding becomes inversely affected, and may even become antagonistic and inimical in social terms. These conflicts occurred in the past (Marchal 1983), but it seems that the range and content of these conflicts is increasing. So, cropping and herding compete not only for labour but also for space.

In the Sahelian context there is no obligatory connection between mobility and pastoralism and between sedentarity and cultivation. Being a pastoralist or cultivator is not so much a question of pursuing such and such activities, but is rather a matter of self-definition, of how someone or a group expresses itself and of which activities someone or a group aspires to pursue, or of which are prevalent in cultural values. In practice in most regions in the Sahel and Sudan most people combine livestock keeping and cereal cultivation to some extent. Even if we find so-called 'pure pastoralists' they are intimately connected to the cultivating parts of the population for they always need to obtain cereals to supplement their diet. Gathering may be an integral part of their subsistence activities (Tubiana & Tubiana 1969, Bernus 1979, 1980, Spittler 1992). They may be engaged in fisheries (Best 1978), and often they are deeply involved in all kinds of trade systems (Spittler 1992, Kerven 1992).

So the 'pure pastoralist' does not exist. Pastoralism is just one of the ways to cope with hazard in arid environments, one of the many 'arid ways'. 'Pastoralist', or 'nomad' which is also used by many authors, are just labels. Being a pastoralist is a matter of self-definition and identity more than anything else, and need not correspond to his/her daily activities or means of existence. Strategies of pastoralists to earn a subsistence, the ways in which they understand their own situation, the manner in which they distribute resources over society, how they take care of each other, vary over time and space. All these 'arid ways' are expressions of how to cope with insecurity. The description of the history and geography of the Hayre will show this multiplicity over time and over space, in continuously changing political and ecological contexts (see also Gallais 1975). The present situation of the Fulbe in the Hayre is only one moment in time and space in this highly variable 'pastoral way of life', in which ideologies about each other and about land use may give another meaning to pastoralism than the reality of today.

Hazard and natural resource management

Our approach to the study of this diversity of strategies is guided by some observations on the role of hazard in land use that will be discussed in this section. Instability in Sahel ecosystems and the ensuing insecurity for the (pastoral) population has been an important subject of debate since the start of the Sahelian drought in the early 1970s. This debate has long been dominated by terms like ecological degradation, sustainability, adaptation, and carrying capacity. Instability has often been conceived of as degradation, and the intensity of use has frequently been confused with the depletion of a resource. Land degradation in this view is the result of a shortage of land as a consequence of population growth, in a situation where this population is almost entirely dependent on natural resources (van Keulen & Breman 1990:192).

Grazing lands and ecological environments in the Sahel were said to degrade as a result of the overgrazing ensuing from overstocking (Lamprey 1983, Mabbutt 1985). Forest resources were depleted as a result of the uncontrolled cutting of fodder for animals and fuelwood (Grainger 1982, Catinot 1984). Later on the unbridled growth of livestock numbers in the colonial era, unclear tenure arrangements, incorporation in the modern economy, lack of control on encroachment of agricultural land into pastoral areas, inappropriate development interventions, and weak government were added as causes for the problems in the semi-arid areas in the Sahel (Franke & Chasin 1980, Horowitz 1986, World Bank 1987, Grainger 1990). So pastoralists are accused of irrationally adhering to unnecessary numbers of animals by some, while others hold that they have fallen victim to the logic of population growth, and improved veterinary care and vaccination cover by livestock services, further promoted by the opening of new pasture areas through the development of water resources, not only by colonial governments, but also by the African states and development agencies.

In both views this situation can only be remedied by investments in more intensive, and appropriate land use techniques (van der Graaf & Breman 1993, Stroosnijder 1994). Cereal cropping should be intensified to reduce pressure on fragile pastoral areas (van Keulen & Breman 1990). Reforestation should be undertaken and forests should be protected against a too high level of exploitation (Grainger 1982, Catinot 1984). The pressure of livestock should be adjusted to the carrying capacity of the range (Boudet 1978, Grainger 1990, Breman & de Ridder 1991). At governmental and international level development policy should be reformed and integrated with environmental planning (UNDP 1992). Farmers (where are the herdsmen?) should be given more security of land tenure, in order to promote investments in conservation of the soil (World Bank 1987). All measures should be implemented within a sound ecological framework so that the human carrying capacity is not exceeded (Kessler 1994:274).[11]

However useful these concepts may be for a global assessment of long-term processes taking place at regional levels of the Sahelo-Sudanian zone, they offer few conceptual tools for the analysis, in both temporal and spatial aspects, of natural resource management at local level in a highly variable environment. The smaller the spatio-temporal scale, the less reliable the models are (Kessler 1994). According to Scoones (1995) the most conventional

strategy to reduce uncertainties at this local level is to devise 'probabilistic descriptions of variability by the collection of more and more data on more and more variables, under the assumption that more information will allow the prediction of outcomes at least in a probabilistic way' (Scoones 1995:6).[12] This approach is aimed at predicting and controlling insecurity, rather than understanding its role in land use. The outlines of a more promising approach become visible in recent contributions to the debate on models for the appraisal of range-land carrying capacity. Critics of these models argue that a major form of insecurity is caused by the highly irregular rainfall pattern and associated drought periods. This insecurity in the ecological circumstances implies that semi-arid ecosystems operate far from equilibrium most of the time (Behnke & Scoones 1993, Ellis et al. 1993). Dry land ecosystems may be controlled more by climatic events and sequences than by equilibrating interactions among the biotic components of the system (Noy-Meir 1973, Ellis & Swift 1988). The resilience of the natural environment of the Sahel to react to periodically occurring periods of serious ecological stress seems often to be underrated. Although the Sahel environment has a low resistance to degradation in the form of disappearance of the vegetation cover and wind erosion of sandy soils, in fact the sandy soils especially recover rapidly from degradation once the disturbing factors such as lack of rain cease (Geerling & de Bie 1990). The production of forage and fodder oscillates wildly with different rainfall patterns and quantities, as measurements over a number of years show (Diarra & Hiernaux 1987, Hiernaux 1984, 1988, 1989, 1990). Consequently the droughts of 1971-1973 and 1983-1985 made clear that livestock numbers are controlled by nature and not by man. If livestock numbers are pushed temporarily over a certain threshold of the carrying capacity under the prevailing environmental conditions, some corrective disasters will take place. But in view of the fast recovery of livestock numbers after these droughts, the conclusion that resources have (irreversibly) degraded is premature and has no empirical foundation. Recent studies have indicated that there is no proof that desertified areas have been expanding during the last decade (Helldén 1991).

Although many local studies have indicated resource depletion in the form of a shift in or disappearance of vegetation cover, and consequent soil erosion, little attention has been given to the question whether such depletion is permanent or temporary. The species compositions of the Sahelian grazing lands are very dynamic, as species react differently to the variable rainfall conditions, depending on their germination strategy, water-use efficiency and length of growth cycle (Breman 1994). For instance, the germination of all kinds of grassland species is significantly influenced by the timing and spacing of showers early in the rainy season (Granier 1975, Elberse & Breman 1989, 1990); consequently species composition may vary considerably over the years. In some studies it has been found that pastures under extreme intensity of use, for example around boreholes, have not degraded after twenty years. The species composition changed, but in a direction indicating enrichment of the range rather than degradation (Valenza 1975). Some studies have also indicated that Sahelian tree species are far more vigorous than commonly assumed (Heermans & Minnick 1987); often they are resiliently adapted to stress factors including climatic fluctuations and utilization. Research on the effects of pruning, coppicing, and

indigenous silvicultural management on the vitality of trees has so far been neglected (Savenije 1993:ix, Timmer et al. 1995).

Rainfall in the Sahel is characterized by its irregularity not only in timing, but also in location. The irregular spatial distribution of rainfall over a region, coupled with the different resource characteristics of sandy and clayey substrates respectively, result in ecological niche differentiation. Historically, the natural resource utilization systems were highly adapted to this shifting mosaic of favourable and temporarily depleted landscape niches (Breman 1994). Regional-level analyses therefore may obscure the potential for local level resource management (Turner 1994). Pastoral systems of resource extraction have been described as the most efficient way to exploit (semi-)arid zones where cropping is a risky affair; they are also more efficient than high-tech commercialized ranching (Coughenour et al 1985, Breman & de Wit 1983). Similarly, the high efficiency of cereal farming in the fluctuating environment of the Sahel has been remarked (Geerling & de Bie 1986, Breman 1992).

The ecological proof of the relation between the degradation of resources and indigenous management of these resources has never been delivered (Horowitz 1986). Regularity and normality rather than ecological variability and resilience of the existing resource systems were used as a starting point for analysis of the land-use conditions. When analyzing natural resource utilization and management in semi-arid regions insecurity should be taken as a given factor.[13] As ecological insecurity and its associated risks for production failure are often unmanageable, notions like 'degradation', 'carrying capacity' and 'adaptation' become (very) relative terms. In such non-stationary situations it also becomes questionable if we can predict the relations between the various human activities and the state of natural resources. This calls into question to what extent it is possible to predict or even monitor the effects of different kinds of development interventions and the land use problems they are supposed to solve. At the level of decision-making by the land users we can no longer assume that the outcome of decisions corresponds to the intentions of the decision-maker, as it is assumed in many decision-making studies.

Instead should not scientists, just as the cultivators and pastoralists in the Sahel, try to learn by studying events, their outcomes, and the decisions taken in-between by land-users (Scoones 1995)? Given the unpredictability of environmental hazard, and its differential effects on various individuals and social groups, land use in the dry areas of the world may be approached more usefully through the consideration of decision making and individual responses (Henderson 1987:262). Assuming that in highly insecure ecological, economic and political environments key events might not be predictable, decision-making will be analyzed as a chain of sequential adjustments to circumstances as they unfold (Watts 1983). People always make such adjustments on the basis of the cultural understandings they have of their environment and other relevant factors. However, the role of, for instance, indigenous knowledge has rarely been evaluated in the light of rapidly changing circumstances (see e.g. van Beek 1993b). Decisions are based on past experience, but our recollections are to a large extent determined by our concerns of today (Ortiz 1980:188).[14]

In such a highly variable context contacts with the outside world, i.e. outside the sphere of the units which are the basis for production and consumption, are also the most crucial

means to calibrate the unpredictable events in the management of natural resources. Historically trade and the exploitation of other population groups played a critical role in the survival of the population of arid zones in the past (see. e.g. Bernus 1990, Kerven 1992, Spittler 1992). Trade and markets for livestock and cereals are indispensable to dampen fluctuations in the production of basic food stuffs and forage in rural areas (Swift 1986, 1989, Frankenberger & Goldstein 1990, Kerven 1992).[15] Normally the number of calories in cereals that may be obtained for one calorie of livestock products is very much in favour of the livestock keeper (Dietz 1987). However in times of crisis this relation may erode to such an extent that pastoralists may be forced to sell their whole herd in order to survive (Swift 1986, 1989). Mobility and flexibility are essential prerequisites for the maintenance of successful relations with the outside world. Not only do pastoral resources, such as livestock, have to be moved from one place to another, pastoralists of the Sahel may also move from one place to another in search for new markets for their products and to obtain basic food. In crisis situations migration may be a key strategy to lessen the burden on the resources for those who stay behind and to add additional income earned by the migrants (Reitsma et al. 1992, White 1984). This means that one cannot view hazard in isolation from related, economic, social and political events (Henderson 1987:263).

So, the focus of the study of natural resource management is on how people use and manage natural resources and take decisions with respect to the allocation of labour in various ecological, social, economic and political settings, in relation to cultural understandings of these settings. The way in which the organization of production is affected by various political and economic factors and changes in these factors, and the cultural understandings people have of insecurity, the organization of production and political and economic factors, will be an integral part of this study of decision-making.

Property and tenure regimes

In a situation of recurrent or persistent scarcity resulting from important variations in agricultural production, property and tenure regimes, more specifically rules and norms with respect to access to resources, such as labour, livestock, agricultural land, water, trees and pastures, are an important unit of analysis. As Shipton recently stated 'Nothing excites deeper passions or gives rise to more bloodshed than do disagreements about territory, boundaries, or access to land resources' (Shipton 1994:347), and livestock and water in the case of pastoralists. It is with property and tenure regimes that groups at various levels of society regulate the use of these highly variable resources. In a situation where people have to deal with ecological, economic, and political contingencies, social relations that mediate access to productive resources are often of crucial importance: not only to have the highest chance of producing a sufficient amount of food to survive, but also to be able to shift from one activity to another when the need arises. On the one hand these rule complexes should be sufficiently flexible to enable individuals to cope with environmental variability, and contain some sort of equity principle. On the other hand rules and norms must serve to

prevent chaos, and contribute to a decrease in insecurity in order not to enhance the chance of disasters inherent in the pastoral way of life.

Property and tenure regimes are thus not just tools to regulate natural resource management. They are much more, for they also direct the circulation of resources over the members of society. It is for this reason that all property relations and rules of access to natural resources are always social relations: 'it is nature engaged in social relations' (Ingold 1986:136). In the same way property relations over live resources such as domesticated animals embody the social relations of their masters (Ingold 1986:168). Given the nature of the pastoral way of life these rule complexes are always formed in interaction with the outside world. However, property and tenure regimes over different resources are defined at various levels of society. It is a well-known feature of pastoral societies that livestock is mostly individually owned and herded by small groups and that pastures are managed collectively. Some social categories may be denied access to specific resources, such as land and livestock: e.g. women (Talle 1988, Horowitz & Jowkar 1992), but differences may also exist between categories of women (de Bruijn 1992). Overlapping rights may exist over the same resources, and may be held by different social groups or categories. Multiple normative complexes may be applied to the same resource. In the case of land customary as well as state law may be in force. Actors operating in these kinds of situations may resort to different bodies of rules in changing circumstances, and may draw inspiration, justification and an ideological explanation from these multiple sources. This situation may be labelled and analyzed as 'legal pluralism' (von Benda-Beckmann 1983, 1992, Griffiths 1986).

So, in the social relations with respect to property and resources 'dynamic, and historical interrelationships between different laws in the thought and practice of people' (von Benda-Beckmann 1992:307) are embedded. These social relations and property and tenure regimes reflect the ways various categories of people understand not only ecological insecurity, but also other factors stemming from insecure economic, social and political sources. A number of studies indicate that non-environmental concerns, like ideologies with respect to continuity and rules with respect to the tenure of resources (e.g. Holy 1988, Toulmin 1992, Gavian 1992), and even ritual (van Beek & Banga 1992) play a crucial role in natural resource management. Social relations with respect to property and tenure regimes cannot be regarded as an adaptive response to ecological insecurity, nor as a direct outcome of political hierarchies, values, or religious norms. Rather they may be regarded as a field where the impact of various kinds of insecurities converge and are mediated. In a situation of scarcity individuals and groups try to manipulate and negotiate to bend property and tenure regimes in the direction they desire given their situation and aims. Multiple normative and legal structures form a matrix in which they orient their claims and decisions with respect to the distribution of property and the tenure of resources. Resource competition resulting from a declining resource base or population growth inevitably leads to conflicts, and may alter the nature and content of property and tenure regimes, and consequently the social relations between people which they embody. Just as in the field of hazard and natural resource management society is transformed by the solutions people develop for these problems and conflicts.

This implies that we abandon normative or policy-oriented approaches to the study of property regimes, which are normally based on the assumption that these rules may be valid irrespective of time and space. The comparison between the 'ought' and the 'is', which is normally followed in these approaches, leads to a reduction of reality to its relation to the normative claims of the legal system studied (von Benda-Beckmann 1992:308), whether they are legal, economic, or ecological.[16] Another hidden assumption in the analysis of property and tenure regimes is that there is only one legal framework in force and relevant at a particular moment (von Benda-Beckmann 1992:309), or that this is at least a desirable situation. However, in almost every pastoral area of the world customary bodies of rules coexist with state law, and bye-laws, leading to a situation of legal pluralism, and even the symbiosis of various legal systems (von Benda-Beckmann 1992), which, far from being disastrous in all instances, may give extra flexibility to the use and management of the resources in accordance with the variety of needs of their users. The ways in which resources are allocated to the competing parties is of course a political rather than a legal process, and will result in differential access to resources for various interest groups and individuals.

Coupled to this assumption is often the norm that a clear and unequivocal framework of rules, and norms is the only desirable solution for defining access to resources. This norm is also often applied to the analysis of practice. In real life such less 'civilized' means as bribery, violence, raiding, military deterrence, political relations (Evans-Pritchard 1940, Johnson & Anderson 1988), and ritual (Ingold 1986, Schlee 1992,)[17] often play a significant role. The ethnographic literature on pastoral societies abounds with examples, though this corpus has never been analyzed from this perspective. Even enlightened progressive policy reformers filter these realities out of their analyses, and inevitably formulate prescriptive and voluntaristic frameworks for the transformation of tenure regimes.

In these frameworks the issue of resource variability is hardly ever addressed. The demarcation of boundaries plays a crucial role in the definition of clear bundles of rights over resources, according to many observers of property regimes. Behind this argument for the creation of boundaries is the assumption that a framework of rules can be devised based on the expectations and calculations of users and policy-makers about the stream of costs and benefits from the resources. They may estimate and negotiate about the quantity of the resource they need for their production purposes and how much may be gained at the expense of other individuals and groups who are also interested in the use and management of the resources. In practice these costs and benefits are not predictable, especially in arid regions where the variability and biomass production fluctuates enormously with varying climatic conditions. So in many situations nature rather than society determines the possibilities for use, and this in turn may make the definition of clear boundaries an academic exercise for the users of the resources involved.

Property and tenure regimes are thus analyzed as historical phenomena, as normative complexes, which are bound in time and space, and which are constantly recreated in a dialectical process with daily practice. These normative complexes consist of networks of

rules, norms and regulations with respect to access to a wide variety of resources, under a wide variety of circumstances, and within heterogenous forms of social organization.

Poverty and social (in)security

Historical studies show that the burdens resulting from the ecological and political insecurities were never evenly distributed over the population in the Sahel. According to Iliffe (1987:6) there was always a large group of poor in African societies, consisting of the 'structural poor', who were the people who had no access to labour, and the 'conjunctural poor', whose poverty resulted from disasters, with as chief causes climatic and political insecurity. In case of catastrophe conjunctural and structural poverty converged, because the structural poor were less well fed and more vulnerable than the rich. Access to resources, social as well as natural, is not equal for everyone. Some people have more power to manipulate these than others. In times of scarcity this will become even more apparent than under normal circumstances. It is this inequality that is seen by some authors as the basis for exchange and social support relations (Platteau 1991). Recently support relations of this kind have become a central theme in a new field of studies labelled 'social security' (von Benda-Beckmann et al. 1988a, Ahmad et al. 1991, F & K von Benda-Beckmann 1994). Social security is a thematic field of studies. In contrast to studies of reciprocity, of gift relations, which were oriented to the investigation of social structure and social cohesion, central within this research theme is the question, what do social relations do for people with respect to the coverage of all kinds of insecurities in life? The support aspects of social relations and networks are taken as the focus of attention, as well as the ideological and normative considerations (cultural understandings) that form the background of these social security mechanisms.

Social security as a field of systematic research was first defined at the administrative level, as the analysis of social policies at government level. The concept has been widened to include also social security relations and institutions at local level, not regulated by the state. As soon became clear, coverage for the rural poor is far too costly and difficult to organize for the majority of Third World governments. Social security mechanisms at local level, in communities, families, kin groups etc. will remain far more important than any governmental form of support in the foreseeable future (Midgley 1984, 1994, Dittrich & Petersen-Thumser 1994). In its localized version '... social security can be taken to refer to the efforts of individuals, kin groups, villages and state institutions to overcome [these] insecurities (i.e. food, housing, and many other insecurities)'(von Benda-Beckmann et al. 1988b:10, cf. F & K von Benda-Beckmann 1994). Some authors situate these efforts in the field of production and access to productive resources, as well as (re)distribution (cf. Platteau 1991, Agarwal 1991).

However, we should not naively assume that these mechanisms apply to all people under all circumstances in the same way. This becomes especially clear in crisis situations, for instance in the domain of access to natural resources (see above). Further, social security may be an unforeseen by-product of the efforts people undertake to survive. Efforts to

maintain social relations with all kinds of people may turn out to have social security aspects in a certain situation, while they are not meant to cover insecurities. This is more likely in case of extreme insecurity, and therefore a study directed at social security only may not give enough insight into the way social security is organized. It may be better therefore to focus on actors' day-to-day decision-making with respect to survival, as well as the differential effects of insecurity on various social categories and individuals. However, these effects vary with time and place. Social security mechanisms can take an institutionalized form, i.e. gift relations, help relations within a kin group, reciprocity, which have been studied by anthropologists for a long time already (Elwert 1980), but may also be based on a more practical day-to-day basis such as alms giving, begging, and mere chance. In each situation social relations as defined by norms, values, ideologies, may be the basis of social security arrangements, though they must continuously be renegotiated. The practical outcome of this process differs for each individual or subgroup in a society.

In this negotiation the 'needy' individual is not a passive recipient of support or help. He or she must dispose of certain means in order to participate in the social security arrangements. He or she can even manipulate the situation so that new social security relations are formed. Social relations are used strategically in the coping strategies of these people, so that they return material benefits in order to survive. Involvement in religious spheres, and adhesion to certain moral complexes, may prove quite essential means to survive a situation of scarcity. The term symbolic capital as developed by Bourdieu is very useful in this sense. With this is meant one's personal (social, political and economic) history in society, for instance the networks a person participates or has participated in, the number of people one can mobilize, the status, social prestige one has in society, e.g. related to religious position (Bourdieu 1977, 1990:112-121). These symbolic assets of a person can be transformed into help relations, recruitment of labour, i.e. access to social resources, so that this symbolic capital is transformed into material capital (Bourdieu 1990:119), and may provide people with a living. This implies that power relations are also instrumental in gaining access to social security mechanisms in society. The economically weakest are often people with hardly any symbolic capital, without a wide social network on which to rely in difficult periods. They have less access to distribution and production relations. This may reinforce economic differentiation (von Benda-Beckmann et al. 1988b:16, de Bruijn 1994).

Inequality and poverty have been part of life for a very long time, and social insecurity, rather than social care for all at village level, may have been the rule, especially in pastoral societies in the past (Iliffe 1987), as well as at present (Baxter & Hogg 1990). East African pastoralists incorporated only certain poor people and obliged the remainder to seek refuge outside the pastoral economy (Iliffe 1987:68). In the Eastern lake Turkana region in Kenya, '... the notion of equality and redistribution in these 'egalitarian' societies was ideological. Individual holdings varied enormously, from those with a few head of cattle or camels to those with hundreds of head' (Sobania 1990:2).

Inequality may also be part of the ideology of a pastoral society in the form of a political hierarchy and rules with respect to the circulation of specific categories of property. In some societies however it may function as a mechanism to integrate the poor in society. In

West African pastoral societies non-stock-owning people formed a reservoir of cheap labour and clients (Iliffe 1987:65-68). The organization of Kel Geres Tuareg society may serve as an example. 'Almost all the livestock belong to the *imajeghen* (aristocratic warriors) whose slaves (*iklan*) care for them. In a country adapted to rain-fed agriculture, the Kel Geres society has created a true dichotomy between animal husbandry, with herds owned by an aristocratic minority and maintained by servile manpower, and an extensive rain-fed agriculture (millet, sorghum) in the hands of dependents, who must give away part of their crops to the *imajeghen*, the landowners' (Bernus 1990:154). Impoverished pastoralists or even impoverished elites could join this group of servile manpower and thus remain in the society. Political hierarchies and even religious institutions (like the Islamic *zakat*) have always been ways to incorporate the poor and to legitimize their existence (Iliffe 1987:42-47). Norms, rules and ideologies were not promoting equality, though they functioned as security for the poor in an indirect way when conditions allowed.

Inequality applies not only to material wealth and access to productive assets, but also to differential access to the institutions of society that may lessen poverty, i.e. the symbolic capital, or access to social resources of an individual. This may lead to situations in which people do not have access to any social security mechanisms at all. The general decline in living conditions of pastoralists in the Sahel over the past decades may obscure the tendency of social security mechanisms to erode or, in reverse, it may conceal their non-existence in the past. According to Popkin 'insurance, welfare and subsistence guarantees within pre-capitalist villages are limited (...) the calculations of peasants driven by motives of survival in a risky environment led not to subsistence floors and extensive village wide insurance schemes, but to procedures that generated and enforced inequality within the village' (Popkin 1979:32-33). Platteau on the other hand argues that this view on social security is applicable only to the situation of pre-capitalist societies which are in an advanced state of social disintegration, due to slave raids, wars, epidemics, persistent famine conditions, capitalist penetration, national integration and other forms of transformation of societal control (Platteau 1991:120-121). His reasoning implies, however, that under 'normal' conditions subsistence guarantees exist. The paradox is that the characteristics Platteau gives for abnormal situations are normal features of Sahelian societies.

In the reactions of societies and individuals to crisis situations in the past as well as at present it also appears that social insecurity is the rule and that inequality remains deep. The poor no longer have access to social security mechanisms. Due to a lack of material base and the enforcement of power relations, social security deteriorates. This disintegration may depend on the stage and length of a crisis (Dirks 1980). In a case of extreme hunger among the Fula in Guinea individuals had to look after themselves (Downs 1991:39). Vaughan (1987) observed a breakdown of solidarity between husband and wife in a famine situation, resulting in a higher rate of divorce. Tension between the obligations to give to a wider group of kin and relatives and to keep one's own family alivė, and a greater incidence of stealing may arise (Spittler 1992:243). When Firth did his restudy in Tikopia the situation was so bad that rituals were not held any more (Firth 1959).[18] This breakdown of solidarity may be temporary. Laughlin & Brady (1978) label this the 'harmonica' effect. In a crisis situation solidarity is stretched and put under strain. When

the situation returns to 'normal' these relations are repaired and resume their function. This would mean that rules, norms and values concerning solidarity are not forgotten. As Spittler (1992) argued: '*se sont les institutions, les normes et les vertus qui jouent le role principal dans la maitrise d'une telle crise*' (ibid: 248) et '*le bon fonctionnement des institutions des Kel Ewey dans le domaine de l'approvisionnement et de la distribution en periode de crise empêche la famine d'atteindre la même ampleur que dans une autre société*' (ibid:248). According to Rahmato (1991) during famines solidarity is even strengthened in Ethiopia. The accounts of both these case studies, however, indicate that these judgments need some qualification in the light of the day-to-day reality described by both authors.

In every case of crisis and famine norms and values are put under heavy stress, and therefore social security relations, if existent, will at least change. The people have lived through the crisis and will value help relations in a different way. The crisis itself moulds the social relations to which people direct their actions. Though norms and values are well remembered and these rules may still help people to survive, new forms of relating to each other may develop. Shipton (1990:174) sees a change in rules, norms and ideologies in the process in which the centrifugal tendencies in groups get the upper hand as individuals try to ally themselves with new or emergent kinds of groups. Similar observations were made by Niezen concerning the reaction of the Sonrai to drought: 'Drought in the Sahel made villages more dependent on each other for mutual aid, but at the same time traditional kinship ties and other bonds of reciprocity were weak, making the religious community a strong alternative focus of solidarity' (Niezen 1990:421). Put in this perspective there is no back to 'normal' after the crisis; society and individuals have inevitably changed.

In such situations of rapid change people are confronted with existential problems. Belief systems, moral complexes and linked world views, and the like, may no longer give a satisfying answer to the uncertainties people have to encounter and to the social and ecological crisis. Information on this aspect of the crisis is almost lacking in the literature. In refugee studies some attention is given to this last aspect. Refugees are people 'without homes, people in bad health, people without rights, and quite often people without hope' (...) 'refugee's stories are those (...) of the hardships of suffering open hostility and feelings of uncertainty, of lost identities and broken futures' (Tieleman 1990:1). These metaphors may also be applicable to people who have lived through other crises. The 'mental' crisis people endure is also linked to how the poverty is perceived, and to what extent coping with crisis is part of life. This existential aspect of social (in)security is hardly mentioned in studies in this field. Nevertheless the feeling of being secure is an emotion embedded in culture (see Hastrup 1994). If these feelings of security are not experienced we can speak of an existential crisis. For the people in the Hayre this 'mental' or 'psychological' aspect of social security was certainly very important, and we will try to assess it by investigating the various (ideological) explanations of the situation given by the people involved, their cultural understandings of the crisis and insecurities.

In the situation of scarcity the Hayre endures nowadays we may expect many people to rely on the help and support that social relations may provide. The 'coping strategies' of these 'poor' then depend on social security mechanisms as allowed by the cultural understandings of society, and on access to social resources. As was shown in other studies

it is especially women, old people, families without cattle or workforce (health), the ill who are very vulnerable. In order to gain access to social resources and transform them into material capital, they will mobilize symbolic capital. If society can no longer support them, they have to look for support outside society or create new social relations. In this quest for support the poor will change their cultural understandings of the situation. The institution of marriage, which can be regarded as a social security institution for women, the coping strategies of the poor, and the care for the ill, are all fields that exemplify how in times of scarcity social security is influenced by cultural understandings, and *vice versa*, and how individuals try to create a living.

Synopsis of the book

Part I consists of one chapter (chapter 2) devoted to providing a historical and geographical background to the research area, and to the problems we are addressing. In chapter 2 the historical interplay between variable climatic circumstances, local political hierarchies and concomitant norms and values, and outside political forces such as the Maasina and Futanke empires, the colonial and modern state, will be assessed. This chapter will serve two purposes. It will give a historical explanation of the situation of Fulbe society at present, and the historical dynamics of the political, social, and ideological divisions of Fulbe society which are relevant for understanding the present situation.

Part II is about the role of the past in the present. Chapter 3 treats the historical and geographical heritage in the form of the spatial organization, ecological environment, economic organization and division of labour, of Serma and its surroundings, the group of temporary settlements where most of our fieldwork was conducted. This description will not be exhaustive as a number of elements will return in Part III. The various normative complexes and organizational frameworks which are typical for Fulbe society in the Hayre will be the subject matter in chapters 4 to 6. Chapter 4 contains a discussion of social organization at the local level. It will be shown that the larger organizational entities such as the community, the lineage and the chiefdom hardly play a role in daily life. Instead the Jallube and Riimaybe at the level of Serma are organized in small families which engage in agricultural production. Within these families mother-children units form the basic sources of care, redistribution of food and income, and other social security arrangements. Even these basic entities of society are extremely flexible from an organizational point of view. At a higher level the rainy season settlement, the village, and the lineage serve primarily political purposes, but their functioning has been imperilled in the course of history. In chapter 5 we discuss the organization of the religious community, which forms an integral though distinguishable part of daily life. As will be shown religious practices form an important focus around which people orient themselves. In chapter 6 it will be shown that other normative complexes, which may be labelled customary or emanating from the pastoral way of life, are also very important constituents of the identity of Jallube and Riimaybe alike. They form an inseparable whole with Islamic values, and people may shift

from one set of values to another. In this chapter we seek to clarify the meaning and content of these normative complexes through examination of Fulbe ethnography.

In part III, chapters 7 to 10, the focus is on the use and management of natural resources, i.e. how people deal with ecological and economic insecurity, and on increased resource competition. In chapter 7 a description will be given of day-to-day decision-making with respect to agricultural production. Special attention is given to the role of hazard during this decision-making process in the two years of our fieldwork. In the end non-agricultural or non-ecological considerations are shown to play a key role in these decisions. A more quantitative as well as qualitative analysis of the dynamics of agricultural production is undertaken in chapter 8. This analysis serves two aims. First, to see what patterns can be detected in the interplay between farming and herding strategies and the ecological circumstances, and second, to examine how people and groups of people manage to make ends meet, in a situation of chronic crop failure and lack of a subsistence basis in the form of a sufficient number of pastoral animals.

In chapter 9 we look behind the apparent failure of the herding and farming family to produce sufficient food for its members. We investigate the organization of labour, and the circulation of productive assets, such as livestock, agricultural land, and water reservoirs, between members of the family, and over the generations. The inherent contradictions in the rules and practices are shown to be exacerbated by the difficult conditions. This discussion will be continued in chapter 10, where the regulation of access to productive resources at the level of the community is the main subject. To understand tenure and territoriality we explicitly need to turn to contemporary history. In a historical review of the development of tenure regimes in Serma it will be made clear that these are extremely dynamic and have resulted in a large variety of forms of tenure and regulation of access to pastures. Social relations and organization are the key to an understanding of these tenure regimes. Together with their political marginalization the people have lost control over their resources.

Part IV, chapters 11 to 13, concerns the ways in which people who have been pushed out of agricultural production survive. The main focus is on how people manage social and cultural resources (social and symbolic capital), i.e. how they deal with the social insecurity which is the consequence of the declining resource base in the pastoral community. In a situation of chronic food shortage for those people who are still engaged in agricultural production, and still enjoy a certain measure of wealth, there is little capacity left in society to take care of the very poor. In chapter 11 the position of women in marriage is discussed. The erosion of social security derived from the marital bond leads to a weakening of the bargaining capacity of women. The option to fall back on their own family has become less attractive, for often their own kin are also often impoverished, and do not have the capacity to take care of a returning sister. Chapter 12 considers the position of those who can no longer take care of themselves, the very poor, the old and infirm. The various strategies, moral complexes, and symbolic capitals on which they rely are highlighted. Lastly, in chapter 13 the position of the sick is considered. In order to seek treatment the sick are dependent on the care and the resources of others. How these resources are mobilized, which normative and explanatory frameworks are used in this process, as well as the importance of symbolic capital, are discussed in this chapter.

In Part V, chapter 14, we take up again the question of the historical and ecological context, focusing on the interaction of the pastoralists with the state and the outside world in the situation of drought. The main vehicle for outside intervention in Serma has been a grazing scheme which was established after the drought of 1972-73. The outcome was almost predictable. The success of this undertaking has to be attributed to the fact that the Fulbe of Serma have been robbed of their autonomy and the capacity to control their own resources. In this project and its results for the people of Serma the new realities of power and powerlessness are dramatically revealed, illustrated by the damage the project caused to the scarce resources in the area. Finally in chapter 15 some conclusions of this study will be discussed.

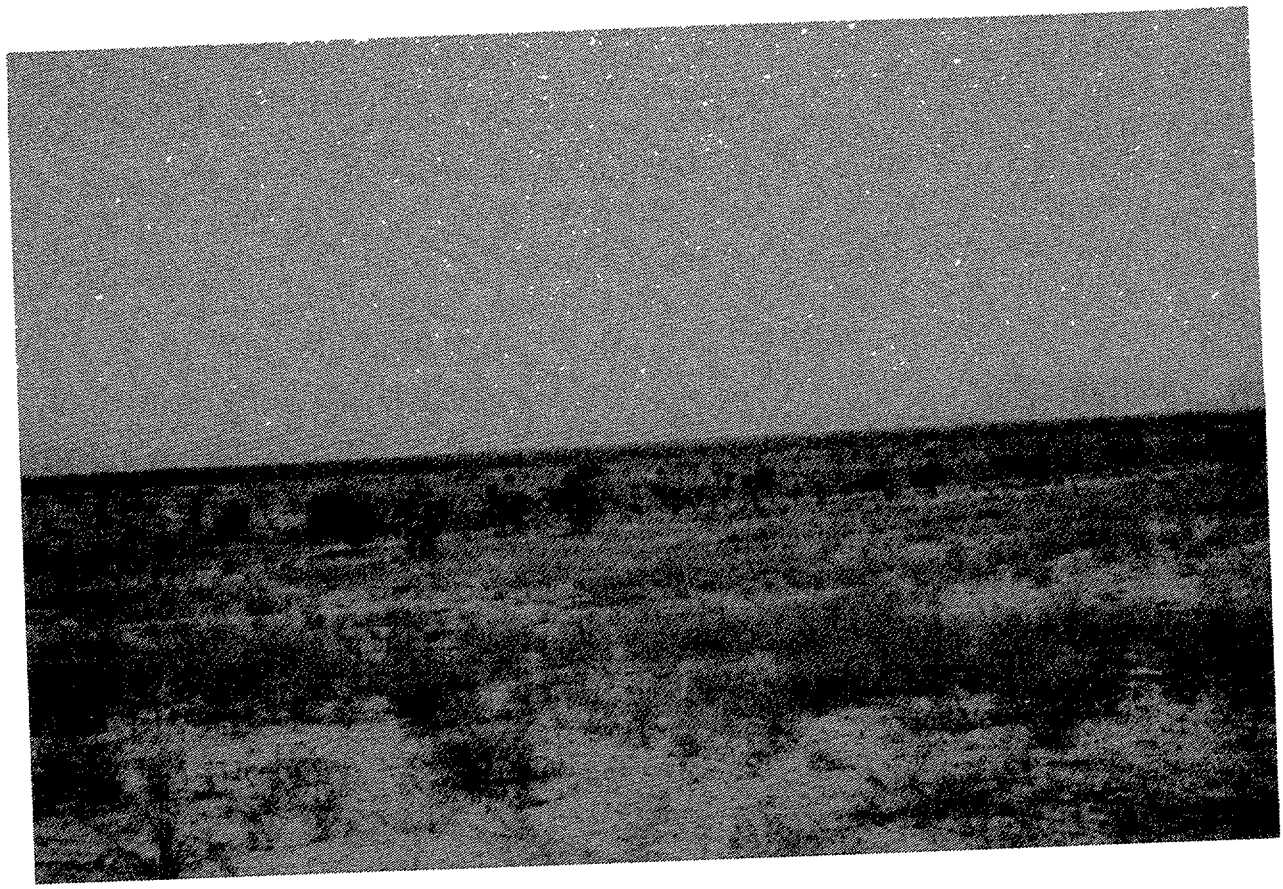
Notes to chapter 1

1. The names for the social categories are in fact occupational names: Weheebe = warriors, chiefs; Moodibaabe = Islamic clergy; Jawaambe = traders; Nyeeybe = artisans; Riimaybe = cultivators/slaves; Jallube = herdsmen. The name Jallube is not correct in this sense. Jallube is a clan name, to which the Weheebe also reckon themselves. However the occupational term for herdsmen would be egga-hodaabe, which is quite unapt for a text.
2. During the fieldwork we had an all-terrain vehicle for transport.
3. Douentza is the administrative centre of the *cercle* Douentza, one of the *cercles* of the region Mopti. Douentza has about 7000 inhabitants and has some governmental offices.
4. We gladly borrow this phrase from Scheper-Hughes (1992:4), who also defines her work in these terms.
5. Studies of change in religion or in belief systems or in rules, norms and values in pastoral societies are scarce. See for some examples Tapper (1979), and Barth (1961).
6. Adaptation is a term used in ecological anthropology to denote the responses of humans to structural and functional characteristics of their environment. According to Moran 'virtually all behaviour is a response that either serves to maintain a stable relationship to the environment or permits adjustments to changes in that environment' (Moran 1979:7).
7. E.g. Salzman 1980, Khazanov 1984, Azarya 1993, cf. e.g. Fleuret 1986, Lachenmann 1988, Swinton 1988, Niamir 1990, Frankenberger & Goldstein 1990.
8. This is not completely true. Economists such as Sen (1981) and Dreze and Sen (1990) have done much research on the anatomy of famines.
9. Khazanov (1984) even regards this factor as the principal weakness of pastoralism (nomadism as he calls it).
10. Given the cultural importance cattle still have among cultivators in the Mandara mountains in Cameroon (van Beek 1993a), this idea is not at all unreasonable.
11. Kessler (1994:274) defines human carrying capacity as 'the maximum level of exploitation of a renewable resource, imposing limits on a specific type of land use that can be sustained within a given area without causing irreversible land degradation within a given area' to be expressed in sustainable population densities.
12. A recent example of this approach is de Steenhuijsen Piters (1995).
13. In view of the enormous complexity, heterogeneity and uncertainties associated with land degradation in the Himalaya region (Thompson & Warburton 1988) also Ives (1988) has emphasized the need to give more attention to the role of uncertainty in land use developments. Henderson (1987) has discussed the problem of modelling environmental conditions in arid Western Rajasthan in response to the lack of clearly definable normal conditions.
14. For example de Groot (1992) labels such an approach 'actor-in-context' or 'problem-in-context'. Though there are many similarities between our approach and de Groot's, one of the basic premises of de Groot's approach is that he maintains a notion of system, regularity, and predictability.

15. In a different approach developed by the economist Amartya Sen, the concept of 'entitlement' has been coined to analyze the relation between access to food rations and survival in case of famine (Sen 1981).
16. This is particularly a problem in discussions concerning the management of common property or common pool resources, where proponents of common versus private property regimes claim that this or that property regime may or may not work under such and such circumstances (see e.g. Hardin 1968, McCay & Acheson 1987, Shepherd 1988, Lai & Kahn 1988, Ostrom 1990).
17. See for a literary example *The Songlines* by Bruce Chatwin.
18. Among the Dogon in Central Mali a number of core rituals have been postponed for years on end because of the bad food situation. The people were not able to save sufficient millet for the preparation of the required amounts of beer for the proper execution of the rituals (van Beek p.c).

Part I

The Past





2

The History of Natural Resource Management and Ideologies in The Hayre, 1400-1985

so ada anndi tariiki Dalla, a yalti hoddo Dalla, a laateke biddo Dalla
(if you have learned the history of Dalla, you are no longer a stranger,
but you have become a child of Dalla)

History and ideology

The saying indicates how important history is in the life of the inhabitants of Dalla. Learning about the history of Dalla and the Hayre was an important process in our integration into Fulbe society. Oral traditions are an important element in the construction of the identities of several groups in society. They provide the people with a historical frame, which plays an important role in the present problems and dynamics of daily life. History also showed us how political and ecological insecurities were linked in the past, and how the interaction between the two has resulted in the marginalization of the pastoralists in society (cf. Khazanov 1984). The past will also show us that Fulbe society in the Hayre underwent radical changes in the course of the centuries. In each period of history society is something different. The Pullo is a warlord, but also an agro-pastoralist or a woman, who sells her milk, who has to struggle very hard to provide his/her dependents with a living. These variations can be found not only over time but also in space, e.g. between Dalla and Booni, the two Fulbe chiefdoms in the Hayre, but also within the chiefdoms, going from the political centres in Dalla and Booni to the periphery, the Seeno-Manngo, where the Jallube pastoralists and some Riimaybe live. At the same time the chapter aims to present new historical material on an area which has not been treated in the literature on the grand empires which dominated the historical scene of Central Mali in the pre-colonial period. In this way we hope to contribute to historiography from the periphery rather than from the political centre, which may lead to new interpretations of power relations and the economic situation. Up to now this area of investigation has been largely neglected.[1]

The description of the economic, ecological and political insecurities people had to face, in the region and within their own society, and the way they met these insecurities, reveals a shift in who had to carry the burden. To understand this transformation more insight is needed into the changing power relations in Fulbe society in the Hayre. One important development in this respect is the formation of the Fulbe chiefdoms, Dalla and Booni, and

their incorporation into the various states that ruled Central Mali, from the 19th century Islamic state of Maasina to the independent 'modern' Malian Republic. How these empires influenced power relations, social hierarchies, and their symbols in the Hayre is narrowly related to the development of natural resource use and management, access to resources, and to the distribution of property between various groups in the society. The most recent changes in management of natural and social resources were triggered by the period of drought in the 1980s.

The formation of social hierarchies in the Hayre is retold in oral traditions and historical accounts. In these stories some elements are reinforced or reshaped in the process of telling the stories, as well as by the reality of the present. In this way an ideology is constructed about social life, including ideas about behaviour, labour, and social systems in the present that play an important role in the identity formation of different social groups in society. In the present, symbols of the past associated with Fulbe custom, Islam and cattle, are essential in the discourse about social reality.

The oral traditions of the Hayre are related to the historical accounts of the surrounding regions as written down in *tarikhs* from the time of the Gao empire, especially the reign of the Askias (1464-1591), and the invasion of the Moroccans (1591), as presented by *griots* from these areas (Bâ & Daget 1984), in the National Archives of Mali in Bamako and the French National Archives in Paris, and in literature written by scholars of West African history. The adjacent areas of the Hayre were the setting for the formation of states. The Hayre played a subordinate role in these written narratives. The area was and is a marginal area in a political as in an economic sense, and was heavily influenced by these larger states which sometimes incorporated the Hayre. These influences are very important for explaining the present position of pastoralists and the patterns of land use.

Historical stories about the Hayre were collected from various people, among whom the *griot* of the court of Dalla, Aamadu Ba Digi, was the most important. As *griot* he had an important ceremonial function during rituals and festivities. His task was to conserve the oral traditions and present those from time to time to the public. Aamadu Ba Digi was our tutor in the history of the Hayre. In the course of the research he became an intelligent investigator himself, searching for new data. He interviewed old people who would never have talked so easily with a white anthropologist from a far-away country. The death of Aamadu Ba Digi in the spring of 1993 struck us very hard. We lost a good friend, and the Hayre lost its last 'court *griot*' which means that another library has burned, as the saying of Aamadu Hampaate Bâ goes.

The *griots* were not the only conservators of history. In the Hayre the Islamic clergy has taken most of this task out of their hands. The clergy or *moodibaabe*[2] in Fulfulde are the scribes of the courts and one of their tasks is to record the history (of the elite). However, nowadays they no longer take this task very seriously. The capitals of the chiefdoms have been reduced to simple villages, and the *moodibaabe* have lost the political power they had in the past. This written history has nevertheless become the dominant version of history, but it does not exclude different interpretations of history by various social groups. The documents that are written by various *moodibaabe* of Booni, Dalla, and Nokara, are variations of the same story. Each group stressed those aspects of history that affirm the

power of their political patrons. For instance the sequence of the chiefs of the Hayre varies as much as there are written documents. The task of the *griot* is as ever to translate the history to the 'ordinary people', being story teller and praise singer. The written documents help him to 'remember' these stories.

The story that was told by Aamadu Ba Digi was a combination of the knowledge he gathered from the *moodibaabe* and of the history he learned from his own father. Telling stories was not his only job. Like most people in Dalla nowadays he was an impoverished cattle keeper and cultivator. He worked in his smithy and during ceremonies (e.g. marriages, name giving days, circumcisions) he played his public role consisting of the recitation of genealogies to honour the families performing these rituals. The telling of the detailed history was a new challenge for him, which he took up with pleasure. He checked the stories known to him from his father with the Islamic clergy, and interviewed old men and women. In this way he constructed the history of Dalla for us, a version of history from the viewpoint of the Islamic elite, as he himself was a very pious Muslim. Several times Islam and our refusal to convert to it were subject of discussion. This Islamic fervour of the *griot* clearly left its marks on his accounts.

Next to this type of information we found written documents (old letters, tax registers) that gave clues to the history of the Hayre. These documents were in the hands of the elite, chief's family, and the Islamic clergy. From the start of our research it was clear that the recovery of the documents would be a difficult task.[3] For example, the first month of our stay in the Hayre was largely filled with waiting for people to come and tell us something about the history of the Hayre, most of the time in the entrance hall of the concession of the chief of Dalla. It was an interesting time, because we met many people, but it also became clear that we would not obtain the documents immediately. And indeed we had to wait until the last month of our stay. Finally, we decided to offer people money for taking pictures of their documents. Muusa Dikko, a son of the longest reigning chief of Dalla and the half brother of the current chief,[4] gave us this advice. He saw no other way to recover the documents. We held some sessions in which people showed their documents, most often letters, and we took pictures of these documents, while a *moodibo* who originated from Nokara, told us their content.[5] Bura Moodi, the most important *moodibo* in Booni, was more cooperative. After the chief of Booni consented he read the *tarikh* of Booni for us in several sessions, and gave us permission to take photographs of his written documents.

The data gathered from the *moodibaabe* of Dalla and Booni, the chiefly families, and the *griot* of Dalla, were checked with the 'ordinary' people who were no specialists in history. Their versions of history served to counterbalance this elite's history. In this latter herdsmen (Jallube), slaves and women only play a role in the margin and as subjects of the political and Islamic elite. Contrary to what we expected, however, their versions of the Hayre's history did not differ greatly from the elite's history. For us their stories served as additional information, giving a better idea of the history from the perspective of the Jallube and former slaves.

For the history of the 20th century the sources mentioned above were important, but without the data from the archives we would have no good impression of the period. The understanding of the French colonial administrators of the situation in their colonies is

essential to comprehend how they directed change in this period. It is clear that colonialism caused fundamental changes, but it is hard to disentangle all the processes at work in a specific area or domain, because little historical research has been done. With respect to the history of use and management of natural resources even less material is available than concerning the political history, and the task of an historian is more complicated. Changes in this domain consist of the cumulative effects of the decisions of millions of actors. Causes and effects are often related in seemingly tautological ways and it is hard to specify the relation between this change and that cause. In oral traditions the political history is often better remembered, documented and written down, than the history of land use. The archives from the colonial period, which in a number of places are rapidly decaying, have remained largely unexploited on the subject of natural resource management.

In the following sections the Hayre is presented in its historical context. We distinguish five periods. First, we will describe the period in which the Hayre was invaded by the ancestors of the current chiefs. This period covers the 15th to the 18th century, when this part of Africa was dominated by large empires such as the Gao empire of the Sonrai. Next follows a period of consolidation of the chiefdoms in the Hayre under the reign of the Diina, the Fulbe empire in the Inner Delta (1818-1864). The following section describes the reign of the Futanke[6] during the three decades from 1864 to 1893. This period was characterized by oppression, exploitation, raids, plunder and wars. After the interregnum of the protectorate of Maasina (1893-1903), which was created by the French, the colonial administration took over (1903-1960). In this period fundamental transformations took place in the use of natural resources, and the social stratification of Fulbe society in the Hayre, the imprints of which are still present. Despite these changes the values, rules and norms that are presented in the stories about the history of the Hayre are highly esteemed by the Hayre people. The fifth period we discern in this chapter is the phase of independence roughly from 1960 to 1985. In this era the changes set in motion under the colonial regime were emphasized and reinforced.

Throughout all these periods the history of the Hayre was narrowly linked to its geographical characteristics, so that we have deemed it necessary to start with a section on the geography of the Hayre in relation to the wider geographical context. It will be shown that the presence of the Inner Delta, the presence of the mountain range, in relation to the vast plain of the Central Gurma, the climate, and the ensuing vegetation and possibilities for biological production and land use are important explanatory variables for the political and economic situation over the centuries, and the composition of the population of the Hayre. The glorious past as presented in the oral traditions is hard to reconcile with the political and ecological reality of today. It is therefore indispensable to develop this geographical perspective in order to put history, and later the present situation, better into its ecological perspective.

Geography

Geology of the Niger Bend and the Inner Delta

The Hayre is located in the centre of the Niger Bend (see map 1.1 and the map at the end). Although it is a dry land region and located far away from the river itself, the Niger and its floodplains are the dominant geographical entity, around which life in Central Mali oscillates.

In the Niger Bend several geological formations of different origin are found. The soils that were formed on the various substrates have quite distinct qualities that considerably influence the possibilities for use. The floodplains along the river, of which the Inner Delta is the most important, are of fluviatile quaternary origin (Gallais 1967). The soils in these floodplains are clayey or loamy but not very fertile because the water of the Niger contains very little nutrients (Harts-Broekhuis & de Jong 1993:76). The dry land areas in the Niger Bend, collectively called Gurma, border on the Mossi block, a very old geological formation, forming a gently sloping landscape (van Staveren & Stoop 1985).[7] North of the Mossi block the formations of the northern Gurma are found. To the north-west the terrain is dominated by dunes of quaternary origin. These dunes alternate with depressions in which clayey soils can be found on a schistose substratum (Urvoy 1942:100, Gallais 1975:35). In this sub-region, that stretches from the mountain range in the central Gurma, which forms the Hayre, to the most northern point of the river Niger a number of semi-permanent lakes can be found which are fed by the tributaries of the Niger (Gallais 1975:35). At present these lakes hardly contain any water. The rest of the northern Gurma, named Haut-Gurma by Gallais (1975:32-33), is formed on an argilo-schistose substratum, resulting in a gently rolling landscape. More to the east bands of quartzy sandstone occur, which are more resistant to erosion, so that relief is more abrupt in this area.

In the central Gurma two rocky formations dominate, the Bandiagara plateau and the mountain range that extends from the plateau to Mount Hommbori. The Bandiagara plateau consists of sandstone, and towers in the east and north to 200 metres high above the Seeno-Gonndo plain and the flatlands of Bore to the north. The plateau slopes gently down to the valley of the Niger and Bani in a south-western direction (Daveau 1959:9-25). The mountains, from the plateau to Mount Hommbori, which form the northern part of the Hayre, are formed of quartzic sandstone (Serpokrylow 1934:9), and form the first agro-ecological zone of the Hayre. The adjacent plains, the second agro-ecological zone of the Hayre, are formed on a schistose or dolomitic substratum (Gallais 1975:31-32). The soils of these plains consist either of massive laterite or soils ranging from gravel to gravely clayey-sandy soils. The latter class of soils are the result of three processes: laterization of fluviatile material; weathering of laterite; and the import of dust by the wind (Serpokrylow 1934:6-7). These terrains are covered with a dense bush altering with denuded areas. On aerial photographs this results in a tiger-skin pattern, hence the name tiger bush or *brousse tigrée* in French. These plains form the second agro-ecological zone of the research area.

The last geological sub-areas that can be distinguished in the Gurma are the Seeno-Gonndo, Seeno-Manngo and Seeno-Monndoro plains. These plains consist of dunes of eolic

quaternary origin. The dunes are oriented in the east-west and the northeast-southwest directions. Most of the dunes do not move, and the soils range in colour from yellow to grey-yellow and even reddish indicating the presence of iron. The soils consist of sand, with some clay and loam (5-10 %) (Hiernaux et al. 1984). These dunes are overgrown with grasses and herbs, and few trees, which is in sharp contrast to the tiger bush area. The Seeno-Manngo and parts of the Seeno-Monndoro constitute the third agro-ecological zone of the Hayre.

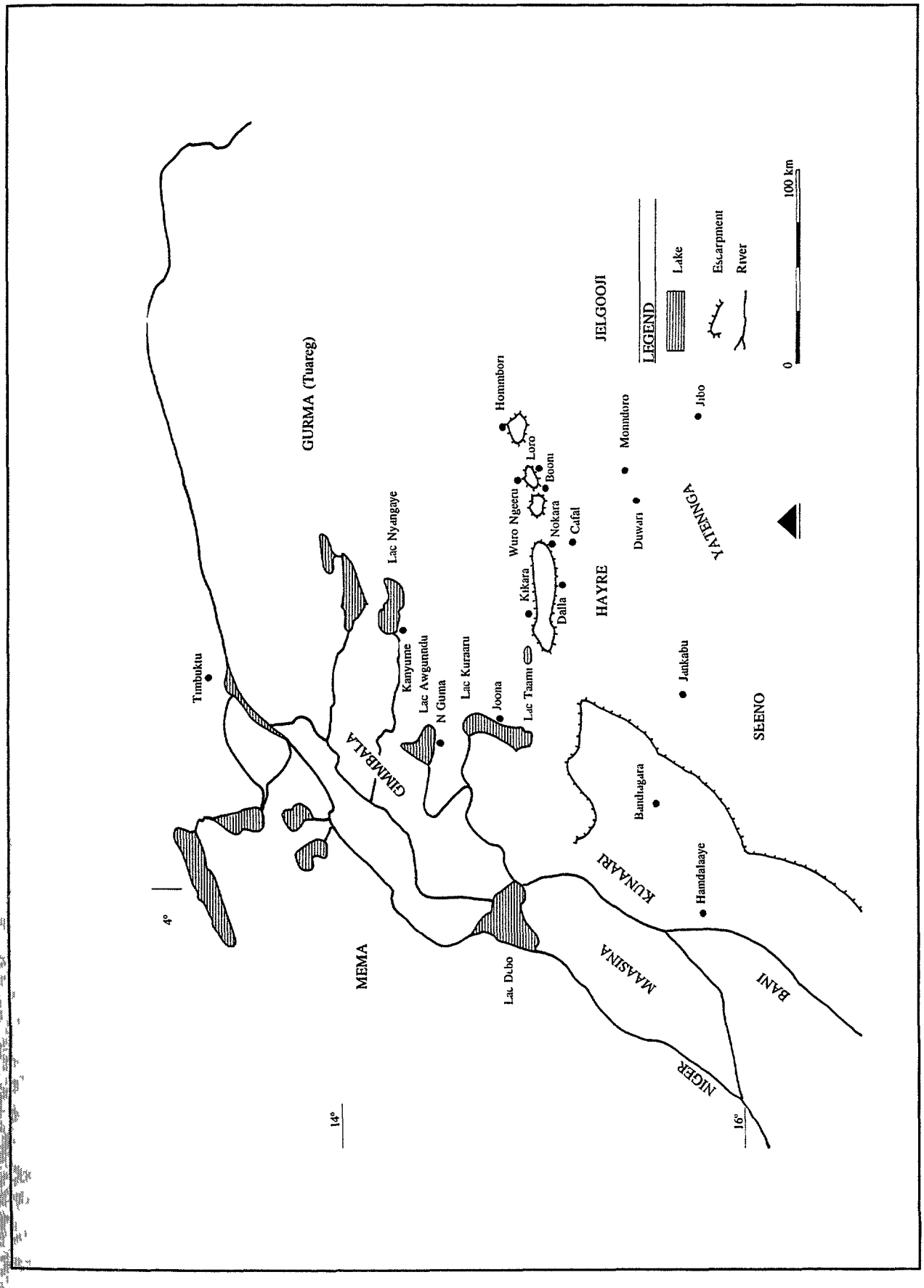
Given the climate and the mother material of the soils the productive potential of the region is low. The small amount of rainfall limits the growing season to no more than three months except for the Inner Delta. The high temperatures combined with low rainfall and the paucity of nutrients in the soil lead to a low content of organic matter, extreme weathering and a low capacity to bind nutrients required for the growth of crops and pastures.

The ecological relations between the Hayre and the Inner Delta of the Niger

The Inner Delta is the most important of the floodplains in the middle course of the Niger. The Delta and its surroundings, the Mema on the left bank and the Gurma on the right bank, correspond roughly to the fifth (Mopti) region of Mali and some parts of the region of Timbuktu (see also Harts-Broekhuis & de Jong 1993). In the remote past a population of fishermen had been attracted to the Inner Delta, the vast flood plain of 20,000 km^2 in surface area,[8] located between 14° and 15°30' northern latitude, that forms an unusually rich ecosystem for this part of Africa. The Delta provides ample opportunities for fishing, grazing and cultivation. At present all these activities take place in an amazing variety of management systems that are all adapted to the rhythm of the floods, which overflow the area each year in the rainy season and leave behind fertile land and good grazing when they recede in November. In February more than 1.5 million head of cattle and numerous sheep and goats may be found on the pastures of *burgu* (*Echinochloa stagnina*). Other areas are used for the cultivation of flood rice (*Oryza glaberrima*), and more recently modern rice varieties in areas where water levels can be controlled.[9]

An important consequence of the seasonal character of the floods is that the Inner Delta as a pastoral grazing system cannot exist on its own. When the area is flooded the livestock of mainly Fulbe and Tuareg has to leave the Delta to seek refuge outside the area on the surrounding dry lands of the Mema to the west and the Gurma to the east. Any empire in this part of Africa, that was dependent on the pastures of the Inner Delta for livestock keeping, had to cope with this fact and to find a way to control and exploit the dry lands. At present herds originating from the Inner Delta may be found as far as Hommbori and Monndoro in the east seeking rainy season pastures. Other pastoralists direct their herds towards the Bandiagara plateau and the areas north of the plateau and the mountain range east of the plateau. When the water resources in these dry lands are exhausted shortly after the wet season, the herdsmen direct their herds back to the Delta. Notably the Seeno-Manngo, which belongs to the Hayre, the Gurma and the Mema cannot be fully exploited

Map 2.1: *Historical map of the Hayre and surrounding areas.*



after the wet season, due to the absence of watering points for the animals. Before entering the Delta in November and December the herdsmen spend some time with their herds in the waiting areas at the borders of the Delta, awaiting permission to drive their herds over the Niger or its tributaries such as the Bani.

So, the movements of herds around and in the Delta concern the whole of the region of Mopti and even beyond in the *cercles* of Niafunke, Gundam, and parts of the central Gurma belonging to the region of Timbuktu. In between these pastoral movements a large sedentary agricultural population practises the cultivation of cereals, predominantly millet and sorghum, in the dryland areas. In the Inner Delta of the Niger Marka, Riimaybe (former slaves of the Fulbe) and Sonrai practice rice cultivation. Nomadic groups of fishers, Bozo and Somono, exploit the fish that breed in the Inner Delta. In the drier areas Bamana farmers, originating from the Segou empire, cultivate millet. The Dogon inhabit the Bandiagara plateau and the Seeno-Gonndo plain, working their vast fields of millet and beans. Wherever possible they also cultivate onions, tomatoes, and peppers, during the dry season in small gardens near natural water reservoirs and small dams on the plateau, constructed with the help of foreign agencies. In the Gurma Bella[10] herd small ruminants and gather wild grains such as wild fonio (*Panicum laetum*) and 'cram-cram' (*Cenchrus biflorus*).

At present management of the Delta faces increasing problems. Due to the decrease of the floods since the onset of the droughts the area that overflows in the rainy season has diminished considerably. As a consequence fewer pastures of *burgu* are available for the herds that visit the Delta. The total pasture area has further diminished because of the encroachment of rice cultivators (Marka and Riimaybe) in pasture territories (Gallais 1984:175,183-185, RIM 1987:76). More and more pastoralists from the dry lands direct their herds to the Delta in the dry season. For example numerous Fulbe from the Seeno-Gonndo now have their base in the Delta, while in the past their movement was the reverse. Their pastures on the Seeno-Gonndo have nearly all been occupied by Dogon cultivators (Gallais 1984:190-191). These changes create numerous conflicts between cultivators, pastoralists, fishermen, and government officials, because everybody wants to make use of a diminishing stock of natural resources (Gallais 1984, Moorehead 1991).

The *cercle* Douentza and the Hayre[11]

The Hayre proper consists of the steep cliffs, which tower 200-800 metres high above the adjacent plains, east of the Bandiagara plateau between 120 and 260 kilometres from the eastern shore of the Inner Delta of the Niger. Administratively it belongs to the *cercle* Douentza. Within the fifth region the *cercle* Douentza is by far the largest administrative unit with its surface area of one quarter of the region of Mopti (RIM 1987) (see map 2.1). Population density is the lowest of all the *cercles* of the fifth region. After the drought of 1983-1985 the number of inhabitants dropped to 124,857 in 1986 (5.4 inhabitant per km^2) due to the enormous migration (Hesse & Thera 1987:18). Population densities vary from 10.3 inhabitants per km^2 in the central arrondissement to 2.8 and 3.4 inhabitants per km^2 in

the arrondissements of Monndoro and Booni.[12] Mean annual rainfall in the *cercle* varies between 401 mm per annum in the *cercle* capital Douentza to 349 mm in Hommbori and 264 mm in N'guma the most northern weather station in the *cercle* (Hesse & Thera 1987:15-16). These are after-drought means. Before the droughts average rainfall was roughly 100 mm higher per annum. The most important characteristic of rainfall figures is the high variability over the years and within the region. The standard deviation in total rainfall figures is more than 30 per cent, and the correlations between rainfall figures from various stations in the *cercle* are rather low (Hesse & Thera 1987:16,76). An additional problem is that the decline in rainfall concentrates in the month of August, which is the most critical period for the development of the millet plants, the staple crop.

The northwestern part of the *cercle*, called Gimmballa locally, stretches from the lake system in the north of the *cercle*, with lac Koraru and lac Niangay, to the northern escarpment of the Bandiagara plateau. The population in this area consists of Fulbe agro-pastoralists, Riimaybe cultivators, Bamana and Sonrai cultivators and some Dogon villages at the escarpment. The landscape changes from almost desert-like scrub on sandy soils in the north to dense bush land, called tiger bush, on the clayey soils in the south of the area. At present the lakes hold water only temporarily and are no longer fed any more by the tributaries of the Niger (Hesse & Thera 1987).[13]

The central part of the *cercle* consists of the mountain range and its adjacent plains north and south of the mountains. In and around these mountains a very diverse population of Sonrai, Dogon, Hummbeebe, Fulbe and Riimaybe has established its villages in the course of the centuries. The relatively flat areas at the top of the mountains are fit for cultivation, but offer somewhat limited possibilities for the grazing of cattle. The most crucial resource in the mountains is the presence of permanent water resources that allow permanent settlement. On the Gandamia plateau numerous villages of Riimaybe, Dogon and Sonrai can be found. The inhabitants practise the cultivation of millet and sorghum and keep small ruminants. Recently they have started growing dry season crops like tobacco near permanent water resources, and tree crops like bananas and mangoes, e.g. in Kikara, a large village of Sonrai (Gallais 1975). A number of the villages of Dogon and Sonrai have decided to move their dwellings down to the foot of the mountains. More to the east four groups of Dogon villages can be found in the block mountains of Sarnyéré, Tabi, Ella and Looro, comprising 15 villages. This group of Dogon is known in the scientific literature as an isolate, because they do not seem to have genetic exchange with other populations in the region (Cazes 1993:1), and have limited ecological, economic and social links with the outside world (Gallay 1981:143). However, this self-chosen isolation in the mountains, to preclude the attacks of slave raiding bands, ended with colonialism. At present most of these Dogon have converted to Islam, and the inhabitants of several villages have descended to the plains.

At the foot of the mountains and in the adjacent plains most villages of Fulbe and Riimaybe and some villages of Hummbeebe can be found. Most Riimaybe live in separate villages either on the slopes of the mountains or somewhere hidden in the rugged terrain of the flats. The Fulbe have two kinds of settlements: sedentary villages of mud-brick houses where the elite lives with its servants, and related caste groups, and temporary settlements

of straw huts, inhabited by the Jallube pastoralists. In some villages both types of housing can be found. At present the villages of mud-brick houses consist largely of Riimaybe, Dogon and Hummbeebe. In the course of the 20th century almost all the camps of pastoralists moved to the prairies of the Seeno-Manngo. They set up their rainy season camps in the border area between the tiger bush and the dunes, locally called Daande-Seeno. After the droughts the cultivators of the mountain zone have cleared fields on the flats covered by tiger-bush. These fields are mainly located in the wetter parts near temporary ponds in the wet season. In this way they obstruct access to water and grazing for the pastoralists. The remaining pastoralists have all taken up cultivation to compensate for the loss of livestock during the droughts. Dry season water resources in the areas covered with tiger bush are less abundant, so that the opportunities for exploitation are limited to the rainy season and a short period afterwards. Where this area of tiger bush borders in the south on the Seeno-Manngo and Seeno-Monndoro a number of settlements of Fulbe, Riimaybe, Dogon and Hummbeebe were established in the course of this century. This colonization area, called Daande-Seeno, may be regarded as part of the Hayre. Population density is low in this area due to the scarcity of water resources. Groups of sedentary cultivators of Hummbeebe, Riimaybe and Dogon have settled only around deep wells of 70-80 metres depth. The Seeno-Manngo is used as pasture area by Fulbe in the rainy season, and around permanent water resources in the dry season. These Fulbe also cultivate millet fields near their wet season settlements. On the Seeno-Manngo no habitation sites can be found, only southwards around Monndoro and Duwari (*cercle* Koro). Monndoro, Duwari and Dinanguru are large sedentary villages of Hummbeebe cultivators, who settled there in the 19th century.

Taken together the *cercle* of Douentza is at present one of the poorest areas in Mali. Although we have no estimates of average income in the *cercle*, the high rate of permanent and temporary migration and the persistent cereal deficits leading to localized near-famines every year indicate that living conditions are poor. The population of the *cercle* is hardly able to produce sufficient cereals in normal years, let alone in the drought years of the past decades. The current poverty of the population in the *cercle* can also be demonstrated by the dramatic decline in livestock numbers in the *cercle* of Douentza. Gallais (1975:59) estimates the number of cattle in 1970 at 300,000 head, plus 100,000 head of cattle grazing in the area in the rainy season. From then on things get worse. Zborowski (cited in Röell 1989:21) reports a decline of 26 % in numbers of cattle of between 1967 and 1984. After the drought of 1984-85 only 62,000 head of cattle remain (RIM 1987:66). Total losses of cattle in this drought were 120,243 (RIM 1987:54). The number of goats and sheep in 1986, 242,658 goats and 58,743 sheep (RIM 1987:66), seems to have declined less. This should not lead us to the conclusion that the economic situation was much better in the past. We will see later on that the threat of famine and poverty has always been present in the 19th and 20th centuries.

Apart from cereal cropping and livestock keeping there are hardly any economic activities worth mentioning. In a number of Dogon villages at the northern escarpment of the Bandiagara plateau onions, vegetables and tubers are grown in small irrigated gardens. In the mountains there is some tobacco growing. There are no industries and government

employment is limited to Douentza, the *cercle* capital, and the arrondissements headquarters. The *cercle* Douentza, just as most of the region of Mopti, with the exception of its twin capital Mopti-Sevaré, had less than its share in development oriented employment. Most foreign donors and NGO's concentrate their efforts in the south of Mali or in irrigation works in and around the Inner Delta of the Niger, where faster and more spectacular results can be obtained from development investments.

The health situation in the region of Mopti is very bad. Mortality among both urban and rural populations of the region is higher than in other regions of Mali. In 1976 average life expectancy at birth was 39 years, almost nine years less than that of the average Malian citizen. Population growth in the period 1976-1987 was 1.07 % annually, which was much less than calculated for earlier periods (Harts-Broekhuis & de Jong 1993:83,85). Child mortality in the first year reaches 200 per thousand in some areas of the region (van den Eerenbeemt 1985).

Within the region of Mopti, Douentza is on the lower end of the scale with respect to health care. Medical infrastructure is very poor. The health service in cooperation with the 'Save the Children Fund' (SCF) is trying to improve this infrastructure. In Douentza town there is a small hospital with a laboratory and an operating theatre. There is a state-run pharmacy in Douentza and in addition a pharmacy connected to the hospital run by SCF. In the arrondissement capitals and in Dalla there are dispensaries run by a nurse. In some villages there are mid wives and rural health workers. However, the general condition of the dispensaries and the hospitals in the Gurma is bad. Hygiene is a precarious subject and the buildings are badly equipped (Randall 1993a:285). Accessibility of the hospital and dispensaries is poor, and especially for the poor in isolated villages the distance to modern health care is too great to cover. Pastoralists who cross the region hardly ever make use of health care (Randall 1993a:293).[14]

The establishment of Fulbe hegemony, 15th-18th century

Political situation

The history of the Hayre is closely linked to the history of the Fulbe in the Inner Delta of the Niger. In a document about the origin of the Fulbe in the Inner Delta kept by Bulo, the eldest son of the former chief of Dalla, the origin of the Fulbe chiefs of the Hayre is explicitly linked to the Fulbe in the Inner Delta. According to Brown (1964:2) the Fulbe entered the Inner Delta of the Niger during the 15th century (see also Gallais 1967). They established their hegemony over the area through the installation of a flexible political structure, based on lineage organization led by chiefs or warlords, *ardube* (sg. *ardo*). From the Inner Delta they spread to the west and the east.[15] The Fulbe mentioned in the document of Bulo may belong to these migrating groups of Fulbe. According to his story some descendants of the first Fulbe *ardo* in the Inner Delta settled in the Hayre and formed raiding bands. This long history of Fulbe hegemony in the Inner Delta and in the Hayre is

also confirmed by the *tarikhs* of the Gao empire. In these *tarikhs* it is reported that Fulbe were present in the Gurma in this period.

One of the main influences on the establishment of Fulbe hegemony in the Hayre was the Gao empire, especially the reign of Sonni Ali and the Askias (1464-1591), with Gao as its capital. This empire stretched from Gao-Timbuktu in the north to the northern frontier of the Mossi-kingdoms, south of Bandiagara. The Hayre was situated in its southern sphere of influence. The various references to conflicts between Fulbe and Sonrai in the *tarikhs* and in the story of Bulo indicate the political unrest and insecurity of the time. The relationship between Sonrai and Fulbe was characterised by antagonism, both were raiding and plundering to secure their existence. The Fulbe and the Zaghani, another pastoral population, were the main opponents of Sonni Ali, the king of the Gao empire, in the Gurma (Tarikh es-Soudan 1964:115-116). Sonni Ali undertook an expedition against the Hayre from Bamana country. From his foothold, Kikere, north of the Gandamia mountains, the mountainous area up to Hommbori was conquered (Tarikh el-Fettach 1964:86). Sonni Ali did not seem to like the Fulbe and wanted to eliminate them (Brown 1964:39).

> Il (Sonni Ali) n'avait pas d'ennemis qu'il haissait aussi vivement que les Peuls et ne pouvait voir un Peul sans le tuer quel qu'il fut, savant ou ignorant, homme ou femme. Il n'acceptait aucun savant Peul ni dans l'administration politique ni dans la magistrature. Il décima la tribu de Sangaré (les Barri[16]) et n'en laissa subsister qu'une fraction infime, laquelle put se rassambler à l'ombre d'un seul arbre qui suffisait à l'arbriter tout entière. (Tarikh el-Fettach 1964:83)

The Sonrai regarded them as a threat, a rebellious force, against their empire. In the document kept by Bulo this is also emphasized. It describes a rebellion of the Fulbe in the Hayre against the Sonrai prince Askia Mohammed, which was won by the Fulbe (see also Sanankoua 1990:22-23). Fulbe, Tuareg and Sonrai mutually raided each other (Tarikh es-Soudan 1964:182). It seems the Fulbe were able to keep a measure of independence of the Sonrai (cf. Brown 1964). But many of them were captured in raids and razzias. These Fulbe probably were incorporated as slaves in the Sonrai empire, herding the cattle for the Sonrai. Some Fulbe lineages in the Hayre still trace their origin to the Sonrai, and the names of several Fulbe lineages in the Hayre are derived from the Sonrai language.

In 1591 the Moroccans defeated the Sonrai. The Gao empire had been declining steadily due to internal warfare. The disappearance of the trade from West Africa due to this decline was of growing concern to the Moroccans and they aimed at controlling the salt mines in the north of the Gao empire, close to Timbuktu (Fage 1969, Brown 1969). Their reign did not change the situation of insecurity in the area. Instead the Moroccans continued to oppress and raid the Fulbe (Tarikh el-Fettach 1964:337, Tarikh es-Soudan 1964:430-431), and the situation may even have become worse.

> ... enfin, après avoir établi notre campement, le pacha envoya un escadron de cavalerie qui razzia quelques Foulanes, fut un maigre butin de boeufs et revint vers nous, le mardi soir. Le lendemain nous étions de nouveau en marche dans la direction du mont Hombori. (Tarikh es-Soudan 1964:430)
> Pendant que l'on était encore là, le pacha envoya un corps de cavalérie razzier les Foulanes; cette expedition réussit et ramenait comme butin un certains nombre des boeufs. (Tarikh es-Soudan 1964:431)

Under the Moroccans the Inner Delta fell into a state of anarchy, with Fulbe *ardube* striving against each other (Swift 1983:i). In the areas bordering this area, like the Hayre, the situation must have been the same. The Fulbe (and other groups) secured their lives through raids and wars, which necessitated an organization under warlords, the *ardube*. Herding was a risky affair.

Political insecurity and disaster are closely linked. When considering the occurrence of disasters we must take into account that the political situation in the first half of the era of domination by the Gao-empire was relatively calm compared to the periods after it (Cissoko 1968:812). The Tarikh el-Fettach and the Tarikh es-Soudan report no climatic disasters, only epidemics in the Niger Bend during the 16th century. This should not lead us to think that there were no droughts or disasters in this period, for in the chronicles of the city states Kano and Bornu in northern Nigeria, two periods of famine with a duration of eight years each are mentioned (Alpha Gado 1993:32). It means only that the empire prospered and that the consequences of drought could be accommodated with relative ease. In the peripheral regions of the empire, like the Hayre, where turmoil ruled there were probably more disasters. The era of chaos during the 17th and 18th century was marked by periodic droughts, famines and epidemics. The effects of these calamities were more severe because of warfare and plunder. Trade systems on which many areas in the Sahel relied for their provision with cereals were disrupted (Cissoko 1968:814-815). In his account of famines in Oualata and Tichit, Tymowski (1978:49) explicitly links the political insecurity with the lack of food and the disrupted economy. So, one is led to the conclusion that in addition to the climatic conditions, political insecurity was a major determinant of famine and crisis. This conclusion is of course tentative, because we do not have further and reliable information about the living conditions of the population.

Social differentiation

The insecure situation in the 17th century may explain the acceptance by the population of the Hayre of an incoming group of Fulbe who subsequently took over power in the Hayre. They were able to provide the protection that was so badly needed. These *ardube* used the same techniques as their opponents, they formed their own bands to pillage the area.[17]

The story of Aamadu Ba Digi, the *griot* of Dalla, starts at this point in history, when an immigrating group of Fulbe from the Inner Delta established its power in the Hayre. This must have been in the middle of the 17th century.[18] The story tells us that the Fulbe group which nowadays forms the elite of the Fulbe of the Hayre are the descendants of three brothers, Siire Jam Allah, Ali Jam Allah and Maane Jam Allah.[19] They were *ardube* but in the Hayre they are called the Weheebe.[20] They entered the region as hunters with horses and dogs.[21] They came from the west, and settled near lake Taami, north of the Gandamia plateau (see map 2.1), where they encountered a group of nomadic Fulbe, of the clan Jallube and the lineage Taamankoobe.[22] Between them an understanding developed, the Tamankoobe received the three brothers as their guests and gave them presents and every evening some milk. In turn the three brothers gave them the game they hunted.

One evening the Tamankoobe herdsmen returned home without cattle. During the day they had been raided by Tuareg from the north. The three brothers were waiting for the milk, but there was no milk. After they were told about what had happened, they decided to help the Tamankoobe, and mounted their horses to recapture their livestock from the Tuareg. With the help of Allah they surprised the Tuareg and brought home the cattle of the Tamankoobe.[23] In another version of the story it was not Allah who helped the Weheebe but a rifle, which was their only possession. They scared the wits out of the Tuareg (and the Tamankoobe) with this unknown weapon.[24] The Tamankoobe were impressed by the power and strength of the three brothers and they decided to stay together, and accept their leadership for the future. This new relationship was confirmed by the marriages of the three Weheebe brothers with Jallube women. From then on their rule was accepted by the nomadic Jallube.

This pact included a division of labour between Weheebe and Jallube, which is explained by the following story told to us by a Jallo.[25] The children of the Weheebe and the children of the Tamankoobe had a conflict over the distribution of cattle. The Weheebe claimed cattle, which the Tamankoobe did not give. The conflict ended in a serious fight. Eventually they decided to let the Tamankoobe in the bush have the animals, and to endow the Weheebe with the power to rule, on the condition that the Weheebe had the right to ask for cattle whenever they needed some. This developed into an obligation for the Tamankoobe, with the sanction of breaking the bond between them and the Weheebe.

This pact has remained in force until today. Another important binding element is formed by the kin relations between the Jallube and Weheebe, which were formed by the gift of Jallube women to the three Weheebe brothers. That this relationship dates from the 17th century, and that Jallube as well as Weheebe are endogamous groups today, does not diminish its value. In the kinship terminology of the Fulbe they are all siblings, and thus equal. The Weheebe as well as the Jallube stress the equality in their relationship. Some elements in the story, however, contradict this equality. The Weheebe come from outside, they were hunters. In West Africa hunters are associated with magic, they are people of the bush, outside the civilised world. This makes them powerful. The magic power of the Weheebe chiefs is also indicated by the rifle. The help of Allah, as the *griot* related, indicates that the Weheebe have some special features which make it worthwhile to respect them (cf. Terray 1988).[26]

From then on the Weheebe are ascribed leadership qualities and they are presented in the written documents as chiefs, first nomadic and later sedentarised. The eldest of the three brothers was Siire Jam Allah, the first chief of the region from Kaanyume north-west of the Hayre to Jelgooji in the south-east. His brother Maane Jam Allah, who succeeded him, migrated through the region, he did not settle in one place. He ruled as a Fulbe *ardo*. Later on this region was divided between his descendents into three smaller nomadic 'chiefdoms': Kaanyume, Joona, both in the Gimmballa, and the Hayre. Alu Maane, a son of Maane Jam Allah, was the first chief of the Hayre. The establishment of these chiefdoms and the recognition of the leadership of the Weheebe by the inhabitants of the Hayre is still regarded as the basis of the social differentiation of Fulbe society in the Hayre.

Islam in the 18th century

In stories on the origin of the Fulbe in West Africa Islam plays an important role. The ancestor of all Fulbe is believed to be a warlord of the prophet Mohammed who married a Malinke woman (cf. Tauxier 1937:31-32,35-36, Brown 1964, Robinson 1985:7, Botte & Schmitz 1994:12).[27] Other sources indicate that the Fulbe have indeed been in contact with Islam for a very long period. The first contacts were established through the courts of the big savannah empires, via trade, markets and trade routes (cf. Trimingham 1959, Brown 1964, Lewis 1966:36). The political elites of the Inner Delta of the Niger, and most probably the Hayre, must have had contact with Islamic scholars in this way.

Furthermore the state of chaos that followed the conquest of the region by the Moroccans was possibly compensated by an intensification of 'the Islamic faith in the disturbed regions and increased missionary works therein' (Brown 1964:72). Moreau (1982:114) also argues that after the collapse of the Mali[28] and Gao empires the Islamic clergy (*moodibaabe*) did not lose their role. They were the forces behind the spread of Islam in the countryside. According to Brown (1964) in the 16th century '... there was an indigenous religious class in Maasina with influence at the court of the *ardube*. (...) Islamic law was being observed and practised, if only at the *ardo*'s court' (ibid:68). The establishment of this religious class was possible because the region was wealthy and a stratified society had already been established (Moreau 1982).

The story told by Aamadu Ba Digi about the first contacts of the Hayre with Islam should be understood in this context. These contacts, according to him, were established in the period of the foundation of the Fulbe chiefdom of Alu Maane in the Hayre.

> An Islamic scholar from Youvarou (of the clan Yaalarbe) crossed the Hayre on his way to Mecca, on a pilgrimage. He stayed in the camp of Alu Maane (north of Wuro Ngeru). Alu Maane became curious about this man and asked him to stay in the Hayre to teach his people Islam. To persuade him he reasoned that this may be just as good as going on pilgrimage and he offered him all kind of gifts. Initially this could not change the mind of the *moodibo*, named Moodi Tawhiidi, but finally he accepted the honour shown to him, and was tempted to take the offer of Alu Maane. Before he could accept, he had to check the intention and honesty of Alu Maane. Thus he asked Alu Maane to give him his most beloved wife, his paternal cousin. Alu had to divorce her and leave her three months in seclusion as Islamic law prescribes. Alu Maane asked the opinion of his wife who agreed to marry this important stranger. Thus Moodi Tawhiidi married the paternal cousin of Alu Maane and stayed in the Hayre to teach Islam. Moodi Tawhiidi explained to Alu Maane why he had decided this way. Their children would now have the same mother, which would avoid all kind of troubles. Since that time the Islamic faith has not left the Hayre.

In this story Islam is depicted as a religion of the Hayre court. It is very difficult to guess how widespread Islam was in the Hayre in this period. There is controversy about the time when this event must have taken place. It is difficult to assess the date of Moodi Tawhiidi's entrance into the Hayre. His genealogy (constructed with the Imam of Dalla) indicates that he possibly lived in the period of Alu Maane, but it may have been manipulated in order to make it congruent with the genealogy of Alu Maane or *vice versa*. Thus the Moodibaabe (the religious elite) and Weheebe situate the introduction of Islam into the Hayre at the end of the 17th century. Other informants suggested that Moodi Tawhiidi only came into the

region in the 19th century.[29] What is important is that most people subscribe to the story of Aamadu Ba Digi. In this way the Fulbe of the Hayre claim to have chosen their own way in Islam, independent of the later Fulbe empires based in the Inner Delta.

The invasion of the Weheebe, the installation of a 'Weheebe court' and the Islamization of this court, mark the beginning of their presence on the political scene of the 17th/18th century for the inhabitants of the Hayre. The Hayre is still known by outsiders as 'the Hayre Alu Maane'. And during ceremonies and festivities the *griots* sing the genealogy of the chiefs descending from Alu Maane.[30]

The intervention of the Weheebe may have brought a situation of relative peace and order to the area. At least it ended the strife between the different Fulbe lineages living in the Hayre in that time. Nevertheless insecurity in the area did not disappear, as a description of the activities of a Fulbe *ardo* in the Hayre by Bâ and Daget exemplifies.

> *L'armée de Babel Kassoum, composée de 231 fantassins et 9 cavaliers, semait la terreur dans les falaises de la région de Hombori, Douentza et Bandiagara. Elle était réputée pour n'avoir jamais reculé au cours d'un combat, d'où le nom qui lui était donné, nanna (=avance) nannga (=prends).*(Bâ & Daget 1984:39fn)

Very little is known about land use, except that the Fulbe ruled over the plains, constantly alert to fight off intruders such as Tuareg, Mossi and other Fulbe groups. Sedentary cultivators, Dogon, Sonrai and Kurminkoobe retreated to the mountains to escape plunder and slave raiding. Cultivators who remained in the area, such as the Hummbeebe around Duwari and Dinannguru, had to place themselves under the protection of a Fulbe *ardo*.

The Hayre and the Diina, 19th century

The Diina of Seeku Aamadu

In the story of Aamadu Ba Digi the history of the Hayre in the 19th century is closely linked to the emergence of an Islamic Fulbe state in the Inner Delta of the Niger, Maasina, also called the Diina. The abundance of natural resources in the Inner Delta of the Niger, and the trans-Saharan trade routes that crossed the region via Timbuktu and Jenne, made it an object of political and military struggle. Especially for the Fulbe, as pastoralists, control over the Delta was of immense importance, because of the rich pastures of *burgu* in the dry season and the tribute Riimaybe rice cultivators would yield. Until the beginning of the 19th century control over the Inner Delta was divided among various Fulbe chiefdoms, which, each on their own, were no match for powerful intruders, such as the Bamana from Segou and Kaarta. The *jihad* led by Seeku Aamadu brought an end to this situation in 1818. His 'war' was successful because of the power vacuum in the Inner Delta at the end of the 18th century when the definite collapse of Moroccan power led to disputes between *ardube* of different Fulbe lineages. The majority of these *ardube* were Jallube, while the leaders of the *jihad*, which constituted the Diina or Maasina empire, were from the Barri clan (Azarya 1988).[31]

The *jihad* of Seeku Aamadu was inspired by a similar movement in northern Nigeria (Hausaland), with its ideals of sobriety and order. The political organization of the Inner Delta changed from a loose federation based on clan-like and tribal alliances, to a well organized state inspired by Islamic ideologies aiming at replacing these pastoral traditions (cf. Moreau 1982:138, van Beek 1988, Azarya 1988). Diina indicates the empire of Maasina itself as well as its organization, the rules concerning management of natural resources,[32] ideologies and the state apparatus based on Islam. The new elements in the organization of the Diina were: a central command over the military to better protect the territory, a bureaucracy and a social stratification, sedentarization of pastoralists, subjugation of agriculturalists in order to produce a surplus, and a strict regulation of the use of natural resources. Although the Hayre was neither the political nor the economic centre of the Diina, it was deeply affected in its economic, ecological, political and ideological organization.

In the core area of the empire a strong bureaucratic apparatus was established, with an important military force to protect the country. Islam, as state ideology, penetrated and defined the format for this organization. The ruler, Seeku Aamadu, was assisted by a council, *battu mawdo*, in which representatives of all regions, and all social strata (except the non-free people) of the empire participated. They were all members of the Islamic clergy. They were the scribes, judges and advisors of the court. They had to watch the observance of Islamic law in all projects of the empire. In the organization of the Diina the autonomous and often nomadic chiefs before the Diina, *jom tube*, owner/holder of the drum of war (*tubal*), or *ardube* (Bâ & Daget 1984:69), remained in office if they submitted to the Diina and became sedentary. The nomadic warlord *ardo*, changed to a sedentary chief, *amiiru*. They were at the lowest level of the hierarchy of leaders (cf. Kintz 1985). The council could remove a chief or *amiiru* from office, and even expel him, and install a more loyal chief (cf. Brown 1969, Gallais 1984). This was a means for the Diina to abolish the old custom of heritable leadership based on kinship and clan loyalty. The new chief was also selected for his Islamic piety.

According to Bâ and Daget (1984) the Diina had a large standing army, with divisions in each province of the empire. Each province had its military commandant, who was assisted by a religious, a legal and a technical advisor (Bâ & Daget 1984:59-60). They were responsible for peace and order in the region and outside the borders (Bâ & Daget 1984:68). Each village had to keep in reserve some granaries full of grain for the soldiers who had to fight a war or make an expedition. A permanent cavalry east of the Delta was found in Douentza, Bambara-Maounde and Djibo (Bâ & Daget 1984:70).

For provision of the army, payment for the wars, and not least the support of the various elites, political, religious, and mercantile, the production of a surplus by pastoralists and cultivators was required. The provinces had to produce extra to pay taxes to the political centre. Partly these revenues were covered by the collection of Islamic taxes (*zakat*) from the ordinary population (Diop 1971, Bâ & Daget 1984). The agricultural population paid tribute in exchange for protection, i.e. those that were the free cultivators. Some of the cultivators, however, were subjected by the elites and reduced to the status of slaves. They produced grains and other agricultural products for the political and religious elites, and the

provision of the army. During wars and raids people were captured and made slaves. Slavery was an important institution for the production of a surplus for the state (Johnson 1976, Lovejoy 1983:185, cf. Meillassoux 1975). Within Islamic ideology slavery is accepted as a form of exploitation of infidels. Slavery was even seen as a means of converting non-Muslims (Lovejoy 1983:16). The production of a surplus was only possible because the 19th century was relatively prosperous. The growth of slavery at this time indicates that the economy was booming (Lovejoy 1983).

Islam not only penetrated organizational structures. It was also instrumental in creating a common ideology for the propagation of state power. Thus the spread of Islam was actively encouraged, not only among the elites but also among the 'ordinary' people. The spread of the faith was promoted mainly among the Fulbe population, who were the main following of Seeku Aamadu and the Diina. In each region the Diina supported Koranic schools (*dude Diina*) in the capitals of provinces or cantons. Other schools were supported by the people themselves. *Moodibaabe* wandered through the region in search of students or simply to preach Islam (Bâ & Daget 1984:63-64, cf., Brown 1964, 1969, Moreau 1982). In this way the centre of the empire of the Diina hoped to replace the old ideology based on kinship and territory with an Islamic ideology (Azarya 1979, 1988).

Management of natural resources in the Inner Delta was regulated by Seeku Aamadu in accordance with the needs of the empire and its administration. At the level of land management this led to the codification of a number of practices that had existed for a long time but were contested. These regulations concerned the delineation of territories for rice cultivation and pasturing, the use of pastures, the timing of herd movements, the allocation of fishing rights, and concerned the core of the agricultural economy of the empire (see Galloy et al. 1963, Gallais 1967, Cissé 1986, Schmitz 1986). The following of these rules and the smooth functioning of the pastoral economy required, however, the cooperation of the people who controlled the dry lands east and west of the Inner Delta of the Niger. Notwithstanding the control over the Delta that the Fulbe wrested from the other occupants, their command over the dryland regions bordering on the Delta was much less and was constantly endangered by attacks of e.g. Maures, Tuareg, Bamana from Segou, Mossi. Numerous are the stories of punitive expeditions undertaken by the armies of Maasina against these threats (Bâ & Daget 1984, Sanankoua 1990).[33] The herds were vulnerable to these attacks on their trekking routes. In some cases the trekking routes of livestock to and fro the Delta were altered because safety could not be guaranteed. In another case a treaty with the Bamana of Kaarta was signed which allowed their livestock access to the Inner Delta in return for safety of the Fulbe herds on transhumance (Gallais 1967:364). In other cases the cavalry had to escort the herds to protect them against pillagers. For this purpose schemes were laid out with the places to be occupied by the cavalry and the itineraries to be followed by the herds (Bâ & Daget 1984:97-101)

The organization of the transhumance was less well developed on the dry lands of the eastern border than on the western side of the Delta (Gallais 1967:365,370). It is highly probable that this area was safer because of the position of Fulbe chiefdoms like Kaanyume, Joona and Dalla between the Maasina empire and its enemies in the Gurma the Tuareg. The cavalry supplied or stationed in these chiefdoms may have been crucial for the defence of

the herds of the Maasina empire. They are, however, hardly ever mentioned in the historical literature concerning the Maasina empire. They are regarded as parts of the provinces Hayre Seeno and Gimmballa (Bâ & Daget 1984:59, Sanankoua 1990). Gallais (1967:156) labels Dalla and Booni '*postes de surveillance*' to keep the Dogon and Tuareg in check. Hommbori is described as the last outpost of the Maasina empire, against the Tuareg.[34] The herds of the Fulbe of Maasina used the areas north of the mountains constituting the Hayre only, as far as the permanent lake near Gossi and the salt licks at Durgama (Gallais 1967:366, Bâ & Daget 1984:100). So, the herds of the Fulbe of the Delta did not enter the grazing territory of the chiefdom of Dalla, located south of the mountains. The realm of Dalla was probably respected because of the strategic importance of this nucleus of Fulbe power. This strategic importance required however, permanent occupation. How the herd movements of the pastoralists of Dalla and Hommbori were organized internally in the Hayre was not described extensively by these authors, except for some remarks by Gallais (1967:365), which seem to apply to the Seeno-Gonndo, south of the territory of the chiefdom of Dalla, to which he devotes considerable attention, and the lakes northwest of the Hayre (Gallais 1967:156-157). Nevertheless the framework for the organization of the use of natural resources of the Diina was of some importance in the Hayre, on the Seeno and in the Gurma. It was, however, adapted to the local circumstances.[35]

The Hayre 'incorporated'

The story of Aamadu Ba Digi, the *griot*, about the initial contacts between the Diina and the court of Dalla in the beginning of the 19th century, goes as follows:

> At that moment Ba Bulkaasum was the leading *ardo* in the Hayre, head of a nomadic court, when he received a letter from Seeku Aamadu. In this letter it was explained that the Hayre should also join the Diina, and follow Seeku Aamadu. Bulkaasum refused to do this because he claimed to follow already his own Diina and that he could not submit to another Diina.[36] Contrary to Ba Bulkaasum, his brother, Seyoma Tahiru, who studied in Timbuktu at the time of the conquering of the Inner Delta by the Diina, joined the camp of Seeku Aamadu. He participated in the decisive battle of the *jihad* in the Inner Delta, the battle of Nukuma, March 31, 1818. He decided to do this not only for the Islamic faith, but also to gain power in his own country, the Hayre, if he helped to bring victory to Seeku Aamadu. After Ba Bulkaasum refused to accept the Diina, he left the Hayre, probably expelled by Seeku Aamadu, and Seyoma Tahiru took his place.

In Bâ and Daget (1984) another picture of the first contacts between the Hayre and Maasina is presented. In their version of the history, Ba Bulkaasum was very active in helping Seeku Aamadu, which appears in their description of the army of Seeku Aamadu. The army of Seeku Aamadu during the battle of Nukuma consisted of different small armies of warlords from different regions, with amongst others, 'Babel Kassoum, prince of Dalla with 240 lances and nine horses' (Bâ & Daget 1984:39). Babel Kassoum must be Ba Bulkaasum, who was chief of Dalla at the beginning of the 19th century.

The conclusion that can be drawn from both versions of this episode is that part of the political elite of the Hayre sought to get close to the empire of Seeku Aamadu, the Diina. The chiefs who succeeded Ba Bulkaasum in the Hayre were all vassals of the Diina and followed the rules of the Diina. However, what this meant exactly for the Hayre is not clear. The beginning of this episode in the history of the Hayre is characterised by conflicts at the court of Dalla, where different chiefs succeeded each other rapidly, leading to political instability. The story of the *griot*, Aamadu Ba Digi continues as follows:

> Seyoma Tahiru ruled two years, then he died. After him the sons of Bulkaasum presented themselves to Seeku Aamadu to become chief, but Seeku Aamadu (i.e. the *battu mawdo*) installed one of his followers who was of another branch of the Weheebe lineage than the branch which had ruled the Hayre until then. His name was Mulaaye Hammadi Barke. Under his reign the nomadic court of the Weheebe was sedentarized definitively in the place called Dalla nowadays. Banco houses were constructed and the first two galleries of the mosque were built. In the meantime the opponents of Mulaaye Hammadi Barke found a reason to remove him from office. During the last move of the court from Douentza to Dalla, Mulaaye allowed the women to travel the day. This is a violation of the Islamic rule that allows noble women to leave their houses only by night. As a result of this action Seeku Aamadu could no longer support Mulaaye Hammadi as chief of the Hayre. In his place he installed his son Abdu Salam Seeku Aamadu, who was given a concession and a field in Dalla. His concession was situated near the mosque, the place is still indicated by rocks. He was sent to Dalla to observe the people and to advise the *battu mawdo* later on who might be a good and loyal chief in the Hayre. His other task, to teach the Islamic faith to the people, proved not necessary because, as he reported to Hamdallaye, the noble people of Dalla were already very good Muslims.[37] He chose his friend and excellent *moodibo*, Moodi Mboolaaye, as his successor. Moodi was installed as chief by Seeku Aamadu and was supervised from Hamdallaye during his reign. He ruled for 30 years for as long as the Diina lasted (± 1832-1862). (...) Moodi took over the model of Maasina, he had a council, in which his most important advisors were the Jaawambe, from the merchant class. He was given a cavalry army of 500 head by Seeku Aamadu and his territory reached from Bambara-Maounde to Mossi country (Kilimba) and from Kobu to Sinda. All protected by the army of Seeku Aamadu. He was chosen by the leaders of the Diina and not recruited via the inheritance rules, thus departing from the old tradition. Only at the end of the 19th century did the chiefdom of Dalla restore the practice of inheritance.[38]

The political stability during the reign of Moodi Mboolaaye may have been the result of the protection and support he received from the Diina. Protection by the Diina was necessary because the Hayre formed the border of the empire. From Bâ and Daget (1984) it may be understood that the Hayre, situated in the periphery of the Inner Delta, formed a buffer zone against the attacks of opponents of the Diina (cf Brown 1969:161). The military chiefs were mainly occupied with scaring off intruders and with protection against their attacks. The military chief of the Hayre, Guro Malado, controlled the eastern frontier, on the side of the Dogon, the Mossi, the Samo, the people of Hommbori and Jelgooji. Soldiers for the army of the Diina were recruited from the different regions. They were also drafted in the Hayre as becomes clear from a letter between Moodi Mboolaaye and Seeku Aamadu in which Seeku asks Moodi to send more and better soldiers than the last time, because they proved useless.[39] The chiefs of the Hayre had to follow instructions from Hamdallaye to protect their country, as becomes clear from a letter by Aamadu Seeku Aamadu (son of Seeku Aamadu) to Moodi Mboolaaye, in which he orders Moodi to position troops in Douentza and Diamweli in order to protect the population against invaders.[40]

Islam in the Hayre under the Diina

In this struggle for power, Islam played an important role. Religion was the motor behind political development during the 19th century. The claim on the primacy of Islam in the Hayre before the Diina in the stories as told by the Moodibaabe and the Weheebe is disputed by other inhabitants of the Hayre. They situate the penetration of Islam into the Hayre under the reign of Seeku Aamadu at the beginning of the 19th century, and argue that the court of the Fulbe was animistic until that time.[41] Aamadu Ba Digi's interpretation of the penetration of Islam into the Hayre is shared by most people. It may be true, however, that only under the regime of the Diina were the Moodibaabe able to advance themselves as a separate 'class' in the social hierarchy of the Hayre. They became the scribes, judges, clerics of the court, which is also clear from the letters from this period which are all written in Arabic. And, very important, they became the protectors of the chief with the fabrication of charms and with prayers. The political elite and the Islamic clergy mixed through marriage, but as they kept strongly to their patrilineal descent they remained separate groups. This establishment of an Islamic clergy also indicates a change in governing style in the Hayre. Moodi Mboolaaye is pictured by Aamadu Ba Digi as a pious Muslim and as a sober man (on a par with Seeku Aamadu). Moodi Mboolaaye also added two galleries to the mosque of Dalla, which Mulaaye Hammadi Barke had began to construct. His court followed Islamic rules and practices among which was the levying of Islamic tax, *zakat*. This tax was meant to be redistributed among the poor in society (Azarya 1988:116). The chief had to pay the Diina and therefore needed more income, so that the *zakat* collected in the Hayre by the chief was divided between the empire of Seeku Aamadu and the court of the chief.[42]

According to the oral traditions Islam was actively promoted in the countryside of the Hayre. Aamadu Ba Digi emphasized the role Moodi Mboolaaye played in this process. 'Moodi was more ambitious in spreading Islam than his predecessor, the son of Seeku Aamadu. He started to islamize the villages in the mountains, where Sonrai, Kurminkoobe and Dogon lived. In this time many Kurminkoobe left the region to settle in Mossi' (e.g. the villages Tebaga, Tombowu and Kasina on the mountains are empty nowadays). The Kurminkoobe migrated most probably because they did not want to convert to Islam. Their refusal would imply that they would be made slaves.

Slavery

Under the Diina slaves became an important social category, in number and in an economic sense. They were positioned at the lowest level of the social hierarchy. Although there are no exact figures for the number of slaves in the Hayre in those days, considering the number of former slave villages in the Hayre and the number of concessions they inhabit in Booni and Dalla, it must have been an important proportion of the inhabitants.[43] Another indication of the importance of slavery in the Hayre is the fact that big slave markets were

situated near the Hayre, for instance in Bandiagara, where numerous slaves were marketed at the end of the 19th century (Lovejoy 1983).

In the story of Aamadu Ba Digi the conditions of the slaves in those days are not discussed, except that they were prohibited from studying the Koran. Although their status changed from non-free (*maccudo*) to free (Riimaybe[44]) during the colonial period, they still share with the Weheebe and Jallube their history in which they play no significant role. 'Slaves are present in oral traditions of the larger community, but only in passing. They are mentioned as followers, companions or victims. Traditions are concerned with the deeds of leaders rulers and founding heroes' (Klein 1989:211). Thus we cannot give more than a superficial account of the history of slaves in the Hayre as it developed under the Diina.

The model of slavery in the Hayre is a variant of slavery as it was widespread throughout West Africa. Two categories are generally distinguished, the slaves living in slave-estates, and the house slaves (see e.g. Lovejoy 1983, Meillassoux 1975, Olivier de Sardan 1984). Slave-estates are villages of original inhabitants of the region that were subjected. As told by Aamadu Ba Digi one of the important actions of Moodi Mboolaaye was the demotion of many villages to the status of slave-estates.[45] The inhabitants of these villages were divided between different Fulbe families. They worked on the land and fed the country. Their children were taken as house servants for the noble families. The change from free man (*dimo*) to slave (*maccudo*) came very suddenly. One day they were simply informed by the Weheebe-chief who was their master. From then on they belonged to Weheebe and Jallube families and friends of the chief of Dalla. In most cases Riimaybe still remember their ethnic origin as Mossi, Sonrai, Dogon or Bamana.

In these villages often a Weheebe family was installed to control the population. These families still live in these villages, such as Torobani and Naani. The rainy season camps of Jallube herdsmen were situated around these slave estates. The slaves belonging to the Jallube also lived in these villages. Because of the frequent movements of the Jallube with their herds, their slaves often lived far from their master or were integrated into the families of their masters and undertook the transhumance with them. Jallube did not control whole villages as the Weheebe did. They owned individual slaves who worked for them in the household, on the land or with the cattle (cf. Balde 1975).

The slaves living in slave-estates had to give part of their produce to their masters. This could vary from a quantity of grain sufficient for one or two years subsistence of a person, or payment in labour: five days of the week they worked on the land of their master, and two days on their own land, which was given to them by their own master (Lovejoy 1983:192). These rules for the division of labour and produce were not fixed in the Hayre. In one slave village of Dalla, where slaves from both Jallube herdsmen and elite lived, two important products were produced: cotton thread, which was women's work; and millet, which was men's work. Half of the production of the thread went to the master, who gave it to the weavers, the other half was for the slave who could invest it for example in cattle. These cattle, in many cases entrusted to a Jallo herdsman, could be taken by their master in times of need. The millet harvest was divided between the master and his slave, but there was no fixed rate.[46] The slave estates were essentially a reserve of labour, grains and animals, as Aamadu Ba Digi presents it.

Another category of slaves was formed by the people who were captured in raids or during wars. They could be resold, whereas the slaves from slave estates could not. In Dalla the descendants of these captives, and some young girls from the slave-estates, were the slaves of the chief's family at the court. They lived in the concession of the chief. Even more so than the slaves who lived in the slave estates, these people were robbed of all their former family ties (Meillassoux 1991). They took the name of their master, and became members of their master's families, with a very ambivalent, and often low, social status. The court slaves were socially differentiated. They had a slave-leader. Some slaves were the guardians of the weapons of their warlords; others looked after the horses; others worked on the fields. The wives of the chief and his daughters had their personal servants (*kordo/horbe*).

The ties with their original home area also faded away. Ase Kaw, an old Diimaajo woman (84 years old) living in Dalla said: 'The grandmother of my mother's mother was Sonanke. The slave raider captured her in the bush. The chief of Dalla took her as slave'. She did not know where this happened. The origin of her father's family was not told to her. Jugal, a Diimaajo of the chief of Dalla, told us that his grandfather originated from a Bamana village in the Inner Delta of the Niger, they were called Nonankoobe. His grandfather was taken as slave in a razzia. When he was old, he told Jugal and his father about their origin, whereupon Jugal and his father went to this place to look for their origin in their 'home village' Jambakurel near Konna. Of his family in Konna only some cousins (children of brothers of the father of Jugal) were left. It turned out that they felt more at ease in Dalla, which has become their village now.

Thus the groups of Riimaybe in Dalla have two origins. They were either the original inhabitants of the region, or people from other areas who were taken into slavery during raids. The changes in life were much larger for slaves from outside the region. They were forced to live in a 'new' country, with strangers, where they had to work for their master. The old Riimaybe women in Dalla all worked in the house of the wives of their master. The men worked on the land of their master. These captured 'house slaves' had no family, no descent, no genealogies. They belonged to the family of their mother's master, whose name they carried. The master of their mother was in fact their 'father'. Slaves did not reproduce themselves. If there was something to inherit, this would be taken by the master, just as their children belonged to the master. The slaves in the slave-estates could continue their life as they lived before. They were, however, no longer owners of their own land, labour and children. Their labour and production had to be paid to their master, who could also take their children. However, it is possible that they did not 'feel' the changes so directly because they continued to live with their former families (cf. Meillassoux 1991).

The Diina and land use in Dalla

The incorporation of Dalla into the Diina resulted in numerous changes in land use. The changes in social hierarchies, the creation of slave-estates, the sedentarization of the court, the levying of taxes, the differentiation of labour organization at the court, and the

production of provision for the army (cavalry), entailed a radical reform of land use and land tenure. Just as the political and religious relations between the Diina and the Hayre were strained in the beginning, the reorganization and the requirement that Fulbe pastoralists sedentarize may have caused considerable tension. The more so, because they were quite independent before the Diina.

According to our informants the herds of the Fulbe of the Hayre never took part in transhumance movements oriented towards the Inner Delta of the Niger. Instead the patterns of transhumance in the Hayre proper were an oscillating movement between the Seeno-Manngo or the pastures north of the mountain range in the Gurma where they visited the salt licks at Durgama, and the mountain range where permanent sources and wells were present. These groups of pastoralists were constantly engaged in territorial dispute with the Tuareg from the Gurma, who were attracted by the water resources and wealth of the mountain range.

On the one hand the Fulbe of Dalla did not want the herds of the Inner Delta on their valuable pastures south of the mountains. On the other hand they did not want to be plundered by the Tuareg. The 'deal' with the Maasina-empire thus had to meet two conditions. Firstly, no herds from Maasina on their pastures and secondly, a better army to ward off the Tuareg intruders. The Hayre was probably not very prosperous, so that in order to 'pay' Maasina for protection against outsiders, a larger share of production would have to be centralized to pay the taxes. This necessitated a reorganization or rather a centralization of natural resource management along the lines laid out by Seeku Aamadu, which paradoxically could only be enforced with the power of the Diina in the background. Slave labour was to ensure the agricultural basis of the fief, in the form of cereals to feed the noblemen and their families, and what may be more important, the horses of the cavalry.

In the past the court of the Hayre had been replaced several times. Gallais (1975:134) mentions Noukiri (Nukuri) north of the Gandamia as the place Ba Bulkaasum had to leave under pressure of the Tuareg. In local traditions a number of other places such as Caafal, Bumbu, Wuro Ngeeru are mentioned as locations of the village of the chief of the Hayre. As a strategic choice the present location of the village Dalla is extremely well chosen. The site, at the foot of the Gandamia massive is at the end of a valley that cuts deep into the mountain block. There were permanent springs in this valley. Though these have dried up, the water situation is still good, with the water table at only five metres in the dry season. The valley bottom north of the village could sustain a fairly large population needed for the defence of the village. The fields are fertilized every year by the run-off water from the mountains. In case of attack cattle, horses, supplies and the population could retreat into the mountains. There were numerous villages of cultivators in the mountains so that in the case of a siege cereals could be obtained from the hinterland. The pastures south of Dalla on the Ferro and the Seeno Manngo were close enough to provide protection from Dalla to the herds in the rainy season. At the time there were few other permanent settlements outside the immediate surroundings of the mountains and the Bandiagara plateau, only at Bumbam, Petaka, and Kerana there were permanent water resources where Hummbeebe and Fulbe

lived, and there was a temporary cultivation hamlet of Hummbeebe at the border of the Ferro and the Seeno-Manngo, named Tula.

The exploitation of human and natural resources around Dalla was modelled upon the organization of natural resource management in the Inner Delta. It may serve as an example of how the Diina influenced land use in the periphery. There were differences because the ecological circumstances were not the same. Moreover, the almost permanent threat of war necessitated a different kind of organization than in the core area of the empire, the Delta. Around the village there was a *haarima*, land that was not cultivated but reserved for the calves, young goats and sheep (and later on donkeys), which were the off-spring of the herd that remained all year round in the village to provide milk for those who stayed at home in the rainy season (*dunti*). The milking cows and goats were led in the morning to the pastures through three *burti* (cattle routes) in northern, eastern and western directions. These pastures were located at some distance from the village to prevent damage to the millet fields. In the evening the herds returned to be milked. For the horses that formed the cavalry of Dalla there were separate pasture areas east and west in the mountains, Ndongo and Katsina respectively, within an hour's walk from the village. These areas could be closed off, so that the animals did not go astray and were at hand in case calamities occurred.

Nominally the livestock was the property of the Jallube, the pastoralists. However, this livestock was given to them by the Weheebe, after having raided the Tuareg. Formally, the Weheebe owned no livestock, having distributed it all among their Jallube. In practice the Jallube were obliged to render service to the Weheebe in the forms of gifts of milk and animals for slaughter. In this sense the Weheebe 'owned' all livestock of the Jallube. Slaves had no rights to inherit livestock. If by chance they were able to build a small herd it might be taken by their master upon their death.

The millet fields located around the *haarima*, pastures and *burti*, were worked by Riimaybe who were the *captives de case*, or *captives de guerre* (or *maccube*) of Weheebe, Jaawaambe, Moodibaabe and Nyeeybe. Land was assigned to these groups of nobles at the time of their settlement and from then on became inheritable and transferable property, according to Islamic law. Next to the stream running east of the village, fed by run-off water from the mountains, there were gardens worked by the *maccube* that supplied the village with cotton for clothing. The spinning and weaving of these clothes was done in the village itself by the *maccube* and the weavers (*maabube*).[47]

After the rainy season, when the harvest was done, the herds of the Jallube that were not kept near the village returned from the rainy season pastures on the Seeno-Manngo, in the mountains, or north of the mountains where the herds went for the annual salt cure at the salt licks of Durgama. As soon as the harvest was done they were admitted onto the millet fields to graze on the crop residues. Later on in the dry season the animals were corralled on the fields at night and watered at the village wells, so that the fields were supplied with manure for the next rainy season millet crop. When pastures around Dalla were exhausted the animals were taken to other villages along the mountain range, where abundant grazing was possible and permanent springs were available.

During the transhumance in the rainy season and in the dry season the herds were in principle accompanied only by the herdsmen, their families staying at home with their wives secluded. It is not clear if the pastoral inhabitants of Dalla kept to this practice. Sometimes the herdsmen were also assisted by Riimaybe when drawing water from the village wells. Probably they also cultivated temporary bush fields on the Seeno-Manngo when camped there in the growing season.

As a general rule, control of natural resource management became weaker the further one went from the political centre. Pastures were only managed in the sense that decisions were taken concerning the transfer of livestock from one region to another. This was done on the basis of considerations concerning the quality of range, the necessity of going to the salt licks for the health of the livestock, the protection of millet fields, and the safety of the herds from outside raiders. Fulbe herding groups from outside the chiefdom, e.g. from the Inner Delta, were temporarily incorporated into this structure, when staying in the area north of the mountains in the rainy season. Near the centre of power, herds were managed more strictly in order to protect the millet and sorghum fields that formed the backbone of production for the elite and its military capital, the horses for the cavalry.

The same applies to control over land. Land around Dalla was the property of families belonging to the various groups that composed the class of nobles. The *maccube* worked on their estates, within a preordained schedule dictated by the rains and the movements of herds. The bush fields cultivated by the pastoralists and their accompanying *maccube* were also family property and inheritable. However, they could not be cultivated permanently, because of the lack of manuring. Consequently rules concerning time and spatial distribution of millet cultivation were less exact and depended predominantly on the coordination achieved by groups of herdsmen. The *maccube* who were living in villages in the mountains and along the mountain range also enjoyed more freedom. Though their belongings (livestock, cereals, jewelry, clothes) became the property of their Weheebe masters when they were subjected to Dalla, tenure of the fields remained theirs, as they were the occupants of these fields. This was in contrast with the court slaves in Dalla who were put to work on fields that were cleared by their masters and had no own rights to land.

The gathering of bush products was also the domain of the *maccube*. Household work, including the fetching of water and wood was done by *maccube* women, the Weheebe women remaining secluded in their compounds. Other bush products, some of which were important foodstuffs in case famine struck the region, were gathered by *maccube* men as well as women depending on the type of product and the season. Among these bush products were wild fonio, wild rice, fruits and the leaves of trees. If they were living independently from their masters in a hamlet the produce entered their own household. If they were part of the household of a noble the gathered produce entered the household of their master. It seems likely that these gathering activities supplied important quantities of food to the *maccube* in times of shortage, because their masters had preferential access to milk, meat and millet in their households. To our knowledge there were no rules governing access to bush products other than status.

So, the sedentarization of the court of Dalla under the Maasina-empire gave rise to fundamental changes in virtually every aspect of natural resource management near the

political centre. The pastoralists in the periphery had to adapt the timing and direction of herd movements to the new land management scheme, and the organization of the labour of the family. The chief became the owner of all the land, as he had the authority to direct the herd movements in his territory. It is easy to see that the elite with all its subdivisions was weighing heavily on the productive part of the population, Riimaybe and Jallube. Moreover, the military organization in the form of cavalry required that the horses be fed with cereals for most of the dry season when the quality of range diminished. This formed a great burden on the cultivating *maccube* population. The urge to subjugate more cultivators to the Fulbe may have stemmed from this development.

The question remains, however, whether this reorganization of natural resource management was forced upon the chiefdom of Dalla or whether this was the result of the internal dynamics within the chiefdom. As is often the case the answer is mixed and depends to a large extent on the perspective one takes. Given the fact that the chiefdom of Dalla was and is divided into different status groups with different political power, they have different stakes and different roles in such a process of change. It is clear that the position of the Weheebe and the Islamic clergy improved with the emergence of the Maasina-empire. They got the necessary back-up to impose their will upon the cultivating population and reduce them to the status of slaves. This together with the rules of natural resource management made it possible to intensify the production of cereals and to centralize the accumulation of surpluses. Productive resources in the form of cereals, milk and very important nutrients in the form of organic manure, were concentrated at the political centre Dalla. Not only labour power and produce was transposed to the centre but also the soil fertility necessary for centralized production was accumulated around Dalla.

In this process the Jallube pastoralists lost part of their flexibility. They became part of a land management scheme that was not of their own design. Moreover, this land management scheme enabled the Weheebe to become less dependent on the Jallube. The Jallube not only provided the milk for the Weheebe, they also contributed the necessary manpower successfully to undertake raids and obtain bounty. With the domination by the Maasina-empire, their contribution became less important for the Weheebe to remain in power for they had the back-up of Maasina, the labour of the Riimaybe, the soil fertility from the bush on their land all at their disposal. Milk and meat were only the luxuries of life. Islam was in this perspective the perfect ideology to bind all these features together.

So, the Diina was imposed upon the Riimaybe and Jallube, but this would never have been possible if there had not been an immanent struggle over power within the chiefdom which the Weheebe decided in their advantage.

The Futanke: back to anarchy

The Futanke domination over Maasina

Under the third king of the Diina, the grandson of Seeku Aamadu, Aamadu Aamadu, the empire became weaker, partly as a result of economic problems and partly as a result of the

continuous rebellions of Tuareg and Fulbe at the fringes of the empire (Johnson 1976, Brown 1969). Internal political factors also played a role. As Sanankoua (1990) analyses it there was disagreement at the political centre (*battu mawdo*) about the succession of Aamadu Seeku by Aamadu Aamadu, and about his style of government. Those favouring the pastoral mode of succession felt that Ba Lobbo, the uncle of Aamadu Aamadu, being his elder by generation and in experience, should have succeeded Aamadu Seeku. Under the rule of Islam, Aamadu Aamadu, being the son of Aamadu Seeku, was the legal successor of his father.

In 1862 a major conflict arose with the expansionist empire of the Futanke led by El Hadj Umar Tall, a famous, very learned and zealous Muslim. In the years before 1862 he built up his dominion from Senegal to Segou. Although the conflict had a religious origin and was justified as being a *jihad* it can also be interpreted as a clash between two expansionist empires, a war over resources and the trade routes of the Inner Delta. The Diina was so weak and its armies so dispirited and divided that it collapsed after a couple of battles in 1862. After the conquest of the Inner Delta, Fulbe groups favouring Maasina fled to the east, from where they tried to undermine the Futanke regime. These rebellious forces, led by Ba Lobbo, were joined by the Kunta, an Islamic group from the north of the Inner Delta. The Futanke resisted these attacks successfully and in 1864 they established the capital of their Maasina empire in Bandiagara. In these skirmishes both Aamadu Aamadu and El Hadj Umar perished.

The death of El Hadj Umar in Diguimbere near Bandiagara in 1864 marked the beginning of an era of internal strife between his potential successors, his sons, which eventually led to the division of the empire of the Futanke into several states. This discord coloured the relationship between the state of Nioro (Segou), where Aamadu Umar was king, and the state of Maasina north of Segou, where Tijani was installed as 'king' of Maasina in Bandiagara. The Inner Delta, as other areas, became a border region of both states, exploited and plundered by both. There began a period of insecurity for the population of the area (Inner Delta and dry lands), characterized by raids, wars and exploitation as part of daily life. Many villages were pillaged, people were captured, herds seized. The Futanke economy was not based on an organized bureaucratic apparatus, as their predecessor the Diina was in its heyday, but had all the traits of a war economy (Saint-Martin 1970, Oloruntimehin 1977, Roberts 1987, Barry 1993).

Under Tijani, Maasina was a state with a limited bureaucracy and much autonomy for the peripheral regions. From time to time large meetings were held with the chiefs of all conquered areas. The areas that were not under complete control were left to the families who ruled there before the Futanke, and were made to pay tribute. In areas that were subjugated to the Futanke, Tijani made use of the existing chiefly families to control the area (Oloruntehimin 1977). His representatives controlled these chiefs (Barry 1993).

Despite the Islamic ideology political interests seem to have been far more prominent for Tijani. As always *moodibaabe* were the scribes and administrators of his empire. Bandiagara, the capital of the empire, became an important Islamic centre during his reign, though it never matched the importance of Hamdallaye, the capital of the Diina in former days. In Bandiagara and its direct surroundings Islam was spread. Koranic schools were

established in large villages. In the peripheral areas of his empire he left the spread of Islam to the people themselves, and no action was undertaken in this domain (Barry 1988, 1993).

The most important revenues for the state were taxes, booty, and slave trade. Slaves were also an important labour force and responsible for most of the agricultural production. Almost all surplus was spent on the army. This was indeed necessary because Tijani had to deal with not only his brother Aamadu in Nioro in the south, but also the continuing resistance from proponents of the Diina, e.g. from Joona (Barry 1988, 1993). One of these, Ba Lobbo, wandered through the region also living off loot and plunder. For example in 1864-67 his forces formed a terrible menace for the kingdom of Yatenga in north-west Burkina Faso (Izard 1985:541). Furthermore there were some regions where the chiefs resisted Futanke rule, e.g. the Seeno-Gonndo (Barry 1988:73), Barani (Diallo 1993), and Jelgooji (Barry 1993). These rebellions were a constant threat to the hegemony of the Futanke. The only way to keep everything in check was by dividing these forces as much as possible.

Division of the Hayre in Booni and Dalla

With the weakening of the Maasina empire the Weheebe of Dalla became more oppressive, and the number of raids by Tuareg from the Gurma on camps and villages increased. Moodi Mboolaaye was eliminated by the Futanke. His rivals presented him as a threat to the Futanke. They accused him of collaborating with Ba Lobbo and resisting the Futanke. The Futanke replaced him with Allaaye Ba, who was more cooperative (Aamadu Ba Digi p.c., cf. Barry 1993:428). The exploitation of the population continued under his rule, copying the methods of the Futanke. Aamadu Ba Digi said of this time: 'In those days Islam had no power in our country. The chiefs did as they pleased, they could kill people, catch people, steal their belongings, raid villages, they could do as they thought good'. Thus the Hayre, situated at the fringes of the Futanke empire, was also exploited and pillaged by warlords, sometimes their own chiefs, who roamed the area. This situation continued till the end of Futanke rule. A French governor wrote in 1892: *'Les épizooties et les guerres intestines dans le Macina ont ruiné les populations des pasteurs et ont empêché les autres de cultiver. Tout a contribué plus que jamais à admettre le pillage'*.[48]

This mismanagement and oppression by the chiefs was not accepted by all people of the Hayre. In the eastern part (nowadays Booni) a rebellion was organized against Dalla. Central in this movement was Maamudu Nduuldi, a nephew of Moodi Mboolaaye. In the National Archives of France Maamadu Nduuldi is mentioned as the most important warlord of the Hayre (Barry 1993). Bâ and Daget situated the period in which Maamudu Nduuldi operated in the Hayre as far back as the reign of Seeku Aamadu. He is depicted as an important warlord who helped to fight the Tuareg (Bâ & Daget 1984:160,260). *'Le chef Peul de Boni, Mamoudou nDuuldi, était un guerrier fameux, spécialiste de la guerre contre les Tuareg (...)'* (Bâ & Daget 1984:160). The genealogy we recorded in Booni, however, situates the start of the reign of Maamudu Nduuldi over Booni somewhat later, in 1863, shortly after the fall of the Diina.[49] The difference may be the result of the condensation of

history which often happens in oral traditions and which may have happened in the traditions gathered by Bâ and Daget in the Inner Delta of the Niger. Nevertheless Maamudu Nduuldi's specialization as a warlord raiding the Tuareg has made him famous among the population of the Hayre and in other regions because he brought them cattle and prosperity.[50]

The story of Maamudu Nduuldi was read to us from a manuscript kept by the *moodibo*, Bura Moodi, in Booni.

> Maamudu Nduuldi is a son of Aamadu Ba Bulkaasum Tahiru, who left Dalla to the east with his father Ba Bulkaasum when Seeku Aamadu vested his power in the Hayre.[51] His mother was a Jallo, of the lineage Hawgiibe. Maamudu Nduuldi was educated by his uncle Moodi Mboolaaye in Dalla, who treated him as a beloved son. Maamudu being a clever and strong boy was hated by other members of the court. In the situation of that day, an unstable political situation at the end of the reign of the Diina, this was dangerous, because his rivals would not hesitate to murder him. His uncle Moodi Mboolaaye, therefore, feared for his life and sent him away. Maamudu left for the east where he settled in the area of modern Booni in a cattle camp, Bubani Kani, and in the rainy season he worked on his fields at the edge of the Seeno, 30 kilometers south of modern Booni, a site called Serma. He married in his turn a Jallo woman from the lineage of the Seedoobe. Maamudu worked together with his two sons on his fields in Serma and spent the dry season in Bubani Kani. He lost contact with Dalla. But the people of Dalla, who knew his skills as a warlord, wanted him to fight at their side in the raids against Tuareg and others. So they called him to come back. Although Maamudu did not trust the people of Dalla, he decided to help them for his uncle's sake, and, as the story tells us, he won the battle. And more than that he rescued his uncle, Moodi Mboolaaye, who was wounded. This again enlarged his power and brought him more admiration by the people. Maamudu left Dalla and continued to live in Booni. When the Futanke took over power and Moodi Mboolaaye was killed, his nephew Maamudu Ba was installed as chief of Dalla.[52] Maamudu Nduuldi drew the right conclusion that he was now a real rival of Maamudu Ba and staying in Booni would be risking his life. Thus he fled into the Mossi country, where he prepared himself well for a possible war against his rival in Dalla. A *moodibo* made a talisman for him to protect him in war and he learned many magic things. In the meantime the reign of Maamudu Ba, under the Futanke, did not bring prosperity to the people of the Hayre. It was a period of misery and oppression. The population was looking for someone who could free them from the yoke of the Weheebe. They turned to Maamudu Nduuldi who was by marriage their kinsman. In the end Maamudu decided to go raiding with them (Jallube), and this brought prosperity to the country. Booni separated from Dalla and the Jallube populated the area of Booni. They fought together with Maamudu Nduuldi in the raids and wars against the Tuareg. Dalla left them the area of Booni and eventually Booni became a chiefdom on its own. The last raid Maamudu Nduuldi led was against the Tuareg of Cililel. From that time on the Jallube again possessed cattle and prosperity entered the country. In this raid near Cililel Maamudu Nduuldi died (and his eldest son with him).

The rivalry between the Weheebe of Dalla and Maamudu Nduuldi brought the Hayre to the brink of internal war. However, as long as the forces under Maamudu Nduuldi were successfully pillaging the Tuareg of the Gurma they would not move against Dalla. On the other hand it is likely that the Futanke did not like to have a strong Dalla or a Hayre unified under Maamudu Nduuldi, nor the raiding bands of the Tuareg in what they considered as their backyard. By officially dividing the chiefdom of Dalla into two with the better half for Booni, and endowing the chiefdom of Booni with its own *tubal*, they neutralised the danger of Dalla, while creating a strong chiefdom on the edge of their territory to ward off the Tuareg.[53]

The social hierarchy which developed in Booni was of a different nature than that in Dalla. The hierarchy of Dalla became dependent on an outside power, an extension of the Diina and later on the Futanke, with complex sets of rules concerning the collection of taxes (and booty) for itself and for the empire (Diina and Futanke), and a relatively centralized organization of land use. The leadership in Booni of Maamudu Nduuldi we may label charismatic. People in the chiefdom still talk with veneration about his capacities. He won every war he started, except the last one in which he died. By the population he is remembered as a courageous warrior of enormous height and strength, with long arms, heavy eyebrows and big ears, almost superhuman. His lance was twice the size of a normal one. Even his former enemies, the Tuareg from Gossi, still talk with respect about Maamudu Nduuldi (Mike Winters p.c.). When he came to power there were no cattle left in the Hayre. Everybody, including Riimaybe, Bellaabe who escaped their Tuareg masters, the Dogon of Sarniere, Looro and Tabi and Hummbeebe, united under his banner to fight off the intruders. The economy of Booni was a war economy. The principle source of wealth was the booty in cattle and slaves. Maamudu Nduuldi as the warlord was entitled to divide this loot. He was at the centre of redistributional networks, with cattle as the most prestigious commodity to be circulated. In Bâ and Daget (1984:160) it is mentioned that after a successful raid against the Tuareg every warrior received five head of cattle, two slaves and other commodities, after the taxes for the empire, that amounted to one-fifth of the booty, had been deducted. Although these quantities are almost certainly overestimates, Maamudu Nduuldi is remembered at least by the Jallube pastoralists as the source of all wealth in livestock in the Booni chiefdom.

Land use in Booni

From the history of land use in the Booni chiefdom it can be clearly seen that patterns of land management were quite different on the periphery than in the centre of the chiefdom of Dalla. When we asked the chief of Booni in 1987 on a first visit if Booni had been part of the Diina and the Maasina empires, this was proudly denied. The chiefdom of Booni is something of its own making, it was a reconquest of power by pastoralists, Jallube, from the bush, who preferred to live off raiding and livestock keeping and not to pay taxes to a far away power in Dalla or elsewhere.

The elite of the chiefdom of Booni, the chief and his Jallube warriors, did not centralize labour power, soil fertility and cereals geographically. Instead Maamudu Nduuldi alternately stayed in Serma, where he cultivated a field with his Riimaybe, Booni and Bubani Kani. He wandered and never organized natural resource management in a way similar to that of the Diina and the Weheebe in Dalla. Instead the elite of Booni accumulated livestock and slaves as booty from raids on neighbouring groups. The livestock was redistributed among the Jallube, who used this as the basis for their herds. Most villages of Dogon and Hummbeebe were left in peace and not reduced to the status of Riimaybe as in the chiefdom of Dalla. Instead the army of Maamudu Nduuldi protected the Hummbeebe of Duwari and Dinanguru against raids of the Foynonkoobe, Fulbe from the Gonndo. In the rainy season the herds

were on the Seeno-Manngo or were taken to the salt-licks at Durgama. In the dry season the Jallube took their herds to places near the mountains where water was available, e.g. at Booni, but also at Nokara, and other villages regardless of the status of the inhabitants. Quite a number of Jallube used to take their livestock to the Hummbeebe south of the Seeno-Manngo, where they were very welcome because they supplied manure for the fields. They bartered their milk for the cereals of the Hummbeebe. So, relations with cultivators were more cooperative and less exploitative than in Dalla. Until the 20th century an Islamic clergy did not exist in Booni, so they did not have to be maintained by the Riimaybe and the Jallube. The mosque of Booni is of very modest size compared to that of Dalla and is built at the back of the village and not in the centre. There were no *haarima* and no *burti* around Booni.

The movements of the herds were, however, just as in Dalla, confined to the territory of the chiefdom. To be able to pursue a pastoral way of life, control over land was indeed paramount. In this period this control was largely based on military power. The balance of power and the coalitions changed constantly as becomes clear from the colonial archives. The Jelgoobe and the Jallube of the Seeno-Manngo raided each other reciprocally.[54] A son of the chief of Diankabu on the Seeno-Gonndo departed with a number of warriors and cavalry from Booni and Hommbori to loot Oulam, a Tuareg camp. They succeeded and returned safely to Hommbori where they divided the spoils.[55] This raid was repeated in October on Zakmun, another Tuareg settlement.[56] In their turn the Tuareg tried to plunder the Hayre regularly.[57] So, pillaging became a way of life and subsistence for the Fulbe of the Hayre and in this way they kept intruders at bay and wealth and resources concentrated in the hands of the Weheebe and the Jallube.

Pastoralism and pre-colonial statehood: a balance sheet

The influence of the Diina on the Hayre was very important. The Maasina empire dominated Dalla, the Hayre, by controlling the political elite. This elite in its turn seems to have profited from the protection of the Diina to establish their power, and Dalla developed into a vassal chiefdom of Maasina. The chiefdom took over the organization and symbols of the Diina government. For as far as this history is known it is mainly the history of Dalla, the centre of the Hayre and the centre of politics: the elite. The influence of the Diina, and the necessity for nomadic groups of the Hayre to protect their area, prompted the development of a social stratification which enabled the elite to rule and to go to war and to establish an Islamic clergy who helped the political elite. The main work force were the slaves, without whom the state could not exist. The Jallube were part of the armies, herded the cattle, and paied taxes. Based on this division of labour and social hierarchy an ideology of social stratification linked to Islam and Fulbe values developed. At the end of the Diina the various social categories in Fulbe society in the Hayre, Weheebe, Moodibaabe, Jawaambe, Nyeeybe, Jallube, *maccube* (nowadays Riimaybe), were firmly established. The Jallube depended on the protection of the elite in order to herd their animals, as the Weheebe depended on the Jallube as soldiers in their armies and for work with the herds.

However, with the incorporation into the Diina the loyalties of the Weheebe changed, because the chiefs had to cooperate with the Diina which supported them in wars and in times of scarcity and as a religious centre. The times in which they, together with the Jallube, were solely responsible for the protection of the Hayre against intruders, and had to survive on the bounty of the raids, had come to an end. This reorientation of the Weheebe to the outside world and the concomitant centralization of resources led to a widening gap between elite and nomadic pastoralists. This became clear when the Maasina empire collapsed and Dalla had to survive on its own for some time. The hierarchy and exploitation of the population continued, while safety was not guaranteed. The pastoralists on the fringes of the chiefdom rebelled under Maamudu Nduuldi in order to protect their interests. In the terms of Khazanov (1984) the state was reconquered by the pastoral interest. Dalla was divided into two and began its unremitting decline as a political power. Booni emerged as the regional power.

Although slaves captured in raids were already present in the Hayre before the Diina, their number increased enormously when the Hayre became a sedentary chiefdom, or vassal of the Diina. Slaves serve in the story of Aamadu Ba Digi to explain differences between the social categories of society. The principal opposition was that between the Rimbe, or nobility (*ndimaaku*) and the *maccube*, or the subjected. The division of the population into free and non-free became an important ideological vehicle that left its imprint on Fulbe values down to the present day. This is very clear in the division of labour. Weheebe and Jallube and Moodibaabe were associated with power (*laamu*), cattle (*jawdi*) and Islam (*juulde*). These three assets in varying degrees became assets of the free people, the nobility (*ndimaaku*). All three were prohibited to the non-free, the slaves and serfs who were confined to hard work with their hands and on the land. Nonetheless they were incorporated as an integral and indispensable part of Fulbe society, *pulaaku*. This still forms the ideological basis for the division between social categories in Fulbe society of the Hayre. Narrowly related to this division between *ndimu* and non-*ndimu* is the concept of shame, *yaage*, which is also a privilege of the elite and not for the slaves, because it would hinder them in their activities (cf. Olivier de Sardan 1984). The content of the ideological concepts of *ndimu*, *yaage*, and *juulde* in the present will be discussed at length in chapter 6.

The ideological claim of the Weheebe and Moodibaabe of Dalla to be earlier and better Muslims than the followers of Seeku Aamadu may be meant to compensate for their loss of power after the collapse of the Diina. This critique of the oral tradition does not exclude the possibility that Islam penetrated very early in this area. The existence of nuclei of Islamic faith early in history is very well possible in the African context. The influence of the Diina in the Hayre was restricted to Dalla only. In Booni little is recognized of the management of natural resources as prescribed by the Diina. This also indicates that the power of the Diina may not have been as great as some authors would like us to believe. The influence of Islam came also much later in Booni than in Dalla, and probably only in the 20th century. Islam in Booni was introduced also via other channels than the *moodibaabe* from the Inner Delta associated with the Diina, as we will see in chapter 5.

We may conclude that pastoralists and political and religious elites escaped fairly well the consequences of the ecological and political insecurities of the region in which they lived,

by taking their fate in their own hands. The emergence of the chiefdom of Booni is an example of this mechanism. The question then has to be raised, who carried the burden of these insecurities during the Diina as well as during the Futanke reign? Historical sources are scanty as to who were the systematic victims of droughts, locust invasions, and political unrest, and thus were paying the costs. In a study of the African poor Iliffe (1987:32-33) is not very clear in specifying who were the poor and how they survived and underwent calamities. Tymowski (1978) provides us with some clues on the differential effects of disasters. He based his conclusions on the chronicles of Oualata and Tichit of the 19th century.

> *L'auteur des chroniques de Oualata note plusieurs fois que la plus grande mortalité regnait au cours des épidémies parmi les captifs. Ce fait s'explique par la faim ou par la sous-alimentation permanente qui affaiblissent les couches les plus pauvres de la population. (...) [Cette] grande mortalité des esclaves produisait non seulement des difficultés démographiques, mais empirait la situation économique (...).* (Tymowski 1978:43,48)

So, in his opinion slave labour was the basis of wealth, for slaves worked the land and at the same time they were the buffer for the nobles to bear the costs in times of hardship. Ould Cheick (1993:185) also concluded that the slaves had to carry the burden in the stratified society in Mauretania in the past. In one of the few accounts of daily life in a pastoral society in the 18th and 19th century Mungo Park sketches a lively picture of the miserable existence of slaves and vassals of the Maure nobles (Park 1983). Social hierarchies were indeed instrumental in accommodating the effects of disaster. In Maasina under Seeku Aamadu the slaves had to produce and it seems plausible that they were the main victims of droughts and plagues. Their masters lived at the expense of the slaves. The period of the Futanke was much worse for the people because of their incessant raiding and plundering of the Inner Delta and its surroundings. They adopted a totally different model of pastoral statehood. Instead of building their power on organizing agricultural production and resource extraction, they remained in control by weakening competing powers. In essence Maamudu Nduuldi followed the same model in Booni. It seems plausible that slaves suffered most in this situation, though pastoralists were also hit by the political unrest as the rebellions led by Maamudu Nduuldi illustrate. About the position of pastoralists the literature is not clear. This probably indicates that in this period they had already become peripheral in what Iliffe (1987:37) called the 'urban-rural continuum' of West African savanna societies. For example, numerous Wodaabe went north to escape insecurity in the Sokoto region during the *jihad* in 1804 (Maliki 1988). However, we must not forget that they are also underreported because of the fact that indigenous written sources are of urban origin and European travellers passed from town to town (Iliffe 1987:34), and when not in town they stayed in cultivators' villages and not in the camps of pastoralists.[58]

French colonialism and indigenous rulers

From conquest to control and reform

In this description of the colonial era and the influence of French policy on local politics and local resource management we may distinguish three periods in Central Mali. The first is the period in which the French consolidated their power (1893-1918). Little was done to promote the productivity of agriculture, livestock keeping and forestry, because the French were mainly occupied with controlling the area, and the conquering of the rest of the hinterland of West Africa. The establishment of an administrative apparatus engaged all their efforts. Pacification of the area, the abolition of slavery, and the encapsulation of the local chiefdoms and their organization into a larger colonial state were the most noteworthy events in this period.

For the Hayre the transition from Futanke to colonial rule was gradual, because the French left Maasina (of which the Hayre was part) in the hands of a Futanke king, Aguibu, as their protectorate. However, pacification had its influence and in a later stage the local chiefs and their Islamic clergy were more and more incorporated into the protectorate, and efforts were made to abolish slavery at the same time. Although no efforts were made to regulate natural resource management, French policies had unintended effects on patterns of land use in the region. For example, cultivators became free to move, no longer endangered by slave-raiding groups, and began to occupy land in use as pasture from 1895 on (Gallais 1975). The division of labour in society changed radically after the abolition of slavery.

The second period is characterized by the French effort to get more direct control over their colonies and their economies (1918-1945). By 1920 the last centres of resistance against French government in West Africa were crushed (Suret-Canale 1964), and a period of relative peace begins. This period is marked by more intense involvement of the colonial administration in the agricultural economy. Services were established to intervene in natural resource management. The primary goal of this involvement was the creation of more revenues for the colonial administration. This led to the establishment of markets, to taxes on transhumance routes and forest use, and to the promotion of cash cropping.

In the third period of colonialism, from the end of the Second World War to independence in 1960, attempts aimed at reforming the economy and the political system were made. After the Second World War public opinion in France and the changing attitude towards the colonies resulted in a new policy to prepare the overseas areas for more autonomy and political emancipation. This meant that the chiefs were given more independence and investments were made in economic development. A start was made with democratization in the colonies by the establishment of political parties and the election of representatives from the colonies to the French parliament.

All these policies were developed by the French as a means of reducing the insecurities the colonial state was confronted with. The policies they developed for local politics and local resource management were focused on the reduction of insecurity, on rendering these domains controllable. Though they may have been effective in stabilizing the colonial state, the insecurities for the rural populations involved were rather increased by these colonial

policies. In the Hayre the old social hierarchies were completely transformed, through the pacification of the area, the encapsulation of the chiefs and the abolition of slavery. This in turn led to radical changes in land use, and the reallocation of land among production systems and population groups. Especially the (semi-) nomadic populations were the focus of efforts aimed at controlling political and economic insecurities for the colonial administration. These attempts altered the structure of authority over natural resources in a fundamental way, because they worked through newly established political relations, in which pastoralists did not participate. Eventually this led to the removal of the pastoralists from the local political scene. This development was already apparent under the Diina, but now it also became apparent for the Jallube of Booni. The ultimate consequences of these transformations of the power structure over natural resources became very visible during and after the droughts of 1968-1973 and 1984-1985, under the government of independent Mali (see chapter 14).

Controlling the Hayre

After the vain attempts of the French to establish trade relations with the 'king of Maasina', Tijani, the only way to incorporate the area into their colonial empire was by force (Barry 1993:496).[59] The conquest was led by Archinard who was guided by Aguibu, a disgruntled son of El Hadj Umar, who did not get his fief after his father's death. Aguibu took the chance to gain power and defeat his brothers through his collaboration with the French.

It was not easy for the French to beat the Futanke. Especially the resistance of the king of Segou, Aamadu, proved tenacious. After Segou fell into the hands of the French he fled to Bandiagara. The people in this region seemed glad to be freed from the yoke of the Futanke and received the French as their liberators. Eventually Aamadu also fled from Bandiagara, which was subsequently conquered in 1893 (see also Saint-Martin 1970, Barry 1993).[60] The French tried to arrest Aamadu who first escaped to Douentza and then to Dalla and from there to the east into Niger. In their search for Aamadu a battalion of French soldiers was defeated in Dalla in a battle with Aamadu's army which was supported by the Fulbe of Dalla. Aamadu managed to stay out of the hands of the French until his death in 1897 when he was nearly 65 years old (Saint-Martin 1970). His retreat to the east is known in the Hayre as the *feerongol tubakuube* (the migration of the time of the white people). Many inhabitants of the Hayre left with Aamadu on his flight from the French. Aamadu Ba Digi explains this migration as a refusal of the Muslims to convert to Christianity. It was better to flee than to stay and convert.[61] How many people left and what effects this had on the local economy is not clear.

Aguibu was placed on the throne of Maasina by the French in May 1893. Maasina became a protectorate of the French, with the Futanke king Aguibu as figurehead.[62] The first thing that had to be realized for the French under Aguibu was the pacification of the area. As early as 1895 the French had suggested establishing a post in Douentza to get a better grip on the area, which eventually happened only much later.[63] Aamadu was not the only local ruler who created unrest. In a political report of 1894 it is recognized that the

region of Douentza (east) was not yet under the control of Aguibu.[64] These regions were full of turmoil, and controlled by raiding bands, led by the chief of Dalla and the chief of Booni.[65]

The resistance of the chiefs of the Hayre continued until the end of the 19th century. Aamadu Ba Digi said about this in his recital: 'First the chiefs were all angry with the new power (the French[66]). The French were much worse than the other powers. They killed a lot of our people, so everybody had problems with them. We only knew the Futanke, we did not know the French, how they lived and who they were.' Allaaye Maamudu Nduuldi, who succeeded his father Maamudu Nduuldi as chief of Booni, was among the most difficult chiefs for the French and for his own people. During his reign many Fulbe groups fled the region. From 1895 to 1898 this exodus is reported in the archives. As early as July 1895 a group of Fulbe from the region of Booni left for the Seeno Hummbeebe near Monndoro, because they no longer wanted to live under their chief.[67] The exodus of disgruntled groups ((sub)-lineages) of Fulbe continued until 1898.[68] His reign was characterised by raids, exploitation of his own people and refusal to pay taxes to Aguibu. Many people fled the regions and some even complained in Bandiagara in 1895.[69] Other groups of Jallube (pastoralists) supported him and gained from the situation. With this backing he scared off the French so much that they undertook action against him only in 1899. He was replaced by Aamadu Yero Maamudu.[70] The chief of Dalla, the successor of Allaaye Ba is also noted as rebellious and exploiting his people.[71]

This behaviour of the Hayre chiefs remained much the same throughout the protectorate period. This may also have been a consequence of the style of government of Aguibu, who simply copied the organization of his Futanke brothers. The organization was based on the levying of tribute from vassals and the exploitation of the population by a few Futanke based in the capital Bandiagara. It also exemplifies the relative independence of the chief of Booni, which remained as it was under the reign of Tijani.[72] The institution of slavery flourished in these days. Bandiagara and Douentza were important slave markets.[73] The state of Aguibu was organized as an Islamic theocracy as was the case under his brother Tijani. The situation of the Islamic clergy did not change in this period and judgements were given according to Islamic law, but Aguibu did not follow an active policy of promoting Islam. He could not because he was controlled by the French.

By the end of the 19th century the Fulbe chiefs seemed to have accepted the reign of Aguibu. This may be concluded from the changing attitude of Nuhum Paate Mboolaaye, chief of Dalla. In correspondence between him and the court in Bandiagara the tone is more cooperative,[74] not the least because the French lost their reluctance to send their troops on his behalf to reestablish law and order. This attitude of the Fulbe chief contrasts with the attitude of Dogon and Tuareg who were still opposing Aguibu's power. Despite Aguibu's increasing control over the area, the French took power over Maasina out of his hands in 1903, and the Hayre became part of the French colonial empire, and was incorporated into a unified administration directed from Bamako and Dakar. The measures taken by the French deeply influenced the life of people and the organization of chiefdoms and states. The social hierarchy in the Hayre, which hardly changed under the Futanke, was transformed radically by the measures of the new colonial regime. The incorporation into

the modern administration of the indigenous chiefs, who had to look after the collection of taxes, the recruitment of forced labour and soldiers, the extension of schooling; the policy with respect to Islam, and the abolition of slavery were among the most important transformations in this regard.

The shift from Aguibu to the French did not pacify the region immediately. Pacification still figured high on the agenda of the French and it proved very difficult. There are many reports in the archives about revolts of Dogon in the Hayre and the Bandiagara region, which indicate that French rule was opposed well into the 20th century. This opposition was directed against tax collection, forced labour, etc, hindering the collection of taxes by local chiefs. The Fulbe (herdsmen) also refused to obey the French, but followed a totally different tactic than the Dogon. They simply migrated as in the case of Bubani Kani, a rainy season camp near Booni along the road to Bandiagara.[75] A famous hotbed of resistance was the Dogon village of Taabi on the mountains near Booni. Its final submission to the French is still vividly remembered by the people of Booni. It was a real firework, when the French used dynamite to force their way up the mountain to the village. This conflict between Taabi and the French was a continuation of their resistance against the Fulbe and Hummbeebe to whom they were subjected from the middle of the 18th century.[76] Taabi was punished by its displacement to the Seeno plain in 1920, in order to be better controlled (cf. Suret-Canale 1964:143-144).[77] Only at independence were they allowed to return to their home villages at the top of the mountain. Eventually the French succeeded in controlling the region of Maasina, and from 1920 on there was relative peace and order in the area. As the commandant of Douentza writes in a report of 1917: 'The people are calm, the work on the road has been done and the collection of taxes no longer poses real problems'.[78]

The French and local political hierarchies

In order to understand the way the French intervened in political structures, religious affairs and natural resource management, it is important to know how they perceived local politics and power relations, and the position of the Fulbe in this framework. From the very start of their rule in West Africa the French took an ambivalent attitude towards the Fulbe which was motivated by fascination and distant admiration, because of the high positions they held in local politics (Harrison 1988). For the French, the Fulbe elite, the chiefs, represented the Fulbe and were considered as the Fulbe. The different lineages and related political structures were in the first instance neglected or not noticed. This attitude can be traced in the archives concerning the Fulbe in the Hayre and in the analysis of Aamadu Ba Digi. According to Aamadu Ba Digi: 'The French took the Fulbe for a war-loving people who murdered each other for power only'. A French commandant wrote: '... *les Fulbe submettent sans problèmes pour une autre force supérieure, mais ils attendent toujours pour revange* ..'[79] The distinction between free and non-free people soon played a role in their perception:

> *Les Foulbes de Dallah, appartiennent en majorité à une sorte de caste de nobles les Bérébés (bérédio). Ces Bérébés ne font absolument rien et ne vivent uniquement que de produit de leurs captifs, qu'ils exploitent le plus qu'ils peuvent. Voici pourquoi la question de captivité et celle de partage de diakka [zakat] est si importante; c'est pour eux une affaire de vie ou de mort.*[80]

Which was coloured with racist overtones:

> *... leur [the Fulbe] type physique ainsi que leur langue plus perfectionnée que les idiomes noirs, indiquent qu'ils appartiennent à une race supérieure....* [81]

> *Les Peuls (...) donnent par le croisement avec le nègre un type nègre superieur, plus beau et plus grand que le nègre proprement dit est, lui, trapu, robuste et laid. (...) Ainsi les Peuls ont considérablement amélioré la somatologie de l'Afrique occidentale française et ce sont eux qui ont empêcher ici qu'on puisse trouver normalement dans cette région le nègre pur, épais, prognathe et stupide* (Tauxier 1937:10).

Despite this ambiguous attitude and the distrust of the French towards the Fulbe, the French needed the collaboration of the Fulbe chiefs badly in order to implement the exaction of taxes, which was the monetary basis for their administration. They followed a policy of keeping the Fulbe chiefs quiet and loyal to the colonial administration. Chiefs who did not comply were removed. In the Hayre the example of the chief of Booni, Hammadu Yero Dikko (grandson of Maamudu Nduuldi), clarifies this point. He disobeyed the French in the collection of taxes, and rules of forced labour, for which the French removed him from office. In the skirmishes around Taabi he gave the French advice and helped them to find soldiers. This led the French to reinstall him in power.[82] This policy towards the chiefs worked well as is witnessed by the fact that in both Dalla and Booni the longest reigning period of a chief was under the French colonial regime: in Dalla, Yerowal Nuhum Dikko, 1911-1966; in Booni, Hammadu Yero Dikko, 1899-1952. In neighbouring Hommbori this was the same. Ba Lobbo, the Sonrai chief ruled from 1924 to 1968 (Marie & Marie 1974).

With changes in the colonial administration, i.e. the geographical division of the country, the position of the local chiefs changed. In the new administrative division the chiefs of Dalla and Booni each became *chef de canton*, with related tasks for the French government. The archival sources on the colonial administration in Douentza indicate that it was predominantly concerned with the levying of taxes, a phenomenon that has also been observed elsewhere (Suret-Canale 1964, Marchal 1974). Taxes were levied on persons (poll-tax) and livestock. Collection of taxes became the central role of the chiefs which meant a severe reduction of their status. In the Hayre the chiefs already exacted the Islamic tax (*zakat*) with the Jallube for the Maasina and Futanke empires. On top of that, the head tax was introduced. They had to collect the taxes in the villages that were part of their *cantons*. They made survey lists, written in Arabic by the *moodibaabe*.[83] The chiefs were allowed to keep part of the tax (5%).[84] They also had the task of recruiting soldiers or others to work on public works among their people.

The position of the indigenous chiefs was very ambiguous. The administration was organized through the chiefs, who were controlled by the French bureaucrats. At the same time they were free to manipulate the colonizers who did not know their colony very well. As a consequence the French bureaucrats had very little contact with the rural population.

They did not know the nomadic herdsmen and knew the situation of the cultivators only superficially. Controlling the local chiefs was already enough work. This restricted knowledge of the French was also a consequence of the attitude of the Jallube pastoralists who preferred to maintain as little contact as possible with the administration. They were glad that their chiefs handled their administrative affairs. Of course the Weheebe chiefs did not do this free. They collected livestock for the 'services' they rendered to their subjects.

Another administrative change influencing the political relations in the area was the installation of a court of justice by the French where Muslim, French and customary law were administered. The court of Dalla and Booni was in Douentza. This introduced a new opportunity for the population to complain about abuse and exploitation. Such a 'neutral' institute had not existed before. The fact that the abuse of taxes by the chiefs of Booni and Dalla was reported and that the chiefs were prosecuted but not convicted by the French is only an example.[85] In these transformations the Fulbe chief as warlord definitively disappeared, which made an end to the special cooperative relation between Weheebe and Jallube. The chiefs became *chef indigènes* incorporated in the French administration, which symbolized the end of the Hayre as a semi-autonomous province or independent chiefdom.

In general the French hardly interfered in the religious domain. They tolerated Islam and controlled it from a distance. Islam was regarded as potentially rebellious, but also as a source of stability. Control and if necessary suppression of Islamic centres was the basis of French policy towards Islam. The registration of Koranic schools was part of this policy. In a letter of 1908 Taillebourg (the French governor) charged all the commandants to report every year in May on the number of Koranic schools in the region and on the *mouvements Islamiques*.[86] In the Hayre as in other regions the Koranic schools were registered, but only in the 'urban centres': Nokara, Looro, Dalla, Booni.[87] The French only intervened when law and order was at stake (cf. Adouin & Deniel 1975, Brenner 1984, Harrison 1988). Suspect *moodibaabe* were arrested. In a political report (of 1896) the action of a *moodibo* is mentioned, who was busy organizing a holy war (*jihad*) against the French in the eastern provinces (cf. Riesman 1977).[88] In the period after the Second World War the Islamic movements were more carefully scrutinized by the French. To open a new Koranic school the *moodibo* had to ask permission of the French who checked his antecedents (cf. Moreau 1964, Brenner 1984).[89]

This policy was followed in the whole colony, especially in the early period of the French colonial regime. The *moodibaabe* were essential as scribes and judges for the functioning of the colony. On the other hand it enabled the French to encapsulate the Islamic clergy, who were potential leaders of rebellion (Moreau 1982:191-192). In the Hayre the Islamic clergy and the Fulbe chiefs cooperated. The *moodibaabe* helped the chiefs with the execution of their tasks, as before as scribes, administrators and judges. The role of the Muslim *cadi* in the newly installed court must not be exaggerated. Reports on cases at the court show that French law dominated.[90]

The *moodibaabe* from the Islamic elite in the Hayre were fairly cooperative with the French, so that they saw no necessity to intervene. The local structure of Islam was left intact, and the coalition between Moodibaabe and Weheebe was even reinforced in the Hayre. Probably the relative peace and order in the region after 1920, combined with this

attitude of the French, promoted a further spread of Islam among the ordinary people Initially only among the nomadic people, because the sedentary population was kept in slavery and thus not allowed to convert to Islam (cf. Moreau 1964, Audouin & Deniel 1975). However, the incorporation of Islam into the administration and the encapsulation of the chiefs into the French regime led eventually to a decrease in the role of the religious elite.

A third important group in the political hierarchy in the Hayre were the slaves. They were indispensable for the economy of the Hayre. Some groups of slaves had considerable power and a relatively good position as we have seen above. However, for the French the existence of slavery was a thorn in the flesh. It was against the ideas of humanity that were widely shared in Europe at the beginning of the 20th century, which can also be interpreted as inspired by feelings of superiority towards the African population, as is illustrated by the following citation from a French report.

> *L'état de liberté individuelle et politique et de progrès social actuel de la France est le fruit de longs siècles de lumière et de philosophie On ne saurait improviser de tels résultats en Afrique française dont les populations sont encore dans une ignorance et un état de moeurs voisin de la barbarie.*[91]

Another reason for the French to abolish slavery was economic. The colony badly needed free labourers to do all kinds of work for the administration and private enterprises. The slaves were a potential reserve to fill the labour gap, if only they were free. The actual abolition of slavery proved difficult. The local economies were so dependent on slave labour that it seemed impossible to make an end to it without ruining the elites and creating widespread unrest, which the French did not want (cf. Klein 1983).

At the beginning of the 20th century slavery was not at all on its way out in the Hayre. As we have seen the subsistence of the elite depended for an important part on slave labour. Slaves were also culturally important as a marker of the noble identity of the elite. These cultural and economic dependencies on slavery make clear why the chiefs of the Hayre fervently opposed the abolition of slavery. According to Aamadu Ba Digi the chiefs of the Hayre and Hommbori got permission from the French administration to keep their slaves. The slave trade, however, was forbidden. As a result the social situation of the slaves changed little in the Hayre, especially in the first half of the 20th century. It was only after the Second World War that we can speak of the liberation of the slaves, which was the result of a change in the political attitude of the French. To emancipate the population of their colonies democratic elections were organized in 1946. In this atmosphere it could not be tolerated that someone with the right to vote lived in a situation of total submission to another person. Also from the stance of the slaves themselves this gradual liberation may have been the best solution. Because of their status they were people without family and without land or children. Sudden liberation would have meant enormous subsistence problems for them.

This attitude towards the abolition of slavery and emancipation of Riimaybe, which was in clear contrast to official directives from the capital and governor, may be explained by the fear of the French for the Fulbe. The French administration at local level feared the Fulbe much more than the Dogon, though the latter were far more rebellious. Dogon

uprisings took place in isolated villages, which were no match for the French army. The Fulbe with their cavalry and centralized political organization were considered a much more formidable threat when set in motion. Nevertheless there were a number of Riimaybe who broke away from their slave bonds. They fled or the family of their master died out. During the drought of 1913-1914, which is very well remembered, numerous Riimaybe escaped to the lake system northwest of the Hayre and into Burkina Faso, on the run from the ravages of hunger and famine. Upon return they found their master dead or decided to settle elsewhere. Enlistment in the colonial and metropolitan army to fight in the First World War was another way of gaining freedom. In Fulbe society Riimaybe were sent because Weheebe and Jallube did not want to join the troops of the French occupiers. For Riimaybe to become free they had to apply for their *carte de famille*, which testified that they were independently paying poll-tax, instead of via their master. They could also become free people upon payment of compensation money to their master. The required sum was, however, far out of reach for the Riimaybe because it was equivalent to 100 times the poll-tax.[92]

In principle slaves were liberated and free to do as they liked. The word *maccube* fell in disuse, former slaves were then called Riimaybe, which means *protégé*, and is derived from Arabic (Breedveld 1995). However, they did not break the bond with their masters but instead tried to keep his protection. Protection was to be expected more from Weheebe masters, who were close to the French administration, than from Jallube who were marginal in the colonial administration. The result was that many former slaves took a Beweejo as patron. Another important effect of the liberation was that the Riimaybe turned themselves to Islam and started to study the Koran. Being Muslim narrowed the gap between them and the elite. Nowadays some slave families try to augment their free status by claiming that they were the first inhabitants of the Hayre. In Booni some families say that they were incorporated into the army of Maamudu Nduuldi simply to seek protection and to fight with him in war, and that they have never been enslaved. They are called *koma galluuje*.

An example of an indigenous chief: Yerowal Nuhum, Dalla 1911-1966

Yerowal is presented in the story of Aamadu Ba Digi as the most powerful chief of Dalla since Moodi Mboolaaye. He was kind to his people, but also strict. According to his children he was a just person, who ruled his people in a harsh manner. The stories we heard about him illustrate the reality on the local level behind the changes of the colonial period in the Hayre.

Despite the fact that Yerowal's status was no longer chief, or king, but *chef de canton*, subordinate to the French, he tried to uphold an image of power and authority befitting for a 'chief of the Hayre', the position he inherited from his father. One of the means he employed was to keep his court functioning in the old style. He maintained the *tubal*, of which the function changed from war to warning drum. This *tubal* and a charm made of three wooden bowls, are the symbols of power of Dalla. Without these two magic objects the power of Dalla would cease to exist. His personal servant Allaaye still remembers he

had to bury each night at midnight some Koranic texts in the concession. The building that now serves as kitchen still keeps these texts and texts of Yerowal's father, Nuhum mBabi, in its walls. Yerowal gave the *moodibaabe* horses and cows for these services. During his reign the compound was kept in good condition. The (mud) walls were well maintained. The tomb of his father and grandfather were kept in good shape.

Yerowal retained his title of *amiiru*. He had a council of advisors around him. In this council the different groups of his chiefdom were represented, except the slaves/Riimaybe, who had no vote; the eldest of the two main Jaawambe families of Dalla (Bookum and Waigalo), the eldest of the Weheebe family, the eldest of the Jallube of Dalla, and a representative of the Nyeeybe. Of these the Jaawambe were the most powerful. After each meeting the Riimaybe were informed about the decisions taken. Yerowal esteemed his Jaawambe very highly and followed their advice. The Jaawambe were much richer than the chief and they were indispensable for the smooth functioning of politics as an old Jawaando said: 'For work as well as important decisions, during councils, it was the Jawaambe who had a veto'.[93] 'If there is no Jawaando present, the reign of a chief cannot be good'.[94]

Although Yerowal, as *chef de canton*, was formally deprived of his power over the population in his chiefdom, there was considerable room for manoeuvre to maintain and even reinforce his position as chief of the social hierarchy of Fulbe society, by using his position as intermediary with and extension of the administration.[95] He was also *cadi* at the court of justice in Douentza. The maintenance of good relations with Islam and the Islamic clergy was another strategy. Dalla was a fairly important Islamic centre (Marty 1920:215). Marriages between the Weheebe and Moodibaabe of Dalla were promoted to strengthen this relationship. All Weheebe children were sent to the Koranic school, and were not allowed to settle outside Dalla, until they mastered sufficient knowledge of the Koran. His marriages were also meant to strengthen relations with various social categories. He married five women, all from different villages, among whom a Jallo woman, a Sonrai woman from Hommbori, and two Riimaybe women from the Gandamia. His children and grandchildren are related by kin relations to all these groups, and may rely on their support.

His position also enabled him to manipulate the tax money, and to collect his traditional dues. From the information on tax collection in the archives we may conclude that Yerowal's father, Nuhum Mbabi, was very lax in delivering the taxes to the French. Yerowal is remembered as being less unwilling, but his behaviour was not very coöperative either.[96] He also collected tax money for himself, calling this the Islamic tax (*zakat*). Aamadu Ba Digi told us about this:

> In the month of *haaram*, the first month of the Islamic year, the chief went to count the number of animals with the Fulbe. Each herd that counted 30 head of cattle had to give one animal of two years old; of a herd of 60 head of sheep or goats one had to give one animal. This is the *jakka [zakat]*.[97] The country became prosperous again. The chief might gain 20 animals on his tour If he went to the west, in the villages of Sigiri, Naani, Torbani, Bussuma, Baraussi, all the people were glad.

If a Pullo did not give these dues to the chief he would be followed by misfortune, which is indeed reported in stories. An example is the story about a herdsman who refused to slaughter a goat for Yerowal, when Yerowal visited his camp, which is the very least to

honour the chief. A few months later this herdsman lost all his cattle to a mysterious disease. Only his cattle were infected. Nowadays his son has started to rebuilt the herd a little.[98] The chief was able to exploit his people in this way because he made an appeal to the old pact between Jallube and Weheebe, and because he was ascribed magical power.

Modern education also proved beneficial for the chief. Yerowal refused to send all his children to the French school. He wanted his children to study the Koran instead. Nevertheless, he was forced by the administration to send some of his children to school, whom he summoned home as soon as they could read and write a little. They became his secretaries. Only two of his 21 children became civil servants. But they saved the chiefly family several times from the shame of imprisonment of one of its members, with their interventions and connections with the administration and the ability to get credit on their salaries. The pastoralists in the bush refused to send their children to school, and even paid the chief in cattle for keeping their children out of school. Yerowal simply sent Riimaybe children instead.

In Dalla slavery was abolished only after the Second World War on the occasion of the free elections. One of the reasons was that Yerowal needed the political support of the Riimaybe. He abolished slavery symbolically by building a wall in his concession between the part of the Weheebe (his family) and the part of their slaves. In practice this did not mean an end of the relation that existed between the slave-families and the Weheebe families. Close relations were maintained and still are. He never made any difference between the children of his Riimaybe women and the children of his noble women.[99] The present chief of Dalla is a child of one of Yerowal's slave-wives. These marriages with slave women were strategically very important because they created an enormous (political) support for the chief, which was badly needed in view of the French policies towards political liberation after the Second World War. The support of Riimaybe became much more important than the backing of the Jallube who were far away in the bush, and not interested in politics.

In the second half of the 20th century the Jallube left the council. This could have been the result of the pacification in the area, which allowed them to settle in the bush, an environment they considered better for their animals. Their physical absence in Dalla has also led to their disappearance from the council, indicating their loss of political power, and the growing gap between the Weheebe and the Jallube.

The attitude of Yerowal towards Islam is very much stressed as characterizing his reign. He is considered a good Muslim chief by his people. In the story of the Aamadu Ba Digi the Islamic aspect of the Yerowal period is (over)stressed. This may be to compensate for the chief's loss of political power to the outside world. No doubt Islam played an important role at Yerowal's court, but was it really so important as the people led us to believe? The stress on his Islamic piety may also function as an example of how it should be, for a Pullo and especially for a Beweejo. Islam is an increasingly important attribute of Fulbe identity in the Hayre, and may therefore be emphasized in the stories about the former chiefs. Under the French, Islam was tolerated and even stimulated as they considered it a means of organizing the country. In this way French rule contributed to the growing importance of Islam for Fulbe identity.

Despite exaggeration of some aspects of the reign of Yerowal in the stories we recorded, they illustrate very well some transformations in the social hierarchies in Dalla and Booni. The chiefs became part of the colonial administration which meant that the distance between them and their former allies, the Jallube, increased. In Booni this may have been less the case than in Dalla, because, as the story of Maamudu Nduuldi showed, the Jallube and Weheebe were less alienated from each other in Booni than in Dalla. This development also resulted in a withdrawal of the Jallube from the 'modern' world. They did not send their children to school; taxes were collected via their chiefs; they tried to avoid the administration as much as possible. When they moved to the plains of the Seeno-Manngo and settled in the Daande-Seeno the distance between them and the Weheebe increased, to the point that they were also excluded from the traditional government of their area. The fact that many Riimaybe grouped under the Weheebe and left their Jallube masters is another side of the same process. The Moodibaabe consolidated their position as moral leaders of the community and supporters of the chief. It seems that more Jallube and Weheebe devoted themselves to the study of the Koran. Islam became an important point of orientation for the liberated slaves. The following of Islam was a means of acquiring some status, a marker of their liberation, to be able fully to participate in Fulbe society. In politics their power diminished. Islamic law lost influence against French secular law, if only because the Islamic law was used for the administration of law but not for determination of the required punishment. In the courts, as scribes for the chiefs, moreover, they were gradually replaced by young people who were literate in French.

Interventions in natural resource management under the French

The economic situation in the Hayre

So far we have concentrated on politics and religion. In this section the results of the changes in these domains for the ordinary people who had to cope with the vagaries of everyday life will be discussed. This may well be illustrated by the effects of the French policies on resource management in the area. Before doing so we will first try to describe the economic situation of the ordinary people in the Hayre at the beginning of the 20th century and the climatological circumstances in which they had to produce a subsistence.

Census data collected for the levying of taxes by administrators give us some insight into the economic situation of the Hayre in those days. These administrators were frequently travelling in their domain, and their observations are an important source of information. In the beginning of the colonial era reports of these registration tours often contain sections with impressions about the economy, the population and markets. Later on these observations become more rare and the reports are exclusively devoted to administrative matters, taxes and statistics (cf. Marchal 1974:1-2).

Although the census figures of the administration are probably very incomplete and probably very inaccurate, they give some indication on the number of people and their wealth in livestock.[100] In these sets of data two main trends are visible. In the first place,

a big difference in size of livestock holdings of cattle and to a lesser extent small ruminants between Fulbe on the one hand and Riimaybe and cultivators (Hummbeebe, Sonrai, Dogon) on the other hand. The Fulbe own significantly more livestock than all the other groups. The second tendency is that livestock numbers fluctuate very much, due to climatic circumstances and diseases.[101] We may estimate the proportion of people belonging to Fulbe society very roughly at 40-50 % of the total population of the cercle Douentza. Any attempt to produce more reliable estimates of the population of the chiefdoms of Dalla and Booni and even the number of Fulbe and Riimaybe in the *cercle* Douentza would be ill-founded. The only thing that can be concluded from the data on livestock numbers is that even if the Fulbe of the *cercle* Douentza in the chiefdoms Booni and Dalla were able to hide 50 % of their livestock from the administration, most of them were not able to live off livestock alone, with the possible exception of some of the Fulbe of Booni who owned more livestock than the others.

The *cercle* Douentza and the Fulbe chiefdoms were marginal poverty-stricken areas in the colonial period.[102] The margins for survival were narrow and when some disaster in the form of drought or locusts struck the region all kinds of irregularities occurred. During the drought of 1913-1914 hungry people started pillaging the herds of pastoralists to eat the animals or to sell them for food.[103] In the Gimmballa (north-west of Douentza), near the lakes, nomads from the north entered the region and caused damage to the fields and bush of the local population, who could do nothing but retreat.[104] In 1942 the food situation was bad but not alarming in the chiefdom of Booni. The population was eating *giigiile*, the fruits of *Boscia senegalensis*.[105] In 1946 a large part of the harvest was destroyed by local locusts. The export of rice and millet out of the *cercle* was forbidden in 1947. In 1948 the administrator of the *cercle* asked the governor of the French Sudan for permission to open the grain reserves. Administrators of neighbouring *cercles* were asked to supply Douentza with millet.[106] Too much rain could also be a problem. In 1950 enormous rains wiped out 15-25% of the livestock population in Dalla. For Booni it was reported that livestock numbers had been greatly reduced and that complete herds had perished.[107]

These were not the only difficult periods in the 20th century. According to Hesse and Thera (1987:42) the people remember six other periods of food shortage this century. Marchal (1974) reaches similar conclusions in his analysis of historical records of the *cercle* Yatennga in northwest Burkina Faso. So we should not assume *a priori* that living conditions in the past were better than at present.

From pastoralism to agro-pastoralism

Probably the most important change in land use in the colonial era in this part of the colonies, was the shift of both pastoralists and agriculturalists to agro-pastoral land use strategies. Pastoralists began to take up cultivation, and agriculturalists began to accumulate livestock. Both groups began to combine livestock keeping and cereal cultivation in various ways. The main impetus for these changes came from the political and economic changes in this period. In response to these changing circumstances both categories of producers

developed new ways of dealing with environmental and economic insecurity. This was further promoted by new administrative policies with respect to famine, the development of transport, and the favourable climatic conditions towards the end of the colonial period. Alongside these autonomous changes, the French tried to intervene directly in land use to induce rural producers to produce desired commodities, such as cattle and export crops.

In the period of consolidation of French power they did not directly intervene in land use. Their actions, such as the suppression of local warfare, the abolition of slavery (and the slave trade) and the raising of taxes, had nevertheless numerous unintended consequences. The abolition of slavery and pacification of the countryside created more room to manoeuvre for the agricultural peoples. Before the French conquest they had taken refuge in the mountains and were not free to go and cultivate where they wanted out of fear of being taken as slaves by Islamic pastoral groups, such as the Fulbe and the Tuareg. Sometimes the French forcibly settled rebellious mountain villages of cultivators in the plains in order to better control them, as in the case of Taabi. All over West Africa pasture land was converted into croplands. The administration did not prevent these colonization efforts (Franke & Chasin 1980, Cissé 1986, Schmitz 1986, van Beek & Banga 1992).

Because of the abolition of slavery the Fulbe pastoralists had to start cultivating millet for themselves. In Duma, a large Fulbe settlement near Douentza, they began in 1911, but their harvests were so low that they had to buy additional millet from the Dogon.[108] The Weheebe of Dalla and Booni still collected 'gifts' of millet as tribute from the Riimaybe in the surrounding villages in addition to the poll-tax. From the pastoralists, the Jallube, they received gifts in livestock. Nevertheless the source of labour needed for the production of cereals for the pastoralists and their elite dried up eventually, and they were forced to take up cultivation by themselves and to engage in trade and barter of livestock and milk in return for cereals.

The administration intervened little in conflicts concerning land and livestock, due to lack of manpower at local level and out of fear of stirring up all kinds of new controversies when taking the wrong decisions. In the domain of law, however, the foundations of the hegemonic project of the modern state were constructed. All land that was not in use by local people was nationalized, including all land that was in use as pasture or left uncultivated for more than a specified number of years, and became the private property of the state (Catinot 1984, Bertrand 1985). The colonial administration also tried to appropriate what was on the land in the form of forest resources. In 1900 a decree was enacted containing a list of valuable tree species on which restrictions of exploitation were placed. Permission to exploit these species became dependent on the written consent of the administration. Apart from this legal project hardly any special investments were made or special projects implemented.

After 1920 the French tried to extract more revenues from their colonies. This was for example done by the raising of taxes on trade in cash-crops and livestock, and the lease of concessions or the giving out of licenses for the exploitation of forests or pastures. For example the official export of cattle to other French and British colonies in West Africa from the French Sudan, as Mali was called, was estimated at 40,000 to 50,000 head of cattle, which meant a considerable source of revenue for the colonial administration.

However, in the effort to levy as much taxes as possible the administration almost smothered the trade. The system of taxes was very complicated. Traders had to pay for licenses, market tolls (dues) of about two % of the value of the marketed livestock, and for the sanitary inspection.[109] Duties on cattle ranged from 2-6 % when exporting to Ivory Coast to 30-33% when exporting to British colonies in West Africa.[110] As a result one beast that cost 100 Francs in Gundam cost 173 Francs at the border (Curasson 1933). Moreover the quality of the livestock delivered to the British was often so bad that in some cases the herds were not allowed to enter British territory.[111] The French administration also tried to organize the export of meat to France and Europe around 1933. The lines of transport were, however, too long and the cattle lost too much weight.[112] Alongside the legal export a lively illegal trading network developed in the French colonies. In Niger the marketing of livestock moved to and fro between markets in southern Niger and markets in northern Nigeria depending on the zeal of the French colonial administration in collecting market dues (Kerven 1992:78-79).

The development of markets for cereals and livestock had also important (though not intentional) effects on land use by pastoralists. Although trade existed for a long time and pastoralists were far more price responsive and willing to market livestock in the past than has been assumed for a long time (Kerven 1992), the nature and extent of trade systems changed fundamentally. In the first place the selling of livestock or cereals or other crops was the most important way to obtain cash to pay the taxes of the colonial administration, while in the past taxes were paid in cowries or in kind. Often the animals destined for the payment of taxes were collected by the chiefs, and subsequently sold by means of middlemen such as the Jaawambe. Secondly, because of the imposition of peace, and the reorientation of trade networks from the Sahara to the coast of West Africa (Jorritsma 1979), the situation became sufficiently safe to allow expansion of the trade in livestock to the coastal countries. These areas had a chronic meat deficit due to tse-tse infestation. Thirdly, the demand for meat rose enormously with the growth of cities on the coast, but also in the Sudan and Sahel. Fourthly and perhaps most important, the relationship between the buyer and seller of cereals and livestock changed fundamentally. Before the colonial conquest the pastoralists were dominant and imposed their conditions of trade in cereals on cultivators, or just took it as tribute. After the colonial conquest they had become equal partners in a commercial transaction.

These changes made it attractive for pastoralists to grow their own cereals in order not to deplete their herd, which they would need in times of cereal deficits to buy cereals. For agriculturalists it became attractive to invest in livestock as a safety device for times of crisis, for the accumulation of means for investments in marriages and rituals, and the provision of manure on their cropland. These transformations promoted an increasing demand for livestock and provided an upward pressure on the number of cattle.

Gradually the French administration began to attempt to get more control over agricultural production and natural resource management. The thrust towards more control became manifest in the introduction of a *laissez-passer* for pastoralists on transhumance, to control the increasingly 'chaotic' movements of pastoralists and their liberated slaves, who were drifting to the south.[113] However, contrary to expectations most pastoralists regarded

the 'laissez-passer' as an authorization to move anywhere freely. This led to an increasing number of conflicts with cultivators (Doutresoulle 1952:30,201).[114] For a long time there had been growing concern in administrative circles over the condition of forests in the colony.[115] In the Sahel the pastoralists and more specifically the herdsmen of goats are identified as the principal cause behind deforestation.[116] The response in this domain was also repressive. Specific tree species were legally protected,[117] a forestry code was drafted,[118] and forest reserves were created (see also Catinot 1984, Bertrand 1985). A forest service was created to enforce the forestry code. However, in the absence of sufficient means and manpower its authority was delegated to local administrators and indigenous chiefs.[119] It was thought that these repressive measures would also promote a more rational use of these resources and stop the 'waste' of trees and forests by the local population. The opposite happened, control over forest resources was taken out of the hands of the population and local leaders responsible for land tenure. Nobody felt responsible any longer, and the administration lacked the capacity for control.

Around 1936 it was decided that more direct intervention in the livestock sector in the French colonies was desirable. By that time the technical means were available in the form of vaccines that worked against the major cattle diseases, rinderpest and bovine pleuropneumonia.[120] In 1934 budgets were made available for the '*aménagement de la production*'. A considerable part of this budget was devoted to the improvement of livestock production. After a conference in 1936 a final plan was drafted.[121] This plan envisaged the construction of inoculation centres, which would have to be supplemented by mobile groups, for example in the Gurma.

After the Second World War livestock development came high on the agenda of the French. Some interventions, such as the digging of wells, the increase in personnel and the creation of mobile inoculation campaigns, were already carried out before the Second World War, but the real growth in investments in rural development began after 1945. This growth was part of French policies to give the colonies more political autonomy and to africanise the administration and government services. The inoculation campaigns that were started by the colonial livestock service were an uncontested success and contributed enormously to its prestige (Landais 1990:37). As a result livestock numbers began to grow in the Sudan.

Within the livestock service a special division was created for the development of water resources (Service 1948:94). In Senegal, Mauretania and Niger boreholes were drilled in the early 1950's to open up large areas of dryland pastures (Inspection 1951:154). These boreholes are still an important part of the pastoral infrastructure in these countries (see Dupire 1972, Franke & Chasin 1980, Grainger 1982, Touré & Arpaillange 1986). In the French Sudan only wells were dug, partly because there were no maps (Inspection 1951:143,154, 1952:115,121, 1953:102), partly because the hydrological situation in for example the Gurma is extremely difficult (Doutresoulle 1952:105-109), and probably partly because most livestock is attracted to the Inner Delta of the Niger. A lot of money was wasted, because in the absence of plans, the budget for investments in wells was divided over regional French administrators. The wells constructed within this framework often failed due to lack of knowledge on the hydrogeological situation (Doutresoulle 1952:294-296).

Interventions on the local level

Although the investments and the amount of intervention in natural resource management may seem limited given the enormous areas and the variety of problems that had to be faced, the effects were far-reaching on the local level. Most policies permeating to the local level were designed in the capitals Bamako and Dakar, and given the poor organization and administration of investments it is not surprising that most interventions led to disappointing results. Despite this, authority structures over natural resources at colonial level were decisively altered, as we discussed above. The question remains whether these changes mattered at local level, in regions such as the Hayre. The French colonial administration was not merely a successor of the Maasina empire. It was different, but with essentially the same goal, i.e. to exert more control, political as well as economic, over production.

The only thing that really aroused the interest of the French in the *cercle* Douentza, was its potential for livestock raising north and south of the mountain range. The population of the *cercle* and the herdsmen from the Inner Delta who exploited the region north of the mountains in the wet season owned a considerable number of livestock. The location of the *cercle*, adjoining the Bandiagara plateau and in the heart of the Gurma, made it the gateway to and from the Inner Delta and an important route for the export of cattle from the north, the Gurma, the Inner Delta, to Ghana (Dolo 1969). The total extent of pasture areas on the Seeno-Manngo, Seeno-Gonndo and around Monndoro (Seeno, Gonndo and Monndoro) was almost 50,000 km^2. These pastures were considered of high quality. Exploitation was very difficult because the water table was too deep (Doutresoulle 1952:66). There were also almost 1 million ha. of pasture land that remained unexploited for most of the year, because of lack of water, just as many such areas in the Gurma (Gallais 1975). There were also serious drawbacks in the *cercle* Douentza. Rainfall was not sufficient to ensure self-sufficiency in food grains every year. Moreover, from time to time the area was literally stripped bare by plagues of local locusts, that devastated all that was grew on the land.

Because of the wealth in cattle of the *cercle* and its central location in the middle of the Gurma it was only logical to establish an office of the veterinary service in Douentza. In 1938 an auxiliary veterinary officer was stationed in Douentza (BSZEAOF 1938:67). The density of stations was still low. The nearest other offices were in Mopti, Gao, Ouahiguya, at a distance of more than 150 kilometres. In 1939 the mobile teams were ready for functioning. The investments were made with borrowed money. The stationary inoculation centres were not yet ready (BSZEAOF 1939:69). During the Second World War personnel remained in Douentza (BSZEAOF 1943:184).

After 1945 the infrastructure of the livestock service in the *cercle* Douentza was further developed. In 1948 a stone building was put into use as an inoculation centre, and three sub-centres, without permanent buildings, were run in N'guma, Hommbori and Monndoro (BSEIAAOF 1948:90).[122] By 1958 the veterinary service in Douentza consisted of a head office with one veterinary doctor, two veterinary nurses, a driver, three labourers as personnel, and was equipped with a landrover, and a refrigerator; and three branch offices in N'guma, Booni and Hommbori equipped with refrigerators, and each manned by a veterinary nurse (Service 1958:58-60). Investments in improvement of the water situation

were not made. Only between 1956 and 1958 a number of boreholes were drilled on the Seeno-Manngo, equipped with windpumps (Chapuis et al. 1972), but these were already out of use in 1960 (Gallais & Boudet 1979:6, see also chapters 10 and 14).

The French were not really interested in the development of the other economic sectors in the arid rural areas. To our knowledge no investments were made in subsistence agriculture. There were no possibilities for the large-scale growing of cotton and peanuts, the important cash-crops of the Sahelian countries, because of lack of rainfall. This may, however, also be the result of the incapacity of the French administration to handle all the changes. This limited capacity of the French administration was reflected in the way it intervened in conflicts concerning the management of natural resources. They reacted only in cases of violent conflict and grave misconduct. However, it often remains unclear how they intervened. In 1908 there were problems with sheep herdsmen, driving their animals into the *cercle* Douentza from the lake area. On the road from Konna to Douentza 15,000 sheep were counted in three days.[123] These herdsmen were probably Bella, former slaves of the Tuareg, who started wandering around after the abolition of slavery. The Fulbe in this area reacted by confiscating the sheep which led to violent conflict.[124] The relations between cultivators and pastoralists in the *cercle* were also sometimes tense. In 1907 two Fulbe herdsmen were killed by Dogon cultivators in a conflict over crop damage on the Dogon's field.[125] In 1912 it was reported that Dogon slaughtered an animal to which Fulbe fed the young shoots of trees.[126] Conflicts among the Fulbe also occurred. The inhabitants of Naani, belonging to the canton of Dalla, and Ella Buli, belonging to the canton of Booni, came into conflict over the pond between their villages in 1907, when herdsmen of Ella Buli wanted to drive their sick animals into the pond. Both villages were fined and compensation money was paid for the wounded.[127]

The colonial administration took a more active stance with respect to the (re)settlement of Dogon cultivators on the Seeno-Gonndo. This movement had already begun under the Futanke empire. The Futanke were under constant pressure from their Fulbe enemies, who were loyal to the Maasina empire. They badly needed the support of the Dogon, and allowed them to settle in the Seeno-Gonndo. They even established a Futanke colony in Bankass in the plain. After the French colonisation this movement led to the creation of 43 villages between 1900 and 1913 (Gallais 1975:11). The famines of 1913-1914 and 1940 and the locust plague of 1929-1930 resulted in the creation of 46 more villages. According to a letter of the *Commandant de Cercle* of Bandiagara, this process should be promoted by the digging of wells in the plains, to stop the migration of young Dogon and to temper the religious zeal of the Fulbe of the plains, by bringing them into contact with the Dogon.[128]

With respect to the management of trees and forests considerable authority was delegated to the local chiefs. They were given the authority to patrol the bush to enforce the *Code Forestier*, and to exploit it with local labour for their own profit.[129] The administration allowed them to collect fines for their own pocket. In Dalla, for example a Diimaajo of the chief, Yerowal, was appointed bush guard on his behalf. Together with the chief he patrolled the bush. When they spotted someone who was cutting wood or branches illegally, i.e. when it was someone not living in the chiefdom, they confiscated the axe and an animal, most often a goat. Yerowal never gave permission to cut branches of trees.[130] In

the chiefdom of Booni two members of the family of the chief were appointed bush guards. Even now there is still a close connection between the family of the chief and the forest service. In Douentza the bush was patrolled in similar ways according to informants.

Contrary to the Dogon population the Riimaybe were not helped in acquiring land. The French noted their weak position vis-à-vis the Weheebe. A French lieutenant for example wrote to his superiors *'J'ai appris que les Bérébés* [Weheebe] *empechaient les Riimaybe et Habe d'étendre leurs lougans, dans le but évident d'empêcher les malheureux se pouvoir jamais rachêter'*.[131] However, the administration intervened on behalf of the Riimaybe only when outright criminal acts were committed.[132]

This is confirmed by statements of Riimaybe who were interviewed on this subject. They did not have rights to land, only in their own villages if they had not been deported to the court of their master. If a Diimaajo cleared a new plot, it became the property of his patron when he died. Everything a Diimaajo harvested was for his lord, who fed him in return. Trees on the fields also belonged to the masters. If a Diimaajo wanted to clear a field the chief told him not to in order to save pastures for the livestock. If there were many trees on the prospective field clearing was always forbidden in order to have fodder for the animals in the dry season. If someone of noble origin of Dalla wanted to sell his land to a former slave, the chief of Dalla prohibited it and bought the plot for himself.[133] This remained so in Dalla even after the Riimaybe were eventually liberated.

> For the Riimaybe there were no fields. Until now they have no fields. All the fields they cultivate are given to them by the Fulbe. During the French colonial regime no fields were given out in the bush, and the government could not touch the old fields. In 1946 the Riimaybe were liberated but with respect to land nothing changed. The authority over land remained with the chief as *chef de canton*.[134]
> The land in the mountains is owned by the Riimaybe, but they worked for the Weheebe. The Riimaybe do not have any land.[135]

Riimaybe women had a double task. They worked for their master in the household and in cultivation. In addition they often cultivated millet with their husbands and children on private fields owned by nobles. From these rented fields half of the harvest went to the owner.[136]

So, while control over the labour power of the Riimaybe weakened, control over land and production remained firmly with the Weheebe. Redistribution of land was virtually impossible, because the court in Bandiagara decided that in Islamic villages fields were held in almost private property and could only be taken back by the founder of a village to cultivate for himself or for the construction of new houses in case of population growth.

> *... Sans cette réserve la propriété est absolue, la location et la vente en sont régulières, et le detenteur n'en peut être privé que s'il laisse en friche pendant dix ans consécutives. Nul ne peut donc lui contester cette propriété, même dans le cas de destruction de village dont la terre dépendant. S'il est de notorité publique, qu'il la tient de ces ancêtres établis dans ce dit village...*[137]

The only way to acquire land was to clear new fields in the bush. Weheebe and Jallube were however very keen on preventing this from happening, because they would lose control over these fields. Besides the expansion of cultivation sites would disrupt the

balance between cultivation and grazing in the area around Dalla. In the chiefdom of Booni on the other hand cultivators, among whom were Riimaybe from Dalla, Hummbeebe and Sonrai, were allowed to clear fields in the bush.

Although the French nationalized all unoccupied territory, they apparently left the distribution of land in the Hayre and probably in the whole Sahel to the local chiefs, and they recognized customary tenure. In the first place they lacked the bureaucratic apparatus and manpower to get a better grip on the distribution of land. Further they followed a policy of non-interference in land management, in order not to stir up existing conflicts between different interest groups on the one hand and not to arouse feelings of hostility among the Fulbe elite against their occupation. So they avoided conflict as much as possible; only when vital interests were threatened did they intervene in the management of natural resources. The natural resources in the Hayre and on the Seeno-Manngo hardly had any value. The French were happy when the population did not starve and was able to pay the taxes, and to export some livestock. For this they preferred to leave control over agricultural land and forests largely with the indigenous chiefs, who regained some of the prestige they had lost with the colonisation.

With respect to pastoralists the situation was much more complicated. They posed an administrative problem because of their irregular movements. The French, therefore, actively supported the pastoral chiefs in order to prevent anarchistic tendencies, for this, they felt, would make French rule over the masses of the population impossible.

> *...pour conserver la possibilité d'atteindre celle-ci, il fallait réagir en s'efforçant de maintenir intacts les groupements anciens et en fortifiant sur ceux-ci l'autorité de leurs chefs naturels. Ce fut là, je le répète un des principes essentiels de notre politique sahellienne.*[138]

The reasons for this policy were the immigration of an increasing number of ex-slaves, Bella and Haratin, of the nomads in the north (Tuareg, Moors) into southern areas,[139] and the introduction of a *laissez-passer* for transhumance. This problem was never satisfactorily solved as a report of an anonymous administrator quoted in Gallais (1975:91) indicates:

> *Le seul problème est celui des Bellahs vagabonds enfuis depuis plusieurs années dans la brousse et qui pillent et même tuent les voyageurs isolés. Les Touareg ne demandent qu'à organiser des chasses à l'homme pour les récupérer. Mais pour éviter de regrettables excès, il serait prudent d'examiner en commun les mesures à prendre avec les circonscriptions voisines et d'y faire participer gardes et goumiers.*[140]

However, the main cause behind this problem was the security provided by the colonial administration in comparison with the past. Pastoralists were in a position now to go anywhere without running the risk of being robbed of their animals. *'Le caractère pulverisé des mouvements'* (Gallais 1975:52) eventually led to the political fragmentation of pastoral society. The criminal Bella mentioned above were just an unwanted by-product of this development.

The way the French administration approached the pastoral groups, via their chiefs, may explain the little information that is available on pastoral groups. Pastoralists, Fulbe, but also Tuareg herdsmen, hardly figure in the archives. For the *cercle* Douentza barely any

information is available. They seldom figure in court cases, nor is there anything written on their whereabouts and activities. The only thing that interests the administration is the export of livestock, and the development of unexploited pastures by well-digging programmes to promote the productivity of livestock keeping and the export.[141] For their part the Fulbe pastoralists prefer to avoid the administration as much as possible.

Independence, modernization and drought

Administrative reforms

In 1960 the Malian Republic became independent of France. The difference from the colonial period was less distinct than is commonly assumed. Ideologically the new rulers under the presidency of Moodibo Keita distanced themselves from France. Practically there was much more continuity in the countryside, especially in regions which were economically backward. Only the administrative division of the Hayre changed, which mainly influenced the status of the chiefs, and their opportunities to exert power over the population by their role as brokers with the administration.

These administrative changes originated in the policies with respect to the gradual increase of political autonomy, introduced by the French after the Second World War. From 1946 onwards regular elections were held in the colonies and it became possible to organize political parties. Two big parties dominated the scene: the *Partie Progressiste Soudanais* (PSP), the party of the elites, and the *Rassemblement Démocratique Africaine* (RDA), the party of the common people. Yerowal and Ba Lobbo, the Sonrai chief of Hommbori, choose for the RDA. The chief of Booni, Aamadu Hammadu Yero, voted PSP. The RDA won the elections, Yerowal bet on the right party. This political game was totally new and as Aamadu Ba Digi explains in his story, it was something outside the daily order. The ordinary herdsmen and cultivators were not interested. For the elite, however, it was a means to maintain and enlarge their power at national level. Together with this policy directed at more autonomy the French made a new administrative division of their country. They divided the Hayre into arrondissements. Booni and Monndoro were attached to the arrondissement of Hommbori. The people revolted. They did not want to accept the authority of Ba Lobbo, because of the treacherous and oppressive role of the Sonrai elite of Hommbori at the beginning of the colonial era (Marie & Marie 1974). The people had their way. Hommbori, Booni and Monndoro became independent arrondissements (Muusa Dikko p.c.). The *canton* Dalla was attached to the arrondissement of Douentza. This meant an important change in the political hierarchy of the Hayre. Dalla was 'degraded' to an ordinary village part of the arrondissement of Douentza, whereas Booni became the capital of its own arrondissement.

Under the socialist regime of Moodibo Keita the effects of this new subdivision were not yet clear. Dalla's importance was growing, as the village favoured the RDA. However, when Moodibo Keita was removed from power by a bloodless military coup in 1968 the tide turned against Dalla. The new regime led by Muusa Traoré established a national

political party as a democratic facade in 1979, called the *Union Démocratique du Peuple Malien* (UDPM). This party was instrumental in channelling the political ambitions of regional and local elites and paid them off with lucrative political positions as deputy in the parliament, and by creating possibilities for the diversion of governmental and development funds. Connections with the administration now became more important. As will be clear, the chief of Booni obtained far more influence on the government services and gendarmerie in his own village, with his traditional authority over the whole arrondissement, than the chief of Dalla, whose chiefdom formed only an insignificant part of the central arrondissement. This situation was aggravated by the fact that Yerowal died in 1966 and there was a lot of internal strife in his family. The consequences for Dalla will be outlined below. The role of the chief of Booni will be further discussed in chapter 14.

Thus in national politics Dalla ended at the lowest end, while Booni was lifted on the political scale. In both cases, however, it did not make a real difference to the situation of the former chiefdoms and of the herdsmen and cultivators living there. The effects were mainly felt on the position of the chiefs. Formally the chiefs of Dalla and Booni both became village chiefs, and 'their' Jallube no longer fell under their authority. The chief then was no longer regarded as the chief of the Jallube and Riimaybe of the Hayre. For the collection of taxes the Jallube and Riimaybe were grouped under other village chiefs, e.g. of Hummbeebe villages where they lived. As in the case of Booni the Jallube were divided into groups each with their representative (counselor). These changes, however, did not eliminate the role of the chiefs as defined in the historical accounts. They are still regarded as regional chiefs by a large part of the population, which also means that they are ascribed the power belonging to this position.

Yerowal's death, in 1966, was a turning point in the history of Dalla. Yerowal was the last chief with influence outside the village boundaries. His successors lost themselves in court intrigues. His son Hamidu Yerowal, who is at present chief of Dalla, is openly challenged by the people. He has no power, and he looks for support to the Riimaybe only. His council consists of Riimaybe, Weheebe and Jaawambe only. However, he does not listen to the Jaawambe, who are still considered as an essential element of power. Most crucial in this critique is that he is very lax in executing the rituals and his duties vis-à-vis the Moodibaabe, which are believed to be preconditions for keeping power as chief of Dalla. The population admits that Booni has in fact become more powerful than Dalla, because of the new administrative division, and because of the character of their respective chiefs.

The decline of Dalla's power is visually evident. The *tubal* is old and needs repair, which the chief refuses to pay for. He has never collected the charms of the three wooden bowls from the house of his predecessor. The court-*griots* of Booni and Dalla died respectively in 1991 and 1993 and they have no knowledgeable successors. A very important historical document, the *tarikh* of Dalla, was taken to be used as evidence in the conflict of Mali and Burkina Faso in 1986 by government officials, who never returned the document to its owners. No one really bothered until we tried to get more insight into the history of the Hayre. Then people realized that the loss of this document signified very clearly the end of Fulbe power in the Hayre, and thus their identity. The former Imam of

Dalla asked us to bring it back. Our investigations with the international court, and the Malian embassy in Brussels, did not yield any response.[142]

Under the secular republic of Mali Islam as a political institution plays no role whatsoever in the administration. This tendency was already set in motion under the French. However, at the local level Islam is far from disappearing. For the ordinary people it becomes more and more an identity marker. Also outside the Hayre, the region is identified as Islamic and Dalla is still the Islamic centre of the Hayre. The current Imam is great-grand-son of Moodi Tawhiidi, and his father is considered as an almost holy person. Nevertheless, under his reign the mosque of Dalla has fallen into disrepair.

Development policy after independence

The post-independence period is marked by more intense state intervention in land use. These attempts to regulate land use become manifest at two levels: in the juridical domain and at the level of direct regulation of production. At independence the new Malian government embraced a socialist policy, aimed at collectivization of productive resources and monopolization by the state of trade and industry. For this the legislation with respect to land and forests was reviewed, in order to ensure that access to natural resources cannot be monopolized by a specific interest group, namely the village elders who hold traditional responsibility for the allocation of land. Consequently all exclusive rights in pastures, water points, land and all the benefits that accrue from these rights were annulled (Gallais & Boudet 1979:14).

At the level of production the Malian government undertook several steps to promote production. In contrast to most other African states the stress was on the advancement of agricultural production by means of so-called *Opérations de Développement Rural* (ODR's). One-third of national investments went into the agricultural sector. Most of this money was spent on support for cash-crop production. Little attention was paid to traditional food crops (Harts-Broekhuis & de Jong 1993:55), despite the fact that self-sufficiency in cereals was one of the stated objectives of the five-year plans (Diarrah 1986:73). An impetus was given to collectivization by means of the introduction of a collective field for the production of cash-crops, to be worked by the village. These attempts were stopped when the 'traditional' structures in rural Mali proved much too hard to abolish in this way (Diarrah 1986:108-110).

Within eight years after independence economic and political chaos reigned in the country. The ambitions of the Keita regime were too high. The failure of the development schemes resulted in a stagnant economy, mounting debt and inflation and inefficient state enterprises. In the beginning of the regime of Muusa Traore there were few changes in government policy. The new regime also opted for state control of the economy. Only in 1981 when the economic problems grew out of hand, because of mismanagement of state enterprises, corruption and the effects of the climatic difficulties, was the administration forced to adopt a different policy in return for aid from external agents like IMF and the World Bank to restructure the economy. From that time on direct engagement in the

economy has lessened (Harts-Broekhuis & de Jong 1993:54-55). However, political control over natural resources has been stepped up, by means of new legislation concerning land and forest resources. In 1986 all the laws with respect to natural and wildlife resources were amended, to heighten the pressure on the population not to overexploit natural resources. Penalties on infractions of the regulations were increased and some rules were added, notably the obligation to install a more efficient wood stove in every household. Restrictions on hunting were made more severe, and the repressive qualities of the forestry code were improved. It was hoped that in this way degradation in the Sahelian zone could be stopped. More important, the clearing of land was strictly regulated. For the opening of land belonging to the forest domain, which is in practice all land that has remained uncultivated for more than 5 years, permission is required from the administration (see République du Mali 1986, Marie 1989, Elbow & Rochegude 1990). Hereby the role of indigenous authorities was abolished.

On the practical level the control of the government over natural resource management has increased. After the drought at the beginning of the 1970s, extensive funds became available from bilateral, multilateral as well as non-governmental donors. Several ODR's, parastatal as well as state departments, were provided with new capital investments in order to promote food production, combat desertification and reduce dependency on foreign assistance (see Kliest et al. 1982). According to some authors these development efforts have only led to the strengthening of the interests of the urban elite, who have gained jobs, the political means to divert funds for their profit, and gained control over important natural resources because of their control of the state apparatus and the administration of law (Gallais 1984).

At an economic level the situation in the Hayre deteriorated enormously because of the droughts. The production of cereals declined because of failing rainfall. The reduced amount of precipitation in the 1970s and 1980s caused a structural decrease of soil productivity. To compensate this loss of production cultivators and pastoralists tried to take more land into production leading to augmenting pressure on scarce grazing resources near habitation sites, especially in those areas where water and pasture and thus the wettest soils are found together. The pastoralists lost most of their cattle.

The depastoralization of natural resource management in Dalla

What happened to the organization of natural resource management in Dalla that was established under the Diina? Although the organization of natural resource management remained fairly well intact into the 1960s we have noted that there were many changes in the context. The *maccube* were liberated and became Riimaybe. The economy was gradually commercialized. Decrees concerning land tenure and forestry were enacted. The structure of the administration changed. At the same time we noted that the period before the droughts was marked by a general rise in prosperity of the population. Even though the elite of Dalla lost all its administrative powers and was deprived of slave labour it kept a firm grip on politics and natural resource management around the village until this period.

The drought of 1968-1973 was hardly felt in the Hayre. The harvests were bad and a lot of livestock perished, but the people disposed of sufficient means to survive this dry spell. At least the drought is remembered in this way by the people. New in this drought was the aid in food and money from the international community, which made it easier, though parts of this aid drained away through corruption at the level of the administration.

In the post-drought years, however, problems grew. The amount of conflict over natural increased, and it is easy to see that with the course of time, drought, and increasing poverty, the pastoral groups around Dalla lost out against their competitors, the Hummbeebe, Jaawambe, Weheebe and Riimaybe. Cultivators from Hummbeebe villages started to clear fields in pasture areas. The Riimaybe of Dalla sought new opportunities for occupying land. The Jaawambe, some of whom grew rich during the droughts by speculating in cattle, laid claims on both pastures and agricultural land. The struggle over pasture on the Seeno-Manngo is not included here but will be discussed in chapter 14.

A conflict about agricultural land arose in the early 1980s, between Dalla and Kerana and between various groups in Dalla. The conflict shows that the pastoralists and Weheebe were also internally divided. The Riimaybe of Dalla started clearing land at various places in the bush between Dalla and Kerana. The Fulbe of Kerana and three other pastoral settlements protested because the fields were located near a number of small ponds which provided water for livestock in the rainy season. Not only did the fields hinder access to the ponds but the Fulbe would also run the risk of having to pay compensation money, when their livestock damaged the crops if they entered the fields by accident. The Riimaybe on the other hand appealed to ancestral rights to these fields. In the remote past there were villages of Kurminkoobe in this area. One can still find the remnants of blast-furnaces, and the Riimaybe considered themselves as the descendants and, having become free, as the rightful heirs of the Kurminkoobe who were captured by the Fulbe. They were also backed up by the chief of Dalla, Bukari Yerowal. However, under pressure of the pastoralists he turned down the claim of the Riimaybe.

Later, after the drought of 1985 the chief of Kerana visited the chief of Dalla, with a request to reconsider the occupation of these fields. After all, the Fulbe lost their cattle and were also eager to cultivate more land in depressions where water was available. At that moment the best parts of the area were already occupied by the *griot* of Dalla and some Jaawambe, who cleared the land without anyone knowing about it. The Fulbe of Bankassi, the settlement nearest to the fields, still regard this land as stolen from them. The administration did not alter this situation, because the responsible officer of the agricultural service was bribed. So, in silence this encroachment on pastoral land was made.[143]

The last conflict we will discuss in this chapter is even closer to the heart of power of the chiefdom and is a severe threat to social cohesion in the village of Dalla. It concerns the *haarima* and *burti*. The *haarima* is one of the most fertile pieces of land in Dalla. Animals have dropped their manure on the soil for ages. Though in the past most of the dung was transported to the surrounding fields, much manure remained in the soil. With the declining number of cattle and the growing pressure on land around Dalla, as testified by the accounts of the conflicts above, pressure on the chief to open the *haarima* for cultivation mounted, although this would militate against the rules of the Diina and even modern legislation, for

in this body of law customary rights were recognized. The former and present chief of Dalla, Bukari Yerowal and Hamidu Yerowal gave in to this pressure, but decided that they had better also take advantage of the *haarima*, and thus were among to first to occupy a field as near as possible to the village and also to occupy a cotton garden to plant mango trees. As a result the whole village rushed to get their share in the available land. At present only the market place and rocky parts have escaped occupation.

Apart from the conflicts between villagers about the boundaries dividing their newly established fields, a major conflict arose in 1991 about the pastoral claims on the *haarima* and the *burti*. When the rush on the land occurred around 1985 there were hardly any people who disposed of livestock. However, by 1991 some Jaawambe had managed to reconstitute a considerable herd and were confronted with the problem of where to leave their animals at night. All the land around the village is occupied for millet cultivation, and the access roads (*burti*) are blocked with fields. They demanded, that the chief reverse occupation of this land. The chief gave in and had his brother and nephew lay out the *burti*. The Riimaybe cultivating this land responded by threatening to chase away the animals. The Jaawambe put more pressure on the chief, declaring that they would complain to the administration if he did not force the Riimaybe off the *burti*. This would mean the end of the chief, for then he would be removed from office.[144] The chief consulted the former Imam, his father-in-law, on what to do. The old man took the position of the Jaawambe, because it is closer to the Islamic doctrine of the Hayre. He called the spokesmen of the Riimaybe and told them to stop the conflict and to leave the *burti, haarima* and some of the ponds that are contested territory.

These conflicts show that the influence of the Jallube pastoralists in Dalla has become zero. In Dalla itself there is not a single family of Jallube left. In the neighbourhood of the village there are three small hamlets of Jallube left. Bussuma at 2.5 kilometres distance with about seven families, Hoggo Loro at 1.5 kilometres consisting of one family, and Bankassi with four families. Pastoralists who still dwell in these settlements no longer feel comfortable. They think of moving, or remain in the area only to stay close to the Moodibaabe of Dalla. The rest migrated to other parts of Mali or have sought refuge on the Seeno-Manngo. The Weheebe defended the interests of the Riimaybe who were looking for land to cultivate, because of the declining harvests, against pastoral interests. In the conflicts after the droughts there seems to be a return of pastoral power in Dalla, but this is not represented by the Jallube pastoralists. Instead Jaawambe entrepreneurs who manage commercial herds become the champions of the pastoral way of life, and *moodibaabe* defending what they believe to be Islamic orthodoxy.

Another important change in comparison with the past is the reference that is made to the modern state as the ultimate court of appeal in case of grave conflicts. The extent to which people feel able to win conflicts is closely related to their bargaining power in relation to the administration. In the second conflict the threat of appeal to the state, against the chief, is sufficient to force a (temporary) solution. In this game of power the Jallube no longer play a role. The participants in all these conflicts agree on nothing except for one thing, namely that the power of the Jallube at present is nil. With the droughts and the loss of

cattle they have lost their only source of power. In the absence of cattle they have no bargaining power left and cannot get their way by bribing the administration.

Conclusion

This decline of pastoral power is the result of a long process that had already begun under the Diina. Before the Diina the pastoral power ruled over the agriculturalists. Under the Diina both agriculturalists and pastoralists were incorporated into a theocratic state and a land management scheme which benefited the political and Islamic elites. As was shown, these elites came to depend for their subsistence and military power on enslaved cultivators and cereal farming. Pastoral production became subordinate to the requirements of this agro-pastoral production system and the inherent flexibility in pastoral land use and pillaging was reduced. The rise of Booni as a competing power to Dalla in the Hayre is an indication of the discontent among the pastoral population on the periphery of the chiefdom. This rebellion could only have been successful because the Maasina empire collapsed due to its internal contradictions and the pressure of the Futanke led by El Hadj Umar Tall. The chaos that reigned in the country under the Futanke was in fact pastoral power reinstalled as far as the Hayre was concerned. The style of leadership and mode of subsistence, plunder, and the reinvention of pastoralism under Maamudu Nduuldi testify to this.

The shift from a weak empire of warlords to a centralized colonial administration once more confirmed the power of the political and religious elites over the pastoralists on the periphery. The chiefs were incorporated into the administrative structure as tax collectors and watchdogs for the French. In this position the chiefs promoted their own interests to the detriment of pastoral interests. The liberation of the Riimaybe removed the agricultural basis, first for the Jallube, later on for Weheebe and Moodibaabe. In the course of the 20th century the state gradually penetrated into the countryside by means of legislation and interventions in natural resource management. At independence, the chiefdoms were abolished and the central administration was extended further into the periphery. The chiefs came to play an ambiguous role as both chief and arbitrator with the administration. During the drought the pastoralists were hit very hard, and they were not able to stop the encroachment of cultivation on their land. Many migrated. The impoverished sought refuge on the periphery of modern society. As we will see in chapter 14, the state manages to penetrate further into the countryside by means of development funds.

These changes in the political hierarchies, however, have not eliminated the relevance of historical accounts in the explanation of the actual situation by the people themselves. History is an integral part of daily life. It provides the inhabitants with a cultural frame for understanding the difficult situation of today, and in which the social and political relations of today are defined and justified. Every social category 'uses' the historical accounts in its own way. Weheebe keep to the old political hierarchies, as they do still provide them with a living in times of crisis and, very important, with a certain status vis-à-vis the modern administration. 'Development' has become an important resource for the Weheebe. They are the gate-keepers for these flows of capital between development agencies and the

population. For the Jallube, keeping to the old political hierarchy provides them with another type of security, namely a security of their identity. As will become clear in the following chapters they keep strongly to assets associated with their noble status, and even try to redefine them in such a way that they try to be 'better' nobles than the Weheebe (see chapter 6). However, without the Weheebe and Moodibaabe they cannot keep to this ideology. In the present situation of impoverishment, they clearly need this identity base. As will be shown in chapters 12 and 13 this security of identity does not imply only social and economic security, and may even be counterproductive in the present drought conditions.

The Jallube are politically, socially and economically marginalized. They, instead of the Riimaybe, have become the main carriers of the burdens of insecurity. The Riimaybe appear to be a diverse group. They may still be very dependent on their old masters, but they are also among the most progressive, hard working and successful members of Fulbe society. Their emancipation which started at the beginning of the 20th century is still continuing. In this process the consequences of the insecurities are shifted from their shoulders to the Jallube, or at least they share them today.

In all these reinterpretations of history by the social groups of Fulbe society Islam plays an essential role. Firstly, as an ideology of power to establish the superiority of the chief, and to legitimize the chiefdoms. Also to define its independence from the Diina. Gradually Islam became part of *ndimu*, and even a very crucial element. For Riimaybe and Jallube, each in their own way, Islam has become important in the definition of their identities. For the Riimaybe it has become a vehicle for emancipation, an attribute of status, which was denied to them in the period when they were not yet free. For the Jallube it has compensated for their decline in power, and their bad economic situation.

In the following chapters we will investigate how the Jallube pastoralists and Riimaybe cultivators of Serma, who are on the periphery of the chiefdom of Booni, fare politically, socially as well as economically, in this struggle for identity, subsistence and the state. In the political centre their role is over, but do they manage better on the fringes of modern society or has the battle for survival just been displaced to these areas?

Notes to chapter 2

1. This problem was also noted by Perrot (1989). An example of a study from the periphery is the thesis of Diallo (1993), containing a study of the chiefdom of Barani in Boboola, also belonging to the periphery of the grand empires.
2. We will indicate the Islamic scholars with their Fulfulde title, *moodibo*, pl. *moodibaabe*. In French they are called *marabout*. In the Hayre there exists a social category who are descendents of the first *moodibaabe* in the region. They refer to themselves as Moodibaabe. Moodibaabe used as the name of this social group will be written with a capital M and not italicized.
3. Sanankoua (1989:218) also mentions these problems. She says that this is a way for the Islamic clergy and political elite to show their importance.
4. Muusa Dikko is retired director of the primary and secondary school in Douentza. He gave us lessons in Fulfulde and worked for us as assistant in Dalla, translated Fulfulde texts into French and was, of course, an important informant, and a critical observer of his own society.
5. The people were relieved we only took pictures. There have been researchers before who took the documents with them in order to make copies in Bamako. Although they promised to send the documents back, this never happened.
6. In literature the Futanke are also referred to as Toucouleur.
7. The soils in this region are extremely weathered and form a sequence from sandy-gravely soils on top to more heavy and loamy soils in the valleys (van Staveren & Stoop 1985:15).
8. The surface of the flood plain varies greatly. According to Harts-Broekhuis & de Jong (1993:74) the inundated area may range from 20,000-30,000 km^2 depending on rainfall and the debit of the Niger and Bani.
9. The best introductions to the geography of the Inner Delta are Gallais 1967 and 1984. The information in this section is derived from these books.
10. Or Iklan: former slaves of the Tuareg.
11. A *cercle* is an administrative division in Mali. Mali is subdivided into seven regions that are divided into *cercles* (literally circles). The lowest administrative level is the arrondissement. According to Suret-Canale (1964:94) this administrative unit was introduced in West Africa by the governor Faidherbe who transplanted the administrative system of Algeria to Senegal. In the beginning these '*cercles*' were only fortified points from which the surrounding land was controlled. In the beginning of the colonial period the administrative level of arrondissement did not exist. Instead there were 'cantons' ruled by indigenous chiefs, what Suret-Canale (1964:106ff) labels the '*chefferie administrative*'.
12. Based on a population estimate of 150,000 in 1987 when many ecological refugees returned to their home areas.
13. According to the colonial archives in Bamako this problem was already present in the 1940's. See *Archives Nationales à Bamako* (ANB), *Fonds Récents* 1Q-228: *Arrête interdisant la sortie du mil et du riz hors de la limite du Cercle de Douentza: 1947; Note pour le chef de bureau des affaires économiques par le chef de service de l'agriculture, 13 janvier 1948; Le président de la comission de Douentza à le président du conseil général du Soudan Français, 29 novembre 1947.* See also Doutresoulle (1952:97). It is worth noting here that in 1994 the rains were very abundant, and that some of the lakes have received water from the Niger tributaries (Bedaux p.c).
14. Before the drought of 1983-85 the health situation of the Fulbe in this area was already bad (Hill 1985; see also Riesman 1992:30). Child mortality is an important indication of the general health situation of a population. Van den Eerenbeemt (1985) found a child mortality for Fulbe in the Seeno-Manngo of 35 %, for Riimaybe as well as Jallube. Hill and Randall (1984) recorded a child mortality of 37 % among the Seeno-Manngo Fulbe. Neighbouring Tuareg have the same mortality rate, whereas in the Inner Delta the child mortality was found to be 50 % (van den Eerenbeemt 1985). Hill and Randall (1984) observed a difference in child mortality between Fulbe herdsmen and Riimaybe. Among the latter this is much higher than among the former. This is explained by the fact that Riimaybe have less access to milk than Fulbe herdsmen This is confirmed by the fact that differences in child mortality are only significant for children of six months and older. Compared to other parts of West Africa these figures are extremely high. In Senegal, for example,

child mortality is 'only' 26% (Hill and Randall 1984). This difference is attributed to ecological and socio-economic factors.

15. Into Jelgooji, Burkina Faso (Riesman 1977), into Boboola Burkina Faso (Benoit 1979, Diallo 1993), and into Yatennga Burkina Faso (Marchal 1983, Izard 1985).
16. The Barri belong to the Fulbe clan Fittoobe.
17. Interview with Hammadu Booyi Oiallo, July 9, 1991. He is the only Jallo from the Booni area who has become a civil servant, a veterinary doctor.
18. A reconstruction of the reigns of the first chiefs of the Hayre can be made from different sources, written documents in the hands of the main *moodibaabe* (members from the families who provide the Imam and Cadi of the social group Moodibaabe) of Dalla, and a written document of a *moodibo* from Nokara. The number of years these chiefs reigned give an indication of time to situate the events described. Siire Jam Allah reigned 4 years, Alu Jam Allah reigned 40 years, Maane Alu reigned 40 years, Bukary Maane reigned 1 year, Alu Maane reigned 30 years, his son Tayru (Tahiru) Alu Maane 20 years. After him Tayiibu Alu Maane reigned for 8 years and Aamadu Alu Maane 12 years. During the reign of Abdul Kaasiimi (Bulkaasum Tahiru) the theocratic state of Seeku Aamadu was vested in the Inner Delta (in 1818). Thus the first chief of the Hayre, of the lineage that is still reigning, took power in the Hayre in 1668, 155 years before the arrival of Seeku Aamadu in 1818, which would situate the whole event in the second half of the 17th century. According to the version of Aamadu Ba Digi their reign started 131 years before the establishment of the Maasina empire.
19. Note the surnames of the three 'Jam Allah', which means 'peace with God'. They are symbolized as the bringers of peace to the Hayre, and also as having a close link with God and Islam.
20. Weheebe, sg. Beweejo, which means vultures in the Fulfulde dialect of the Hayre.
21. Also in other stories of the origin of states in Africa the founding fathers come from outside, from another territory. Terray (1988) attributes this phenomenon to the social organization of the groups involved. The character of the segmentary lineage system prohibits the development of a state structure from within the group, because of the inherent oppositions between different groups of society (women-men, old-young).
22. The name Taamankoobe is derived from the place where they lived around lake Taami (see map 2.1). Topographical names for lineages are very common among the Fulbe.
23. According to the story told by Aamadu Ba Digi.
24. This version was told by Nu Saidu Haidu, a Jallo from Dalla, interview January 10, 1991.
25. Story told by Nu Saidu Haidu, a Jallo from Dalla, interview January 10, 1991.
26. The replacement of something magic by Allah may be due to Islamic influence on the story. In Islam the magical aspect of power is not accepted.
27. We found the following text in the Hayre. This text was translated from Arabic into Fulfulde by Bulo Bukari, from Dalla, who owns the document. He found the document in his father's archives, who was chief of Dalla until his death in 1984. The same story was found with a Jallo *moodibo* in Serma and with a *moodibo* from Nokara.

Assulu Fulbe. This story starts in the time of Umaru Ibanu Azj. He sent his soldiers to the west. These soldiers embarked on ships to cross the Red Sea. Umaru told them, if you see chiefs of the countries over there I send you to them with Allah's word. They arrived in the village Duuru, the representative of Umaru Ibanu Azj was Ugbatu Ibanu Yaasiri, he went to the chief of Duuru. He greeted the chief who was also called Duuru. The chief was sitting there with his father and representatives of his people. Together they fought wars against the people who rejected Islam. Umaru Ibanu Azj then was pressed to return to Mecca. He told Ugbata Ibanu Yaasiri to stay with those people, he left him with the inhabitants of Duuru to instruct them in Islam (*duna Allah*). He said: Ugbata stay in this village Lakay to instruct those people the Diina. Ugbata Ibanu Yaasiri stayed and did not return to Mecca.(...)

Then Ugbata married the daughter of the chief of Fuuta Toro. Her name was Yujema'o. They had four children. The first was Diite Jallo, the second Ayu, the third was called Naz. the fourth Rarabu. Naz also got four children, all boys, one of them was called Hudiita. Hudiita is the father of the Jallo lineage of the Fulbe. Hudiita became the Fulbe chief. From Uway sprouted the lineage Barri, from Naasu the lineage Sow, from Rarabu the lineages Yaalarbe and Wolarbe. Those are the Fulbe lineages descendant from the children of Ugbata Ibanu Yaasiri. Ugbata himself is a child of Maariiza. Maariiza is a child of Fulani, Fulani is a child of Saaliimo, Saaliimo is a child of Saaiidu, Saaiidu is a child of Murata, Murata

is a child of Ka-abu. Ka-abu is child of Luway, Luway is child of Raliibi, Raliibi is child of Fiiri, Fiiri is child of Adnaani; Ugbata is the father of the Fulbe (*Ugbata o timi e dow Fulbe*). We thank Allah, He joined our origins with the origins of *Anabiijo* (Mohammed) '*Sallah Laahu Aleekum Asalaam*'.

28. A savannah empire preceding the Gao empire.
29. A lot depends on how many years one reckons for a generation. In any case, the generations from the present to Alu Maane are seven, from the present Imam to Moodi Tawhiidi five. (Pison (1986) for example reckons 42 years for the mean difference in age between father and son among the Fulbe in Senegal).
30. The chiefs of Dalla, Joona, Kaanyume and Booni are related to Alu Maane according to their genealogies. This is, however, only a vague notion. While trying to reconstruct the genealogy of the chief of Dalla it appeared that the link to Alu Maane is not very clear and is not drawn in exactly the same way by all informants. Furthermore there are some gaps in the genealogy that are difficult to fill in with names. This was very challenging for the informants. Still the *griots* sing the genealogy of the actual chiefs linked up to Alu Maane on important ceremonies and festivities.
31. See for general literature on the Maasina empire: Brown (1969), Johnson (1976), Bâ and Daget (1984), Gallais (1967, 1984), Hiskett (1984), Azarya (1988), Sanankoua (1990), Dembélé (1991).
32. This indicates how close the relationship is between empire and control over natural resource management.
33. Marie and Marie (1974:161) report that especially between 1826 and 1850 many expeditions were undertaken against the Tuareg of the Gurma.
34. Marie and Marie (1974) report that the Sonrai chief of Hommbori was replaced with a Fulbe chief when Seeku Aamadu came to power in the Maasina empire, so that we have in fact two Fulbe chiefdoms. The oral traditions we collected in Dalla and Booni do not mention this change. It seems that the Weheebe of both Dalla and Booni regard the present chiefly family of Hommbori as the lawful holder tenant of the chiefly office. Moreover, Ba Lobbo, chief of Hommbori in the colonial period is highly respected (and feared) in Dalla as well as Booni. More peculiar is, however, that in both Dalla and Booni no reference is ever made to the Sonrai chiefdom of Hommbori. We will return to this subject in the section on the colonial period.
35. A recent study of a Fulbe chiefdom in Barani also indicates that we should not overestimate the control of the Diina over the drylands (Diallo 1993).
36. This is a totally different picture of Ba Bulkaasum than we can read in Bâ and Daget (1984:39fn). The *griot* makes Ba Bulkaasum an important Islamic scholar, which is probably a reinterpretation of the history. This is again a claim on the primacy of Islam in the Hayre.
37. Bâ and Daget sketch the Hayre as an Islamic centre comparable to Jenne. When a *moodibo* from Jenne, named Alqadri killed a Tuareg warrior, on an expedition in the Gurma he was reputed to have said '*Il* [the killed Tuareg warrior] *servira d'avertissement aux Tuareg (...), et il montrera aux fils des marabouts de Dalla comment se battent ceux de Dienné*'. Bâ and Daget explain in a footnote '*Dalla localité situé à 38 kilomètres est-nord-est de Douentza. Bien que partisans de Cheikou Amadou, les marabouts de Dalla étaient les rivaux de ceux de Dienné, pays d'origine d'Alqadri*' (Bâ & Daget 1984:261).
38. The political instability is also shown by the lack of consensus over the chronology of the succession of the chiefs of Dalla. The original texts of three versions of the successive chiefs in the Hayre during the Diina: Seyoma Tahiru reigned for 3 years, mBoolaaye Tahiru for 8 years, Moodi mBoolaaye 30 years (information of the son of a former Imam of Dalla); Seyoma Tahiru reigned 2 years, Mulaaye Hammadi Barke 8 years, Ba Kaasum 1 year, Hammadu Ba 1 year, Abdul Bayri 2 years, Moodibo Allaaye (= Moodi Mboolaaye) 27 years (information Alpha Hammada, former imam of Dalla. He is of a different family than the preceding informant); Seyoma Tahiru 2 years, Mulaaye Hammadi Barke 8 years, Ba Bulkaasum 1 year (?), Moodi mBoolaaye 27 years, Maamudu Ba 40 days, Allaaye Ba 9 years (which is already under the Futanke, see also below) (information Alu Booyi Cissé, *moodibo* from Nokara living in Dalla). All the three informants belong to the social category Moodibaabe.
39. Letter owned by the present chief of Dalla, Hamidu Yerowal.
40. Letter in possession of the chief of Dalla Hamidu Yerowal.
41. Interview with the *moodibaabe* of Manugu August 14, 1991. Their view may be inspired by the competition with the *moodibaabe* of Dalla. Interview with Hammadu Booyi Jallo. July 9, 1991.

42. Interview with Alu Booyi Cisse, *moodibo* from Nokara, date unknown. In two letters, in the possession of Hamidu Al Hadj, a Jaawando of Dalla, the payment of taxes to the Diina (one letter is directed to Seeku Aamadu and the other to Aamadu Aamadu) by Jaawambe, who acted as intermediaries, is mentioned.
43. In a census of the French administration from 1904 it is reported that in the administrative district Bandiagara, 35,6% of the male population was slave, 47,7% of the women and 16,7 % of the children (Lovejoy 1983:186-187).
44. Riimaybe means protégé (Breedveld 1995, chapter 1), and not, as is often assumed, the opposite of Rimbe, who are the noble people (see also Diallo 1993). In Fulfulde slave is translated by *maccudo*.
45. Here we find a contradiction in the story of Aamadu Ba Digi. On the one hand he says that Moodi Mboolaaye tried to Islamize the people in the mountains, on the other hand he turns them into slaves so that they will produce for him. However, slaves were not totally excluded from Islam, depending on their integration into the family or society. They were allowed to learn how to pray, but not to study for *moodibo*. This contradiction in the story of the bard also illustrates his own ambiguity about Moodi Mboolaaye. Moodi is believed to be a very good Muslim and therefore he would try to spread the Islamic faith. This is in contradiction with what he did in the mountains, namely turning people who were potential converts into slaves.
46. Interviews with Fatumata Abdullaaye, nicknamed Inna Muusa, the 4th wife of Yerowal Nuhum Dikko, the most important chief of Dalla in the colonial period, on July 31 and August 1, 1991. She was a slave woman, and became free at her marriage with the chief of Dalla. Such a woman is called *taara* in Fulfulde. Her village Omga was such a slave estate.
47. The spinning was done by women, the weaving by weavers, *maabube* and Riimaybe men.
48. *Archives Nationales, Paris,* (ANP), *1D-137: Deuxième partie situation politique et militaire du Soudan Française avant le départ de Kayes du commandant supérieure; extrait d'un rapport de Kayes 22 décembre 1892.*
49. According to this genealogy Maamudu Nduuldi died in 1890. Thus his active life must be placed from 1865 to 1890. Allaaye Maamudu Nduuldi was chief in Booni from 1890-1899; Hammadu Yero 1899-1953; Aamadu Hammadu 1953-1976; Buraima Hammadu 1976 onwards.
50. In an interview with an inhabitant of Bandiagara, Barry was told that the Hayre and adjacent regions were for a long period not really submitted to Tijani. It was only since the death of the warlord from the Hayre, Maamudu Nduuldi, in 1878, in a battle against the Tuareg, and since his son was captured by Tijani, that the Hayre was brought under the control of the empire of Tijani (Barry 1993:562).
51. This presentation of history poses a chronological problem. Ba Bulkaasum had already left Dalla shortly after 1818 when the Diina was established according to the history as told by Aamadu Ba Digi. It seems unlikely that the son of Ba Bulkaasum sent his son back to Dalla to be educated by a brother of his father (it is however not unusual that a boy is raised by an uncle). This would imply that Maamudu Nduuldi was already born before the departure of Ba Bulkaasum and his son. And that he died over 70 years old. As he died in a battle this is also an unlikely scenario. If this is true, however, Bâ and Daget may be right when they state that Maamudu Nduuldi was already a famous warrior during the time of the Diina. This is not consistent with the story of the establishment of Booni. According to another informant (Alu Booyi Cisse, *moodibo* living in Dalla) Maamudu Nduuldi died when 64 years old and came to power when 43 years old. This would mean he was born around 1826. To solve this problem it is necessary to do more research into the history of Maamudu Nduuldi. A comparison of these two versions with the stories as told by Dagaabe (the Kel Gossi Tuareg know him and tell stories about him (Mike Winters p.c)) and Sonrai may yield additional information to solve this problem. For the purpose of this chapter it is not so important to keep to the exact chronology, more important is the fact that in Booni it is believed that Maamudu Nduuldi is the founder of their chiefdom, and that it can be deduced from other sources that Maamudu Nduuldi is remembered in a wide area as an important warlord.
52. According to the *griot*, Allaaye Ba was the successor of Moodi Mboolaaye (see above).
53. The collapse of Dalla is also clear from the instability of the court during the Futanke reign. Several chiefs rapidly succeeded each other. The chiefs in this period were according to Alu Booyi Cissé *moodibo* in Dalla· After Moodi Mboolaaye came Maamudu Ba (40 days), Allaaye Ba (9 years), Hamidu Abdul Barri (2 years),

Maamudu Mohammadu (11 years), Allaaye Ba (again, for 4 years), Maamudu Mohammadu (2 years), Nuhum Mbabi (under the French).

54. Archives Nationales, Paris (below abbreviated as ANP) 15G-175: *Rapports politiques, résidence de Bandiagara; Bulletin politique du mois de juillet 1895, résidence de Bandiagara.*
55. ANP, 15G-175: *Rapports politiques, résidence de Bandiagara, 1894-1896; Bulletin politique, Poste de Bandiagara, février 1894.*
56. ANP, 15G-175: *Rapports politiques, résidence de Bandiagara, 1894-1896; Bulletin politique, Poste de Bandiagara, octobre 1894.*
57. ANP, 15G-179: *Rapports politiques, résidence de Bandiagara, 1894-1896; Bulletin politique et militaire, avril 1894, poste de Bandiagara; Bulletin politique, octobre 1894, poste de Bandiagara; Rapport sur la situation politique du Massina et des régions limitrophes, septembre 1893, poste de Bandiagara; Bulletin politique, résidence de Bandiagara, juin 1897; Note du Commandant de région au sujet du rapport politique du résidence de Bandiagara, octobre 1897*
58. With the exception of Mungo Park, who was captured by Maures and had to observe Maure society, willingly or not. This must have had a negative impact of his perception of this society and the living conditions of the people.
59. See also ANP, 15G-75: *Correspondance avec Aguibou 1818-1900. Notices sur les états d'Aguibou 1896.*
60. ANP, 1D-137: *Deuxième partie situation politique et militaire du Soudan Française avant le départ de Kayes du commandant supérieure; extrait d'un rapport de Kayes 22 decembre 1892; extrait d'un rapport de Kayes date de 21 janvier 1895.*
61. Interview with Aamadu Ba Digi, Novembre 24, 1991. This episode is also reported in the archives in which we read that people are gradually returning to the Hayre: ANP, 15G-180: *Résidence de Bandiagara, rapports politiques rapport générale 1898; Rapport politique générale 1898, canton de Booni.*
62. This can be read in a letter of the commander, Archinard, to Aguibu. *'En retour de ce que la France a fait pour toi, tu t'engages a envoyer dix beaux chevaux mâles d'au moins quatre ans, propres à un bon service de guerre; tu respecteras nos frontières qui sont tracées depuis le Minianka par la route que nous avons suivi ensemble et par le fleuve de Bani jusqu'à son confluent avec le Niger. Sur la rive gauche du Niger, les pays de Dia et de Diafarabe nous appartiennent. En dehors de ces limites, bien que nous ne puissions te donner des pays que nous ne connaissons pas nous mêmes et qui ne sont pas à nous tu es libre d'exercer ton autorité comme tu le pourras à la condition de ne pas nuire à la liberté de la navigation sur le Niger; ...'* ANP, 15G-75: *Correspondance avec Aguibou 1888-1900, mai 1893, le commandant superieur du Soudan français (Archinard) à Aguibou roi du Macina.* Note that the French use the degrading *tu* instead of the more polite and respectful *vous*. This may indicate Aguibu's low status in the eyes of the French. He was no more than a figurehead.
63. ANP, 15G-182: *Copie trimestrielle du registre no. 2, 1899*; ANP, 15G-179: *Rapports politiques, résidence de Bandiagara: 1894-1896; Bulletin politique, Poste de Bandiagara, février 1894*
64. ANP, 15G-179: *Rapports politiques, résidence de Bandiagara: 1894-1896; Bulletin politique, Poste de Bandiagara, février 1894; Bulletin politique, mois de février 1896, résidence de Bandiagara; Bulletin politique du mois de juillet 1895, résidence de Bandiagara.*
65. This idea is confirmed by the stories about this time that still circulate in the area, e.g. interviews with an old woman, August 5, 1991, and an old man, October 21, 1991, both living in Serma, Wuro Kaaral.
66. The use of 'the French' may be confusing as we describe here the situation during the protectorate of the French led by Aguibu (king of Maasina). For the people in the Hayre this was already the beginning of French rule.
67. ANP, 15G-179: *Rapports politiques, résidence de Bandiagara: 1894-1896; Bulletin politique du mois de juillet 1895, résidence de Bandiagara.*
68. ANP, 15G-179: *Rapports politiques, résidence de Bandiagara: 1894-1896; Rapport politique général, résidence de Bandiagara, deuxième semestre 1898.*
69. ANP, 15G-179: *Rapports politiques, résidence de Bandiagara: 1894-1896; Rapport politique, novembre 1895, résidence de Bandiagara.*
70. ANP, 15G-179: *Rapports politiques, résidence de Bandiagara: 1894-1896; Bulletin politique, mois de février 1896, Résidence de Bandiagara;* ANP, 15G-182: *Résidence de Bandiagara, copie de régistre, no. 2, 1899.*

This story also indicates the difficulty the French had in controlling this area. In fact they were afraid of the chief of Booni who could mobilize an army large enough to overwhelm the French.

71. ANP, 15G-179: *Rapports politiques, résidence de Bandiagara, 1894-1896: Rapport politique, octobre 1896, résidence de Bandiagara*; in a letter from Nuhum Paate Mboolaaye to Aguibu when he was not yet chief, Nuhum reports to Aguibu that the chief of Dalla (according to this letter Maamudu Hammadu Ba) undertakes raids in the Gandamia; in a letter of Aguibu to the chief of Dalla, Aguibu greets the chief who just came back from a war against the people from the north (Tuareg) who revolted near Gossi. These letters are kept by the actual chief of Dalla, Hamidu Yerowal Dikko.
72. Archives Nationale Bamako (below abbreviated as ANB), Fonds Anciens 1E-23: *Rapports politique: Bandiagara 1893.*
73. ANB, Fonds Anciens 1E-23: *Rapports politiques, Bandiagara 1893-1920; Rapport sur la captivité dans les états d'Aguibou, par Destenaeve, sans date.*
74. ANB, Fonds Anciens 2E-4: *Politique Indigène: correspondances cercle de Bandiagara, 1899-1907.* see also letters note 71.
75. ANB, Fonds Anciens 2E-4: *Politique Indigène: Correspondances Cercle de Bandiagara: 1899-1907; Lettre de 21 mars 1903, de Hommbori à M. le commandant de cercle de Bandiagara* (see also de Bruijn & van Dijk 1988). ANB, Fonds Anciens, 1D-14: *Résumé historique de la pénétration dans le boucle du Niger par le capitaine Morisson: Say/Boti 1897.*
76. ANB, Fonds Anciens 1N-6: *Rapport d'ensemble politique, administrative et militaire au Lieutenant-Colonel Mangeot, Commandant de la region de Tombouctou sur les opérations dirigées contre le village de Tabi (canton de Boni), cercle de Gourma, octobre-novembre 1920*; ANP, 1D-210, *Region de Tombouctou 1915-1920. Rapport Special militaire du lieutenant-colonel Mangeot commandant de la region de Tombouctou, sur les opérations qui se sont déroulées devant le village de Tabi du 4 octobre au 16 novembre 1920.*
77. ANB, Fonds Anciens 1N-6: *Rapport d'ensemble politique, administrative et militaire au Lieutenant-Colonel Mangeot, commandant de la région de Tombouctou sur les opérations dirigées contre le village de Tabi, canton de Boni, cercle de Gourma: octobre-novembre 1920.*
78. ANB, Fonds Anciens 2D-197: *Proces-Verbal de Remise de Commandant: Douentza 1917.*
79. ANB, Fonds Anciens 1E-23: *Rapports politiques, Bandiagara 1893-1920; Rapport sur la captivité dans les états de Aguibou par Destenaeve, sans date.*
80. ANB, Fonds Anciens: 2E-4: *Politique Indigène: correspondances cercle de Bandiagara: 1899-1907; Rapport de lieutenant Gateau commandant de la poste de Hombori à M. le commandant de cercle du Macina au sujet des réclamations des Foulbés de Dalla, 12 avril 1903.*
81. ANP, 15G-75: *Notices sur les états d'Aguibou 1896; Rapport par le colonel commandant supérieur des troupes, Kayes le 31 décembre 1890, signé Trentinian.*
82. ANB, Fonds Récents 2E-17: *Renseignements des chefs de canton, Douentza, 1908-1957.*
83. Document with survey of people in canton Dalla in the possession of Hamidu Yerowal Dikko, the actual chief of Dalla.
84. ANB, Fonds Anciens 2E-4: *Politique Indigène, correspondance cercle de Bandiagara, 1899-1907, une lettre du 9 janvier 1903.*
85. ANB, Fonds Anciens 2E-4: *Politique Indigène, correspondance cercle de Bandiagara, 1899-1907: Rapport de Lieutenant Gateau Commandant de la Poste de Hombori à M. le Commandant de Cercle du Macina au sujet des réclamations des Foulbés de Dallah, 12 avril 1903.*
86. ANB, Fonds Anciens 4E-6: *Politique Musulmane, correspondance cercle de Bandiagara 1905-1916, lettre de A. Taillebourg du 4 mars 1908.*
87. ANB, Fonds Anciens 1G-111: *Rapports sur les écoles coraniques, cercle de Bandiagara, 1903-1915*; ANB, Fonds Récents 1G-198: *Statistiques des écoles coraniques du cercle de Bandiagara, 1921-1924.*
88. ANB, Fonds Anciens 1E-23: *Rapports politiques, Bandiagara 1893-1920, rapport de mars 1896.*
89. ANB, Fonds Récents, 1G-260: *Création écoles coraniques du cercle de Bandiagara, 1949-1956.*
90. ANB, Fonds Récents, 2M-137: *Rapport sur la justice indigène, 1923-1935. 'D'après l'article 36 du Décret du 16 aout 1912, les jurisdictions indigènes appliquent en matière civile les coutumes locales. En matières répressives au contraire, le tribunal de subdivision doit observer certaines règles pour ne pas violer les principes essentiels de notre droit pénal.'* See also ANB, Fonds Récents, 2M-59, *Notices des jugements rendu,*

cercle de Douentza, 1932-1939. ANB, Fonds Récents: 2M-118: *Etats des jugements rendu, cercle de Douentza, 1921-1917.* The tribunal in Bandiagara started to function in 1903, see ANB, *Fonds Anciens* 2M-56: *Justice indigène, rapport sur le fonctionnement des tribunaux, cercle de Bandiagara, 1905-1920.*

91. ANP, K16: *Enquete sur la captivité en A.O.F., 1903-1905.* This is a general report of *le gouverneur général de l'Afrique Occidentale Française à Monsieur le ministre des colonies (1905).*
92. ANB, Fonds Anciens 2E-4: *Politique indigène: Correspondances cercle de Bandiagara, 1899-1907, le Lieutenant Gateau à cercle de Macina, 18 avril 1903.*
93. Interview with Hammadu Aamadu Waigalo, an old Jaawando of Yerowal, January 9, 1991.
94. *So Jawaando fuu walaa, laamu waawaa gassude.* Interview with Allaaye Jangina January 2, 1991.
95. Informal conversation with Muusa Dikko, brother of the actual chief of Dalla.
96. ANB, Fonds Anciens 2E-4: *Politique indigène, correspondances cercle de Bandiagara 1899-1907;* ANB, Fonds Anciens 2E-4: 1903, a letter in which problems with the chief of Dalla are mentioned. He does not pay the taxes because of the *pénurie*. But the French think it not yet necessary to take measures against Dalla and Booni. See also*: Rapport de Lieutenant Gateau Commandant de la Poste de Hombori à M. le Commandant de Cercle du Macina au sujet des réclamations des Foulbés de Dallah, 2 avril 1903. 'Le chef de Dallah Nouhoun- Il ressort nettent que ses derniers ne protestent contre lui parce qu'il ne partage pas avec eux le diakka [zakat] et des autres produits des coutumes en pays.'*
97. Fulfulde for *zakat.*
98. Muusa Dikko, p.c.
99. Muusa Dikko, p.c.
100. The census figures of the administration contain five sources of error. Firstly, it seems that a number of villages in the Gandamia plateau in the chiefdom of Dalla are not mentioned in the countings. They are probably not registered as villages and their occupants are included as inhabitants of Dalla. These villagers were in majority Riimaybe, so the observed (low) wealth in livestock by the Fulbe of Dalla might be caused by the fact that many of the Fulbe are in fact Riimaybe, who do not own livestock. Secondly the polls might only account for about 40 % of the total number of livestock present in the area. It is a known fact that pastoralists hide their wealth as much as possible and that fiscal countings of livestock numbers in general underestimate the real numbers of livestock. The third source of error is the various changes in administrative boundaries in the region. From 1918-1926 the chiefdom Booni belongs to the cercle of the Gurma, with Hommbori as its capital. This *cercle* was created to suppress the Tuareg rebellions. From 1926 it became once again part of the *cercle* Douentza. A fourth source of error is the various changes in frontiers of the chiefdoms that went unnoticed and the differences in boundaries with the present day administrative subdivisions. The last source of error is the changing composition of the population. Parts of villages move away. New people from outside settle in the village. Administrative or fiscal countings are therefore not always congruent with demographic reality. The population may also change due to changing definitions or self-definitions of segments of the populace, for example the Riimaybe. So, any estimate of the population and of livestock numbers during the colonial period has to be regarded with utmost caution. The archives of the *cercle* were not consulted, which is an omission as far as the present is concerned. The documents on the colonial period, however, had largely decomposed.
101. ANB, Fonds Anciens 5D-55: *Recensement cercle de Bandiagara, 1905-1914.* ANB, Fonds Anciens, 6D-1: *Impots et taxes, cercle de Bandiagara, 1896-1911*; ANB, Fonds Récents 2E-66: *Affaires politiques, correspondances cercle de Bandiagara.* ANB, Fonds Récents 5D-32: *Récensement statistique démographique Douentza 1942-1944.* ANB, Fonds Récents 1E-15: *Rapports politiques et rapports de tournées, cercle de Douentza 1941-1954*; ANB, Fonds Récents 6D-6: *Régime fiscal du bétail, 1934.*
102. This is probably also true for the 19th century. Unfortunately we lack more precise information on this subject.
103. ANB, Fonds Anciens 1E-24: *Rapports politiques et rapports de tournées cercle de Bandiagara, 1896-1920; Rapport politique, février 1914.*
104. ANB, Fonds Anciens 1E-24: *Rapports politiques et rapports de tournées cercle de Bandiagara, 1896-1920; Rapport politique, novembre 1913.*
105. ANB, Fonds Récents 1Q-335: *Rapports économiques cercle de Douentza, 1922-1942: Rapport de tournée, Mondoro, Houmbebe et les Peuhls de Boni: 11-21 avril 1942.*

106. ANB, Fonds Récents 1Q-228: *Arrête interdisant la sortie du mil et du riz hors de la limite du Cercle de Douentza: 1947; Le chef de subdivision de Douentza à M. le Gouverneur du Soudan français, 8 juillet 1947; Le président de la Commission de Douentza à M. le président du conseil général du Soudan français, 29 novembre 1947; Le gouvernneur du Soudan français à M. le commandant de cercle de Mopti, 16 mars 1948.*
107. ANB, Fonds Récents 1E-15: *Rapports politiques et rapports de tournées: cercle de Douentza: 1941-1952; Rapport de tournée à Dallah, Boni, Hombori, 27 juin à 3 juillet 1951; Rapport de tournée à Boni 1952.*
108. ANB, Fonds Anciens 1E-24: *Rapports politiques et rapports de tournées: cercle de Bandiagara: 1896-1920; Le commis des affaires indigènes à l'administrateur adjoint résident à Douentza, 31 mai 1912.*
109. ANB, Fonds Récents 6D-6: *Régime fiscal du bétail: 1934*
A trader had to pay according to the size of his trade:
- < 75 head of cattle: 120 Francs + 5% of the value of the cattle
- 75-150 head of cattle: 120-250 Francs + 5% of the value of the cattle
- 150-300 head of cattle: 750 Francs + 10% of the value of the cattle
- > 300 head of cattle: 1200 Francs + 10% of the value of the cattle

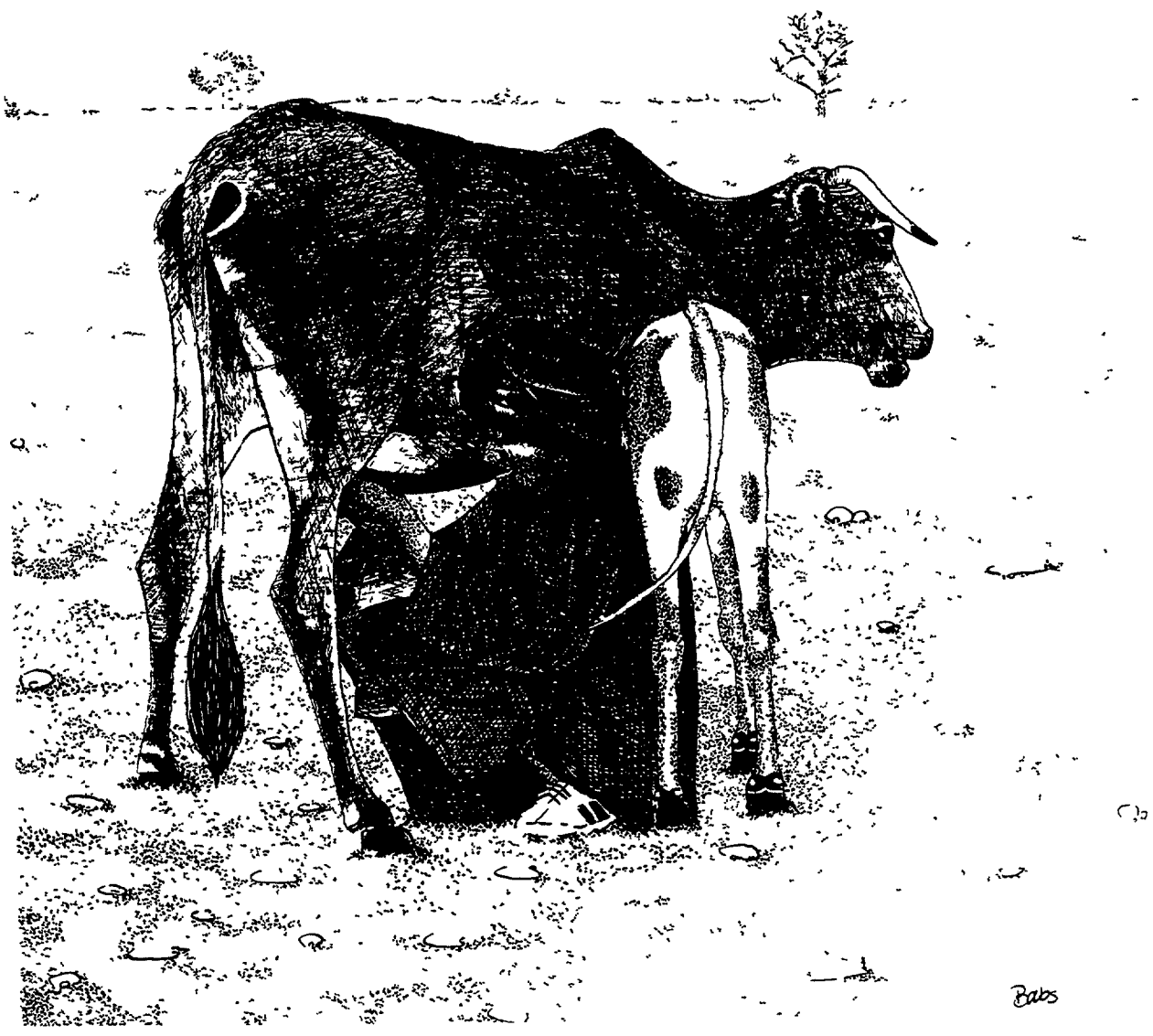
110. ANB, Fonds Récents 1Q-126: *Essai d'organisation des exportations des animaux: 1934-1935.*
111. ANB, Fonds Récents 1Q-125: *Exportations de bétails, 1931-1953; Circulaire aux Commandants des Cercles (sans date); Rapport sur la bourse d'élevage à Kayes, 4 janvier 1935.* ANB, Fonds Récents 1Q-28: *Commerce bétail Gold Coast: 1943-44.*
112. ANB, Fonds Récents 1Q-125: *Exportation de bétail 1931-1935, Projet exportation de bétail à M. le Gouverneur-Général de l'Afrique Occidentale Française (le Directeur-Géneral des Services Économiques); Proces-verbal de la séance du 9 novembre 1933; Le Président de la Chambre d'Agriculture et d'Industrie du Soudan français à M. le Gouverneur du Soudan français, 20 janvier 1933*
113. ANB, Fonds Récents 1E-132: *Transhumance et droits de nomadisations, 1921-1931; Le gouverneur de colonies, Lieutenant-Gouverneur du Soudan français à M. le Commandant du cercle, 5 avril 1927.*
114. ANB, Fonds Récents 1E-132: *Transhumance et droit de nomadisations, 1921-1931; Circulaire: le Gouverneur des Colonies et le Lieutenant-Gouverneur du Soudan français à M.M. les Commandants des Cercles, sans date.*
115. ANB, Fonds Anciens 3R-15: *Eaux et Forêts: Correspondances 1907-1910; Le Directeur du Chemin de Fer à M. le Lieutenant-Gouverneur du Haut-Senegal-Niger, 24 novembre 1907; Le Lieutenant-Gouverneur du Haut-Senegal-Niger à M. le Gouverneur-Général de l'Afrique Occidentale Française, 1908.*
116. ANB, Fonds Récents 3R-15: *Eaux et Forêts, Correspondances 1907-1910; Le Lieutenant-Gouverneur du Haut-Senegal-Niger à M. le Commandant du Territoire Militaire du Niger, 21 octobre 1909*; ANB, Fonds Anciens 3R-19: *Rapport sur le régime forestier par M. Vuillet, 1913.*
117. ANB, Fonds Anciens 3R-13: *Régime forestier: coupe de bois: 1912-1920.*
118. ANB, Fonds Récents 3R-1: *Forêts 1917-1941; Arrête réglementant définitivement certains conditions du régime forestier du Soudan français, 1927; Proposition de M.M. Barras et Repert au sujet de la mise en application des réglements forestiers dans la Colonie du Soudan français, 1927; Les Gouverneurs des Colonies et du Soudan français aux Services, 7 decembre 1927; Proposition de M.M. Barras et Repert au sujet de la mise en application des réglements forestiers dans la Colonie du Soudan français, 1927; Rapport de présentation de deux rapports de réserves forestiers, sans date.*
119. ANB, Fonds Récents 3R-7: *Règlement forestier: circulaires locales: 1916-1934; Circulaire par Dagenes, sécretaire général*; ANB, Fonds Récents, 3R-6: *Foresterie au Soudan; Le gouverneur des colonies et le gouverneur du Soudan Français à M.M. les Administrateurs Commandants des Cercles de la Colonie, 15 décembre 1927.*
120. These were already available in 1932 according to a letter of the Director of the livestock service to the governor of the Sudan see ANB, Fonds Récents 1R-21: *Organisation de centres mobiles de vaccination du bétail: 1931-1932: lettre 'Le chef du Service Zoötechnique à M. le Lieutenant-Gouverneur du Soudan français' janvier 1932' 'Les essais faits en divers points de la colonie des nouvelles méthodes de vaccination contre la peste bovin ayant montré qu'on peut les généraliser, il semble que nous devions dès maintenant entreprendre une immunisation massive et définitive de notre cheptel bovin'.*
121. See also ANB, Fonds Récents, 1Q-169: *Économie: situations, affaires économiques et celles d'agriculture et l'élevage: 1936.*

122. To indicate the importance the French attached to livestock management in the *cercle* Douentza it is worth noting that Jenne in the Inner Delta did not have an office of the livestock service in this period, nor a veterinary doctor.
123. ANB, Fonds Anciens 1E-23: *Rapports politiques, cercle de Bandiagara; Rapport politique juillet 1908.*
124. ANB, Fonds Anciens 2M-63: *Rapports sur le fonctionnement de la justice indigène, Douentza, 1905-1910; Rapport par Tenier sur la justice indigène à Douentza, 1907.*
125. ANB, Fonds Anciens 2M-56: *Justice indigène: rapports sur le fonctionnement des tribunaux cercle de Bandiagara: 1905-1920; Rapport sur la justice 1-er trimestre 1907.*
126. ANB, Fonds Anciens 1E-24: *Rapports politiques et rapports de tournées cercle de Bandiagara: 1896-1920; Le commis des affaires indigènes à M. l'administrateur adjoint résident à Douentza, 31 mai 1912*; ANB, Fonds Récents 2M-118: *États des jugements rendu cercle de Douentza: 1921-1927; jugement 6 septembre 1923.*
127. ANB, Fonds Anciens 2M-56: *Justice indigène, Rapports sur le fonctionnement des tribunaux cercle de Bandiagara: 1905-1920; Rapport sur la justice 4-ième trimestre 1907.*
128. ANB, Fonds Anciens 1E-24: *Rapports politiques et rapports de tournées: cercle de Bandiagara: 1896-1920; L'administrateur des colonies, commandant du cercle de Bandiagara à M. le gouverneur du Haut-Senegal-Niger, 21 novembre 1913.*
129. ANB, Fonds Récents 3R-6: *Foresterie au Soudan; Le Gouverneur des Colonies et le Gouverneur du Soudan français à M.M. les Administrateurs Commandants des Cercles de la Colonie, 15 decembre 1927;* ANB, Fonds Anciens 3R-39: *Eaux et Forêts: 1916-1918; L'Administrateur en chef de 1-er Classe à Ms. Les Administrateurs des Cercles et le Commandant de la Région de Tombouctou, 15 avril 1916.*
130. Interview with Allaaye Jangina, former aid of chief Yerowal Nuhum Dikko of Dalla, January 2, 1991.
131. ANB, Fonds Anciens 2E-4: *Politique indigène: Correspondances cercle de Bandiagara: 1899-1907; Le Lieutenant Gateau à cercle de Macina, 18 avril 1903.*
132. ANB, Fonds Anciens 2M-63: *Rapport sur le fonctionnement de la justice indigène: Douentza, 1905-1910.*
133. Interviews with Allaaye Jangina, the former aide of the chief of Dalla, January 2, 1991 and January 9, 1991.
134. Interview with Alu Booyi Cissé, a *moodibo* from Nokara, living in Dalla, July 24, 1991.
135. Interview with Guril (Ba Samba Guril) and Belko Salumane in Dalla, January 9, 1991.
136. Interview with Gando Allaaye in Dalla, July 25, 1991
137. ANB, Fonds Anciens 2M-56: *Justice indigène: Rapports sur le fonctionnement des tribunaux, cercle de Bandiagara: 1905-1920; Rapport sur la justice 1906.*
138. ANB, Fonds Récents 1E-132: *Transhumance et droits de nomadisations, 1921-1931; Le gouverneur de colonies, Lieutenant-Gouverneur du Soudan français à M. le Commandant du cercle, 5 avril 1927.*
139. ANB, Fonds Récents 1E-132: *Transhumance et droits de nomadisations, 1921-1931; Le gouverneur de colonies, Lieutenant-Gouverneur du Soudan français à M. le Commandant du cercle, 5 avril 1927.*
140. Anonyme, *Rapport de tournée, 16-26 août 1941.* Archives *cercle* de Douentza, quoted in Gallais 1975.
141. ANB, Fonds Récents 1Q-335: *Rapports economiques cercle de Douentza: 1922-1942; Rapport de tournée, Mondoro, Houmbebe et les Peuls de Boni, 5 à 19 decembre 1941, 11 à 21 avril 1942*; ANB, Fonds Anciens 1E-24: *Rapports politiques et rapports de tournées cercle de Bandiagara, 1896-1920; L'administrateur des colonies, commandant de cercle de Bandiagara à M. le gouverneur du Haut-Senegal-Niger.*
142. We were only told about this *tarikh*. We have never seen the written manuscript. The story around this *tarikh* is quite vague. It would have been used by the Malian government in the conflict between Mali and Burkina Faso in 1984, to define the exact boundaries of the Malian territory. High officials from Bamako took the manuscript with them to Bamako, saying they would send it back as soon as the affair was over, which they never did. We have asked in Bamako, the chief of Dalla gave us letters, and we have written the International court in The Hague and the Malian Embassy in Brussels to retrace the manuscript. The problem was brought to the attention of Dr. Alpha Konaré, the democratically elected president of the Malian Republic by a friend of ours, Dr. Rogier Bedaux, head conservator of the National Museum of Ethnology in Leiden, the Netherlands, but there was nothing Dr. Konaré could do. Until now we did not find it. The people of Dalla especially were worried about it. Probably because of our questions they realized how important the *tarikh* is for them. In Booni we were told that the *tarikh* did not exist, or that it was only a very small document. They assured us that the chief of Dalla was tricking us. However, the chief of Dalla had a little note that served as a receipt for the *tarikh*, which was dated and signed.

143. This conflict was related by several informants, among whom Aamadu Ba Digi, the late *griot*, himself one of the people involved, Allaaye Jangiina, the former aide of chief Yerowal Nuhum, and several Fulbe from settlements around Dalla, Nu Saidu Jallo from Hoggo Loro and Hamma Ngarya Jallo of Bankassi.
144. Many more incidents occurred in the past that would justify his removal. This last, but grave incident, would surely tilt the balance.

Part II

The Past in the Present


Babs

3

Serma: Environment, Organization of the Village, and Drought

The occupation of the Daande-Seeno

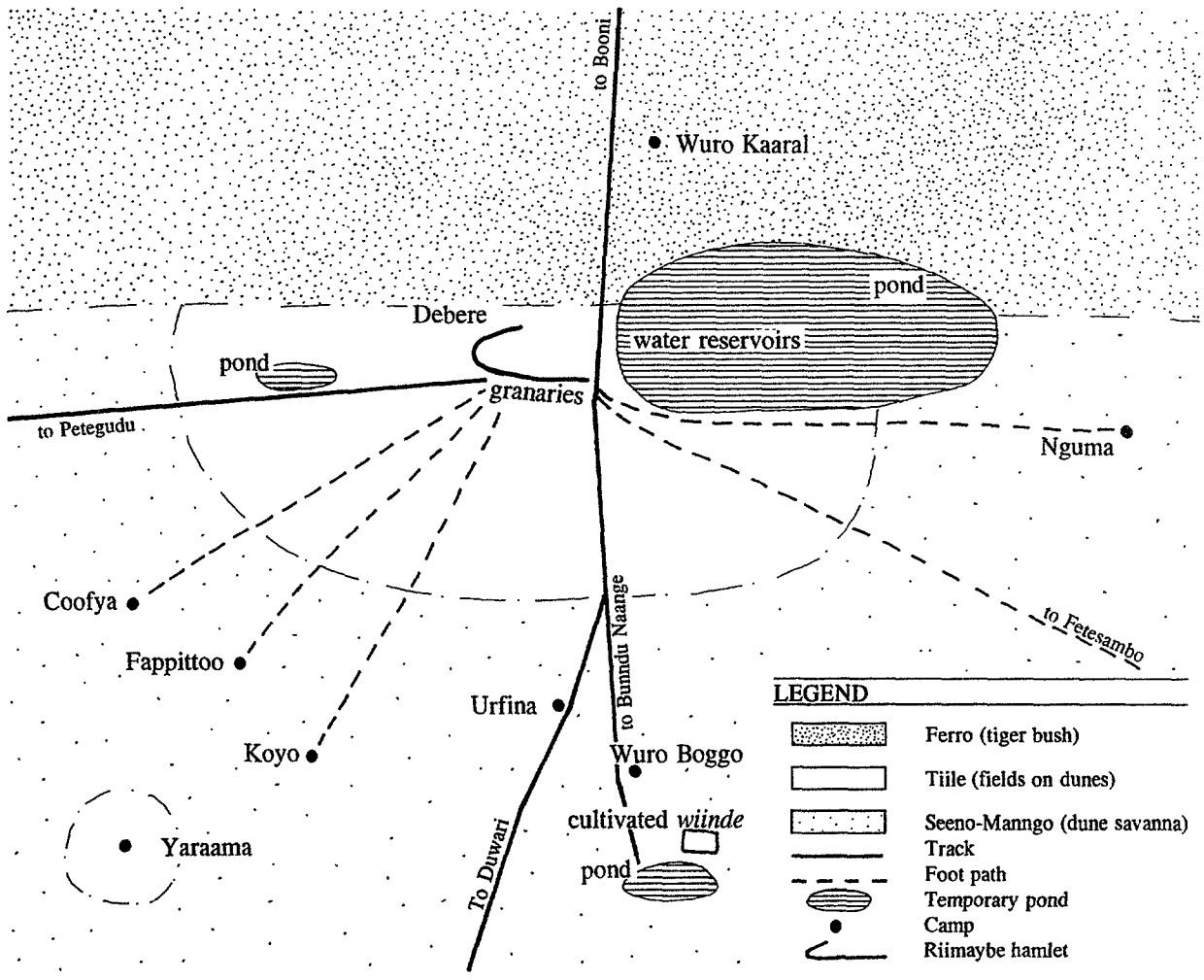
Serma belongs to the string of villages and temporary settlements, stretching from Tula to Lennga in the colonization area known as Daande-Seeno, on the border of the tiger bush and the dunes to the south (see map at the back). When the first Fulbe settled in Serma around the mid-nineteenth century, they probably found the place deserted. Although the area around Serma is an ancient habitation site, nothing is known of its pre-historic inhabitants. They are commonly referred to as *mawbe ndongo*, and it is not known whether they were related to the inhabitants of the mountains, or formed a separate unit. The artifacts of this people still play a role in the daily life of the present occupants of the area. The stones they used for grinding grain are kept as charms to prevent lightning from striking the houses and huts of the Fulbe and Riimaybe in the rainy season. Their stone mortars and pestles are still in use by old Riimaybe women. Some of the huge pots they left, which were excavated by the Riimaybe, are still used for the storage of drinking water. It is even said that one of the ancient habitation sites was once the biggest market place in the region, something that is hard to believe now, because the place is now overgrown with trees and covers barely a tenth of a hectare.

So, the present population regards itself as the lawful owners of the village, the land and the resources that surround it. The Torodbe, who were the first to settle in the village, consider themselves the elders of the village. They belong to a branch of the Fulbe who had an important role in the spread of Islam in West Africa. The fields nearest to the place where they settled are still in their possession as well as the land where their hamlet was located. Initially they settled in Serma only in the rainy season, because there were no known permanent water sources. They only cultivated some fields near a big pond at the border between tiger bush (Ferro) and dunes (Seeno-Manngo). After the rainy season they returned to Booni or another place. This remained so under the reign of Maamudu Nduuldi (approximately 1863-1890), who is said to have passed several rainy seasons in Serma, together with his Jallube, the great-grandfathers of the members of the Jallube lineages, Seedoobe, Taamankoobe, and Hawgiibe, who now inhabit Serma. When the chiefdom of Booni was founded and the followers of Maamudu Nduuldi settled permanently in Booni, Serma became a cultivation hamlet (*debere*) of the village of Booni and not an independent village.

After the rainy season the Jallube and Weheebe moved with their Riimaybe to places near

the mountains where there were springs and wells to spend the dry season. In Booni, Petaka, and Nokara there were wells. Some Fulbe families watered their livestock in ponds near the mountain group called Ella which was inhabited by Dogon cultivators (see Cazes 1993). Others went as far as the vicinity of Douentza to water their cattle in villages like Fommbori and Tommbori. Another important destination during the dry season was the Hummbeebe villages south of the Seeno-Manngo, of which Duwari was the most important for the inhabitants of Serma. Dinanguru was frequented by Fulbe from the Seeno-Gonndo.

Map 3.1: *Sketch map of Serma and surroundings.*



Monndoro and the string of villages from Monndoro to Lennga were visited by the Seedoobe who settled in Manugu. Their Riimaybe lived in these villages and they were helpful in watering the livestock during the dry season.

Up to the mid-twentieth century Serma remained a rainy season cultivation hamlet, just like all the other pastoral settlements on the Daande-Seeno. Liberated Riimaybe from Booni and

Dalla, and even some Jallube from Bore and other areas, joined the Jallube of Serma, and began to cultivate in the bush around Serma. The acquisition of land was relatively easy then. Every free man, noble (Jallube and Weheebe) or non-noble (Riimaybe), cleared land as he saw fit and retained rights in these fields, even if they were left fallow after some time. In this period there were only three temporary settlements of the Jallube in addition to the place where the Torodbe first settled, and Riimaybe and Jallube built their granaries. These three settlements were Wuro Kaaral, Nguma, and Coofya (see map 3.1). The hamlet founded by the Torodbe is now mainly inhabited by the Riimaybe. As can be seen on the map, these three settlements and the site of the granaries were situated near the border between the dunes and the tiger bush. Probably their inhabitants cultivated the soils precisely in this border area, for these are of intermediate texture and fertility. The fields to the east are still located just south of the pond, next to the fields of the inhabitants of Debere. West of Debere there is a corridor for the livestock separating the fields of Coofya from those of Debere. Some forty years ago a new period of settlement began. Wuro Boggo was founded and a well was sunk at Yaraama. Later on, in the 1960s Koyo and Fappittoo were established, and just after the drought, Urfina.

The fields near the pond were probably in almost permanent use. Soil fertility was maintained by the droppings of the animals that were watered in the pond just after the harvest, for as long as the water lasted. Intensity of use diminished with increasing distance to the pond so that gradually the cultivation system graded to a bush-fallow system. Some Jallube and Riimaybe possessed fields that stretched several kilometres from the pond at Debere to as far as several hundred metres south of the present location of Wuro Boggo. Fields were also cleared in the bush. Millet and sorghum were grown in a bush-fallow system, both on the sandy soils of the dunes and in the area dominated by tiger bush, with its more clayey soils. A plot was cultivated for two to four years, depending on soil fertility. When it was exhausted it was left fallow for six to seven years. When there was sufficient regrowth of trees, which indicated that soil fertility was restored, the field was cleared again.

The ecological environment

The long-term mean annual rainfall in Serma is probably about 400 mm per annum, if we take the precipitation in Hommbori, the nearest weather station, as the reference. Gallais (1975:11) reports an annual rainfall of 421 mm over the period 1922-1970. Hesse and Thera (1987:15) give a figure of 429 mm per annum for the period 1936-1965 and 349 mm per annum for the years 1965-1984, a decline of 19%. The standard deviation of this rainfall figure remained almost constant at 26-27%. In Booni an average rainfall of 286 mm was measured over the period 1976-1986, with a standard deviation of almost 33%. In Monndoro rainfall over the same period was slightly better, 338 mm with a standard deviation of 41%. If we extrapolate these figures to Serma, this would mean that between 1976 and 1986 average rainfall was about 300 mm, 100 mm less than in the period before 1970.

There is also a rain measuring device in Serma, but data are not collected very regularly. Total rainfall is also a poor measure of the possibilities for the growth of crops and pastures. The variability is such that significant differences in precipitation may occur over a distance

of several kilometres. If there is a rainstorm in Debere, this does not mean that the same quantity of rain falls in Yaraama. It may in fact be something between double this amount and nothing. The timing of the showers is also very important. In Debere rainstorms have been measured of 75 mm, which would be sufficient for the growth of crops like millet for a considerable period of time, depending of course on soil type. A dry spell of six weeks after such a shower is, however, sufficient to desiccate all crops. Almost all the precipitation is recorded in the months July, August and September. In Hommbori 84% of all rain falls in these months (Gallais 1975:12). The reported reduction in rainfall is the most severe in the month of August. Rainfall in this month was 36% less on average in the period 1965-1984, compared to the years 1936-1965. Temperatures are very high. In Hommbori, the mean annual temperature is about 29.8°C, which is among the highest in the world. In the dry season, in May the mean maximum temperature is about 41.5°C, while it does not drop below 28.5°C during the night. In January, during the cold season, day and night temperatures drop to 31.8°C and 17.0°C respectively. Evapotranspiration attains 3246 mm (Gallais 1975:11-15). Relative humidity varies between 15% in March to 69% in August (average 34%) in Hommbori (Gallais 1975:14).

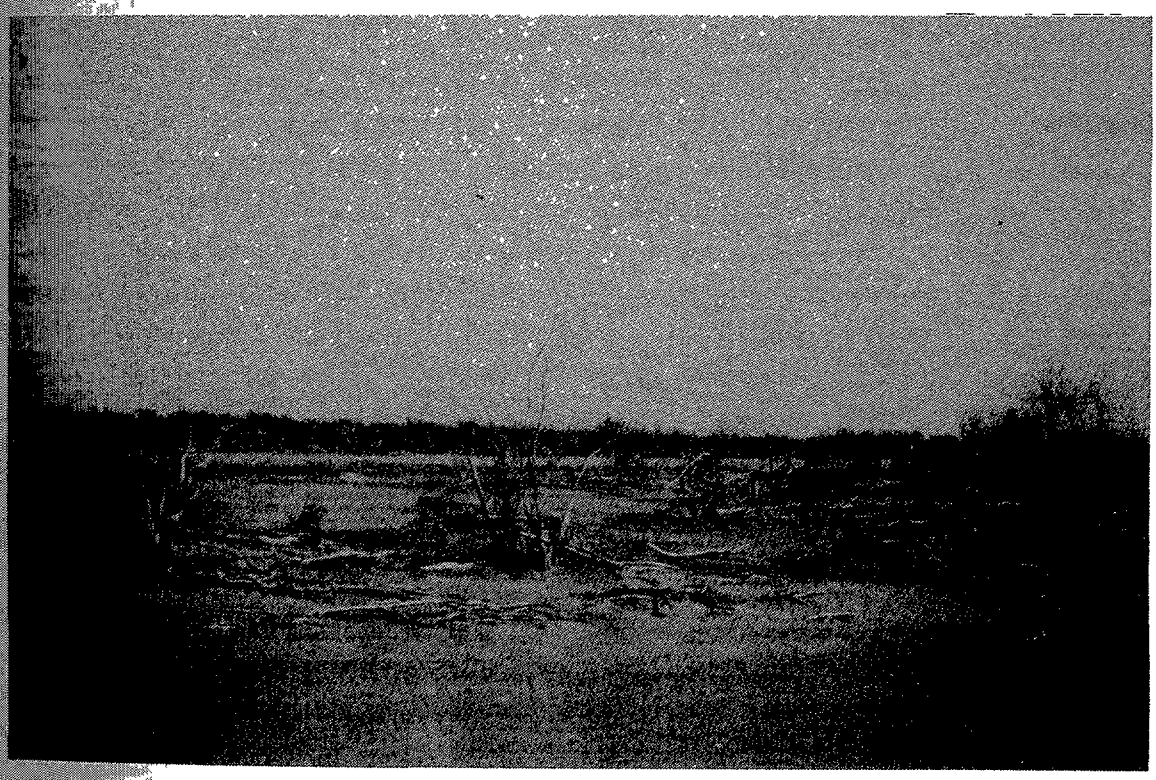
The inhabitants of Serma exploit two agro-ecological zones in order to ensure their subsistence. To the north up to Booni stretch the flatlands up to the mountains. These flats are overgrown with a very dense bush (tiger bush) of *Pterocarpus lucens*, *Combretum micranthum*, and *Guiera senegalensis*. Tree species from the Sudanic zone like *Tamarindus indica*, *Anogeissus leiocarpus*, *Adansonia digitata* and *Acacia* species can be found in wetter areas and in depressions. The soil of these flatlands is loamy with laterite concretions in the subsoil. In between the tracts of bush bare land can be found, due to the combined effects of drought and poor soil quality. This alternation of vegetation and bare strips gives this vegetation type its typical tiger skin pattern, from which the term *brousse tigrée* was derived (it was coined by Clos-Arleduc (1956)). In between, a sparse herbaceous vegetation can be found of mainly *Schoenefeldia gracilis* and sometimes wild fonio (*Panicum leatum*), and sometimes perennial grasses.[1]

There are a variety of names for these flat areas. To indicate the soil type the word *kollongal*[2] (clay, mud) is used. When mud is used for making bricks, it is named *loofal*. For the bare degraded tracts of land the term *kaaral*[3] is used. When referring in general to the tiger bush the term *ferro* is mostly used by the inhabitants of Serma. In the literature other names are employed such as *ceekol* and *bolaare* (see Marchal 1983, Piquemal 1993), but these terms principally refer to low-lying areas where the growth of plants, grasses and trees is abundant, and they are seldomly heard in Serma. The vegetation is severely degraded in the tiger bush north of Serma, so we prefer to term *ferro*, '*..le lieu où les cailloux rouges* [laterized gravel] *sortent petit à petit*' (Marchal 1983:232,608fn). Exploitation of the Ferro is difficult. There are hardly any permanent water resources, so that possibilities for exploitation as grazing area are limited to the wet season and one or two months afterwards. The vegetation provides good fodder for browsers like goats and camels, but the herbal layer is too sparse to afford much grazing by cattle and sheep. Exploitation for purposes of cultivation is just as difficult. Although there is considerable micro-variability, most soils are not fit for the cultivation of millet and sorghum, because of the impermeable layers in the subsoil. Soils with a high clay

content and located in depressions are susceptible to periodic droughts. Soils with a higher content of silt and clay clog up very easily, leading to a high run-off and reduced infiltration of rainfall. In addition there are hardly any permanent water resources on the Ferro, and the water table is very deep. As a consequence there are hardly any permanent villages and/or settlements in this area, in comparison with the areas at the foot of the mountains to the north.

During the rainy season numerous pools appear on the Ferro. In many places the soil is impenetrable, so that run-off water stagnates. The soils are loamy to clayey, have a low water storage capacity, and clog up very easily. This results in high run-off and extensive water erosion, creating a high potential for the creation of pools. However, due to the erosive workings of water and wind the area covered with tiger bush is also very flat. The areas that overflow after a rain storm are usually very large and the depth of the pools is insubstantial, though they cover large surfaces, where the vegetation is also concentrated. Under the impact of the sun and the wind these pools dry out quickly during a dry spell during the growing season. The dried-out soil which is left behind is very hard and impenetrable, so that renewed rainfall is even less effective. These soil characteristics are also the main reason for the difficulties involved in growing cereals, and the impediments for the growth of grasses and other plants that may serve as forage. Only deep-rooting trees may survive in these circumstances.

The second agro-ecological zone exploited by the inhabitants of Serma is located south of Serma, and is called the Seeno-Manngo. The designation *seeno* can be found in almost all the literature on the Fulbe in the Gurma (see Riesman 1977, Marchal 1983, Benoit 1984). In Serma the term is used to denote the sandy soils, and in particular the permanent dunes that form the dominant geological formation south of Serma. *Seeno-Manngo* (the great sand) refers to the vast area of dunes stretching from Serma to Duwari in a north-south direction, and from the



Bandiagara plateau towards the east to the central Gurma.[4] In contrast to the Ferro, where the dense woody vegetation limits the view, the Seeno-Manngo offers a very open rolling steppe-like landscape. The vegetation is at present dominated by annual grasses and plants. Trees are scarce, with as main species *Combretum glutinosum*, *Acacia raddiana*, and *Balanites aegyptiaca*. In the depressions between dunes tree species like *Sclerocary birrea*, and sometimes *Adansonia digitata*, are found, though both have become scarce in the recent past. The pastures of the Seeno-Manngo, consisting of annual grasses (*Diheteropogon hagerupii*) and patches of perennial grasses (*Aristida* spp.), were of excellent quality (Gallais 1975:136). For a long time they remained unexploited, because of the absence of drinking water for animals and humans during most of the year. In the rainy season only small pools are formed which quickly dry out, due to the facts that much water leaks into the subsoil and there is little run-off water on the Seeno-Manngo. The sandy soils of the dunes absorb the water very effectively, and in consequence there is little erosion of light soil particles that might gather in depressions and form the subsoil of an interdunal pool. Only in places where the sand contains more loam do pools appear. As a result, even in the rainy season exploitation of the Seeno-Manngo may be hampered by the fact that the rains are not suitably timed, so that no surface water is available.

Larger ponds are formed only in the zone that separates the tiger bush from the dunes. The plateau, on which the tiger bush grows, slopes downwards by 15 metres over a kilometre or so, just north of Serma, towards a depression, from which the dunes rise to a maximum of about 30 metres high some 10 kilometres from the depression. The water draining down from this slope and the excess run-off water from the tiger-bush plateau, which spills over its edge when the rains are heavy gather in this depression. From Lennga to Tula a string of ponds, interconnected at times, provides the main rainy season source of water for the settlements located in this depression. So it is not by accident that the camps and some permanent hamlets are located here. The ponds in this depression are in general deeper and more reliable than the other ponds on both the Seeno-Manngo and the Ferro.

In the course of the 20th century permanent settlements began gradually to appear in those areas where pastoralists or cultivators were able to develop permanent water points. Hummbeebe settled in Tula and Wayre, Riimaybe and Jallube in Serma, Lennga and Bunndu Jaabi. Sonrai from Hommbori and Dogon from Taabi settled on the ferruginous soils that connect the Ferro with the area around Monndoro. These water resources varied from deep (40-50 meter) pastoral wells at Serma, Lennga and Bunndu Jaabi to cisterns, called '*ceanes*' in French (Gallais 1975), dug into the gravelly subsoil near Issey, designed to catch rainwater, and to the closed underground water reservoirs into which the water percolates during the wet season in Serma. After the drought of 1968-73 deep wells were constructed by the veterinary service at the border of Ferro and Seeno-Manngo, so that an increasing number of people settled permanently in this zone, for example at Tula, Wayre, Daajem, Petegudu, Fetesambo and Lennga (see also chapters 10 and 14).

The fields of the inhabitants of Serma are located at various places. The Riimaybe seem to prefer the heavier soils close to the border with the Ferro, which are located in the depression between the Ferro and the Seeno-Manngo. These soils are less prone to drought in the cultivation season, because they receive some run-off water in addition to the rains. The Jallube seem to prefer the sandy soils on the dunes. These are easier to work. Water availability on

these soils is a little less than in the border area. At present only one family cultivates a field on the Ferro. The soil of this field is of moderate texture and less clayey than average. Sometimes the Jallube cultivate small temporary fields on deserted campsites (*wiinde* pl. *biile*), which may produce considerable harvests, because of the thick layer of manure left behind by the livestock.

The natural vegetation has degraded to a considerable extent over the last decades. On the Ferro, the most valued tree species for human and animal consumption are disappearing at a fast rate. Going from Booni, the arrondissement capital, to Serma, 30 kilometres to the south, one finds large tracts of tiger bush that have simply dried up and form literally a dead forest. Especially *Pterocarpus lucens*, *Anogeissus leiocarpus*, *Grewia* spp. and the more demanding *Acacia* spp. are disappearing. In ponds the large trees, though alive, have decreased in height, the top branches having died. *Adansonia digitata*, providing nutritious leaves, full of protein, iron and vitamins, has disappeared completely from the Ferro as well as the Seeno-Manngo. The perennial grasses on the Seeno-Manngo have become extinct, and the herdsmen complain about the quality of the remaining range, which has changed in composition. On the Ferro one can still find an occasional clump of perennial grasses. The vegetation on the Seeno-Manngo is now dominated by species like *Cenchrus biflorus* that are more typical of regions with drier rainfall regimes. The erratic rainfall also has effects on the availability of water away from the village. The small pools on the Ferro and Seeno-Manngo dry out more quickly than in the past. On the other hand the big pond in Debere holds water for a longer period. Due to the denudation of the Ferro, which drains to the Serma pond, extra water flows into this depression. The inhabitants of Serma said that the pond had never been as high as in July 1991, when the rains were exceptionally abundant.

The degradation is very apparent in the great number of dead trees one can find everywhere around Serma. Tracts of tiger bush have literally turned into dead forest. Except immediately around the camps there are still large amounts of dead wood available. When driving over the Seeno-Manngo, or from Serma to the east, and west along the settlements of the Daande-Seeno in the rainy season, one finds the plant cover is very patchy, depending on the differential impact of rainfall on the establishment of grasses and plants. Often seedlings die because of the impact of sand-blasting and of prolonged drought after germination. Trees are in general more resistant to temporary drought, but the long-run desiccation resulting from the chronic rainfall deficit has had a severe impact on the more hydrophilic species.

Social and economic infrastructure

The local economy

In its present form Serma cannot be termed a real village. Rather it is an amalgam of temporary rainy season settlements of Jallube pastoralists around a hamlet of Riimaybe cultivators, who were joined by some Weheebe and Bellaabe[5] families. As an administrative unit Serma belongs to Booni, the arrondissement capital 27 kilometres to the north. Part of the population pays its taxes in Booni, via the chief of Booni. Other Jallube families, who

immigrated into the zone since the 1950s, pay their taxes to the arrondissement of Monndoro. They belong to the village of Lennga and pay their taxes via the Jallube chief who resides in Camalajoy. Due to the attachment of the inhabitants of Serma to either Booni or Monndoro, and the fluid character of population movements, it was impossible to obtain official figures on the number of inhabitants. If these were available they would probably be most unreliable, since many people have migrated in the last decade. Moreover the number of inhabitants varies enormously from one season to another. In the wet season, when all the Jallube have gathered in their camps to cultivate their fields, the population may be as many as 500 people (400 Jallube and 100 Riimaybe). At the height of the dry season in March the number of people may be as low as half this number or even less. Many young men are away for most of the year and it is difficult to know whether if they should be regarded as inhabitants of Serma or not.

Relations with other settlements in the neighbourhood are close, and in fact it is almost impossible to draw clear boundaries between Serma and adjacent places. To the east Fetesambo is the nearest. It consists of three camps, Fetesambo[6] I and II and Jiigi. To the west there are also a number of communities, the nearest being Petegudu, the others being Kaajorde and Gawdeeru. All these settlements are inhabited by people related to the inhabitants of Serma. In Kaajorde for example live many members of the Moodibaabe or Torodbe lineage. In Fetesambo live a number of Seedoobe, who are related to the Seedoobe of Serma. Moreover numerous marriages are concluded between the residents of these camps, so that people are related not only by paternal kinship ties, but also through their mothers.

In Serma there is a clear distinction between the rainy season settlements of the Jallube pastoralists, that is the eight cattle camps, and the sedentary hamlet of mainly cultivators. The camps have a very open character. In general no boundary is marked between the territory of one family (called *wuro*: pl. *gure*) and another. One can tell the area of one family from that of another by the fact that the straw huts are clustered, and the space between the huts of one family group and those of another is greater than the space between the huts of one group. In Serma there are not even enclosures for the animals in which they might be corralled at night. The only provision that appears to have anything to do with privacy is the fact that all the openings of the straw huts are oriented towards the south. When one of us asked about it, the women, who are responsible for the building of straw huts, could not think of any particular reason for orienting the doors in that way. As we soon found out, there is a sound practical reason for doing so. In the wet season the rainstorms blow from east to west, and in the dry season the Harmattan blows from the northeast. In both instances the chosen orientation of the door causes the least trouble.[7]

The camps of Serma are all within 3.5 kilometres from the border area between tiger bush and dunes, where the main water supply of Serma is located. Just east of Debere there is a large pond that fills in the wet season. Numerous other small ponds can be found in the neighbourhood of the settlements. Often these small pools run dry before the end of the dry season, except for the large basin near Debere which retains water until the end of October. A part of it was deepened by the livestock service in 1987, so that drinking water for the livestock is available until December. To the northwest of Debere there is a small salt lick. The quality of this lick is so bad that it is seldom used. The dry season water supply is assured in an unorthodox way. In the bed of the pond there are a large number of privately owned



underground water reservoirs, up to 200, that are closed during the rainy season. The water percolates through the soil into these reservoirs, where it stagnates on an impenetrable layer in the subsoil.[8] These water reservoirs are not connected, but the water level tends to even out when one reservoir is emptied at a faster rate than the others, because of leakage. In addition to these water reservoirs there is a communal well four kilometres south-south-west of Debere, which holds water for the whole dry season. Until fairly recently the neighbouring groups of settlements had no dry season water supply, so that Debere or Serma were the only places where (limited) permanent settlement was possible.

Despite the fact that the water supply is fairly adequate for the whole year in terms of quantity, the daily chores for the Jallube women who fetch the water are considerable. They sometimes have to walk for more than three kilometres with a bucket full of water on their heads. In addition the quality of the water is often very bad. At the beginning of the wet season when the ponds fill, not much is wrong with the quality of the water. However, as the season advances, the ponds become polluted with dung and urine, with all kinds of bacteria etc. In the water reservoirs all kinds of creatures breed, so that the quality is bad. The quality of the water of the well in Yaraama is better, though the salt content is fairly high. Riimaybe women depend on the water sources around Debere. For them fetching water is a less arduous task.

Apart from Tula and Lennga, Serma is the only core of pastoral settlement with a hamlet of sedentary cultivators on the Daande-Seeno. This hamlet is called Debere, which literally means temporary cultivation hamlet, in contrast to *hubeere*, which denotes a permanent village of cultivators or an administrative centre. The appearance of debere is quite different from that of a pastoral settelement. It consists of a collection of mud brick houses and granaries on a mound next to a large pond on the border between the tiger bush and the dunes. At first sight

one cannot distinguish this hamlet from any other hamlet of Dogon or Hummbeebe cultivators in the region. On coming closer one can see the differences. In between the mud houses one finds the straw huts of some Fulbe who have settled in the hamlet. In contrast to a Dogon village, moreover, the limits of the compound are not marked by high walls. In general the walls, if any, are no higher than breast height and not very well maintained. There are no doors in the wall. One hardly notices when one leaves public space and enters private space.

The presence of this hamlet makes Serma the most important social and economic centre in this part of the Daande-Seeno. Debere provides Serma with a lively heart, where the Jallube and Riimaybe men come to sit and chat under the shelter, which protects them from the scorching sun. Jallube men from other camps come here from time to time to arrange all kinds of affairs with the Riimaybe, but also with the Jallube men. At most times of the day, regardless of the season, the shelters are occupied by men, Jallube and Riimaybe, young and old, who come to play a game called *cokki*, a local variety of checkers, to engage in discussion or simply to rest and sleep. Each group of men, young, old and the group in between (the young fathers' group), have their own shelter, though they may mix a little. In Debere there is also the mosque. The Imam and his family live next to it. Meetings are held in Debere in order to solve conflicts or to discuss development initiatives with government officials or development agencies. Islamic rituals such as the Friday prayers, and the prayers of *tabaski* and *Idul Fitr,* are held in Debere. When the chief of Booni visits Serma he is received in Debere. The vaccination of children and veterinary care for the animals are administered in Debere. When officials spend a couple of days in Serma for these purposes, they are always lodged in Debere.

All Jallube of Serma have a granary built of loam bricks (*beembal*) in Debere, to store their stocks of millet after the harvest.[9] Every day the women or their daughters come to Debere to fetch millet for the daily meals. The Jallube women also market their sour milk and butter in Debere. Often they have a Diimaajo woman friend, who acts as an intermediary. They may sell the milk to the Riimaybe, but also to other Jallube women, who have no milk or butter from their own cows. The Riimaybe women are also the 'market women' of Debere. Most of them engage in petty trade in provisions such as salt, peppers, dried onions, *makaari* - a paste of fermented hibiscus seeds to season the sauce -, and tea, sugar, tobacco, cigarettes, kola nuts, razor blades, soap. They also sell all kinds of products of their own making such as *lacciri*, the couscous from millet, soap, the millet they saved from their own kitchen, or their own harvest, wild grains they gathered in the bush, such as *paqiri* - the wild fonio -, *maaro* - the wild rice that grows in the pond-, and tree fruits such as *giigiile* from the tree *Boscia senegalensis*.

Though the quantities are small this petty trade forms an essential (re)distributive network of goods and credit in Serma and even beyond. Many inhabitants of Fetesambo and Petegudu come to Debere every now and then 'to do business'. In addition once a week a Mossi trader comes with his motor cycle to Serma. His merchandise consists of kola nuts, cigarettes, dates, tea and sugar. He is the main supplier of kola nuts in Serma. He sells to individuals, but Riimaybe women also buy in larger quantities to resell in the village in between his visits. Kola nuts in particular are an important input in the local economy. This mild stimulant drug is consumed by virtually everyone. If the nuts are finished people complain about headaches and

say they cannot work: Debere is in commotion and everybody becomes irritable. Debere may be called the centre of social and economic life; its small market is the only one in 30 kilometres around.

For other trade activities the inhabitants of Serma are dependent on the markets of Booni in the north and Duwari, about 35 kilometres to the south. Especially the sale of cattle, the purchase of large quantities of cereals, and the provision of clothes, all are carried out in these locations. Riimaybe women buy their provisions in Booni for resale in Serma. The weekly market in Booni is on Thursday. The people who want to go to the market often leave as early as Wednesday afternoon, as do the cattle and small ruminants that have to be sold at the market. When it turns late, some people come back only on Friday morning. The market in Duwari is even further away, and it takes even more time to make use of it.

The livestock market in Booni is the most important for the inhabitants of Serma. This market is organized by the livestock service. Some of the men in Serma, Riimaybe as well as Jallube, earn some money as intermediaries at this market. In the past this was the exclusive domain of Jawaambe, but they have increasingly moved into the trade itself. Traders from Burkina Faso and Mopti visit this market regularly. Because of the import of subsidized meat from the European Union, prices and demand have dropped dramatically. Both may have recovered after the devaluation of the FCFA in January 1994. In 1990 and 1991 it was not uncommon for animals to return from the market because there was no demand. An alternative market is that of Duwari. Demand is, however, low, because this market is not visited by the larger traders. When these possibilities are exhausted some people go to the market of Yuba in Burkina Faso. There are a couple of Jallube who go there with animals from their fellow villagers, but not often.

The market for cereals has a different structure. There are no traders from the area itself, who dispose of their own means of transport, so that supply is not assured, at all times. As far as we know, all the markets in the cercle Douentza, except for N'guma, are supplied by traders from outside the region. In Booni millet and sorghum may be purchased from traders who come from the south, from the *cercles* of San and Koutiala. Prices per sack of 100 kilos are 250-500 FCFA (3-10 percent) higher than in Douentza. Supply is not always regular. When the harvest has been good, traders wait until demand is sufficiently high before they send their trucks this far north. Sometimes when they are oversupplied, Hummbeebe from Duwari take millet on their donkey carts to the market of Booni. Prices in Booni are in general higher than in Duwari. When the harvest is bad, the trucks often do not come as far as Booni, for demand further south is so high that traders prefer to sell there and not in the north. Another factor which contributed to the erratic supply of the market in Booni is the unrest caused by the Tuareg insurrections which have spread over the north of Mali since September 1990. An alternative is, again, to buy cereals with the Hummbeebe of Duwari and Dinanguru. However, these villages are subject to the same climatic and edaphic circumstances as Serma. When the harvest fails in Serma, the chance that the same has happened in Duwari and surroundings is fairly high.

When the cereals are bought the next problem is how to get them to Serma. There is no motorized transport from either Booni or Duwari to Serma. The only way to get a sack of cereals to Serma is on the back of a donkey or a camel. When one does not have one of these

animals the only possibility is to ask someone to transport it for you. This costs at least FCFA 1,000 per sack, for it takes almost two days of work, and the labour of the animal, and sometimes the maintenance and investment in a donkey cart. During our stay the price of a sack of millet or sorghum varied between FCFA 5,000 in May 1990 and December 1991 to FCFA 15,000 in September 1991. For many people the effort to get the price of a sack of millet was already too much, let alone saving FCFA 1,000 more to pay for the transport. The only way to get near the food is then to move to Booni and Duwari and buy in small quantities.

Health and education

Serma is no exception in the region regarding the health situation. As was described in chapter 2, the overall health situation is very bad. Adults as well as children suffer from a wide variety of diseases. Consequently child mortality is high. From a survey conducted among women in Serma and Booni it appeared that about 35% of the children died. Most children die before they are one year old, but the death of children between five and ten years old is no rarity.[10] We did not find much difference between Jallube and Riimaybe in this respect. Also adults suffer from many diseases, including worms, and other parasitical diseases. Most adults are infected with chronic syphilis, which may result in blindness.

Hilderbrand (1985), found a similar health situation among Fulbe living in villages south of Hommbori. The health situation was in general very bad, with considerable variation over the seasons. There were no significant differences in health situation between Fulbe and Riimaybe. The Riimaybe seemed to be a little better off, and the Fulbe men seemed to be the least healthy, especially in the dry season. The weight/height ratio for women was slightly better. The observed variation in the height/weight ratios over the seasons was attributed to workload and the harsh climate.[11] It appeared that for both groups the dry season was the most difficult period. Although the expectation was that the Fulbe would be better off because of the availability of milk, it appeared that milk production was very low during the dry season. Subsisting on milk alone was possible only during August. The Riimaybe profited as much as the Fulbe from the milk production by bartering cereals for milk. There are no reasons to believe that the situation in Serma differs significantly from this, or that the situation has improved to any extent since the drought of 1983-1985.

Water is definitely a factor contributing to these health problems. The pools, for instance, form a perfect breeding ground for mosquitoes, which literally swarm from the pools in the evenings during the rainy season. Many people have no mosquito nets, and no one takes malaria prophylaxis. As a result many people suffer from malaria in the wet season. With some people malaria develops into a chronic condition, resulting in severe anaemia, and sometimes death, especially among young children and women. The water reservoirs in the pond near Debere contain all kinds of worms and parasites.

Another important cause of the health problems of the people of Serma is their consumption pattern. In general food intake is inadequate both in quantity and quality. The diet of Jallube as well as Riimaybe is very simple. The main meal is eaten in the evening and consists of a millet dough (*nyiiri*) with a sauce (*oro*) made from Baobab leaves, seasoned with salt, *makaari*

(paste of fermented hibiscus seeds), some peppers, and sometimes potash. If there is milk, part of the dough is mixed with fresh milk (*biraadam*) and eaten in this way. Breakfast consists of the *nyiiri* left over from the previous evening, with some fresh milk. If there is sufficient millet, dough is prepared for lunch. If not, some millet is pounded, sometimes roasted, and mixed with some spices, water, and sour milk (*kaadam*) prepared from the previous evening's *biraadam*. If there is no milk available, and this is often the case today, only water is added. Meat is eaten only at festive occasions, such as name-giving, marriage ceremonies and Islamic feasts. Sometimes a Diimaajo from Debere slaughters and roasts a goat, to sell it in pieces. Fruits are eaten at various times of the year in a great variety. Among the fruit species consumed are *Ziziphus mauretania* (*jaabi*), *Grewia* spp. (*kelli, gursoohi, cibooli*), *Tamarindus indica* (*jabi*), *Balanites aegyptiaca* (*tanni*), *Boscia senegalensis* (*giigiile*).

Debere is the basis for the development activities of the livestock service in this sector of the Seeno-Manngo, aimed at improving the health service for the population. One of the Weheebe of Serma received training from the livestock service as a bush doctor, and is formally responsible for health care and the management of a village pharmacy. Also 'Save the Children Fund' (SCF) has been active in this field. They have trained mid wives, and organized vaccination campaigns in the region. One of the Riimaybe women was trained as a mid wife to assist women in giving birth.

This is accompanied by an effort to provide more general education to the villagers. The village doctor was also trained to give lessons in reading and writing Fulfulde, the language of the Fulbe, in order to promote functional alphabetization of the adult population. There is no formal education for children. For this they have to go to Monndoro or Booni, where primary education is given. To our knowledge not a single child from Serma attends a government school. Rather parents try to avoid this by bribing the head-masters of these schools. The only education children receive is a few years of attendance at Koranic school. In Serma itself there is no practising *moodibo* giving Koranic education. Occasionally wandering *moodibaabe* settle for some time in Debere or one of the cattle camps, and then children, mostly boys, may receive some lessons. More often, however, boys are sent to other villages to have lessons in Islam.

It would be wrong to infer from the presence of these health care and educational provisions that the inhabitants of Serma are better serviced in these domains than other villages in the fifth region of Mali (see chapter 2). The midwife and village doctor have proved to be of very little use in Serma, especially for the nomadic and semi-nomadic people whose mobility is incompatible with 'fixed' health care. Midwives are not known in (semi) nomadic societies such as the Tuareg and the Fulbe (Randall 1993*a*:284, Sarah Castle p.c.). The midwife in Serma received training by the 'Save the Children Fund' (SCF) in Douentza for only one week. She hardly ever helped a woman to deliver a child. In the cases where she did, we were told, she made many mistakes. (The worst case was when she cut the umbilical cord too short.) The midwife herself admitted that she was never called upon by the women (Jallube and Riimaybe alike), and that the medicine box she received from SCF was exhausted. She had no money to buy new medicine.

The vaccination campaigns organized by SCF did not function very well for the (semi-) nomadic population. The time chosen for this campaign was after the harvest, when Jallube

were starting to move. A nurse from Booni would install himself for two days with the Weheebe in Debere, and order the people to come to him. Not only the Jallube women and their children who had already left on transhumance missed the vaccinations, but many women in the camps as well. Besides, most women did not know the reasons for vaccination and were not convinced of its use. As a result most children were not vaccinated among the Jallube. Others did not complete the vaccination series. Vaccines are often not very good because they are kept in cool boxes that do not conserve them for even two days. In sedentary villages like Dalla and Booni the results of vaccination campaigns were much better. People in the 'bush' depend in the majority of cases on their own healers and their own knowledge. Especially the pastoral populations stay on the margins of this 'modern' development.

Division of labour

Riimaybe and Jallube define themselves in relation to each other as the poles in the pastoral-agricultural continuum. The Jallube define themselves as pastoralists. Their heart lies with the rearing of cattle. Yet, in the past as well as in the present, they grow millet for their subsistence, though they detest the work of cultivation, which they find inappropriate to their noble status. Especially nowadays, given the difficult situation, and the small herds they possess, they are forced to grow millet. Other work that belongs to the domain of the Riimaybe is not taken up by the Jallube. They will, for example, not take up work concerned with mud, such as the making of mud bricks, the plastering of granaries, or the maintenance of water reservoirs. The Jallube prefer the mud brick granaries in the village to the field granaries made of millet straw and wood. The reason for this is the risk of theft from a field granary, while the mud brick granaries are positioned in the middle of the village. In addition there is an increasing risk of wandering hungry elephants which open field granaries. Some Jallube also have houses in Debere which are maintained by Riimaybe. Likewise, the Jallube regard the gathering of bush products as beneath their status, and will only do this when compelled by hunger. They prefer to pay a Diimaajo to do this work for them or to buy bush products from a Diimaajo woman. Their preferred food is milk, but in times of millet shortage people would admit to us in private that they 'were hungry for millet dough (*mi rafi nyiiri*)', and in fact liked this more than milk or food based on milk.

The Riimaybe define themselves as cultivators. Though their status is lower compared to the Jallube they are gradually beginning to take some pride in this work. They regard the Jallube as expert cattle herdsmen. If they own cattle, they will have these herded by a Jallo. Further they perform all kinds of menial tasks for the Jallube, such as those mentioned above, and sometimes work as agricultural labourers for them. The reverse also happens, impoverished Jallube who are forced to work as agricultural labourers for the Riimaybe but so far this is less common. In addition some Riimaybe are important agents for the Jallube, with whom they can discuss business matters and deposit money that they do not need for an immediate purpose.

Other kinds of work that are considered inappropriate for a Jallo are crafts like weaving, woodworking, leatherwork and blacksmithing. For the Riimaybe leatherwork and blacksmithing are also forbidden and despised categories of work, but woodworking, the making of beds, and

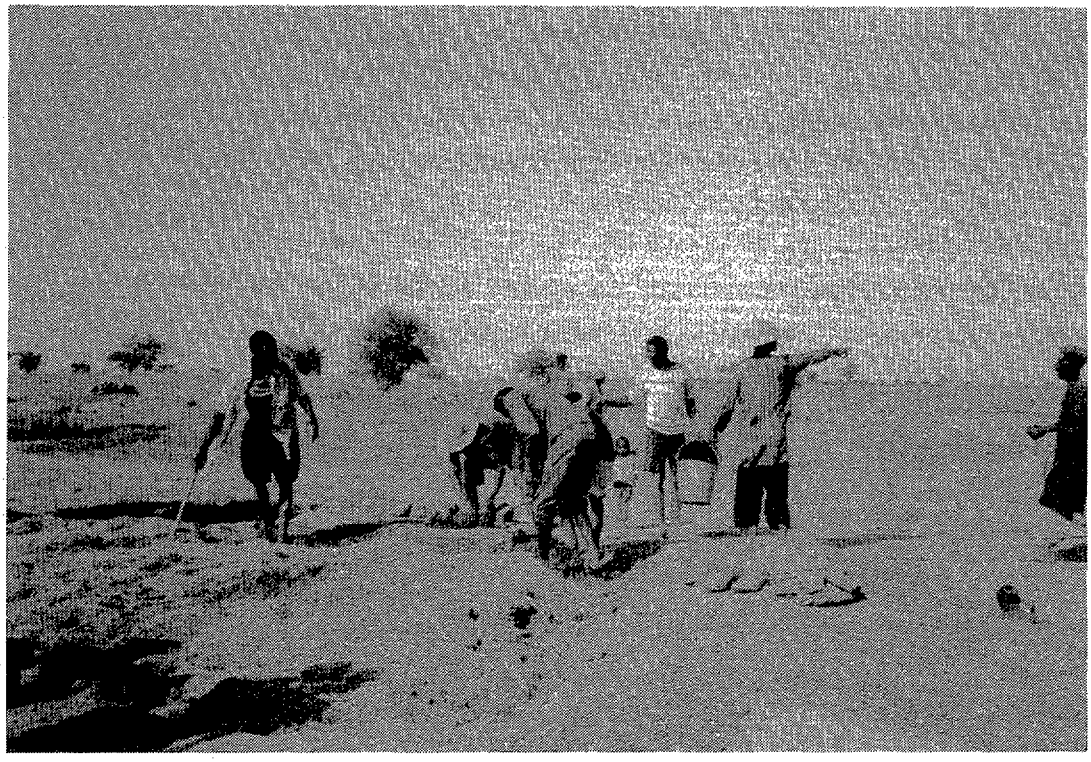
the weaving of cotton cloths and blankets are to some extent the work of the Riimaybe. In Serma these occupations hardly play any role. The Jallube are too poor now to afford the traditional beds. Ironically the only persons who can afford beds for their daughters are the Riimaybe women who engage in petty trade. Although they do not dispose of large amounts of cash, they do save money to provide their daughters with some sort of dowry. In Serma itself there is no one making beds and their front boards. For unknown reasons the caste groups among the Nyeeybe who made these beds and the blankets that belong to the dowry have disappeared completely from the Hayre. Their work, as far as needed, has been taken over by the Riimaybe. The clothes made of woven cotton bands are not worn any more. All people now dress in clothes made from industrial textiles.

The demand for leather working and blacksmithing is low but ever present. Leatherwork is needed for the supply of water sacks, and blacksmithing for the fabrication and maintenance of knives and agricultural tools. Though there are still some Fulbe blacksmiths in the Hayre, most of their craft has been taken over by *gargasaabe*, who originally belonged to the Tuareg. After the droughts these people have settled in the Hayre. They also do the woodworking for household utensils such as bowls to eat from and milk receptacles, mortars and pestles; and they also furnish the Fulbe with shafts for agricultural tools. The *gargasaabe* women do the tanning and working of leather. Often they are paid in kind, with some milk, tea and sugar or millet.

Perhaps the differences between Jallube and Riimaybe are best described along gendered lines. The tasks of the men have grown more alike over the years. They are responsible for the provision of the family with millet, the basic staple. The Jallube men do this on their own. Their women are responsible for the processing and marketing of milk and do not have a part in the work of cultivation. The Riimaybe men do rely on their women for help and support with the work of cultivation. This help is not unreciprocated. When a wife has given birth to her first child, the Diimaajo man has the obligation to give her a piece of land to cultivate. The revenues of this land are entirely hers. In addition, when the harvest has been good, the Diimaajo man has to give her a couple of loads of millet, with which she may (re)start her trade activities or which she may use on her own hearth, and for her own children.

Livestock keeping is a man's responsibility among both Jallube and Riimaybe. Although among the Riimaybe the cattle are often subcontracted to a Pullo herdsman, the decision to do this, and other management decisions, are taken by the men, unless the cattle have been bought by his wife with her own money. This happens only rarely, rather a Diimaajo woman buys sheep or goats, which she entrusts to one of her children to herd, together with the other small ruminants belonging to her husband. Goats and sheep are rarely entrusted to the Jallube. This is in contrast to other groups of sedentary cultivators in the Hayre and Seeno, who regularly entrust their small ruminants to Fulbe herdsmen.

Among the Jallube the management of livestock is the task of men. The management decisions are taken by the elder men, who live in the same compound or *wuro*, or the head of the family. The actual work of herding, watering the cattle and small ruminants is the task of the younger men, brothers or sons, depending on the composition of the family. In contrast to many other Fulbe in West Africa (see Dupire 1962, Maliki 1988), and many pastoral groups in East Africa such as the Maasai (see Talle 1988, Rutten 1992), milking is the task of the men



and not of the women. Only in cases when there is insufficient male labour power available in the family, are girls entrusted with the work of herding and milking. After marriage, however, they are no longer allowed to do this in their husband's family where the couple normally lives.

The fact that a Jallo woman does not help in the cultivation of millet does not mean that she makes no contribution to the procurement of food. If there is sufficient milk, she has the obligation to use part of the income from the sale of milk to buy millet. Moreover, she is expected to buy the provisions for the sauce from this income. What remains she may use for herself, to buy clothes or jewelry or she may save it for the dowry of her daughters. Further, Jallube women may earn some money by making beautifully decorated calabash covers, which are typical for this region, and by making bed mats from perennial grasses.

For both categories of women the presence of children is of prime importance. Among the Riimaybe sons will work on the personal fields of their mothers, and will take care of them when they grow old. They also provide their mothers with household labour in the form of daughters-in-law when they marry. Daughters are important for they also alleviate the task of a mother. They help in all kinds of household tasks and industries, and the cultivation of the fields. To some extent they continue doing so after they have married, at least when they still live in the neighbourhood.

From this overview it may be concluded that the working life of men and women in Serma takes place in separate spheres. This goes for the Jallube even more than for Riimaybe. This separation in work and consequently in space also extends to the domain of social interaction. Husband and wife are not expected to associate in public, nor even to mention each other's name. It is not uncommon for an older man to leave after breakfast and to come back only at sunset to supervise the milking of his cows, and then again to seek the company of other men

for the evening, while his wife has been busy all day with the household chores. Only within the confines of the hut at night are they together. For the Riimaybe this segregation is less strict. Husband and wife may work on the same field though in different places. A man may give his wife an order in public. A Diimaajo man regularly has work to do within the confines of his own compound in the presence of his wife, for example the maintenance of the houses, granaries, and so forth.

Land use and mode of subsistence

The Fulbe agricultural calendar

The Fulbe in Serma know two agricultural calendars, one of indigenous local origin and one which is derived from Islamic knowledge. The first is a calendar for folk use, known by everybody. Knowledge of the second calendar is restricted to *moodibaabe* and older men. This Islamic calendar concerns not the normal lunar Islamic year, but a solar or rather a stellar year. In this solar/stellar calendar the year is divided into 27 periods of 13 days and one period of 14 days, totalling 365 days. Time reckoning with the Islamic lunar calendar is widely known for the dating of important Islamic rituals, and also for the dating of other important events during the year; but it is not used for agricultural purposes, because the agricultural seasons follow the solar year and not the 12 lunar cycles specified in the Islamic year.

The Fulbe agricultural year is divided into four, (some authors report six), seasons, and has been extensively described by others (Stenning 1959, Dupire 1962, Gallais 1984, Thebaud 1988). In the Hayre the Fulbe distinguish four season: *ndunngu*, the rainy season from July to September; *yaawnde*, the short hot dry season from October to the end of November, which we will label the post-harvest season; *dabbunde*, the cold dry season, from December to mid-February; and *ceedu* the hot dry season, from mid-February to the end of June. The Fulbe of Serma distinguish these seasons on the basis of cloud formation, the main wind direction, temperature and humidity. In the Islamic solar calendar the seasons begin on different dates and are based on other criteria. In this calendar the beginning of the rainy season, *ndunngu* is on the 27th of May, the start of the 13 day period called *alhadu atu*, which is Arabic for 'stars' (*hoodere* in Fulfulde). In this period the prevailing wind changes direction definitively to the southwest, and the heat becomes oppressive because of the increasing humidity of the air. The beginning of *yaawnde*, the post-harvest season, is fixed at the 27th of August. Around this date it is indeed clear that the rains are losing force and the eastern winds begin to reappear. The cold dry season, *dabbunde*, starts on the 24th of November, when the nights are becoming really cold. The hot dry season, *ceedu*, starts on the 23rd of February when the cold has ended and the day temperatures especially begin to rise.

In the course of this century the exploitation of semi-permanent fields and bush-fields has changed to an agro-pastoral mode of subsistence, based on the interaction between cereal cropping and livestock keeping. Through this interaction semi-permanent and even permanent cultivation has become possible. Most inhabitants of Serma combine these two, cereal cropping and animal husbandry, in their own production unit. This agro-pastoral mode of subsistence has

been extensively described for other areas in this part of Africa (Barral 1977, Beauvillain 1977, Riesman 1977, Benoit 1979, Marchal 1983, Gavian 1992, Guillaud 1993). In each region the organization of cultivation, the crop mixes and the livestock keeping practices are slightly different. On the Daande-Seeno the most important crop is millet, which is grown in a mono-cropping system.

The agricultural activities in the rainy season are dominated for both the Jallube and the Riimaybe by the cultivation of millet. When the first rainstorms have moistened the soil at the end of June or the beginning of July, the inhabitants of Serma sow (*aawde*) their fields around Debere or Yaraama with millet (*gawri*), the main crop. Hardly any field preparation is done. With a special hoe (*jabirgal*) planting holes are made at intervals of about one metre and in each hole 10-20 seeds (*aawdi*) are deposited. Only a couple of days after sowing the seeds germinate. Depending on the weather conditions, since lack of rain and dust storms may kill the seedlings, reseeding may be done. If all goes well, soon the fields are covered with millet seedlings as well as a great many of weeds and the natural regrowth of trees.

As soon as the delicate plants are impeded by the growth of weeds it is time to start weeding. This is the most laborious part of the cropping cycle and is called *nyaamko* or *demal nyaamko*. Weeding is done with a small hoe called the *jalo*. From mid-July to mid-August all the men and most of the Riimaybe women devote their labour time to the cultivation of the fields. If the rains have been good up to then and the people of Serma have been able to establish plants on all the fields they have sown, most families will have insufficient labour to work all the fields. So not access to land, but access to labour is the most critical factor for millet production in these circumstances.

When the first weeding cycle has finished, the second weeding cycle starts: it is called *dodal* from the verb *dodaade*, to pull out. Often when the regrowth of weeds is only sparse, because of lack of rain or late weeding, a second cultivation cycle is not necessary. Cultivation in this instance may even damage the crop as soil moisture will be lost when the topsoil is disturbed.

In this period of the year relatively little attention is given to tending the livestock. As usual the cows are milked in the morning and the evening. After milking in the morning the cattle are watered and brought to the pastures a few kilometres from Serma. They are left to graze on their own for most of the day. The herdsmen, adolescent boys, are needed for work on the cereal crops. Large predators have become extinct in the Hayre and on the Seeno, so that there is no predation risk for herds of cattle. There is sufficient nutritious grazing for the animals to feed on. Mostly the animals return on their own to the camp around six in the evening, led by the lactating cows, desiring their calves to empty their full udders. Herds of small ruminants on the contrary cannot be left to graze and browse on their own. The risk that goats or sheep get lost or are carried off by small predators is relatively high. Consequently these herds are permanently supervised by young boys, aged eight to sixteen. The watering of livestock in this period is easy and requires hardly any labour, because everywhere, especially on the Ferro, and to a lesser extent on the Seeno-Manngo, small pools are formed.

At the end of the rainy season the millet starts to flower and ripen. Some labour may be involved in chasing away the elephants that sometimes forage in this region. During this period Riimaybe and to a lesser extent Jallube undertake all kinds of gathering activities to supplement the diet. Cereals are often in short supply. Riimaybe women, and also their children, go out

in the bush to gather unripe wild fonio, or *paggiri* in Fulfulde (*Panicum laetum*), and the leaves of various plants that are used as vegetables mixed with the *paggiri* or some millet dough. Sometimes also desert melon is gathered and roasted or cooked, but this is not considered very nutritious.

The beginning of the post-harvest season is marked by the slackening of the rains. The dry spells between the rain storms become longer and the amount of rain per storm decreases. Soon the first millet, still unripe, is harvested and eaten roasted. A week or so later the harvest commences. The harvest may take anything between a few days and eight weeks. This depends principally on the size of the harvest. After the harvest the livestock is admitted to the fields to graze freely on the stubble. The pools on the Seeno-Manngo and the Ferro have dried up, and the animals are now watered at the big pond. When this is finished, the water reservoirs in the bed of the pond are used. The timing of the harvest is very important. Anyone who harvests late has to face the possibility that his/her field will be overrun by the livestock that have been allowed onto the fields of others after they have finished their harvesting activities. On the other hand the millet should not be harvested unripe, for it will decompose and have a bitter taste.

During and after the millet harvest, Riimaybe and some old Jallube women start collecting the wild rice that grows in the northern part of the large pond near Debere. Some Riimaybe women amass more than 50 kilos of this rice. Later in the season some Riimaybe women gather the wild fonio that has ripened, by sweeping the soil and collecting all the plant material before winnowing. Both tasks are very laborious and require hard work. In addition Jallube women cut the few clumps of perennial grasses that are still present on the Ferro. The stalks of these grasses are used to manufacture mats which are used as matresses and for the decoration of beds and huts. Still later in the season the berries of *giigiile* (*Boscia senegalensis*) are gathered. Most of these products are stored or marketed by the Riimaybe women. The rice, for example is either stored or sold at occasions such as the Islamic slaughter feast, or in the month of the Ramadan. The *giigiile* is always stored and only eaten or sold in times of hardship, because of its bad taste.

When the harvest is finished and people have settled down a little they start to think about the way to spend the dry season. Some move their household to one of their fields near Debere. The livestock they manage is coralled at night on the fields, so that the manure the animals produce helps fertilize the field for next year. The women are nearer to Debere, where they can market their milk, and where the granaries of the family are located. Other Jallube move with their animals to villages of Hummbeebe south of the Seeno-Manngo or to the west, or to villages of Weheebe, Riimaybe and Dogon in the north, like Booni, Nokara, and Dalla. There they live by the bartering of milk for millet. Further they hope to gain something out of a contract with a cultivator to manure his millet field. Others go without livestock, hoping to gain a herding contract with someone and then to live off the proceeds from the milk produced by this herd. Young Jallube men leave for the west to look for employment in herding in the Inner Delta of the Niger.

Among the Riimaybe the exodus is less pronounced. Some young men leave for town to look for employment, for instance in house construction or porterage. Most Riimaybe, however, stay at home, except for the very poor. They earn some money in repairing granaries

and maintaining water reservoirs for the Jallube, and Riimaybe women earn considerable amounts of money in small trade with the remaining Jallube and passing pastoralists.

In Serma itself the cold dry season is the most uneventful season. Most Jallube are on trek. Those who did not leave are occupied with the herding of the animals. The cattle are pastured day and night, because the quality of the feed on the pastures around Serma diminishes. The sheep and goats are herded on the Ferro during the day. Watering the animals is the most laborious task in this season. The last pond dries up by the end of November. From then on the livestock depend on the water from the reservoirs in the bed of the pond in Debere. The area around Debere is filled with the huts of the Jallube, who are there to manure their own fields.

The Jallube who temporarily leave Serma try their luck in a variety of occupations. The marketing of milk or the herd may be the principal means of existence for families with sufficient livestock. For this they must stay near to a sedentary village. Access to water in this village is essential if one is to live in the neighbourhood, and therefore they depend on their relations in the village. Old bonds of friendship are reactivated, or new ties have to be created, by negotiating access to water resources in return for the deposition of manure on a field that needs fertilization. Those families who leave with very little or no livestock and get a herding contract have a harder time. Often these herds are small and have few milk animals, or consist of small ruminants only, producing little milk. On the other hand the owners of these herds often send their children to help water the livestock, reducing this arduous task.

By the end of *dabbunde*, the beginning of *ceedu*, the hot dry season, the inhabitants of Serma begin to return from their trek. In the meantime in Serma, most of the people who settled around Debere have moved to Yaraama to make camp on the fields around the well. The water reservoirs in Debere are nearly exhausted by this time. Even people with many water reservoirs are facing water shortage, because their water is leaking into the empty reservoirs. To leave some water for the Riimaybe of Debere, the herds are moved to Yaraama, where the well does not run dry during the dry season, and has sufficient capacity for a large number of livestock. The area around the well then becomes full of Jallube huts. The people who return from their trek also settle around Yaraama, because of lack of water at Debere.

Another point of attraction for the herds of Serma in the *ceedu* season is Bunndu Naange (the well of the sun). Bunndu Naange is a borehole drilled by the livestock service in the middle of the Seeno-Manngo. This borehole is equipped with a motor pump during the three hottest months, so that livestock can be watered here and graze on the high quality pastures around it. In the other seasons of the year, 12,000 ha of pastures in a block called P-17 are set aside for this purpose.

When the end of *ceedu* is approaching and the air humidity starts to rise, the inhabitants of Serma begin preparing their fields for the next growing season. This requires little work, because most of the debris of the crop residues has been consumed by the cattle and the goats, or has been blown away by the strong eastern winds (Harmattan) in the course of the dry season. The fields and pastures around are now completely bare except for the sparse trees that have survived the droughts. Some people already sow, but the first splashes of rain are hardly ever sufficient to allow successful growth of millet seedlings.

The agro-pastoral economy

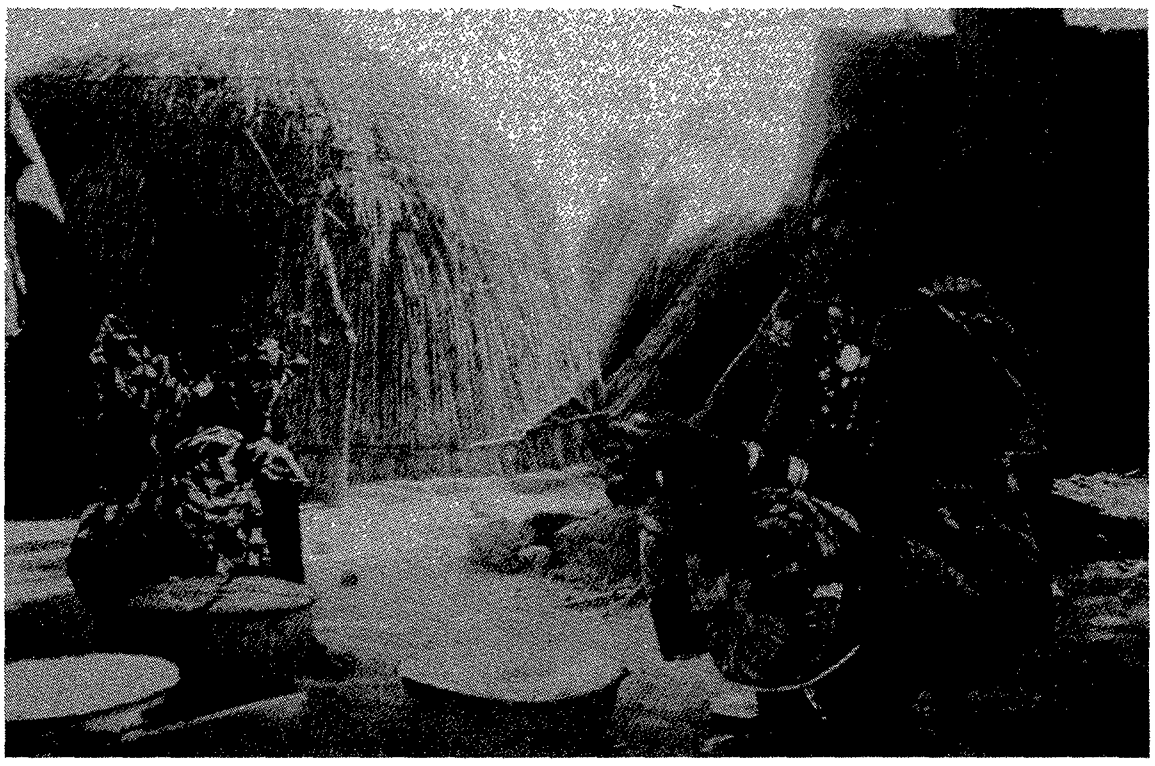
The whole economy of Serma centres on the production of milk and millet. Millet is the basic staple food. Milk is the most important product of the herds of cattle. Given the low consumption of meat, milk is the most important source of animal protein and fats for the people of Serma. For a Jallo a meal without milk is not a real meal. The income of the people is in general far too low for them to afford other sources of basic food, such as rice, milk powder or cooking oil. Most commercial transactions concern either milk or millet. In order to obtain cash Jallube women market their milk. With this cash they buy spices, and all kinds of household necessities. In the dry season, however, they often exchange the sour milk for a fixed quantity of millet in the villages, where they live at that period of the year. In these sedentary villages on the other hand, the milk of the Fulbe is about the only source of animal protein. Riimaybe and Hummbeebe women spent a lot of their surplus of cereals on the acquisition of milk.

For the Jallube milk and millet represents a diversification strategy to avoid risks. When the millet harvest is low, milk can be marketed to obtain millet. However, livestock and cereal production are linked in many other ways. The manure that is produced by the cattle and small ruminants is indispensable for replenishing the fertility of the soil in the millet fields. Without manure the sandy soils of the dunes would be exhausted in just a few years. The people of Serma would be obliged to take new fields into production every two years, and to leave the rest fallow for at least six years. This would seriously restrict the herding of livestock around Serma, and would result in a spatial segregation of cropping and livestock keeping livestock is the principal way to obtain cereals when one has no millet. In normal circumstances Livestock is also vital for cushioning against disaster. Given the low and erratic rainfall the risk of crop failure in Serma is high. When this occurs, animals become critical assets. Selling no animals are sold, as this would undermine the wealth and the prestige of the Jallube family. The livestock is the principal way to obtain cereals when one has no millet. In normal circumstancesmore animals one possesses, the higher the probability that some of these will survive in case of drought or an epidemic (see e.g. Ingold 1980, Horowitz 1986). Animals are sold only when the scope for milk selling is limited, as is the case when the sedentary cultivators, the main buyers of milk, also experience crop failure.

The chance that the Jallube experience crop failure is higher than among sedentary cultivators. This is due to the fact that they devote less attention to cultivation than do sedentary cultivators. The latter are more inclined to invest most of their assets in cultivation, and invest only the surplus in livestock, predominantly small ruminants, so that they have a safety-valve in case of crop failure. A Jallo who has lost most of his livestock may also invest surpluses in the accumulation of a new herd.

The Sahel droughts

The inhabitants of Serma are used to living in a hazardous environment. The first drought after independence at the beginning of the seventies is well remembered by the people of Serma.



They had a bad harvest and lost much of their livestock, but it is remembered most vividly as the period in which many people from the north moved into the Hayre. Some of these refugees died from starvation. The Jallube and Riimaybe of Serma had a hard time, but they had supplies of cereals and livestock to sell. Recovery after this drought was relatively easy, for the rains were moderately good in the second half of the 1970s.

A study conducted in Lennga, a village 15 kilometres from Serma, in 1977 by Hammadu Booye Diallo[12] (Diallo 1977), may give us some indications of the impact of this drought. Around 1968 the 103 families in Lennga owned 3440 head of cattle, and 2525 small ruminants. They lost 62% of the cattle and more than 55% of the goats and sheep in the drought. The mean size of the cattle herd decreased from 32 to 12 head per family. In 1977, 102 families owned 1829 head of cattle, an increase of almost 43% in four years. The mean size of the cattle herd had increased to 17 head of cattle per family. The number of small ruminants per family after the drought remained at 50% of the pre-drought figure and was even lower in 1977 than in 1973. This indicates that goats and sheep were sold in order to buy new cattle. Inequality was, however, enormous. According to the figures, the 75 families (73% of total) owning less than 30 head of cattle possessed only 25 percent of the total cattle in 1968. For them average herd size was already at the post-drought level. In 1977 their relative position has not deteriorated. However, the poorest 82 families then disposed of an average herd of 6 head of cattle. It is also striking that the middle group, families owning 30-150 head of cattle, was severely hit. Only 10 out of 27 families remained in this category. The distance between Serma and Lennga is only 5 kilometres, so it is reasonable to assume that a similar process of decline and recovery of livestock numbers took place in Serma.

The droughts of the 1980s had a much more severe impact on the local economy than the droughts of the 1970s. It may also be that the duration and the timing of the drought years

made it much more difficult to overcome their consequences. From 1980 on hardly one adequate harvest has been recorded. Only in 1988 did the fields yield a normal quantity of millet. In all the other years droughts and pests destroyed the major part of the standing crop.

Table 3.1: *Cattle ownership before and after the drought of 1968-1973 in Lennga, a village in the neighbourhood of Serma (Diallo 1977).*

ownership	# of families		% of families		total cattle/ category		% of total	
category	1968	1977	1968	1977	1968	1977	1968	1977
-	8	20	8	20	-	-	-	-
< 10	34	46	33	45	187	253	5	14
11- 20	19	16	18	16	295	248	9	14
21- 30	14	9	14	9	357	230	10	13
31- 40	5	2	5	2	178	71	5	4
41- 50	4	3	4	3	182	137	5	7
50-150	18	5	17	5	1641	430	48	24
> 150	1	1	1	1	600	460	17	25
total	103	102	100	101	3440	1829	99	101

Drought was the major problem in 1981-85, 1987, and 1990. In 1989 the millet was attacked by local locusts, who literally finished it off. Productivity of the pastures in Central Mali was much less than normal, especially after the rainy seasons of 1983 and 1984. There were too many cattle in the area. There was not enough pasture and probably not enough water. Probably 75 percent of all the animals present in the area perished in the dry season of 1985.

The loss of all these animals and the persistent crop failures have led to an almost chronic cereal deficit for nearly ten years now. It is not quite certain that cereal cultivation was more productive in the past, for the information on this subject is derived from hearsay and the recollections of the people of Serma. However, there is much to indicate that yields of millet farming were higher in the past. The stories we collected indicate that there has been a gradual, but unremitting decline in living conditions and wealth since the start of the drought years. Children who were given livestock at birth often have nothing left today. Livestock that died from disease was not replaced by the natural growth of the herd. Either the natural growth had to be sold, or just too many animals died from disease, malnutrition and so forth.

A wealth ranking exercise (see Grandin 1988) conducted at the end of our stay with five persons from Serma gave additional information about wealth. From the data it appeared that inequality between the inhabitants of Serma is enormous, and that the majority can be labelled poor by both indigenous and international standards. Only two families were classified as rich (*jom jawdi sanne*) they possessed more than 200 head of cattle. One family owned 50 head of cattle. There were 22 families (36 percent) owning between five and 30 head of cattle. The

rest, more than 59% of the Jallube families, owned fewer than five head of cattle, or they owned only some sheep or goats, or nothing at all. Based on these data the average herd size per family is about 15 head of cattle. If we exclude the two large herds, herd size drops to nine head of cattle per family, which is about the same as the average herd size in Lennga in 1977 (ten), for the middle size herd owners four years after the drought of 1969-73. Our data were collected in 1991, six years after the drought of 1983-85. Apparently the herds had not recovered in these six years.

Compared to herd size requirements needed for survival as calculated by Dahl and Hjort (1976) it is clear that the majority of families in our sample cannot survive on the herd they possess. Dahl and Hjort (1976) calculate a minimum herd size of 3 TLU[13] per capita to ensure biological survival. Assuming that crop production may provide food for half of the year, minimally 1.5 TLU per capita would be needed, or about 10 TLU (14 head of cattle) per family.[14] If we estimate the number of cattle in Serma at 1,000 head (see also chapter 8), this number of animals is available. However, 400 of these 1,000 head are in the possession of only two herd owners, so that the rest of the people of Serma, ± 475, people have to do with 600 head of cattle. The majority of this total (59%) depends on only 75 head of cattle. This shortage of cattle is not supplemented by herds of small ruminants, which might have recovered more quickly after the drought. Only a few have dispose of a significant herd of goats and sheep, i.e. more than 100 animals. Sutter (1987) in a discussion of inequality among Fulbe in Senegal calls those people poor, while the poorest group is still able to buy tea and sugar. They spent 41% of their budget on this item (ibid:205). Most Fulbe of Serma could not afford to drink tea at all. Besides harvests had not been good since the drought of 1985, and food, milk, good nutrients were lacking in the bush. Tea, coffee, new clothes were scarce goods. The result was dire poverty. Hamma Aljumaa, whose situation we discussed in chapter 1, is clearly not exceptional. According to people in Serma, the true extent of the category of the impoverished is still greater, since many dispossessed families and individuals left Serma in the years after the drought, and have not returned.

This picture of a poor community and declining living conditions was confirmed by observations in other Fulbe (Jallube) settlements in the Hayre. The Jallube of Serma may even not be the poorest. In the northern part of the Hayre, on the Gandamia plateau for example, the people were truly destitute. Although we stayed no more than a few days in each of the other settlements we visited in the course of our fieldwork, and people may hide both their wealth and their poverty, the impression of deep poverty was very strong. Structural poverty was the rule and not the exception.

Notes to chapter 3

1. There is as yet no satisfactory explanation for the genesis of this pattern of vegetation (see e.g. Clos-Arleduc 1965, Gallais 1975, Marchal 1983:209).
2. Marchal (1983:608, fn 232) defines *kollongal* as '.. *un sol stérile, s'étendant sur de larges surfaces (de plusieurs hectares à plusieurs kilomètres carrés), gorgé d'eau après les pluies, mais où rien ne pousse'.*
3. Hence the name of Wuro Kaaral, which is indeed located on an enormous degraded tract of land.
4. *Seeno-Manngo* is also used in other locations. The areas north of the Mountain range are also called Seeno-Manngo in the local dialect. Benoit (1984) also uses the term Seeno-Maango for the area in northern Burkina

Faso which he describes in his book on the effects of drought in this region.

5. Bellaabe are liberated slaves of the Tuareg. Throughout the thesis we will use the Fulfulde name Bellaabe. In the literature they are also known as Iklan (Mali, Burkina Faso) or Buzu (Niger).
6. *Pette* (pl. *fette*) means 'small pond'. Hence these toponyms refers to the pools in the neighbourhood of these settlements. Fetesambo means the pools where Sambo settled. Petegudu means the village near the pool. *Gudu* is not a Fulfulde word, but a loan word from Malinke.
7. Dupire (1960:157) gives a more symbolic interpretation to the way the huts are positioned in a camp. The order in which the huts are placed also indicates the male hierarchy in the camp. The huts are positioned on the north-south axis, with the opening to the west, because of a counsel of Utman dan Fodio. The east side of the hut is associated with the work and sphere of the woman possessing the hut. She is also buried behind the hut. As will become clear in chapter 4, space in a Fulbe camp of Serma is gendered, but in a completely different way.
8. The water table at this location is very deep. The livestock service tried several times to drill a borehole but failed, because the water table was too deep and the rocks too hard.
9. The inhabitants of Fetesambo and Petegudu store their cereals in granaries built of straw and branches on top of a shelter on their fields. This type of granary, called *bunguru*, is, however, more liable to theft and damage by passing animals, like elephants. Whenever possible Fulbe have mud brick granaries built. In Jigooru, for example a group of granaries is built in the middle of nowhere near a pond. The camps of the pastoralists are located at some distance in the bush.
10. The sample included 32 Jallube women and 35 Riimaybe women. Both dead and living children were recorded. The data: from 32 Fulbe women who gave birth to 195 children, 63 died; from 35 Riimaybe women, who gave birth to 199 children, 71 died. One reason for child mortality among Jallube girls may be the practice of female circumcision. Girls are circumcised when they are between one and three years old. The clitoris and two inner labia are removed. With this practice many girls die of the high fevers caused by infection. The link to the excision is often not made by the mothers, who say the girls have died of fevers caused by ghosts (see chapter 13).
11. The weight/height ratio of the sample fell below 90 per cent of Harvard standards.
12. Hammadu Booye Diallo is the only person we know of among the Jallube who has received formal education, and even became a veterinary doctor. This was entirely due to his own merit. His family repeatedly tried to persuade him to stop studying and return to Lennga where he originates.
13. TLU = Tropical Livestock Unit, a standard animal of 250 kilo live weight. 1 head of cattle = 0.7 TLU, 1 Camel = 1.0 TLU, 1 goat or one sheep = 0.1 TLU.
14. We shall see in chapter 8 that crop production and the production of livestock products is far from sufficient to provide for food requirements in Serma.



4

The Pastoral Community: Sharing Milk

The importance of people

In daily life it is important for an individual in Fulbe society to 'have people'. The presence of '*yimbe am*', which means 'my people', is narrowly related to one's social position and status in society. People may be recruited along different lines of social organization. Some of these are narrowly linked with the historical development of society. This is exemplified by the division of society into endogamic social categories and their sub-division into patri-lineages. For each individual in society these are important identity markers. Through reference to social category or lineage a person belongs to a group. A smaller group on which people rely is the kin group. In Fulbe society these groups play important roles in the organization of residence and care relations. Other groups are formed by age and gender. Residence is also an organizational principle. People refer to their camps or their village to indicate to outsiders who they are. Each individual will refer to different organizational rules at various times, places and social situations. It depends on one's gender, social status and age how these principles are interpreted and used for the recruitment of people.

These rules are not defined very strictly. Partly as a result of the ecological insecurity inherent in the environment in which the Fulbe live, the social structures that bind people together must be very flexible. This is also reflected in their mobility (cf. Dyson-Hudson & Dyson-Hudson 1980, Salzman 1980). The Fulbe in the Hayre do not demarcate social groups very strictly, and a great deal of movement between social groups is normal and an integral part of the social organization. In times of crisis the flexibility of this organization is very important. It allows people to establish new social relations on which they can rely, and it leaves them all room to move with their family and herd without really disturbing the social order. This flexibility guided life in Serma over the years. As will be shown, the composition of the camps and also of Debere is a historical reflection of a society with an extremely fluid organization. The basic element in this organization at the level of kin groups seems to be milk. Social relations associated with milk, cow's as well as mother's milk, are basic in solidarity relations and the most enduring in times of crisis. The sharing of milk is the basis of the formation of social groups, and the demarcation of 'my people'.

In this chapter the social organization of Fulbe society is explained. First the principles on the level of society, the social categories and lineages, are discussed. Their link with history is highlighted. The formation of kin groups is extensively discussed because they are today very important in Fulbe society in the Hayre. The kinship terminology of the Fulbe in the Hayre is

much the same as in other Fulbe societies and will be discussed in this chapter. Age groups are discussed only briefly because their importance is limited in society today. The division of society into gender categories is very important. This is discussed briefly here, since we shall discuss the rapid at length in other chapters. Residential units and their meaning for the organization of society discussed extensively in this chapter. Today, more than ever, they form the basis of social organization, above the level of small kin groups. This will be shown in the description of the constellation of the camps and of Debere in the last section of this chapter. From this description the conclusion may be drawn that the units based on the sharing of milk are the most important in the social organization of Fulbe society today. However, at the same time it appears that these units are becoming smaller due to the general decline in living conditions.

The organization of society, social categories, and the lineage

History in the present, relations between social categories[1]

A dominant theme in the historical accounts recorded in the Hayre is *pulaaku*, the society of Fulbe, which is composed of various social categories which are subdivided into the nobility (*ndimaaku*) and the non-free (*maccube*, later Riimaybe). This division is present on the ideological as well as the practical level. The status of the different groups that constitute the nobility, Weheebe, Moodibaabe and Jallube, is considered equal. The equality between Weheebe and Jallube is expressed in several ways. They are members of the same patri-clan, and both are Jallube, though of different lineages. When they entered the Hayre, the Weheebe were given milk by the Jallube in exchange for protection. The Jallube gave the three Weheebe brothers women, and through these women they became one family, they shared milk from the same breast. Between the two groups a division of labour was established based on assets equal in prestige. The Weheebe were given the power (*laamu*) to lead the Jallube and to protect them, in return for the gift of milk and cattle (*jawdi*) by the Jallube. The third group of nobles, the Moodibaabe, are also related to the Weheebe by marriage. They dispose of the third symbol of power and nobility, Islam, referred to as *alsilaamaaku* or *juulde*. The non-free, the Riimaybe, are also related to the Weheebe by marriage. However, the marriage relations between nobles and Riimaybe were never based on the exchange of women, so they have not become equal to the Weheebe. Nevertheless the kinship ties between political elite and Riimaybe are relevant in the situation of today. Riimaybe have, however, never become partners in a relationship such as those based on the assets *laamu*, *jawdi*, *alsilaamaaku*.

Endogamy is an important aspect of nobility. It links nobility to descent. The idea is that noble people do not 'mix' with others. Each social category is seen as an endogamic group. There are, however, exceptions. For example marriages between Weheebe and Jallube are not really problematic, though they hardly occur today. They are marriages between nobles and reconfirm their historical 'unity'. The historically important relations between the two groups are expressed in non-endogamic liaisons, e.g. the gift of women by the Jallube to the Weheebe, or the marriage of Maamudu Nduuldi to a Jallo woman. These marriages are used in the

historical accounts to symbolize the equal relationship between the two groups; both are noble and belonging to one family for ever. Another example of bypassing the endogamy rule is the marriage strategy of the Weheebe, who marry people from other ethnic groups and (former) slaves. This is explained as a political strategy to expand their group of followers (cf. Dupire 1970: 515-582). They only marry slave women and do not 'give' their women in marriage to slave men. Instead of symbolizing unity, these marriages strengthen the power relations of the nobles over the slaves.

The ability to command (*laamu*) of the Weheebe is based on their position in society within the group of nobles. The marriage alliances with other groups in Fulbe society and outside it increased their power through the number of people (*yimbe*) who had to follow them, because of the marriage relations and ensuing kinship relations between the descendants of both groups. This led people to define them as powerful, i.e. as having *semmbe* (force). The notion of *semmbe* is related to the individual but also to his group, or his lineage (the Weheebe in general). The concept probably has its roots in the time when wars and raids defined life in the Hayre. The more followers a band leader had, the more successful he was in warfare, the more his *semmbe*. One way to recruit followers may have been the mobilization of groups through the patrilineal kin groups. This created inequality between patri-lineages, because the number of members of a lineage was also a measure of their power. In this way the Jallube were differentiated, as well as by their genealogical proximity to the Weheebe and the functions they had within the chiefdom. Not only can this inequality be seen at the level of social hierarchy, but it can also be recognized within the social categories, between Jallube lineages, between families, and between individuals.

The differences in *semmbe* between lineages and social categories are continuously retold and stressed in historical accounts which aim to confirm the political structure in the present. The three Weheebe brothers first met with people from the Taamanke lineage of the Jallube, near lake Taama. It is from them that the Weheebe received their wives, and they legitimized the power of the Weheebe in Dalla (*be ngadan pilkol*, they enthroned the chief). The Taamanke still enjoy this historically rooted 'prestige'. In Serma the prestige of the Taamanke is overshadowed by that of the Seedoobe, another lineage of the Jallube. Seedoobe can be translated as the people who are transhumant, who separate.[2] They claim a special relationship with the Weheebe chief Maamudu Nduuldi. Their founding father Aluure was married to a sister of Maamudu Nduuldi's mother. These women were both from the lineage of the Hawgiibe. In another version of the story about this relationship, the wives of Aluure and Maamudu Nduuldi were sisters and from the Hawgiibe lineage. All versions of the story, however, are told from the perspective that the Seedoobe are linked to Maamudu Nduuldi, and not that the women who form the link are Hawgiibe, which indicates the difference in social prestige of both lineages. The Hawgiibe seem to have lost their important role around Booni.[3] Furthermore it is related that in the past the Seedoobe were important among Maamudu Nduuldi's troops. The Seedoobe proved valuable soldiers, and among them were warlords comparable to Maamudu Nduuldi. To this day the Seedoobe are considered the most powerful lineage among the Jallube in Serma.

The telling of certain aspects of historical events must be situated in this perspective. People retell an event that happened in the past in such a way that it reinforces the present situation.

An example is the conflict between the chief of Booni, Allaaye Maamudu Nduuldi, and the Jallube at the end of the 19th century (see chapter 2). The versions we heard from the people in Serma fill in the gap in the story as we reconstructed it from the archives, namely what the conflict between the two parties was about.[4] In the version of Rukiata Maamudu, second wife of Abdramaane Hamma who is an important Ceedoowo (sg. of Seedoobe) in Serma, the conflict began with the refusal of a herdsman to give a goat to the chief of Booni, Allaaye Maamudu Nduuldi, whereupon the chief took him to prison.[5] That evening the herdsman did not return to his camp and only a small part of his animals returned. Hamidu Buraima Aluure, who was at the time the lineage elder, and the herdsman's father went to Booni to look for him, and freed him from prison. A grave conflict between Hamidu Buraima and the chief developed from this action, and eventually resulted in a mass migration of all Jallube around Booni to the area around Monndoro. Without the Jallube the power of the chief of Booni was reduced to zero. The chief begged them to return, which they refused. Finally, in order to solve the conflict Hamidu Buraima went to the chief of Booni, who had asked help of a *moodibo*. This *moodibo* prepared something to be mixed into the food of Hamidu, which should have made him more cooperative. He ate it and died (by accident?). In reaction all the Jallube left Booni. Some groups returned to the area of Booni in the course of the 20th century. The chief of Booni regretted his deed, which had alienated him from the Jallube. This affair is still regarded as a 'secret' between the Seedoobe and the Weheebe of Booni, giving the Seedoobe power over the Weheebe of Booni.

Fatumata Aamadu, the oldest Ceedoowo woman in Serma and called the 'mother of the Seedoobe', gave more credit to the Weheebe of Booni in her version of the story. She always stressed the links of her family with the Weheebe. 'In that time the Seedoobe were raiding and plundering where they could. They were very powerful. Some people complained about their actions to the chief of Booni, whereupon Allaaye visited the Seedoobe on several occasions, and ordered them to stop these practises. The Seedoobe refused and told him that if he continued to curb them they would tie him up like a chicken. When Allaaye did not stop, all the Jallube who were camped around Mount Booni held a meeting, and decided to leave. They left the area and settled near Monndoro. The next day Allaaye saw that all his Seedoobe had left. He sent a delegation, but his request to return had no effect. Eventually Allaaye himself went to the Seedoobe near Monndoro to apologize for his interference in their life. The Seedoobe accepted his apology, but did not return to Booni. Allaaye went to a *moodibo* to ask him 'to work for him', so that the Seedoobe would return to Booni. Hamidu Buraima was sent to Booni to answer his call. Eventually the Seedoobe returned to Booni, and the relationship between the Weheebe and the Seedoobe was repaired, so that they could interact freely. This is still the case.'[6]

The various versions of the story sketch different pictures of the relations between the chief of Booni and the Jallube. In the first version the chief is the bad guy, in the second the Seedoobe are to blame. In the archives it is the exploitative character of Allaaye's regime that causes the problems. What all versions have in common is that the Weheebe impose restrictions on the actions of the Jallube, and that the ensuing conflict is the beginning of the 'secret' bond between Weheebe and Seedoobe. All the stories stress the equality of both social categories, which is largely ideological. However, both have an interest in maintaining this image. The

Weheebe seek to keep the Seedoobe in check and the Jallube divided, and the Seedoobe wish to claim a higher status than other lineages in places like Serma. Further the stories stress the importance of lineages as vehicles for the political organization, and the role of power holders therein.

The definition of the lineage

Membership of a lineage defines one's relation to the social hierarchy, and one's position in the social category and in the family group to which one belongs. This is signified by the word *jaanyelol*; translated from Fulfulde this term means 'lineage'. It is part of the *ngol* noun class, which has a connotation of continuity, of perpetuity even. It denotes the ongoing line between ancestors, present family, and future offspring (Breedveld 1995). Thus the Fulbe are part of a continuous chain of family relations. The *lenyol* means 'clan', and all the Fulbe lineages in Serma belong to the Jallube clan. *Jaanyelol* is used at different levels of the clan organization. It may refer to the medium size lineage (e.g. Seedoobe Aluure), or the maximal lineage (e.g. the Seedoobe). It includes all people, women as well as men, descended from one male ancestor, e.g. Aluure. In this recruitment the principle of male descent is dominant, and this is also expressed by the custom of adding the father's first name to a child's name.

The Jallube lineages in the Hayre are presented as patri-lineages. In the first place they are a vehicle for political organization. In political conflicts people (*yimbe am*) are recruited along the lines of a patri-lineage, although in this political recruitment segments descended from a female member may also play a role. For instance in the lineage of Aluure descendants of his sons and daughters may count. In such instances that one is related to an important lineage or person is more important than how. This can be by descent through males and females. This 'flexibility' is also related to the fact that the boundaries between the 'patri'-lineages are not very strict. People can easily join another lineage. This they may do if their own lineage is small and has no power, while the other is powerful. These relations may change over time. In this shift from one lineage to another, one can use the ambiguity of the lineage principle, e.g. by associating oneself with one's mother's patri-lineage.

The domination of the male descent principle in the definition of a lineage does not mean that descent reckoned through women is unimportant. Women are given an important role in the construction of the patri-lineages. In the domain of kinship 'sharing' of a mother is very important. More specifically it is the mother's milk which the children share that ties them together, and makes them equal. As we shall see in the following chapters, these social relations through one's mother, one's mother's mother, or father's mother play a role in ritual, in the inheritance of animals, and in patterns of residence. The importance of the mother and milk, and therefore of maternal filiation groups, is an indication of the importance the Jallube attach to the kin categories of mother, mother's mother and father's mother. Thus maternal filiation is important in the dominantly patrilineal organization.[7]

Lineages and social categories in Serma

In Serma three Jallube lineages are distinguished, the Seedoobe, the Moodibaabe, who descend from the Torodbe, who were the first to settle in Serma, and the Junngo Nyiiwa.[8] The lineage Junngo Nyiiwa is the designation for a group of small lineages in Serma among whom are Tamankoobe, Rendowaabe, Taaniraabe Hanndi, and Wakambe. The Seedoobe form a large lineage, even when we count only the members by direct paternal filiation. They also seem to have incorporated many other groups in the course of history. The genealogy of the Aluure-sub-lineage of the Seedoobe is well remembered over seven generations. From this genealogy it appears that they have kinship links with all the other lineages in the area. A member of the Seedoobe lineage may find people related by kinship almost anywhere.

As far as we know, the Seedoobe is the only (patri) lineage that still has an institutionalized leadership. They have a lineage head who is the lineage elder. In the past his role was very important as political leader, as the history of Allaaye Maamudu and the Seedoobe illustrates. Leadership of the lineage is given to the oldest man of the patri-lineage. If he dies his brother will take over first, and only if his generation has no men available will the oldest man of the next generation take over leadership. In 1990/91 the leader of the Seedoobe was Alu Usmaane who lived in Camalajoy. Although he is an old man (93 years), and senile, he is very much respected by Jallube, Weheebe and Riimaybe in the area, and everyone who passes through Camalajoy stops to greet him.

The principle of descent principle or lineage, and related values such as the solidarity derived from sharing milk, are used to indicate the importance of some relationships between social categories which are not related by narrow kinship ties. When Jallube relate themselves to Weheebe this is always through their kinship ties, whether matrilateral or patrilateral. Their relationship with outsiders, when good, are expressed by the word *enndam*, which is derived from the verb *enndude*, meaning to raise young children in a friendly manner. Educating children is in the domain of women in Fulbe culture. *Enndu*, the word for breast, is also derived from the same verb (Breedveld 1995). Other authors relate the word *enndam* directly to the noun *enndu* (breast) and thus to milk (Dupire 1970:149). A relationship characterized by *enndam* is a relationship like a kin relationship but which is not strictly of kinship. *Laatike enndam* means 'having become family'.[9]

For the Riimaybe the connection of identity with lineage poses a problem. They have no family, *sensu stricto*, and are thus not part of a lineage. This means in fact that they have no identity and are part of society only by means of dependency relations with others (see Meillassoux 1991). Today former slave groups are struggling to find an identity. Their gradual liberation in the course of this century did not immediately solve this problem. The creation of a 'new' identity among slaves takes many forms. In a discussion of the position of former slaves in Yola, a town in Nigeria, Vereecke (1994:48) concluded that the Riimaybe are defined as non-Fulbe nowadays. In the Hayre this is not the case. Riimaybe are reckoned as members of the Fulbe community, of *pulaaku*. Nevertheless their identity remains ambiguous. Differences within the group of Riimaybe, and discussions of informants about this problem, reveal the complexity of this issue. First of all the Riimaybe have an ambiguous relation with Jallube and Weheebe. The designation of these relations by the word *enndam* signifies that they

are still outsiders, though part of the community. The *enndam* relationship is not hierarchical *per se*. Nevertheless, the Riimaybe had to create their own mode of descent after their liberation. In general they have taken over the dominant descent principle of Fulbe society, patrilineal descent. They take this more strictly than the Jallube and in this sense they are more like the Weheebe. This can be explained by their resemblance in sedentarity and focus on agriculture, and by the fact that many Riimaybe left their Jallube masters to align themselves with the Weheebe chiefs, because they expected to gain more from the chiefs who grew powerful during the colonial regime. This at least was the case in Dalla. The lineages of the Riimaybe are not very deep, the deepest being four generations. This contrasts with the genealogies of the Jallube. Weheebe also have deeper genealogies, especially the chiefly branches: theirs are even written down.

Riimaybe who claim independence from their former masters mostly live in separate villages. These may be the former slave estates, or newly created villages. The Riimaybe who still live next to their masters, especially the Riimaybe of the Weheebe chiefs in Dalla and Booni, are in a totally different situation. They feel themselves very much part of their master's household. In rituals they have specific roles and if help is needed they will give it. As in the past they are intimately linked to their former masters, and feel themselves members of the master's family. This historically defined difference between categories of slaves is essential in the processes of identity formation among former slaves today.

The difference between Jallube and Riimaybe is also visible in the spatial organization of village society in Serma. The Riimaybe live concentrated in Debere. There is only one Riimaybe family living in a pastoral camp, in Fetesambo. The Jallube live in rainy season camps in the 'bush' (see map 3.1), except for the representative of Islam, the Imam, who is obliged to live near the mosque, and the representatives of the chief of Booni, who symbolize power. Booni is the space of the Weheebe and their entourage of Riimaybe, Jawaambe and Ilgeeybe. Only impoverished Jallube live in Booni nowadays, surviving on the spoils of this small 'urban' centre. The lineage organization has no expression at the level of the rainy season camps. The composition of the camps is rather arbitrary as will be described below.

The lineage organization at present

In the course of the 20th century, the position of the Seedoobe and the position of the Imam were strengthened by the administration of the French and Malian governments and by the growing importance of Islam. This has also had an impact on the situation of the Riimaybe. Relations with the chief (Weheebe) in Dalla and Booni have changed. The Weheebe became village chiefs and lost their regional power. *Semmbe* (force) in the old sense ceased to exist. In Booni the chief was able to associate himself with the 'modern' administration, which enabled him to recruit *semmbe* from outside. The content of *semmbe* has been transformed in the process. In the past *semmbe* was related to warfare, and having many followers. This type of *semmbe* made the chief dependent on the population and brought him into competition with other regional power holders. The modern form of *semmbe* is based mainly on relations with the outsiders, i.e. with the modern administration through which the chief manipulates the

forest service, the court, the veterinary service and development initiatives for his own and his people's profit. This gives the chief prestige, and as long as the people profit from his actions they support him and contribute to his *semmbe*, and recognize him as their chief. In this transformation the Seedoobe have established a dominant position, which means in the present situation that they are the nearest to the chief of Booni and that some of them share in the advantages of his position in the modern administration. In this process the lineage as the basis of *semmbe* and political organization lost relevance. This does not mean, however, that recruitment on the basis of the lineage no longer has any political significance. At the level of the community lineage membership was important for the settlement of conflicts, and for the social and political position of an individual until recently (see chapter 10).

A major influence on the division into lineages and groups of the Fulbe in the Hayre was the policy of tax collection. In the first decennia of French rule, the Fulbe of the Hayre belonged to the Fulbe cantons of Dalla and Booni. The chiefs of these cantons were made responsible for the collection of taxes. When the area was recognized under the four cantons of Douentza, Booni, Monndoro and Hommbori, the collection of taxes had to be organized differently. The Seedoobe in Monndoro did not recognize the chief of Booni so that the French had to appoint a tax collector to collect the taxes from them and to represent them to the administration in Monndoro. This was probably introduced *ad hoc*, and it may explain why only the Seedoobe know the institution of lineage head. The other lineages paid their taxes in Booni and recognized the chief of Booni who collected the taxes as their leader. This may also have been the root of the division between the Seedoobe and the Junngo Nyiiwa. After independence the Malian government copied the French model. The collection of taxes was organized through the chief, or lineage head, who appointed counsellors or advisors to collect the taxes. This organization was also meant to create some form of village based democracy. Serma belonged administratively to Booni. However, as a consequence of the partial remigration of the Seedoobe from Monndoro to Booni during the 20th century the village consists now of two groups: the people who pay their taxes in Booni and those who pay their taxes in Monndoro, congruent with the division between Junngo Nyiiwa and Seedoobe. The counsellor for Booni is a Beweejo, a 'son' of the chief. Because of his age, the lineage head of the Seedoobe entrusted his only responsibility at present, the collection of taxes, to three counsellors, one in Monndoro, one in Camalajoy and one in Serma.

In Serma this is Abdramaane Hamma, a nephew of the lineage head of the Seedoobe. According to Fulbe rules, Abdramaane Hamma had no rights to this position. His father, Hamma Usmaane, brother of the lineage head, who lives with his son, was counsellor before Abdramaane Hamma, but as he grew older and became ill and blind he gave his function to Abdramaane Hamma. In fact Bubaare Aamadu, another inhabitant of Serma, who is from the same generation but older than Abdramaane Hamma, should have been the counsellor. This is a public secret, which is not discussed with the father of Abdramaane Hamma who is an old man and respected because of his age and authority.[10] The importance given to this discussion makes clear that the counsellor is seen by the people as their (informal) leader, representing the lineage head. In Fulbe ideology the oldest of the lineage, or of the lineage segment, has much authority. Generational seniority is an important aspect of political power.

Abdrammane Hamma's 'power' (influence) as counsellor is not limited to Serma, but it

stretches over all Seedoobe who fall under the territory of Booni and who pay taxes in Monndoro. Next to his function as collector of taxes, he is intermediary between the administration and the people. For example food aid arrives through him, and decisions of development agencies are also be taken through him. All the functions of the counsellor concern the 'modern' administration. However, his power to impose his will on the people and to mobilize them for a common purpose is nil. He is indeed only an extension of the administration. Other people in Serma have more influence and charisma in such matters. For example the Imam, as the leader of the Islamic community, is often involved in the same affairs as the counsellor. Next to the counsellor and the Imam a Diimaajo of Serma, Bura Bilaali, who is the oldest man of the group of Riimaybe with the longest history in Serma, is an important informal leader. The most important of all is the chief of Booni, who is officially the village chief for the Riimaybe and the Jallube belonging to the Junngo Nyiiwa lineages. In Serma he is now the administrative and indigenous chief. The relatively weak position of the counsellor may be the result of the fact that he is not recognized as the legal inheritor of this function, who should have been Bubaare Aamadu. Informal leadership is thus narrowly related to Islam, wisdom, respect, and to seniority in a lineage.

Both organizational principles, social category and lineage, appear in daily praxis. The events in which these two historically developed organizing principles played an important role had a political character. These concerned conflicts over land, food aid, collection of taxes, implementation of development projects, and the organization of a cereal bank in the village. These kinds of events require an organization at community level, and to have things organized smoothly representatives of the various groups in society are needed. At such moments representatives of all the groups that can be distinguished on the basis of lineage or of social category participate. To participate in these events an individual's (sub)lineage is important, because it defines the closeness of his/her position to the centre of power.

The individual in society

Kin groups

In daily life lineage membership plays a minor role for the people in Serma. The membership of other groups: smaller kin groups, age groups, groups of women or men, or of residential units, is of much more importance. We will start with a description of the smaller kin groups that exist in society.

Suudu yaaya and *suudu baaba* can be translated as respectively the mother's house and the father's house. Hamma Bama, an old Jallo man living in Serma, explained the significance of these as follows. *Suudu baaba*: '*Be maama gorko rimi, baaba maa rimii, be ndimdaa aan e hoore maa, fuu gere gorko/baaba*' ('They are the people born from your paternal grandfather, and the people born from your father, they have also given birth to yourself, all from the side of the men/father'). And for the *suudu yaaya*: '*Neddo fuu dimdaado e yaaya maa, gila maama debbo araande*' ('All people that are born from your mother's side since her great-grand mother') are the people of the *suudu yaaya*. The *suudu baaba* and *suudu yaaya* are considered

as different groups with distinguishable features. They play a different role in the life of an individual. A large *suudu baaba* (many people) has (political) power (*semmbe*). If a person is part of a large *suudu baaba* he or she will not easily be opposed, or harmed. Out of fear for the *semmbe* of the *suudu baaba*. In case of a conflict the members of the *suudu baaba* will offer help. In the conceptualization of *suudu yaaya* milk is an important metaphor. The sharing of milk, *'be enndu ngootu'* (they are from one breast, also meaning they have a friendly relationship), binds the individuals of the *suudu yaaya*. The *suudu yaaya* is associated with *yurmeende*, pity, and takes care of its members in case of need. Of course such a relationship may exist between members of a *suudu baaba*, but this is not linked to the general characteristics of a *suudu baaba*.

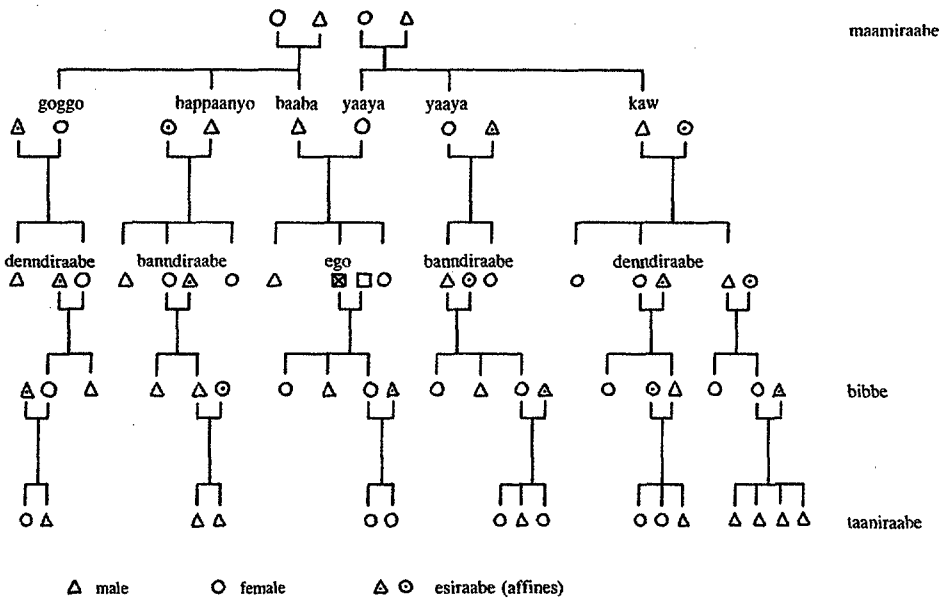
A *moodibo* in Douentza, Alu Hamma Lennga, who originally came from Manugu and is a Ceedoowo, explained membership of Jallube society through the membership of the *suudu baaba* and *suudu yaaya*. According to his explanation an individual is part of four groups: the *suudu baaba* and *suudu yaaya* of his or her mother, the *suudu baaba* and the *suudu yaaya* of her or his father.[11] He ascribed similar features to these two kinds of kin groups as did Hamma Bama above. He relates *semmbe* to the *suudu baaba*, and *yonki* (which means soul, and is associated with emotions) to the *suudu yaaya*. Thus, everybody is a child of his or her *suudu baaba* and *suudu yaaya*.

Suudu yaaya and *suudu baaba* are always defined from the perspective of the individual concerned (cf. Riesman 1977: 32-33). They have no strict boundaries with regard to size and depth. They may indicate close kin, but also the whole maximal lineage, *lenyol*. The number of people included in the definition of the *suudu baaba* or *suudu yaaya* depends on the purpose for which it is used. For example *suudu baaba* in a very narrow sense (patri-lineage of the father only) is used when inheritance after someone's death is concerned. Then in some cases only the men are reckoned in it. The *suudu yaaya* is said to be responsible for the transmission of mental illnesses in the female line. In specific instances both kin groups may be mobilized, for example in choice of residence, and in support in marriage rituals, name giving ceremonies, and the mourning of the dead. In order to have as many people as possible (*yimbe am*) to show the strength of the people at the centre of these rituals. Other undertakings are linked to only one group.

Classification of individuals (see figure 4.1)

Within the *suudu yaaya* and the *suudu baaba* some categories of people are more important than others. They are the people with whom special gift, help, or exchange relations exist. They are defined through (classificatory) kin relations and through age and gender. A very important group of relatives are the *sakiraabe* (sg. *sakiiko*), or people of the same generation as ego. They are divided into cousins, brothers and sisters of a person. Cousins are divided into *denndiraabe* (sg. *denndiraado)* (cross-cousins) and *banndiraabe* (sg. *banndiraado*) (parallel cousins). In this group of *banndiraabe* differentiation is made between children of mother's sisters, called *bibbe yaaya* (sg. *bii yaaya*), and those of father's brothers called *bibbe wappaybe* (sg. *bii bappaanyo*). Siblings, children of the same mother, are also *banndiraabe*, but special

Figure 4.1: *Overview of kinship terminology*



ones because they literally shared the same breast, mother's milk. Other important features of this group of relatives are age and gender, signified by the terms *minyiraabe* (sg. *minyi*) (younger), *mawniraabe* (sg. *mawni*) (older), and the supplement *debbo* (female), *gorko* (male). Members of this group, closely related in both an emotional and material sense, can easily consult among each other for various reasons. Siblings are the most close-knit group and they feel much responsibility for each other.

In the generation of ego's parents the following groups are distinguished: the parents, *yaaya* (mother), and *baaba* (father); mother's brothers, *kaawiraabe* (sg. *kaw*), father's brothers who are also fathers, *wappaybe* (sg. *bappaanyo*) or *baabiraabe* (sg. *baaba*); father's sisters, *goggiraabe* (sg. *goggo*), mother's sisters, *yaayiraabe* (sg. *yaaya*). Grand-parents and all their *banndiraabe* and *denndiraabe* are called *maamiraabe* (sg. *maama*). Great-grand-parents and all their *banndiraabe* and *denndiraabe* are called *njaatiraabe* (sg. *njaatiraajo*). The children of *sakiraabe*, and one's own children, are called *bibbe* (sg. *biddo*). Grand-children and their *banndiraabe* and *denndiraabe* are called *taaniraabe* (sg. *taani*). The use of the terms *njaatiraabe, maamiraabe* and *taaniraabe* is not limited to the generation they primarily refer to, but they may also refer to much older and younger generations.[12]

All these terms have a limited and an extended meaning. For example, *bibbe* is used to denote one's own children, but nephews and nieces can also be included. The same person can also be related through several kinship relations to ego. The high degree of endogamy leads to a situation such that one can at the same time be related to a certain person via the *suudu yaaya*

and via the *suudu baaba*. People use the type of relationship that suits them best at a certain moment and in a certain situation. It may happen that two people each define their relationship differently in kinship terms. Furthermore these kinship relations can generally be traced over one to four generations. When people are related more than four generations from each other they are defined as *reworbe* (sg. *dewordo*), i.e. people belonging to the same lineage, *suudu baaba* or *suudu yaaya*, but too far away to be labelled kin. The number of generations over which one traces kin relations also depends on the purpose one has with the relationship as such. For example a *bii yaaya* over three generations, can be a *bii bappaanyo* over two generations. Depending on the situation people will define the relationship that suits them best in that specific case. This can be used strategically, because different relations vary in content and in 'use value'.

Age

Age is another aspect of the definition of one's position in society. In the discussion of the lineage this point was made in relation to authority relations within the lineage, which are based on generational seniority. In kinship terminology this is recognized not only in the separate terms for older and younger generations, but also in the differentiation between *mawniraabe* and *minyiraabe*. Age is reckoned in number of years and in generation. Generational seniority is most important in the definition of authority relations; seniority based on years comes secondary. Within the lineage older generations have supremacy over younger generations. Within the generation the eldest in age is the most powerful. This principle is shown in the case of Abdramaane Hamma and Bubaare Aamadu. Someone who is older in generation is not *per se* older in age, and the other way around. When this is the case the authority relation is difficult to define.

Within the (extended) family the same principles of authority apply (cf. Riesman 1977:35).[13] A father has command over his sons, brothers over each others' children. In the latter relation age differences need not be very great. Also between *kaawiraabe* and their *bibbe* such an authority relation exists, though the content of this relationship is influenced by the character of the kinship tie which belongs to the *suudu yaaya*. *Yurmeende* (pity) is the leading emotion, which lessens the authoritarian aspect of the relation. Within a group of brothers the oldest has most authority. The same seniority principle applies to relations between women. A mother has authority over her daughters, sisters have authority over each others' children. These relations in the *suudu yaaya* are characterized by *yurmeende* which makes the authority less rigid. *Goggiraabe* have authority over their *bibbe*. This relationship defined via the *suudu baaba* has a notion of *semmbe* (force) in it. Between men and women of different generations and age, authority relations exist following the same principle as described above. However, these relationships are influenced by the gender aspect (see below). Old people are in general respected, regardless of the kinship relations, the generation gap, or gender. Old people are ascribed certain knowledge and related puissance. For instance knowledge about medicinal herbs, herd management and life in general.

People of about the same age and sex form groups that are called *waalde*. In these groups

differences in authority as described above are absent. Instead they consider each other as equals, which comes from sharing not only a common age, but also key experiences in life such as being circumcised, married, having become father, or mother at the same time. Finally, after having passed all these stages of life, all men and women are equal. The most prominent age-group is the *waalde* of young fathers. Nowadays they are present as *waalde* only during festivities, when they eat, dance and sing together. The meal is prepared by one of their wives. One would expect a sphere of solidarity within the *waalde*, which is also stressed towards outsiders. However, the *waalde* of young men is also characterized by jealousy and competition, which is quite logical given their age and function in society. The only other *waalde* that we saw in operation is the *waalde* of young unmarried girls. They work together in the making of calabash covers, and they dance and make music together during the night. The *waalde* did not serve as an institution to mobilize labour, nor as a functional solidarity group, nor as a productive group within society. People remember more functions of the male age groups in the past, when they had their own separate ceremony in ritual contexts, for instance the stick fights. It is not clear if they had any other role to play.

Waalde is also used with another meaning, when people organize things together, e.g. in development projects. The participation of all the inhabitants of Serma in a cereal bank was indicated with the term *waalde*. In these cases *waalde* indicates the formation of a group with recruitment based on non-kin criteria, and in which everyone is able to participate on the basis of equality. Restrictions of age and gender disappeared in this context.

Marriage and gender

Through marriage the kin group as such is reproduced and alliances are made between families and groups. Here we shall discuss the situation of the Jallube because they are the most strict in marriage rules, though the principle is the same for the Riimaybe and Weheebe. The various kin definitions that may apply to a relationship between two people are also a consequence of the marriage patterns preferred by the Jallube. Not only are they endogamous, but within this endogamy they prefer marriages with close kin, maternal and paternal parallel cousins and cross-cousins. These categories of preferred marriage partners are defined not only through the brothers and sisters of the parents of the marrying couple, but also through grand-parents and even great-grand parents. This marriage system leads to the overlapping of the various kin categories for an individual. A sister's child may, for example, at the same time be a cross-cousin, because both parents of the marriage partner are related to ego. As a result no real groups of bride-givers and bride-takers can be discerned. The character of the existing relations is given more importance in this context than the fact that strategic alliances are formed by the marriage. These alliances are nevertheless a desired by-product. Marriage then is often not a contract between (sub-)lineages, but between families. Through marriage another important group of kin is classified, namely the group of *esiraabe* (sg. *eso*) (affines). *Esiraabe* is a reciprocal term. It links groups together and defines specific behaviour and obligations towards each other.

A very important effect of marriage is the significance that it gives to the gender categories

debbo ('woman' also meaning 'wife') and *gorko* ('man' also meaning 'husband'). After marriage the gender roles become explicitly clear. Distinction between gender is only a sub-category in the kinship terminology, which does not mean that it is not an important ordering principle of society. As will become clear it, is one of the most important divisions for the Jallube. This starts already with the education of boys and girls, which has as major aim the preparation of the children for adulthood, of which a large part is lived within a marital union. In this union the division of labour, the identity of man or woman, becomes very explicit (see also chapter 3). Labour is divided between the tasks of women related to milk, which is related to children and the inner social world, and the tasks of men related to *jawdi* (cattle), related to authority and the outside world. The separation of men and women is notably expressed in the division of tasks in economic and social life, but also in the attitude in public performance of men and women towards each other. Women do not play a public role as much as men, and in public men and women will avoid each other. This expression of gender has been interpreted by some authors as the submission of women to men. According to them the meaning of the word for woman in Fulfulde, *debbo*, supports this interpretation. *Debbo* would be derived from the verb *rewde*, which means to follow, a woman then is the one who follows (Dupire 1962:157, Vereecke 1989:5,7).[14] However, in recent linguistic research it is clear that this derivation of the word *debbo* is disputed. The form of the word *debbo* and its relation to the verb *rewde* gives it the translation 'the one who is followed' (Breedveld 1995). Riesman (1977:85) concluded with respect to gender relations: '...when we look more closely at the nature of the woman's submission, we discover that her obedience is much more an adherence to the culture itself than a conformity to the will of an individual, be it father, mother or husband'. Nevertheless, he also concluded that women are subjected to men. However, we may also argue that women simply behave according to the rules of social life, which need not be interpreted as obedience to men (see chapter 6). It is important how the Fulbe women themselves perceive this behaviour. If it is according to cultural rules, it may well be that they experience this behaviour as an attribute of their status as noble women.

Our findings also reveal that women are in some domains equal to men, while in other domains one of the sexes is more dominant. In the husband-wife union the role of women with regard to milk is more important than the role of men. Women receive access to milk through marriage. Milk is essential in establishing a family (mother's milk) and in establishing social relations (cow's milk). Through the division of (cow's) milk a woman defines social relations within the family. In this sense she is at the centre of the social world. In the economic field, both husband and wife have important tasks. Property in animals is also a field in which husband and wife are in principle equal. In the herd of a 'family', women may possess more cattle than their husbands, but the men take care of these animals. This, however, does not mean that the woman has no say over them, although these property relations have changed a lot in the last decade (see chapters 9 and 11). Waters-Bayer (1988), and Dupire (1970:152,153) in her later work, admit that women and men are more equal in Fulbe society than a Westerner with his or her own gender perspective would at first think.[15]

Units of residence

Definitions

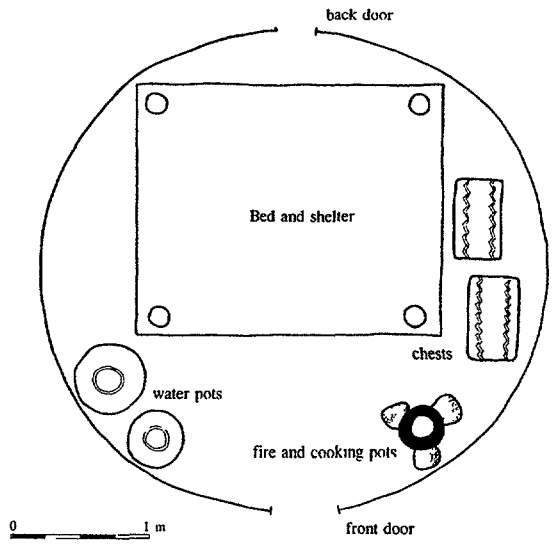
People also form groups through residence. These may at the same time be kin groups, but not necessarily so. Residential units in Fulbe society are not stable, people are free to join or leave them. Relations defined through residence are not fixed as is the case for kinship, age and gender relations (cf. Riesman 1977:30). The word *wuro* is used to indicate various organizational levels in humanized space. It is used in the antithesis *wuro-ladde* (cf. Riesman 1977). In this sense *wuro* means the inhabited bush, bush transformed by human beings, and *ladde* is the outside, the non-transformed bush. A certain geographically defined area is humanized by habitation of people. Humanized space is opposed to non-human space, the bush. Agricultural land, fields, are also transformed bush, and often the Fulbe make it '*wuro*' by building huts on it in which to live in the dry season, so that their animals leave manure on their fields.

Wuro (pl. *gure*) also indicates a group of huts within a cattle camp, where people live who share and manage a herd.[16] This group of huts may be inhabited by a husband, his wife and children, or a number of brothers with their wives and children. The constellation of this group varies in the course of a year, depending on the transhumance patterns. The head of the *wuro* is in most cases a man who is responsible for the payment of taxes for the members of the *wuro*. This does not imply, however, that women do not have a central position in the *wuro*. As is clear from discussion by other authors of the constellation of the *wuro* the contrary is true. According to Kintz (1985:94) it is the presence of a woman that defines a *wuro*. For Riesman (1977:30) both a man and woman must be part of the *wuro*, because only a man and woman together can form a social unit, and it is the social aspect that is characteristic for the *wuro*. Also for the Jallube the presence of a woman is essential, because without her presence there are no children, and there is no one to divide the milk which is so central in the social life of the Jallube. However, the *wuro* is a social entity, i.e. a unit for living, as well as an economic entity, i.e. the unit for management of the common herd and the cultivation of millet, and the provision with cereals and milk (see chapter 9). And although the presence of men is not essential for the social aspect of life, it is necessary for the economic aspect of the *wuro*. Because of the fluctuating constellation of a *wuro*, and its relation to social as well as economic aspects of life, it is a difficult term to translate into English. 'Household', for example, emphasizes the economic side. 'Family' lays more emphasis on the social side. We shall therefore designate this unit throughout the book as the *wuro*.

The central role of women in the *wuro* is stressed by the Jallube in the subdivision of the *wuro* into *fayannde*, literally meaning 'cooking pot'. In most cases a woman with her children shares a *fayannde*, which is also the central unit for the division of cow's milk. Within a *wuro*, several *fayannde* may exist (cf. Waters-Bayer 1988). It is the essential unit for a woman in the *wuro*. For other more social affairs she relies more on her own family than on her husband (see chapter 11). Thus for a woman a *wuro* is principally an economic and reproductive unit, the *fayannde* the social unit. For a man the *wuro* is both.

The importance of the *fayannde* is symbolized by the hut, called *buguru* or *suudu*.[17] The

suudu is built for a woman by women of her *suudu yaaya* when she has given birth to her first or second child in the *wuro* of her husband. So the *suudu* is a unit of residence (the nucleus of the *fayannde*) narrowly related (symbolically) to the wife in the *wuro* and her own *suudu yaaya*. The wife is, therefore, also called *jom-suudu*. The *suudu* is a space reserved for the *suudu yaaya* of the woman in the *wuro* in the cattle camp of her husband. When a man enters the hut of his wife, he enters in fact the domain of his *esiraabe* (affines). The *suudu* and its content (bed (*leeso*), household utensils (*kaake*)) is owned by the woman and given to her by her *suudu yaaya* as 'dowry'. In principle the woman will take the hut with her when leaving in case of divorce. Her own mother and sisters and maternal aunts (her *suudu yaaya*) come to take the building material with them to their camp. Otherwise the hut becomes the property of their daughter's mother-in-law.[18]



Plan of a hut

Wuro is used not only in the sense of a group of close kinsmen residing together, but it is also used to denote the camps in which the Jallube live during the rainy and dry season. In most cases the rainy season camp consists of several *gure* (in the restricted sense), which in turn can be divided into several *fayannde*. The dry season camps are in general much smaller. The *gure* constituting a rainy season camp are often related by kin relations. In one camp indeed all the *gure* were linked through kinship. In camps where the *gure* were not directly linked people were always able to specify some relationship. The inhabitants of a rainy season camp need not be related through kinship, nor belong to the same lineage.[19]

The Riimaybe live in *galle*, consisting of several mud-brick houses, i.e. a compound. The *galle* is inhabited by a woman (sometimes several women per compound) but it is built by the men and is more permanent than a *wuro*. The unit of husband and wife is the focus of social, economic and reproductive life.

The term *suudu baaba* which we have explained as a kinship group, is also used to designate a geographical, residential unit. When used in this sense it designates all the people of a village, including Jallube, Riimaybe and Weheebe. For example the inhabitants of Serma, men and women, of all the rainy season camps and of Debere, belong to one *suudu baaba*.

The rainy season settlements in Serma

A rainy season camp is not a stable residential unit over the seasons nor over the years. As the

examples below will show, the constellation of these camps is constantly changing in time and space. Each head of a *wuro* may direct his dependents to go where he wants. There are no restrictions on the mobility of a *wuro*. The most enduring social unit in time seems to be the *fayannde* which is based on the strong bonds between mother and children.

For the Fulbe to refer to residential units when speaking to outsiders is to specify one's 'origin', geographical identity, and social identity all at the same time. Although a rainy season camp is only inhabited for four to five months every year, it is considered as the geographical centre of life by the Jallube of Serma. 'One belongs to' a certain camp. Probably this is due to the fact that it is the only fixed point in the yearly cycle of the Jallube.[20] A reference to Serma and the camp is a marker of one's own social position, just as the membership of a certain lineage, *suudu baaba* or *suudu yaaya*, may be. Depending on the circumstances one uses one or another of these markers. For instance vis-à-vis a Kummbeejo a Jallo only may refer to his or her clan and lineage, but if this Kummbeejo is a friend then the link may be explained by the residence in a specific rainy season camp. Each camp has special characteristics, like wealth or poverty, or the dominance of a particular lineage, and its own history. These characteristics are ascribed to its inhabitants and so define a person's position in society. However, at the same time people identify easily with a new camp, after they have moved. It is this flexibility that is very important. Flexibility and changing social position may go together.

The rainy season settlements that are part of Serma are clearly different from each other. The more recent camps are partly inhabited by former residents of the older camps, though residents from Fetesambo and Lennga joined Serma recently. We were told that in the past (people referred to the 1950s and 1960s) the three oldest camps were very large, containing at least four times as many people as today. At present they are characterized by small *gure* (in number of people) and small herds. Their inhabitants are the poorest of Serma. Among the recently founded camps Wuro Boggo and Koyo are the richest, with the largest *gure*. The size of the *wuro* seems to be correlated with the size of the herd, or in case of the Riimaybe, the wealth of a family (see also chapter 9). Overall, it may be said that the camps have changed drastically due to the impact of the droughts. People migrated, families split up, and the number of animals decreased. In the following a sketch is given of the way Wuro Kaaral and Wuro Boggo evolved over the past decades. These camps we know the best, because we lived in Wuro Boggo; Wuro Kaaral is said to be the principal residence of Seedoobe in the region of Booni. The other Serma camps are broadly comparable to one or other of these two. Furthermore many of the people who are cited in this book live in Wuro Boggo and Wuro Kaaral, or are related to them.[21] This presentation of the camps also serves as a cast of characters.

Wuro Kaaral[22]

Wuro Kaaral is the oldest camp of Serma.[23] It already existed in the second half of the 19th century as a rainy season settlement, before the migration of the Seedoobe to Monndoro, and was probably the home of Maamudu Nduuldi and Aluure for some time. Around 1960 its size was much larger than today in extent and in number of *gure*. Wuro Kaaral today consists of

11 small *gure* only. In the course of the last two decennia many families from Wuro Kaaral settled in other camps in Serma or left Serma altogether. They left Wuro Kaaral for various reasons, and although it is difficult to assess, their exact motivation can be reconstructed from the stories people tell. It is clear that impoverishment has been an important factor.

Around 1960 three groups of Seedoobe-brothers lived in Wuro Kaaral. They were rich and they dominated the scene in Wuro Kaaral. They were the sons of Moniido Ngori Yacuba Aluure, and of Aamadu Alu Hammadu Aluure who married Rukiata Yacuba Aluure[24] (see for their relations figure 4.2b). The third group are the sons of Alu, a member of the lineage Junngo Nyiiwa. We will follow their histories. The descendants of Moniido did not fare very well in the droughts. Moniido died before 1960, but after his death his six sons stayed together in Wuro Kaaral. However, after a few years the brothers split up. Buraima, Maamudu and Alu went to live in Coofya. Usmaane, Bukari and Bulo stayed in Wuro Kaaral. In 1985 the only two surviving daughters of Buraima left Serma in the direction of the Seeno-Gonndo, where they, as paupers, hoped to find a Dogon herd they could manage. Of the two daughters of Maamudu, one left in 1990 for Bandiagara, and the other daughter is married in Nguma. She and her husband have a few cows left. Their mother, Fatumata Aamadu (7) lives in Wuro Kaaral nowadays, aged 70. Alu Moniido married Fatumata Aamadu (Yaaya Cuume), a Moodibaajo. She is now 72 years old and lives in Debere with her oldest son Hammadu. They have no animals left, and Hammadu cannot work on the land, because he suffers from severe tuberculosis. One of the daughters of Alu and Yaaya Cuume, Hadjata (10), lives in Wuro Kaaral. Four other daughters left after 1985, because of the loss of cattle. We do not know where they are. Their second son lives in Fetesambo. He still has some cattle, but he is not willing to share them with his family. Their youngest son wanders between the Hayre and Abidjan, looking for work.

Both Usmaane's and Bukari's children have left Serma. Usmaane Moniido and his wife died at the beginning of the 1980s, leaving three sons, who kept the herd together, and two daughters. During the drought of 1983-1985 the family herd died, leaving the family without any means. One son left Wuro Kaaral in 1986 to look for a living in Duwari. The second son went to Bandiagara in the same year, empty-handed. The youngest son could not bear this setback. He divorced his wife and just left. Nobody knows where he went (*omo yiilan*). The two daughters of Usmaane married in Serma, but they were also forced to leave when their herds were decimated in 1985. They went to Konna (west) and Koro (south) respectively. Bukari Moniido's children have also left Serma because of impoverishment. His oldest son left for Burkina Faso. His second son lives in Booni.

Three children of Bulo Moniido still live in Wuro Kaaral. They are Fatumata Bulo, Aminata Bulo and Bura Bulo (4a and 4b). Only Fatumata and her husband have some animals. They live for most of the year in Debere, and only the last month of our stay, January 1992, Fatumata was busy rebuilding her hut in Serma. Aminata is married to Umaru Buubu, who is a Barri (another Fulbe clan) and *moodibo*. Umaru was a wandering *moodibo* who ended up in Booni, where he met Aminata. He is Aminata's fifth husband and they are childless. They have no animals but a few goats. Bura Bulo is married and lives in Wuro Kaaral where he herds cattle for a Diimaajo from Debere. Their mother Hawa lives next to the hut of Aminata.

Figure 4.2a: *Overview of Wuro Kaaral and its inhabitants*

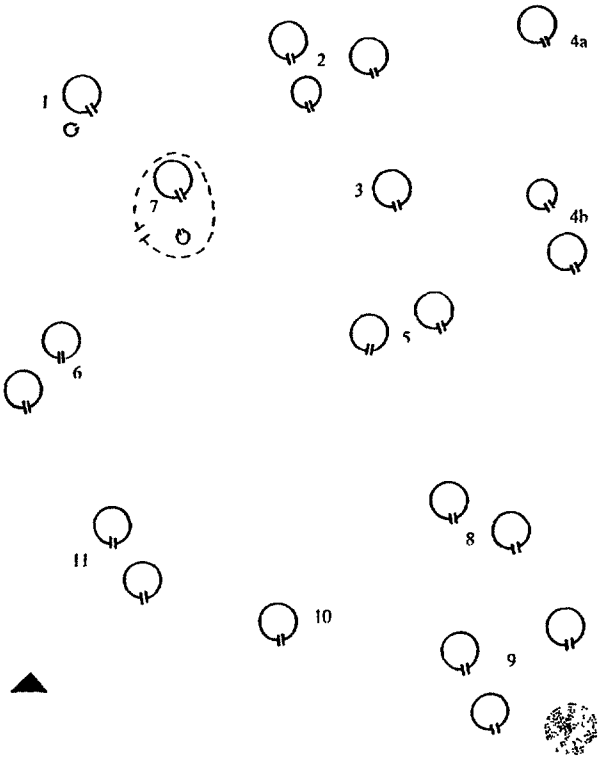
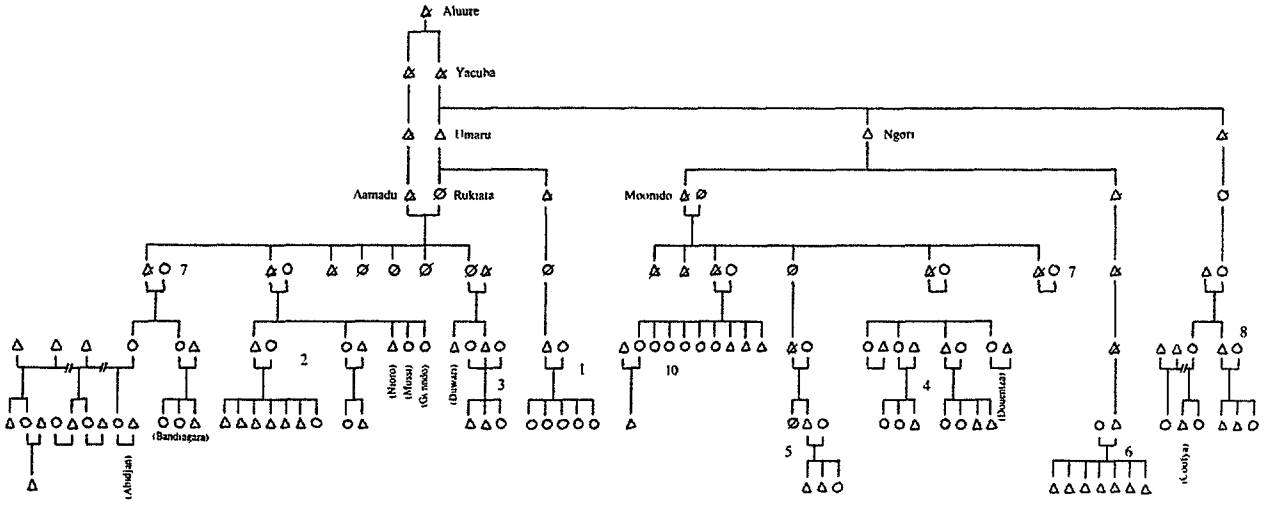


Figure 4.2b: *Kinship relations between the inhabitants of Wuro Kaaral*



The descendants of Aamadu and Rukiata, both Seedoobe (see fig 4.2b), live in the northern part of Wuro Kaaral. Aamadu and Rukiata had two sons, Buraima and Maamudu. Maamudu died before reaching the age to marry. They had six daughters, who were all married outside Wuro Kaaral. The only surviving daughter, Fatumata Aamadu, lives in Wuro Kaaral nowadays (7). She was the wife of Maamudu Moniido. Buraima Aamadu died about 30 years ago. His wife Mariamma Usmaane (2) lives with her oldest son in Wuro Kaaral. Mariamma is 72 years old, and she is constantly ill. Her two sons and three daughters are still alive. Aama Buraima (also called Aama Babel) (2), the oldest son, is married to Hawa Bura, a *dewordo*, member of the Moodibaabe lineage. They have seven children. Aama's sister, Jeneba, and her husband share their *wuro*. Aama and his brother-in-law herd some animals owned by people from Booni and by Riimaybe from Debere. The two other sisters of Aama have left Serma, destitute. One went to Mossi (Burkina Faso) and the other to the Seeno-Gonndo in the *cercle* Bankass. The only brother of Aama left Serma nine years ago, they do not know where he lives nowadays, and it seems that he will never return.

On the east side of Wuro Kaaral lives Bukari Alasunna (3), a grandchild of Aamadu and Rukiata. He only returned from his study as *moodibo* when he was about 30 years old, then he married with a Tamanke woman whose family also lived in Wuro Kaaral. Their three children are between 7 and 16 years old. They have a small herd, which together with Bukari's earnings as *moodibo*, makes them relatively wealthy members of Wuro Kaaral. Bukari's mother, who married in Gawdeeru, is a daughter of Rukiata and Aamadu. When Bukari returned from his studies he decided to live with the family of his wife, his *esiraabe*, and with people from his *suudu yaaya*, his maternal uncle and his cross-cousins, Buraima Aamadu and his sons. Fatumata Aamadu is his *yaaya*, the sister of his mother.

Hamma Bama is also a descendant of Rukiata and Aamadu, however they are not very closely related. His *wuro* (1) is situated between the *gure* of Aama Babel and Fatumata. In Serma he is regarded as a wise old man, because he knows a lot about history; he has extensive knowledge of plants and trees and their use; and he knows all the people in Serma with their genealogies by heart. He is a Bakaano (lineage of the Jallube, Wakambe[25]) by *suudu baaba*. His mother was a Ceedoowo. She was a niece of Rukiata (see figure 4.2b). She left Serma to stay with her husband in Gawdeeru, leaving her brothers behind in Wuro Kaaral. These brothers, the *kaawiraabe* of Hamma, happened to have no sons, and therefore Hamma stayed regularly with his uncles. Eventually he decided to live permanently in Wuro Kaaral, and he still lives there. His fifth wife Buge originates from Wuro Kaaral. They have five daughters. The oldest son of Hamma, from a former marriage, left six years ago and settled in Abidjan, where he has become a rich man. He is not willing to return to the misery of Serma, as he told us when he visited Douentza. Five animals are the only wealth of Hamma Bama and his family. Aama Babel and Bukari Alasunna are Hamma's cousins (respectively a parallel- and cross-cousin).

Another Ceedoowo related to the family of Moniido lives south of the hut of Fatumata, the family of Alu Buraima (6). Alu is married to Jeneba Hamma (no close family, i.e. *dewordo*), he lives together with his elder sister and his wife and children. Alu is Ceedoowo and the only child of his *wappaybe* (Alu's father and his brothers), who still lives in Wuro Kaaral. And he is related to the other Seedoobe, e.g. with the first husband of Fatumata Aamadu (a son of

Moniido).

Rukiata Maamudu (5) is an independent and strong woman. She lives in fact on her own and runs her own *wuro*. Her husband died ten years ago. He lived in Wuro Kaaral together with his maternal uncles, the sons of Moniido (his mother was Ay Moniido). Rukiata's own family originally lived in Nguma; they are grouped under the lineage Junngo Nyiiwa. She still has some aunts living there. She had two children, but her daughter died at the age of eleven. Her only son Aljumaa and his wife live with her, though the largest part of the year they stay with the brothers of Rukiata (*kaawiraabe* of Aljumaa), who live in Taapu, a Dogon village on the northern escarpment of the Bandiagara plateau. After the death of her husband she married Abdramaane Hamma, who lives in Wuro Boggo nowadays. They share a *wuro* only during the dry season, when they both settle on their fields just south of Debere.

So far the families that are more or less directly related to Aamadu and Moniido. For these two family groups we have shown that the *gure* of their families in Wuro Kaaral were larger in the past. The earlier *gure* consisted of more than one nuclear family, mostly a number of brothers together. Nowadays the *gure* of Wuro Kaaral consist of one to at most four adults (men and women). The *gure* of the descendents of Moniido and Aamadu consist all of one *fayannde*, except the *wuro* of Aama Babel that consists of two *fayannde*. They occupy the northern part of Wuro Kaaral. In the southern part of Wuro Kaaral live families of which some are related via women to the Seedoobe of Moniido or Aamadu, and one Moodibaabe family.

The latter is the family of Allaaye Bana (9).[26] He and his wife, and his nephew Adu Obil and his wife, share one *wuro*. The wife of Allaaye is Ceedoowo. The wife of Adu, Hadjata, is a child of a son of Alu, who lived in Wuro Kaaral during the 1960s. Hadjata's brothers left Wuro Kaaral after the death of their father and mother. A few of them live in Urfina.

Another occupant of the south of Wuro Kaaral is Hammadu Buraima, who lived as child in Wuro Kaaral (11). After the death of his father, his mother married a Tamanke from Koyo. His brothers all left Serma and live near Yaale nowadays. After they lived for 11 years in Koyo he and his wife, Hoode, settled in Wuro Kaaral. When Hoode was asked why they lived in Wuro Kaaral, her first answer was that they were all related. Through her mother Hoode is related to the Moniido brothers, Bura and Aminata Bulo are her cross-cousins. The maternal uncle (Alu Muusa) of Hammadu Buraima lives in the *wuro* next to them. They have a small herd. The reason why they shifted from Koyo to Wuro Kaaral was the problems they had in preventing their animals from entering the fields around Koyo. An old remotely related uncle, Ba Lobbo, lives with them. He has no children.

Aamadu Buralde, his brother and his mother share another *wuro* (8). Aamadu's father was a Barri (he died), who wandered around and happened to find a woman in Serma, Dika. Dika is on her mother's side a Ceedoowo (her mother is Ay Bukari Yacuba Aluure), her father was a Moodibaajo. Her family lived in Wuro Kaaral. The other children of Dika, two girls, are married: one within Serma (Coofya) and one to a *gendarme* in Mopti. Hamburalde, son of Buralde, not from Dika, lives with them in Wuro Kaaral, after having spent some years in Abidjan.

Alu Muusa (10) and his brother originally come from Beebi. We are uncertain why they came to Wuro Kaaral. Alu married Hadjata Alu, a daughter of Yaaya Cuume and Alu Moniido. They herd only one cow of a Diimaajo in Debere, and Alu is obliged to leave Serma each dry

season to look for work with Dogon in order to be able to take care of his wife. Their only daughter married a man from Wuro Boggo, after having divorced someone in Beebi.

The third group of brothers who dominated life in Wuro Kaaral in the 1960s have left Wuro Kaaral. The only living son of Alu, Yero, lives in Urfina today. From Wuro Kaaral he went, together with his brothers, to Wuro Boggo. They were the first inhabitants of this camp site. Because of an outbreak of bovine pleuropneumonia among the cattle in Wuro Boggo they left and settled in Nguma for a short period, before returning to Wuro Kaaral. After the death of his brothers Yero left Wuro Kaaral in 1985 and established a new camp, Urfina, 500 metres from Wuro Boggo. The sons of his deceased brothers settled with their paternal uncle in Urfina. Some of them left also for Nguma.

So in the course of 30 years Wuro Kaaral changed completely in composition, not only in the number of inhabitants, but also in the constellation of each separate *wuro*. Today an outsider may get the impression that the inhabitants of Wuro Kaaral are impoverished and separate families. When we look at their histories, however, it appears that everyone is related to everyone else. These kinship links can be actualized whenever they are needed, e.g. to explain why one lives in a certain camp. In the past Wuro Kaaral consisted of much larger family groups which were dispersed because of the droughts and the impoverishment of these families. Most fathers of the inhabitants of Wuro Kaaral lived together with their brothers, and where this is not the case the mothers were linked together, or their parents lived in Wuro Kaaral. If we consider the formation of *gure* within Wuro Kaaral, this pattern is lost. People may decide to stay with the wife's family, to live next to maternal uncles, to live with their brothers. Other reasons like the space around the camp for the cattle, or just the 'tradition' of one's family, or, for old women, the support they may expect from some people, also play a role in the choice of residence. These considerations may change at any moment.

Wuro Boggo[27]

Wuro Boggo is located three kilometres south of Debere. The camp consists nowadays of four family groups. During the wet season a group of *gargasaabe* (woodworkers, craftsmen) join Wuro Boggo. The Jallube inhabitants of Wuro Boggo have come to settle recently. The first inhabitants of this site left after the droughts of 1983-1985, and have been replaced by others.

Hamma Aljumaa (1), whose story was told in chapter one, and his three brothers, from the lineage Rendowaabe, were among the first to settle in Wuro Boggo, but they came after Yero and his brothers, the descendants of Alu from Wuro Kaaral. Abdramaane Hamma (5) was our host in Wuro Boggo, where we also had our hut. Abdramaane Hamma is a Ceedoowo. His first wife, Yaaya Aamadu, is Hawgiijo. They have seven children. In 1974 they came from Lennga and settled in Wuro Kaaral. In 1985 they left Wuro Kaaral and joined Wuro Boggo. The father of Abdramaane Hamma, Hamma Usmaane lives with them. Dikko Maane, the oldest daughter, married in Koyo. Ay Maane and her younger sister Mariamma are both married to men from Wuro Boggo, who are also near relatives (3). Abdramaane Hamma is always busy arranging things, and he often travels, because of his task as counsellor. He can leave the care of the family's herd without hesitation to his oldest son, Aamadu Maane, who has his own family, two wives and three sons. Near the *wuro* of Abdramaane Hamma is the camp of the *gargasaabe* (woodworkers). Abdramaane Hamma offered them this land to settle on (4).

Figure 4.3a: *Overview of Wuro Boggo and its inhabitants.*

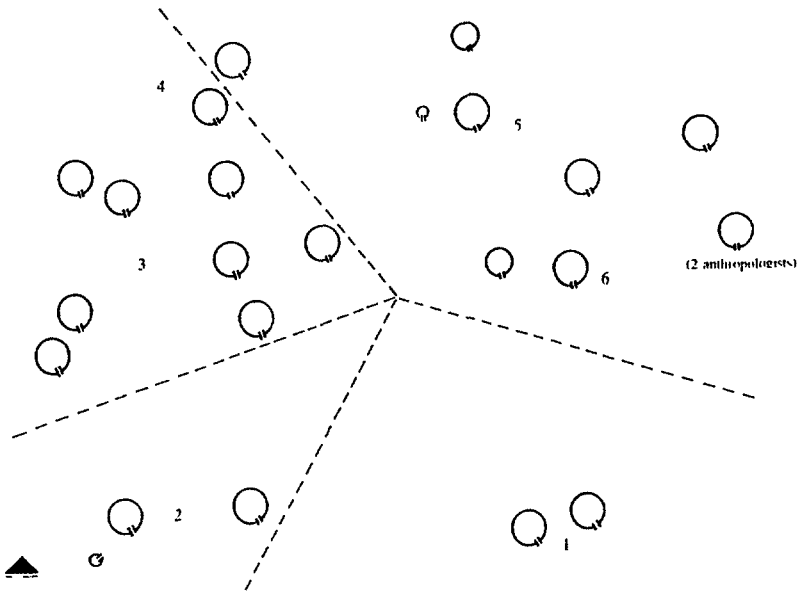
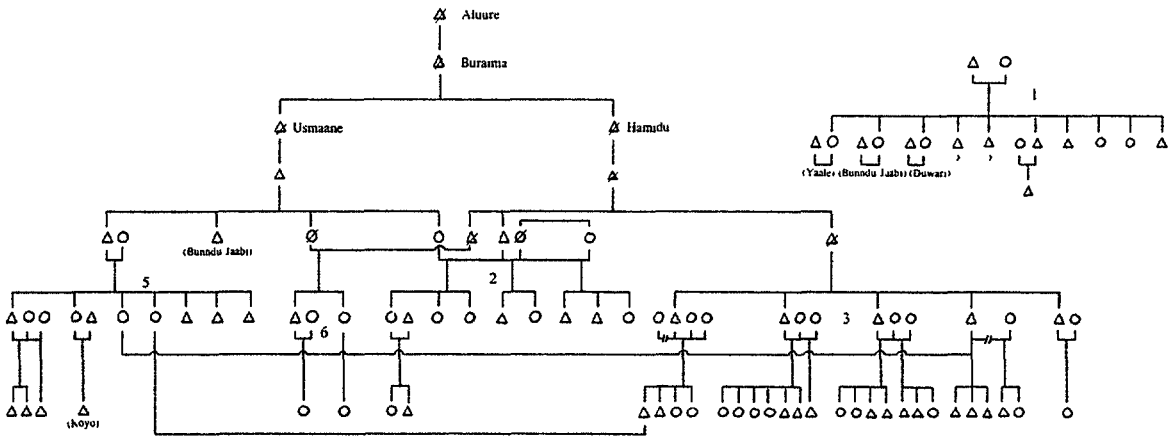


Figure 4.3b: *Kinship relations between the inhabitants of Wuro Boggo.*



A sister of Abdramaane Hamma, Ay is married to Bubaare Aamadu, also Ceedoowo. They live in Wuro Boggo (2). After a conflict about fields and cattle in Fetesambo, where they lived before, and the death of Bubaare's brother Usmaane, Bubaare decided to settle in Wuro Boggo. Bubaare married a second wife, who died after giving birth. Two of the children from this union stay with Bubaare, the third lives with her maternal grandmother in Debere. Bubaare married the sister of his late wife, by whom he has three other children. From his first marriage he has three daughters, of whom one is married, but she has chosen to live together

with her children in the *wuro* of her father, although she is not divorced. Because all his other brothers were dead Bubaare also had the responsibility for the children of Usmaane, his late brother, and they also live in Wuro Boggo nowadays. These are Hammadu Usmaane (Bana), Aamadu Usmaane (Sambo), Buraima, Hamidu and Alu Usmaane. Now they are all married and have children themselves, they have separated their *wuro* from Bubaare (3). Their old mother (Yaaya Bana) lives with them. In addition the oldest son of Bubaare's deceased brother Alu also lives in his *wuro* (2).

Sambo Allaaye, a son of the oldest sister of Abdrumaane Hamma, Fatumata Hamma, and a brother of Bubaare, Allaaye Aamadu, settled in Wuro Boggo a few years ago (6). After his parents died, he went to Burkina Faso to look for gold. He was lucky and bought five cows with the gold he found. With these cows he joined Abdramaane Hamma's *wuro*. Abdramaane Hamma is his maternal uncle and also his paternal uncle. He also settled near Bubaare who is his paternal uncle, and also his maternal uncle. His elder brother, Hamma, left Serma after the death of his wife, leaving his four children behind with the family of his wife, with only one animal. He also went to Burkina Faso (*omo yiilan*). His youngest sister Adama and her little daughter have lived with Sambo since she was divorced by her husband. His oldest sister lives in Duwari.

The inhabitants of Wuro Boggo are much richer than the people in Wuro Kaaral. They also form larger family groups which are closely related through kinship ties. Hamma Aljumaa and his family are the poorest in Wuro Boggo. Sambo who joined his uncles is also relatively poor, but he is still young and may expect his herd to grow. Though Wuro Boggo was established by two families from the Junngo Nyiiwa lineage, the camp is now dominated by Seedoobe. Hamma Aljumaa had to admit that his family lost control over Wuro Boggo. The examples of Wuro Kaaral and Wuro Boggo make clear that people have the following reasons for leaving a *wuro* and settling in a new *wuro*. They join their brothers, paternal or maternal uncle, they leave because of conflicts in their former camp, cattle diseases, loss of cattle, poverty, and because they look for people to support them. In short they leave for all kinds of reasons. It is equally clear that the composition of these camps has changed a lot over time. The people who live here are still members of the same family group, since in some way they are linked to each other. However, they are also linked to many other people in the Hayre, which makes it very easy for them to move to another area, which however they rarely do. An analysis of this process of migration between camps revealed that there are poor and rich rainy season settlements. Rich families settle with rich relatives. In Wuro Kaaral and Nguma, the oldest camps, the poor families remained behind. Fappittoo and Coofya are neither poor nor rich. Wuro Boggo and Koyo are mainly composed of more wealthy families, though some poor families settled in the neighbourhood of their well-to-do relatives. Kin relations and lineage membership may not be the only basis of recruitment of new inhabitants to a camp. They may only be a way to justify the presence of a family, but need not be the reason for their presence.

Residence in the dry season, the Jallube

Although the Jallube regard their rainy season camp as their main residence, they often spend more than half of year in another village or camp. Social relations in these periods are of

course also important, but of a different and a more temporary nature. The Jallube change their places of residence or destinations in the dry season more often than their rainy season camps. After the harvest the rainy season camps are abandoned. Some families go on transhumance with their cattle. Others leave Serma to work in a town (Booni), or they settle near a cultivators' village with their cattle. They leave their *wuro* with their relatives and enter another world in which Dogon, Hummbeebe, Weheebe and Sonrai and many other Fulbe lineages live. In this outside world that the Jallube experience as alien, a network of acquaintances structures life. These are their hosts, *njaatigi*, who live in town or in villages.

Literally a *njaatigi*[28] is a host; someone who receives a traveller in a place far from home, feeds him and houses him, in short has all the obligations of a host. In the Hayre there are extensive networks of *njaatigi*-hood. In every major village that a person regularly visits, he needs a *njaatigi* in order to be able to stay. If one does not have a *njaatigi* one cannot eat in that village. In Fulbe culture one cannot eat in a stranger's house (see chapter 6). So, to be able to stay, some house or someone has to be turned into an acquaintance, into someone one is familiar with, in short a *njaatigi*. We too developed a *njaatigi* network in all the villages we frequented. In turn, if we were in Douentza, Jallube from Serma, who were in town for the first time, would regard us, or our assistants, as their *njaatigi*. Sometimes our *njaatigi* obligations as guests conflicted with each other. In Booni for example, we were assigned the Nyeenyo (griot) as our *njaatigi*, because he was also the host of the Weheebe of Dalla, who introduced us there. In the course of our fieldwork, however, we developed a kind of *njaatigi* relationship with Alu the brother of the chief of Booni, who introduced us in Serma. This caused a problem one time when we had to spend the night in Booni. Normally we did not do this, because we wanted to get ahead to Serma, but this time the track was impassable south of Booni, because of the heavy rains the night before. Where should we spend the night? Eating with Alu was no problem, but spending the night with him would distance us from the Weheebe of Dalla. On the other hand we would insult Alu and the people of Serma if we ignored Alu. We solved the problem by eating with Alu and sleeping in the concession of the griot.

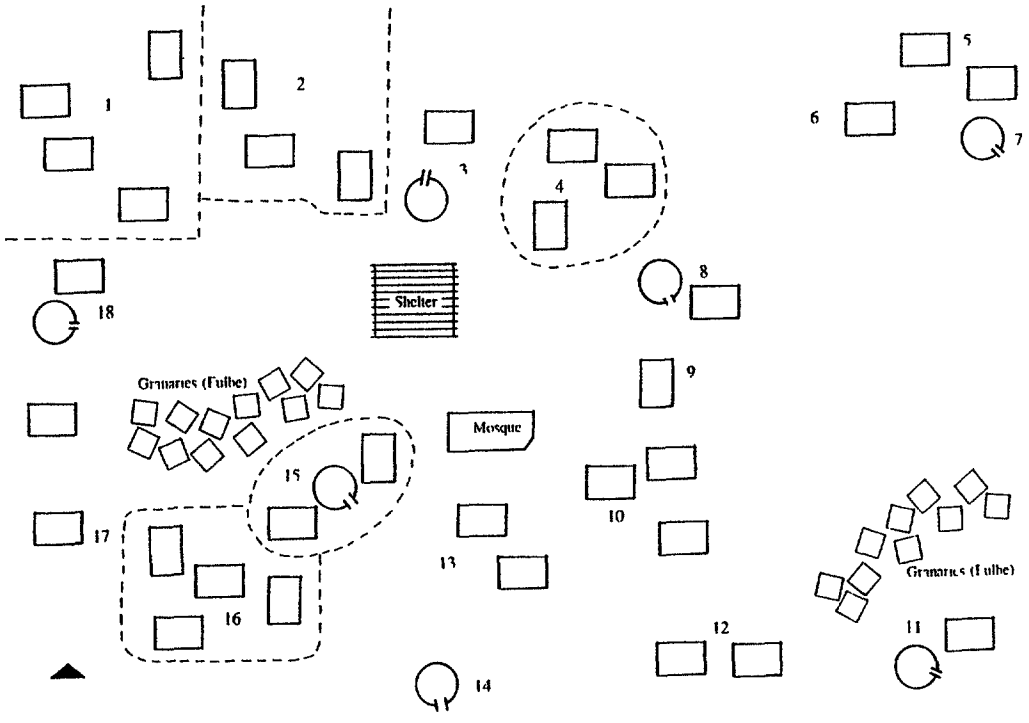
As this incident has indicated, the content of *njaatigi* relations varies enormously, so that probably the best description of a *njaatigi* is someone who makes one's stay possible. Any other service from host to guest and *vice versa* is not obligatory, even reciprocal hospitality in the guest's village or camp, but may evolve in the course of the relationship, and depends on the willingness and the capacity of both parties to invest in the relationship, and the balance of power between the parties. For the Jallube who go on transhumance to a village where they will barter milk for grains, a *njaatigi* is a Dogon, Sonrai, Diimaajo or Kummbeejo. An *njaatigi* receives his 'friend' the herdsman and his family with food, and he invites him to make his camp with his family on his fields. These are relations between male heads of families, and they may continue to exist for several generations. The women of the families may also have a special relationship with each other, and they exchange milk for grains. Milk is the main product on which the Jallube live during the transhumance, either through barter, or through direct consumption. The Jallube family does not stay in the compound of their *njaatigi*. They live on his field, where they build a hut, if construction materials are available. They form a new *wuro* on the *njaatigi*'s land. In town an *njaatigi* relation is much less an exchange relation.

The *njaatigi* is the one with whom one stays and eats during market days, or when one has business to do in town. Impoverished Jallube look for work with their *njaatigi* if he or she has the means to pay a little (see also chapter 12).

The organization of life is not the same in the rainy season and in the dry season. There are no fixed groups that leave together on transhumance, nor that cooperate in another domain. People go when they like and when they think it suits them best. Each year they decide more or less *ad hoc* where to go and with whom. In all cases the decision is taken for the *wuro*, or for a part of the *wuro*. Transhumance is an individual affair. If it happens that some *gure* leave for the same place this does not lead to cooperation among them. Only women with their children mostly stay together. So, residential units have a transient character. This enables people to move from one unit to another, in the course of a year, but also in the course of a lifetime. This happens at the level of a *wuro*, but also at individual level. With the progression of the drought and the marginalization of the pastoralists the reasons for these movements may be various, e.g. herd management, the acquisition of cereals, work.

The inhabitants of Wuro Boggo and Wuro Kaaral exhibit all types of patterns of transhumance in the dry season. These patterns may also vary over time in one family. However, people try to keep to the same model, which may be a consequence of the need to have a *njaatigi*. For instance, in the past Fatumata Aamadu went to Booni with her husband and cattle. As an old widow without animals, she still goes to Booni in the dry season, where

Figure 4.4: *Overview of Debere and its inhabitants.*



she stays with the same *njaatigi*. Others decide to stay around Debere, because their health is bad as in the case of Hamma Bama, or because he or she has to take care of an aged father or mother, who can no longer travel, such as Abdramaane Hamma. At present there are hardly any fixed patterns of transhumance. Due to the drought people go anywhere, partly to look for work, but also because of the worsening relationship with their *njaatigi* as a result of the droughts. They enter new areas, like west of Booni near the villages Wayre, Tula and even Douentza. If the cultivators living there have some interest in these visiting Jallube new *njaatigi* relations are easily established.

The Riimaybe in Debere[29]

At present Debere is not only a hamlet of sedentary Riimaybe cultivators; it has also become a refuge area for people stricken by the droughts. Apart from some Weheebe families (5,6,7) and the family of the Imam (13), old Jallube women (3,12,14), a Tuareg family (17) and a Bellaabe family (11) have recently come to settle permanently. In the dry season several Jallube families reside temporarily in the hamlet, for various reasons.

Change and flexibility are, however, nothing new for the Riimaybe. In this respect they are like the Jallube. All Riimaybe, Weheebe and Bellaabe families settled only this century in Serma. The Weheebe are family of the chiefly family of Booni. The Riimaybe have various backgrounds. They once belonged to either the Jallube or the Weheebe. Some of their former masters live as far away as Dalla. The Bella fled from their Tuareg masters and settled more recently in Debere. Their life-histories exemplify the diaspora of liberated slaves, the processes of assimilation into new social groups, and the relations between Riimaybe and their former masters. Change and flexibility dominate these life-histories too. Of the 'original' inhabitants of Debere, some left their family, others returned or come back only temporarily. Below we will explain the history of the family of Bura Bilaali, the most prominent of the Riimaybe in Serma.

At the beginning of the 19th century Mboobo and his elder brother lived in the household of their master, a Beweejo, in Looro. With the famine of 1913-1914 they left Looro and their master, and went to Jelgooji. After the drought Mboobo came back and settled in Serma. There he joined a Diimaajo called Sidiki, his half-brother from the same mother. Because their mother changed master in between their births, they did not share the same master. The descendants of two children of Mboobo still live in Serma: Bilaali and Koda Mboobo. The descendants of Sidiki returned to Booni.

Bilaali Mboobo married a daughter of Sidiki. They had three sons and two daughters. One of their sons, Bura Bilaali (1), is the head of a large family in Debere, composed of his two wives, one married son, three unmarried children, his brother Aamadu, a son of his late sister, his wife, and Nafoore his only living sister who often leaves for Booni. His son married a daughter of Bura's brother. This brother died in 1979. A daughter of Bura married a Diimaajo n Debere.

The former master of Bura's mother, who was their master at the same time, lived in Dalla. He was a Beweejo. One of his sons married the sister of Bura. Since the death of their father,

Bura and his siblings are free (as Bura told us). The relationships with their former master's family have not ended, but have changed in content. The son of their former master visits Bura from time to time and they spent days on end chatting and discussing the problems of life. They are now related by *enndam*, and they have become *esiraabe*. Bura is one of the richer inhabitants of Debere and Serma, which gives him prestige in the village but also duties. Many people are in fact sustained by Bura and his wives.

Next to the concession of Bura lives Aljumaa (2) who is a child of Koda Mboobo, and therefore paternal parallel cousin of Bura. After the death of his father Aljumaa decided to separate from his father's master and to join his maternal uncle (Nu Sidiki) in Serma. Although his former master no longer had rights over Aljumaa, he continued to collect dues for his father for three years. This practice only ended when Aljumaa reported it to the *commandant* in Booni. Aljumaa's sister, Dikel, married Bura. Aljumaa is married to Dikko, who originates from Booni. They have seven children.

Waddijam Saalu is the wife of the deceased brother of Bura. She remarried in Serma to Demboy. They live next to the half-brother of Demboy, Kemde, and his wife (10). The grandfather of Demboy and Kemde was a Diimaajo of a Beweejo in Booni. This Beweejo decided to live with his animals in the country side, and he settled in Serma together with his slaves. Demboy married two wives, Waddijam Saalu and Altine Aamadu. Waddijam Saalu runs a flourishing shop in Debere, and she has become a central person for many 'poor' families, who can buy from her on credit. The mother of Kemde and Demboy originates from Serma, and is looked after by her daughter, Kumboore (8). Her master was a Jallo, Muussa Hamma. Muussa Hamma died, but his children still live in Serma. She (the mother) told us about her life as a slave. She could still remember how they went on transhumance, with all the animals, to the south on the Seeno. She had to carry all the luggage, but life was good, and there was sufficient food.

Next to the hut of the mother of Demboy is the house of an old Diimaajo woman Yaaya Birgi (9). Her former master is a Pullo from Fetesambo. Of her 14 children not one survived. Yaaya Birgi therefore relies on the children of this Pullo, who sometimes help her with the work on the field, but this is only sporadically. Yaaya Birgi rents her field from a Hawgiijo. Takkolde is another old Diimaajo woman in Serma. She lives with her grandchild Aisata (18). She has no children of her own.

Further there are two more Riimaybe families (15,16). The descendants of the two daughters of a Bellaajo occupy two concessions on the north of Debere (4). In the course of time, culturally they have become Riimaybe. One more Bellaabe family settled in Debere in 1990 (11). To the east of the hamlet, near the pond live the Weheebe of Serma (5,6,7). They descend from Maamudu Nduuldi and represent the chief of Booni. Lastly there is an impoverished Tuareg family, who live in a house of a Jallo family, who engage in trade (17).

A flexible society

As was shown in this chapter, *yimbe am* (my people) is defined in many ways in Serma. Many aspects of social relations, such as descent, kinship, age, gender and residence, play a role in

the delineation for an individual of who 'his people' are. We may regard this flexibility as an inherent feature of the pastoral way of life, as a means to cope with the various sources of insecurity. However, as we shall see in some of the following chapters there is only a thin line between flexibility and social disintegration in these circumstances.

The first remarkable observation is that a community of 500 people, which Serma is, despite the fact that it does not have an official status, functions with such a diffuse structure of leadership. The official village head is the chief of Booni, but he is almost 30 kilometres away. His counsellor, as also the counsellor of the Jallube of Monndoro, does not have a strong position. There is informal leadership in the form of the Imam, one of the Riimaybe, and some older Jallube men. However, no-one is in a position to impose his will on the others. Women play a role in the political process, but merely in the background.

The second important observation is that in the course of time the way all kinds of organizational principles are put into practice may change rapidly. From the (incomplete) overviews of the camps it has become clear that various ways of recruiting *yimbe am* are important for various people over time. The patri-lineage as organizing principle has lost much of its significance. Over time large families have fragmented and become dispersed. As a result there is no longer a group of powerful family heads or sub-lineage heads who might take the lead in political matters. This is clearly the result of the impoverishment of society, and may be taken as an indication of social disintegration. On the other hand, the suppression of warfare made the lineage as a recruiting principle for warfare obsolete. The territorial relevance of the lineage has become submerged in a geographical entity and identity, the rainy season camp, and the geographical entity labelled Serma or the *suudu baaba* in its widest meaning. The only reason for the continuing (official) existence of the lineage is an administrative one: the collections of taxes and school fees.

The third observation is that, within Serma, a further differentiation is emerging with respect to the distribution of wealth. The rich group together in specific settlements, and the majority of the poor are excluded from these camps, apart from some relatives from the same lineage or from the same *suudu yaaya*. Within this fragmenting and differentiating community the main recruiting principle for *yimbe am* remains kinship, but not in the sense that the lineage is the basis for this recruitment. Instead the most constant group in the life of a person is his siblings from the same father and mother, whom we label *fayannde*, with the *wuro*, or *galle* for the Riimaybe, as an overlapping unit. Within the framework of the *wuro* most productive activities are organized. Within the *fayannde* the focus is on sharing, predominantly of milk (see also chapters 9 and 11).

It is in the *fayannde*, and with the symbolic function of milk, that the problems of Fulbe society in Serma appear most clearly, and in the recruitment of *yimbe am* they are at their sharpest. *Kosam* (milk) has come to the fore as an important symbol of social relations among the Jallube. In essence *yimbe am* are the people with whom one shares milk. The relations that are formed through the mother's milk are the most stable in a Jallo's life, i.e. the *fayannde*. But also the *suudu yaaya* and *suudu baaba* are based on this principle. Social relations are created through the division and gift of cow's milk, and the bartering of cow's milk is essential during the dry season when the people are on transhumance, e.g. *njaatigi*-relation. *Enndam*, which is related to breast/milk, indicates other important relationships with people who are

relative outsiders, or no direct kin, like the Riimaybe. The redistribution of *kosam*, mother's milk and cow's milk, is controlled by women. They have the responsibility for the sharing of milk within the family, for the selling of milk, and the amount of milk reserved for a guest. This gives women a very central position in the constellation of social relationships in Jallube society. However, this responsibility is shared by the men, because they milk the cows and can decide how much milk they take from the animal. When a *fayannde* has no milk to offer to her own children, let alone to guests, it means that the sharing of life is at stake and the recruitment of *yimbe am* is becoming increasingly problematic.

The idea of *yimbe am* may suggest that an individual in Serma has a well defined and secure position in his or her community. However, the flexibility inherent in the way people may define *yimbe am* may also have the result that people can deny claims to support, and can withdraw from their social obligations. It may lead to a situation in which people have to live on their own and lack support in difficult situations. The existence of all kinds of organizational principles makes people aware of their culture, and makes it also appear 'natural' to live in (Bierschenk 1994:2). These organizational principles contribute to the formation of a person's identity as a member of the community. The fast changes in an inherently flexible corpus of organizational rules may induce a process in which the concepts of *suudu baaba*, *suudu yaaya*, and even personal kin, lose importance. This may lead to a reconsideration of one's position and identity within the community. However, organizational principles, or rules for the recruitment of *yimbe am*, may not be the only way to define the community, social relations and one's identity. In the next two chapters we will investigate Islam and Fulbe custom to see how these organizational and normative complexes have changed for the people of Serma in a situation of great difficulty.

Notes to chapter 4

1. We exclude Jawaambe and Nyeeybe from this discussion. Historically they form an intermediary category in the social organization, between the free and non-free, although they refer to themselves as belonging to the nobility of society (see chapter 2 for more information).
2. In Monndoro we were told about the origin of the Seedoobe by an important Ceedoowo (sg. of Seedoobe) *moodibo*. Their origin in Maasina, near Timbuktu. They migrated from there to a place between Gao and Timbuktu and then to Gao. After Gao they migrated to Wuddaalal (situated nowadays in Burkina Faso) where they lived together with some Dagaabe lineages. The Fulbe dominated the Dagaabe. In Wuddaalal the Seedoobe got their name, because they were transhumant between Wuddaalal and the Hayre (*seedude* = separate, transhumant in the dry season). One day a Ceedoowo married a Tamanke woman from the Hayre, and they had three sons: Hammadu, Aamadu, and Bukari. The nickname of Hammadu was *wuro na'i*, his descendants live in Manugu nowadays; the nickname of Aamadu was Aama Huna, he went to Jelgooji; the descendants of Bukari live in Serma. This is the origin of the Seedoobe in the Hayre (*assulu naatugol Hayre gaa*). Maamudu Nduuldi and Bura Aluure Hamma Bukari (...) Baayo Ceedoowo were friends. The Seedoobe in Serma trace their origin to Aluure.
3. Information from Aamadu Bura Totoodu, and old man from the lineage Hawgiibe and in the rainy season inhabitant of Serma.
4. The archival sources gave hardly any information on the origins of the conflict and the reasons why the Jallube left Allaaye Maamudu Nduuldi.
5. There was no prison at that time. This is a 'modern' element, to adapt the story to the present reality.
6. In the version of two men, a Jallo and a Diimaajo, it is related that the conflict arose because of the exploitative character of the regime of Allaaye, which is congruent with the version we found in the archives. This however

does not change the content of the stories about the power relations.

7. This is labelled 'complementary filiation' or 'non-unilineal descent' (see Keesing 1975:47,48).
8. *Junngo Nyiiwa* means 'arm of the elephant' with which is meant its trunk. For the Fulbe an elephant has many human characteristics.
9. *Kosam* and *enndam* are from the same noun class in Fulfulde, namely the *dam*-class. This class has the connotation of the 'good life', that what makes life sweet (Breedveld 1995).
10. After Hamidu Buraima, who was chief during the reigning period of Allaaye Maamudu, Usmaane Buraima became chief of the Seedoobe; after him Aamadu Hamidu (Bubaare's father) was chief; he was disposed by the people because *laamu makko ana wulii taw* (his reign was very hard) and Alu Usmaane, his younger brother, followed him; after him Hamma Usmaane has rights to the function, then the oldest of the following generation who is Bubaare Aamadu, and only after him will Abdramaane Hamma become chief of the Seedoobe.
11. Dupire (1970:150) found that the Jengelbe (who live in Djolof, Senegal, and are nomadic) also distinguish four groups comparable to the four groups that are distinguished by this *moodibo*. In fact this is how we explained the 'complementary filiation' and the 'non-unilineal descent' above.
12. On the basis of this terminology in which the direct parents and their sisters and brothers are given the same term and the classification of cousins, parallel- and cross- cousins, we can label the kinship system of the Jallube (Weheebe and Riimaybe alike) Iroquois (cf. Dupire 1970:181).
13. See chapter 9 for an elaboration of the relationship between authority and age or generation on the level of the 'family' in Jallube society.
14. Vereecke (1989) relates this meaning of the word to the influence of Islam, which would have reinforced this aspect of subordination of women in Fulbe culture.
15. Obolor (1994) claims that the fact that women are often perceived as being lower in status than men has to do with a mistaken interpretation of the property regimes with respect to cattle in pastoral societies in East and South Africa. This may be due to the male bias of much research. In her article she shows that property in cattle is as much in the hands of women as of men. For the Fulbe this is certainly the case, although the droughts have changed property relations in Fulbe society of the Hayre to the detriment of women. The division of cattle among the Jallube will be discussed in chapters 9 and 11.
16. Also called *suudu* in Fulfulde.
17. *Suudu* is used to indicate different units, but at all levels it literally means 'house'.
18. In most groups of Fulbe the hut belongs to the woman (Fulbe in Benin, see Bierschenk 1994:7; Jelgoobe in Burkina Faso, see Riesman 1977:32; Wodaabe in Niger, see Dupire 1960; 1962:74; Fulbe in Southern Mali, see Grayzel 1990:46, note 14).
19. In this text the term *wuro* indicating camp will not be used to avoid confusion. The terms rainy season camp and dry season camp are good equivalents for *wuro* in this sense.
20. The Wodaabe, who have a more nomadic lifestyle, have such a reference during the dry season (cf. Thebaud 1988:37, Dupire 1972).
21. For the reconstruction of the history of residential patterns of the camps and Debere we combined the various interpretations of several informants: four Jallube men, two Jallo women, a Diimaajo woman, all from Serma.
22. The numbers between brackets in the following texts refer to the numbers in figures 4.2a and 4.2b.
23. Fatumata Aamadu, herself Ceedoowo, claimed this camp for her lineage. She said that it was originally a Seedoobe camp: 'Without Wuro Kaaral the Seedoobe would not have any say'.
24. Her brother Umaru Yacuba Aluure also left some sons in Wuro Kaaral. No descendants of these brothers are left. We do not know the reasons for their absence.
25. They are also called Nyallibuli Dikko, and about this lineage it is said that they were warriors like the Weheebe in the past. Probably they are Weheebe who devoted themselves to cattle and took up a nomadic way of life.
26. The numbers 11 and 9 are not in the genealogy, because these people are too remotely related or not related at all to the other people of Wuro Kaaral.
27. The numbers between brackets refer to the numbers in figures 4.3a and 4.3b.
28. This term is derived from Bamana.
29. The numbers in brackets refer to figure 4.4.



5

The Muslim Community: *Alsilaame'en*

Religion and social organization

Islam is an important frame of reference for the Fulbe in the Hayre. The people of Serma define themselves as part of *alsilaame'en*, the Muslim community. This chapter describes the influence of Islam on the organization of a local community of Jallube and Riimaybe in Serma. It consequently focuses on the practical aspects of religion (van Beek & Blakely 1994:10), which does not mean that we deny the importance of the other, more theological, dimensions. But as van Beek and Blakely (1994:10) put it 'these are actually for a few', and not so important for people in the bush who try to manage their insecure environment. We will, therefore, concentrate on religion as it is 'lived' by the people in the bush, on 'practical religion' (Holy 1991:6).

Among the Fulbe in the Hayre, especially in the countryside, it is the dialogue between custom and religion that is formative for daily behaviour (cf. Launay 1992).[1] Social organization is not directed only by kinship, residence, age and gender, as described in the preceding chapter, but also by the organizational features of Islam, which will be discussed in this chapter. The separation of these two complexes in two chapters is merely analytic. In the reality of daily life both aspects of social life come together. In chapter 6 we will try to unravel the balance between custom and Islam in the social and moral codes of daily life, and in the role they play in the construction of identity.[2]

To understand the religious organization, and its interrelations with other aspects of the life of the community in the bush, some insight into the process of Islamization in Serma is needed. From this description it will appear that *moodibaabe* (Islamic scholars[3]) are central to the understanding of the organization of the Muslim communitys. The *moodibaabe* are the healers, informal judges, and informal leaders of society. They are the people who control knowledge of the holy books, and of plants and herbs. This knowledge is at the same time their main asset, or symbolic capital, for obtaining a central position in society. Another important asset is the fact that they represent the Muslim community and establish links with the wider Muslim world. Other specialists may share some of their domain, for example herbal healers, but they never acquire the same status as the *moodibaabe*. The 'ordinary' Fulbe recognize these Islamic and non-Islamic specialists as their religious leaders and moral guides. They are the guardians of religion and custom. The description of the work, position and tasks of the religious specialists concentrates on those elements of their knowledge and practice that have immediate relevance to the daily life of the people of Serma.

First a short synopsis of the history of Islamization in the bush will be presented. Then the symbolic capital of *moodibaabe*, knowledge and the way this knowledge is acquired, will be discussed. This framework is the background for understanding the position and the functioning of *moodibaabe* in Serma, which is described in the following four sections: their role in the community as specialists in magico-religious spheres, in law and politics and in ritual. The description of two rituals in the last part of this chapter also exemplifies the interconnectedness of custom and religion.

The history of the organization of Islam in the bush

Moodibaabe have played a central role in the spread of Islam in West Africa. '*La progression religieuse s'étend toujours par une nuée d'agents de toutes sortes qui guérissent, rassurent, arbitrent, offrent un chemin pour la vie, engendrent de nouvelles expériences au moment où les institutions familiales et villageoises perdent de leur dynamisme et de leur sens*' (Moreau 1982:28). Islam put down its deepest roots especially in periods of political turmoil or rapid ecological change. Besides the central role of *moodibaabe* as moral guides in times of disorder, rivalry between Islamic brotherhoods also stimulated the spread of Islam (see Hiskett 1984). Two important brotherhoods are the Qadriyya and the Tijaniyya. The strife between these two was central in the conflict between Maasina and the Futanke regime (see chapter 2). However, outside the political centres such as Hamdallaaye and Bandiagara, the role of the brotherhoods seems limited. In the history of the Hayre they play hardly any role, neither in the past nor in the present. For the people in the bush, the history of Islam is perceived as the personal history of some *moodibaabe*, or families of *moodibaabe*. The more encompassing brotherhoods seem to play a minor role. The Moodibaabe in Dalla were aware that they belonged to a specific brotherhood, but, as we understood from them, this did not mean anything in practice.[4] For the 'ordinary' villagers it had no value at all, some did not even understand the difference between the various orders.[5] It is clear that they played no role in the organization of society. This non-awareness, or at least ambivalence and confusion about the brotherhoods, may be explained by the way Islam spread in the bush. It was introduced from different corners and not in an 'organized' manner. In the course of this history of 'Islamization' a differentiation has grown up between Islam in the Islamic centres of the Hayre, such as Dalla (see chapter 2)[6], and Islam in the bush, though they are intimately linked. We will describe below the various ways by which Islam entered the bush.

The rate of Islamization of the Jallube and Riimaybe in the Hayre probably varied for different groups, depending on the time, the status of the group involved, and the place where they lived. Islamization often went from the town to the countryside (Levtzion 1987, cf. Niezen 1990:407). It seems justified to assume that the nearer people live to the political and Islamic centres the more influenced they were by the religion. A difference must have existed between Jallube living near Dalla in the 19th century, where the elite was quite radical in their attachment to the Islamic faith, and the Jallube who lived in the bush, far from the political and Islamic centres, e.g. on the Seeno, or near Booni where Maamudu Nduuldi ruled. The latter was, as people say, not very Islamic, depended on non-Islamic charms, and sojourned for a

couple of years with Mossi known as pagans. The mobility of the nomadic Jallube, on the other hand, may have diminished the influence of Islam (Lewis 1966:33-34).

The existence of the political centres in the Hayre, where the elite converted to Islam and *moodibaabe* formed a separate social category, as we discussed in chapter 2, justifies the conclusion that the Jallube and Riimaybe in the bush have been in contact with Islam for a few centuries at least. During the Diina (1818-1862) the herdsmen in the bush were tutored by *moodibaabe* who were educated in the Hayre. This system of preaching of Islam was initiated by Seeku Aamadu and was copied to the Hayre from the Maasina empire. According to the Imam of Dalla, children from the bush came to Dalla to study the Koran. Pressure by the Weheebe chiefs on the population, using the power relationship between Weheebe and Jallube, was an important force behind this development. The chief of Dalla urged the Jallube who lived around Dalla to send their children to the Koranic school, which they did; a Jallo cannot refuse the demands of a Beweejo. The father of the Imam in Dalla, who is the oldest living member of the family of Moodi Tawhiidi, assured us that the people of Booni were instructed in Islam by *moodibaabe* from Dalla, and that his paternal uncle was sent to Booni to preach Islam. Descendants of this man still live in Booni, owning fields and a compound there. Given the age of the father of the Imam, and the interpretation of several inhabitants of Booni, we may safely conclude that no *moodibaabe* were sent to Booni during the Diina. However, the importance of Dalla in the spread of Islam must not be overestimated, for at the same time families with a tradition of learning from Looro and Nokara must have had influence on the Jallube living in the bush in the eastern part of the Hayre, which was dominated by Booni (cf. Bâ & Daget 1984:64, Moreau 1982).

The Torodbe, the first settlers in the bush of Booni near Serma, were another important force behind the Islamization of this area at the end of the 19th century. The Torodbe who originate from Fuuta Toro where they had become Muslim, wandered through West Africa, with the explicit goal of preaching the Islamic faith (Willis 1978, 1989:58,60fn). Islamic scholars among them must have preached Islam in Jallube communities. The group of Torodbe who ended up in Serma contend that they were connected with Sokoto and the family of Usman Dan Fodio[7] before entering the Hayre, and they claim to be among the first Jallube to convert to Islam. It is not clear whether they had contact with the *moodibaabe* from the Islamic centres in the Hayre.

In the course of the 20th century another Islamic centre developed, led by the Jallube of the lineage Seedoobe in Manugu in the neighbourhood of Monndoro, independently of the Islamic centres in the Hayre. By this time these traditional centres were no longer the political centres. Their power had diminished under the regime of the French. Manugu became famous because of the *moodibo* Moodi Yuwgo, who started his career in the 1920s. His death in 1985 did not bring an end to the importance of Manugu as an Islamic centre. His tomb is still protected and venerated, and his fame is reflected on to his brothers and their sons who lead this community nowadays.

How this family came to the study of Islam characterizes the entrance of the Jallube into the Muslim community. Bukari Usmaane, who is a brother of Moodi Yuwgo and lives in Manugu, told us about the history of his family.

> In that time our ancestors lived in Wuro Ngeeru (near Booni), and after the rainy season we went to Petaka, where my grandfather (from my father's side) met a *moodibo* with whom he started to study. This *moodibo* was a Jallo. My grandfather did not leave the side of this *moodibo* until he had learned the Koran by heart. He even accompanied the *moodibo* to Bandiagara.[8] The father of my mother comes from Dalla, he is a member of the family of the Moodibaabe from Dalla. He left Dalla during the rainy season to camp in Serma. The fourth year he did this he brought his family with him and settled with his cattle in Serma, where he started to preach the Islamic faith. Usmaane's *bappaanyo*, the elder brother of his father, went to Mecca on pilgrimage. On his return he settled in Wuro Ngeeru. Later he died in Serma, where he is buried at the place where the *moodibaabe* of Serma hold rain rituals nowadays.

These events must be placed at the end of the 19th century. Later this group of Seedoobe migrated to Manugu near Monndoro after the quarrel with the chief of Booni, Allaaye Maamudu Nduuldi (see chapters 2 and 4). All the descendants of this men studied the Koran. Among them Moodi Yuwgo is ascribed special qualities and was considered to be a very wise and holy man.

The Fulbe living near Manugu are still very pious Muslims. All the men wear white clothes, and there are several mosques. All the children, girls and boys alike, study the Koran. When they grow up the boys study and travel with other *moodibaabe*. The power of the *moodibaabe* from Manugu consists of the blessings (*duwaawu*) which are said to have much force, as the following anecdote illustrates. When Moodi Yuwgo was still alive the chief of Booni did not dare to cheat the people of Manugu, as he feared their power. This is still the case. When we visited Booni together with a 'son' of Moodi Yuwgo, Alu Hamma Lennga (Moodi Yuwgo was his paternal uncle), no Beweejo dared to visit him as they feared his power. And if they could not avoid passing him they showed great respect. The *moodibaabe* from Manugu consider their relation with the Moodibaabe from Dalla as an *enndam* relation, '*enndam ana woodi, hono yigiraabe ebe teddini sanne hakkunde meeden*' (there is much *enndam* between us, just like friends it is good among us). Until recently some of the children of Manugu went to Dalla to study the Koran, but they no longer go there. The young prefer to go to the west, to Bankass and Koro.

We may interpret this development of an Islamic centre in Manugu as a move of the Seedoobe against the Weheebe in Booni, with whom they had a conflict. However, this would have been impossible without a tradition of learning in the family, which started with the grandfather of Bukari Usmaane about 110 years ago. Their competence in Islam continues to give them a more powerful position than other Jallube vis-à-vis the chief of Booni and his family. It is a token of the Seedoobe's independence and their equal position to the chief of Booni.

The admission of the Riimaybe to the Muslim community must be dated a few decades later than that of the Jallube in the bush. Slaves were not allowed to convert to Islam, for this would mean that they had to be liberated (see chapter 2). Nowadays the Riimaybe are serviced by the same *moodibaabe* as the Jallube, for study, as well as for advice or religious services. The Jallube are the example for the Riimaybe. Among the Riimaybe we did not encounter a single *moodibo*, although we were told about a village, named Gay, in which the Riimaybe were performing the tasks of *moodibaabe*. This village had not been visited by anyone we knew, and was not mentioned as a village where important *moodibaabe* live. So the profession of *moodibo* is more or less closed to the Riimaybe (cf. Riesman 1992:51-52).

So the penetration of Islam into the Hayre is not a unilinear process. Attempts at the Islamization of the population and the origins of Islamic learning came from different sides and were inspired by different groups of *moodibaabe*. This history can still be recognized in the organization of Islam in the bush, in which the learned men, *moodibaabe*, play a central role. Given their diverse backgrounds, the *moodibaabe* in the Hayre are not a homogeneous group, although they have their Islamic learning in common. Even the learned men in Manugu form a relatively small group, and probably this Islamic centre will decline in importance now Moodi Yuwgo is dead, as there is no charismatic successor. The people of the Hayre do not gather around one *moodibo*, nor do they follow one Islamic leader who is the example for everyone; *moodibaabe* who live scattered over the Hayre each having their own clientele, people who consult them. Neither do the old Islamic centres, such as Dalla, have this function. Dalla is not a centre of an Islamic movement with branches all over the Hayre. In this respect the organization of Islam in the Hayre differs from adjacent regions, where Islam expanded through one charismatic leader who attracted many followers. The Fulbe Jelgoobe on the other side of the border in Burkina Faso were part of such an Islamic movement in the 1930s (see Riesman 1977). In Dori too such a movement developed (Moreau 1964).

Nowadays it is impossible to find a member of Fulbe society in the Hayre who does not define him or herself as Muslim. A life without Islam is unthinkable for the Fulbe in the Hayre. The form Islam has taken among the Jallube and Riimaybe in the bush is not a mere copy of the Islam practised by the Weheebe. This difference is a political weapon in the hands of Seedoobe as well as Weheebe. For Weheebe it is a means to claim their superiority and to claim political power. Their primacy in Islam is confirmed in the oral traditions (see chapter 2). The Weheebe do not accept another group of strong Islamic scholars in 'their country', because this would diminish the power of their *moodibaabe*, who descend from Moodi Tawhiidi. The case of Manugu shows that such a group of Islamic scholars is indeed able to challenge their power.

The lack of cohesion in Fulbe society parallels the fragmentation of the organization of Islam. This must have been different in the past. In the 19th century Islam was for the Weheebe an ideology of power. Islam was also reserved for the political centre, and it reinforced the political hierarchy. Under the French colonial regime the power of the Weheebe chiefs diminished, which made room for an independent development of Islam in the bush, and this diminished the power of the political and Islamic centres of the Hayre. This also created possibilities for the Jallube to oppose 'their Weheebe', as probably was the case for Manugu. The independent development of Islam in the bush was at the same time a sign of the loss of power by the Weheebe in the Hayre, and their loss of control over the people in the bush. This reinforces the idea that Islam spreads fast in periods of political insecurity, or rapid ecological change, which was voiced by Moreau (1982:28). Both processes were present in the Hayre in the 20th century.

The symbolic capital of *moodibaabe*

Knowledge

In the bush not all *moodibaabe* have a long tradition of learning in the family, though people in such families are more likely to study. In principle, however, Koranic education is open to everyone, and there is no closed shop of *moodibaabe* or groups of families of Islamic learning. This brings us to the central element of the profession of *moodibo*, knowledge. Knowledge is not inheritable and everyone has to acquire it by him or herself. The realm of this knowledge is not limited to the Koran and law books only. It also contains knowledge obtained from Dogon or Sonrai, e.g. about herbs and plants.[9] It contains information about the supernatural world, the *jinns* in Arabic, *jinnaaji* (sg. *jinnaaru*) in Fulfulde. This complex of learning is withheld from the 'ordinary' people, and its secrecy (*siiri* in Fulfulde) makes the knowledge powerful, and helps to maintain the authority of *moodibaabe* in the community. It is the basis of the work as *moodibo* in the community: expressed in the spoken word, prayers, blessings (*duwaawu*), and the magico-religious tasks, the preparation of medicine and charms (*talkuru* in Fulfulde). In the latter, knowledge of books and herbal medicine are combined. In every instance Allah is asked for help or protection (*yaagude Alla*) (see Mommersteeg 1996). During interviews with the *moodibaabe* in Serma the magico-religious aspect of their work was emphasized most. This may have been the result of the difficult situation in which people lived at that time. Illnesses, plagues, lack of rain were part of daily life. The *moodibaabe* were asked to solve these problems, and for this they made all kinds of charms.

In Fulfulde the word for specialized knowledge is *anndal*.[10] *Anndal* is the secret knowledge of a *moodibo*, as well as the semi-secret knowledge of old people, and the knowledge of specialists outside the community (a modern doctor, a veterinary specialist). *Anndal* is one of the assets on which a person's wealth is based. This became clear while we were discussing 'wealth' with some inhabitants of Serma during a wealth ranking exercise (see chapter 3). They assured us that '*jawdi, yimbe e anndal woni semmbe*', with which they meant that cattle, people, and specific kinds of knowledge, such as knowledge of the Koran or of herbal healing, may provide people literally with a living, because they give them force or power. Moreover, they are able to generate an income with it by providing services to other people. Consequently *moodibaabe* were situated higher on the wealth hierarchy, than ordinary people who possessed the same number of animals, and whose family had about the same size. The Fulbe, therefore, regard *anndal* as convertible into material wealth, and, thus, knowledge may be regarded as a person's symbolic or intellectual capital (cf. Bourdieu 1977, 1990, see chapter 1).

Moodibaabe themselves as well as 'ordinary' people make a distinction between the different kinds of Islamic specialists, based on their knowledge, social network and social skills. *Moodibaabe* do not all have the same knowledge. Each will have concentrated on a certain domain, e.g. one is knowledgeable about law, another is competent in the healing of small children or a special illness. The skill of a *moodibo* is related to his advancement in learning. All *moodibaabe* in Serma, except the Imam, called themselves *taaliibo*, literally meaning student, by which they indicate that they are still learning and have not yet attained the grade of *moodibo*. Only the Imam of Serma has achieved the highest grade in learning, i.e. explaining

the Koran. Another important factor of differentiation is related to the family of which he is part. This may give the *moodibo* some prestige (*yimbe*).

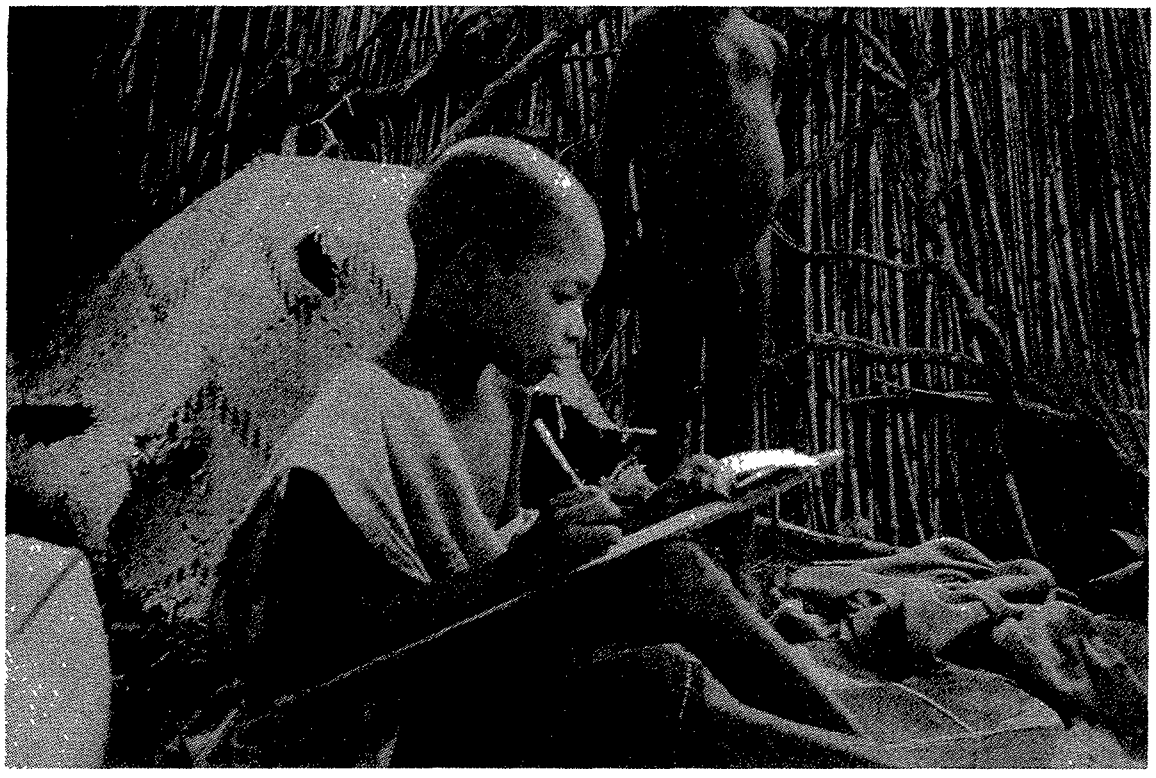
Success in the domain in which the *moodibo* is skilled depends on a number of characteristics. It is, for example, measured by the number of people he heals, or by his success as arbiter. The social skills of a *moodibo* are thus extremely important. He must have 'charisma', and, in our western perception, be a good communicator. The other essential element is *barke*. A *moodibo* without *barke* cannot be successful in his practice (Bakker 1993).

Barke (*baraka* in Arabic) is a force emanating from Allah. The Fulbe not only relate it to Islam, but also attribute it to persons in other domains. It cannot be manipulated, and is an innate quality of a person, which he or she may transmit to his or her descendants. A person who has a good hand in cattle raising, or has much experience, and is an erudite person, may bring this force into his family (Dognin 1975:299). At present the concept of *barke* is increasingly related to the Islamic interpretation of the concept, though it is not exclusively reserved for the *moodibaabe*. Ordinary people may also have *barke*, which is for example manifested in the number of cattle he or she has, or in correct social behaviour, so that even the poor may be endowed with it.

Moodibaabe are not the only specialists controlling knowledge about the 'other' world. Another category of learned men, narrowly linked to the *moodibaabe*, are the *bonngobi* whose domain of knowledge is herbs, plants and magic, which they learned from Dogon or Sonrai. They do not use the Koranic texts, and in general they have not studied the Koran. Old women, widows of *moodibaabe*, who have studied the Koran a little, are also considered specialists. The charisma of the late *moodibo* is reflected on his wife. Furthermore, some old women and men are often consulted because of their knowledge of medicinal plants and herbs which they learned from their parents. Among these specialists there are also many differences based on the same characteristics as those noted for the *moodibaabe*. The primacy of the *moodibaabe* in all these domains remains, however, undisputed.

Koranic education

To become a *moodibo*, gathering *anndal* is the first requisite. Obtaining this knowledge is in principle open to all social categories, through the practice of teaching by *moodibaabe*. Teaching is seen by some authors as the major task of the *moodibaabe* (Moreau 1982:245). Koranic students (*taaliibo, taalibaabe*) go through several educational stages, which can be divided into elementary and secondary education. Most children do not pass beyond the elementary education in which they learn how to recite the Koran (see Mommersteeg 1991). Elementary Koranic schools are everywhere in the Hayre, in the Islamic centres as well as in the countryside. In the countryside these schools are not immediately recognizable as 'school'. An ordinary Jallo *moodibo*, living in his camp among his family, may have a few pupils, whom he teaches to recite parts of the Koran. Other *moodibaabe*, mostly younger men, wander together with their students through the area, and settle for a few weeks here, and the next few weeks there. These pupils live off the gifts of the community. Children whose teacher is sedentary may also work for him in his household, on the land, or with the cattle. Children



from the bush also visit Islamic schools in Dalla, Douentza, or Nokara. In Dalla, for instance, the Imam said that his school had 100 pupils who spent at least a few months each year in Dalla to study the Koran. Some live in the concession of the *moodibaabe* who teach at the school, work on the land and help in the household of the *moodibo's* wife. Others go out begging in Dalla. Students who live off the 'gifts' of the community are called *gaaribaabe* (sg. *gaaribu*). Giving these children some food or a little money is 'good', it may bring *barke* (Islamic) to the giver. Children from the bush who leave for town to study the Koran do not always receive such higher education. They may live for some time with a member of their family who settled as *moodibo* in town or in some village. In Serma there lived 13 *moodibaabe* between the ages of 18 and 60 out of a total of 61 families in 1991. They did not teach. The only 'schools' we encountered in Serma were those of wandering *moodibaabe*.

Girls are almost always excluded from Koranic education in these schools. Only in Dalla was there a Koranic school led by a woman who taught young girls. However, girls who continue the study to become a *moodibo* are exceptional. In Serma only boys are sent to the Koranic school by Riimaybe as well as Jallube families. Most families send only one son to the Koranic school, because the other sons are needed to do the work on the land and the work with the herd. The children of Serma who want to receive further education have to leave the village. Some study with a Kummbeejo *moodibo* in the neighbourhood of Duwari. A few boys studied with their maternal uncles, who often lived far away or were wandering *moodibaabe*. One child studied in Petaka. A few studied in Dalla and Nokara. The most ambitious who continue the study of the Koran and other books have to travel even further to acquire all this knowledge with specialized learned men. It sometimes happens that they cross the whole of West Africa and so build up a large network of contacts with Islamic scholars elsewhere.[11]

Most women in Serma expressed the wish that their sons would attend a Koranic school. Having a son in Koranic school has various advantages for the family. The child is given to the *moodibo*, in order to be 'initiated' into the world of *moodibaabe* and Islam in general. This gift of a child as such, and the knowledge he will bring with him when he finishes his studies, brings the family nearer to God, because his blessings (*barke*) are reflected on the family. On the other hand it is also a strategy of the family anticipating the economic advantages the child may have, if he is able to become a respected *moodibo* (cf. Saul 1984:82). However, in most cases they did not continue for more than a few years, as they were needed to work on the land. Another reason why many boys returned so soon was that they experienced the hard work for the *moodibo*'s household as exploitation. Sometimes this hard work made it hard for them to study. They compared their status with a slave in the past, which is not acceptable for the Jallube. Another reason for returning home quickly is the material poverty of existence as a Koranic student, though poverty at home may also be the reason for sending a boy to the Koranic, school as one *moodibo* assured us (cf. Saul 1984:83).

The education in the Koranic schools aims at making the child into a pious Muslim, and giving the child his Muslim identity, i.e. socializing him into the Muslim community.[12] For the Jallube and Riimaybe children this education is not something separate from the education in 'normal' life, i.e. in the pastoral community. The participation in the household of their uncle *moodibo* (*kaw* or *bappaanyo*), and the fact that they only spend a few years at the Koranic school, prevents them from becoming 'totally socialized' as Muslim. The education these children receive during this time is not only Islamic, but also Fulbe, for they also have to work in cultivation, herding, or in the household. For the children who go to the Koranic schools in the Islamic centres this will be different. Their lives change completely and these children will become much more part of the Islamic community. The children who live for a few years with a wandering *moodibo* also enter a new life completely devoted to Islam which will leave an enormous impression on these children and 'socialize' them in a different way than those at home. Not all parents wish such a socialization for their children. A child of a Pullo must also be a herdsmen, and learn how to cultivate, and internalize the Fulbe norms and values. Only if the child can become a 'real' *moodibo* is it accepted that he will partially leave the pastoral community, but he may not forget about it. Boys who continue their studies part from their families for a long period and they often travel over long distances. When they return to Serma they have a special status, for they have become *moodibo* and have taken another identity than that of the ordinary Fulbe. This change in identity was very visible for some of these learned men. The diet of mainly millet porridge and only a little milk also changed their physical development. Visibly they had been absorbed into another world than that of the Jallube who remained behind in Serma.

Although the way the *moodibaabe* live and operate in the bush may give the impression that they are rather isolated, this is not the case. In their study period they build up a large network of acquaintances not only consisting of *moodibaabe*, but also including other students who will become *moodibaabe*. These networks comprise people from different ethnic groups. Being part of such a network makes a *moodibo* a member of a larger Muslim community, sharing the same experiences, norms and values (cf. Moreau 1982:182).

For the people (women and men) who do not attend the Koranic school access to knowledge

is very limited. They may go to the *moodibaabe* who live in their village to receive some instruction on the performance of the daily prayers or on a few Koranic verses. This is often the way girls are socialized into Islam and acquire some knowledge about the Koran. In Serma some old women leave their family during the dry season for a month or so to receive instruction from a *moodibo* in Booni. In Debere some men receive instruction from a relative who is *moodibo*, when the hard work on the land has been done. Young women go to their *moodibaabe* relatives or friends on an individual basis to learn something from the Koran. At least this is the way men and women learn how to pray before they marry or have their first child. Wives of *moodibaabe*, or women who have a certain respect because of their age or because of their lineage membership, sometimes reach the status of *moodibo*. They have learned some verses of the Koran, and in some cases even parts of the Koran. With this knowledge they are able to perform certain rituals, or to do individual blessings. However, these women do not play a role in the public aspects of Islam in Serma.

Moodibaabe in Serma

Portraits of learned men: *moodibo* Buya Bukari and '*taaliibo*' Bukari Alasunna

In this section we discuss the way in which the Muslim community in the bush functions, and how it is related to the outside world. Perhaps this is best analyzed by describing the life-histories of the main *moodibaabe*, and their roles in the community, and comparing their position with that of other people who occupy themselves with healing and problem solving. Of the 13 *moodibaabe* in Serma only two can be considered real village leaders, i.e. they lead in rituals, cure people when ill, and are called to help when there are conflicts over inheritance, marriages, and land. The other learned men are only consulted in minor cases. These two, Buya Bukari and Bukari Alasunna, lead the Muslim community in Serma. They are introduced below.

The Imam of the mosque of Serma is Buya Bukari. He is a Torodjo and a descendant of the first settlers of Serma. He describes himself as the only *moodibo* in Serma who has completed an important part of the study of Islamic books, and who is no longer a student. Buya has two assets that make him a good *moodibo*. He is considered 'wise', and he is the oldest member of the Torodbe lineage of Serma, which implies that he is related through kinship to almost all the people in Serma (and its vicinity).

Buya's first wife was a girl from his own lineage, but because she was barren he divorced her. Now he lives with his second wife, who is a Ceedoowo, in Debere behind the mosque. His daughter (about ten years old) and youngest son live with them in Serma. Buya himself teaches the Koran to his youngest son. (His eldest son studies in Petaka with a Jallo *moodibo* there). They live in a big concession with a mud-brick house and a hut on it, owned by Buya. This place is always very neat and clean. Buya was not very rich. He did not possess any cattle nor did he have enough labour force to work his land. So it must have been due to his income as Imam and *moodibo* that he could afford to smoke cigarettes and to drink tea.

At the beginning of our stay Buya took a very reserved attitude to us. Only after a few months, when he knew a lot more about us, because he used to ask more than we could answer, and had observed that we did not meddle in his affairs, he accepted us as *moodibaabe* from the west. Didn't we travel to gather knowledge just as *moodibaabe* do? Giving an interview was not his favourite activity, but eventually we bartered knowledge with him.[13]

His father taught Buya the basics of the Koran. He started his advanced study in Nokara at the age of 14. When he was 19 he went to Kerana, where he studied until he was 26. Then he went to Tenenkou, Gembe (near Mopti) and Bankass. When he was 30 years old he returned to Serma. In his studies he specialized in Islamic law. He also studied the healing of people with the help of Koranic texts and herbs. Most often he is consulted in matters of law, which he himself also likes most. A few years ago he stopped teaching the Koran himself, because he was tired of it. From then on he sent children who wanted to study with him to another *moodibo*. When there was a functional alphabetization course in the village he attended the lessons, and so he also learned to master the writing of Fulfulde in Roman script.

During the rainy season Buya worked his field in the mornings. After a few hours he returned to Debere where he would sit under the shelter and chat with the men, or sit in his house to study or to give advice to people. As Imam he led most public ceremonies, especially the Islamic festivities and rituals. When he led the prayer of *tabaski* wore a beautifully embroidered robe. After the prayer he gave a sermon in which he stressed the proper Islamic way of life. When there was a marriage, a name-giving ceremony or a funeral, Buya was often asked to conduct the 'official' Islamic part. Besides these Islamic duties Buya played an important part in political affairs, like the division of food aid, or the setting up of a cereal bank in the village. He also acted as the village scribe and often wrote letters in Fulfulde (Roman or Arabic script) for the people.

Bukari Alasunna is a remarkable person. We often met him in his old worn out clothes, a writing tablet in one hand and a chapelet in his other: a tall and very thin figure with an aura of stillness and wisdom. He spent his days reading and praying, advising and curing people. He was considered a very good and skilful *moodibo*. His skills in curing madness were especially marvelled at. Where Buya takes the lead in the legal and political domain, Bukari is more prominent in his role as healer and magician. Both participate in rituals.

Bukari lives with his wife and three children in Wuro Kaaral. During his childhood and adolescence his family was rich. Although his family had no tradition of learning, he was sent by his father to the Koranic school in Nokara, when he was only ten years old. The head of this Koranic school was Hamma Siidi, a friend of his father. His father studied the Koran a little in Karana, but never continued the study. Bukari was the first of the family to study the whole Koran systematically.

Bukari studied in Nokara for five years. He was a *taaliibo*, and worked on the fields of his *moodibo*, fetched firewood, pounded millet. The lessons were in the afternoon. After these lessons he gathered his food as *gaaribu*. After Nokara he went to a *moodibo* in Petegudu, who came from Mossi (Burkina Faso). This *moodibo* was Torodjo, but not of the same family as the first settlers in Serma. Bukari stayed with him for three years. Then he went to Tula, where he studied for another three years. After this period he went to Abidjan. He explains his

leaving for Abidjan as follows: 'While studying the Koran a family does not help a student to survive. They give no support. A student has to search for money, clothes and food himself'. He stayed in Abidjan from 1947 till 1963, and engaged in all kinds of jobs. He herded cattle, worked in the rice fields, worked as *moodibo*, and even worked as a cook in a hotel. He also continued his studies there with a Sonrai *moodibo* from Hommbori. From him he learned how to do benedictions, and how to make charms. He also learned more healing practices. Next to this he read books in which were explained the rules for the prayers, and law. All the books Bukari studied he bought at the market.

When he came back from Abidjan he found his country a prosperous period. Everyone was richer than he was. His father's herd had increased enormously. He settled with his father. In the rainy season he worked on the fields, and in the dry season he went to Booni where he continued his study of the books with the *moodibaabe*, Bura Moodi and Allaaye Moodi, two brothers. In Serma he worked as *moodibo*. He was often consulted and people paid him well. They came to him especially to heal animals, for help in finding a beautiful woman, and for curing insanity. He also had a Koranic school, but after he married he had to stop this school, because his wife was constantly quarrelling with his students. Bukari regards himself as a *taaliibo*, because he has not finished his study. Each dry season he goes to Booni to study with a *moodibo* there. He is less educated in orthodox Islam than Buya, but both are seen as very skilful *moodibaabe* by the people of Serma.

Taaliibe and *Bonngobi*

The other *moodibaabe* in Serma were also consulted by the people, but they played hardly any role in the performance of official Islamic ceremonies in Serma. Some of them were evidently poorly skilled, they had hardly studied and were still very young. At the beginning of the dry season one of them, Aamadu Hammadu from Koyo, gave lessons to men from his own *waalde*. From these less able *moodibaabe* many women learned how to pray. A Jallo *moodibo* from the Gandamia, who had married a woman from Serma, concentrated on the making of love-amulets. He was often visited by women in his house in Debere. When asked what they wanted of the *moodibo* they always started laughing. Later on the *moodibo* told us about his skill in the fabrication of love-amulets for which these women besought him. He seemed sympathetic to the women.

During and after harvest Serma is visited by some wandering *moodibaabe*. They travel with their students from village to village staying for a while in each village, depending on the gifts of the community. The two wandering *moodibaabe* we met in Serma were related to the people of Serma. One *moodibo*, a Jelgoojo,[14] was married a Jallo woman from Serma. The other was a Jallo from Petegudu, also related to the people of Serma. Early in the morning and in the evening the students of these *moodibaabe* made their rounds along the cattle camps, collecting milk and food.

A *bonngobi*, which may best be translated as a specialist in herbal medicine, may have the same status as a *moodibo* if case he has proven to be successful. A *bonngobi* is associated with

supernatural practices and is often linked to black magic. This may be the reason why they do not show their skills as openly as the *moodibaabe* do. Further they have no public functions as the *moodibaabe* have. This made it very difficult to find out how many *bonngobi* there were in Serma.

We became acquainted with two *bonngobi*, Aamadu Yaaje and Hammadu Allaaye. Aamadu Yaaje married a daughter of Fatumata Aamadu, an old lady from Wuro Kaaral, but he divorced her a long time ago. Aamadu is about 50 years old, he is slenderly built and very skinny. We were told that he once was the richest man in Serma, but he lost most of his cattle in 1985, and the animals that were left were spoiled by his son. He told me that after he was ruined he left Serma and its people behind, to wander over the Seeno. He worked or just sat in Dogon villages and there he became acquainted with the knowledge of Dogon specialists. He already knew a little about it before, which he had learned from some specialists living in Serma. His knowledge of plants, trees and herbs increased and he became himself a practising healer and magician.[15] He will never apply his knowledge in Serma, even if he is asked for it. Most of his time he spends in the neighbourhood of Bankass and Koro, where he can ask money for his services as *bonngobi*. This is impossible for him in Serma, where he is known as the formerly rich cattle owner and where he is part of a kinship network. Both factors make it hard for him to ask for payment for his services. Aamadu himself said about his craft: 'A Pullo does not like to practice medicine. If you see a Pullo selling medicine you know he has no cattle any more. If you have no animals you go out gathering knowledge. You pay or you work for your teacher.' Aamadu did not want to tell us the names of his teachers, he wanted to keep this a secret.

Hammadu Allaaye's story about how he became a *bonngobi* is an extraordinary one. As a young men he was loved by all the women, which aroused the wrath of other men of his age-group (*waalde*) in Serma. This resentment was so strong that they went to two Sonrai men, who were staying in the house of Tummbuga and Jamwari Beydaari. They asked them if they had the power to kill someone. The two men answered that provided they would pay the agreed price, they would kill whoever they wanted. Before paying, the Fulbe men wanted the Sonrai to show their magic power. An evening following this discussion Hammadu Allaaye felt very tired. He was not able to do anything, he slept. The men of his *waalde* came to him and they saw he could do nothing, and they concluded this was the work of the Sonrai. Having seen this, they asked the Sonrai to kill him. They wanted to see the money first, which the Jallube refused. They did not reach an agreement and that is why Hammadu Allaaye escaped death.

Of course Hammadu Allaaye was not aware of this event. Because he had a lot of work to do he went to the Sonrai to ask them if they could help him pound millet. They did, and they became well acquainted. During lunch the Sonrai told Hammadu what had happened. In compensation for their shameful deed the Sonrai wanted to give him a medicine which would protect him against anyone who wanted to kill him. Hammadu Allaaye refused, because he preferred to know his enemies and look them straight in the eyes. Instead he promised the Sonrai a white bull of two years old if they could teach him how to protect himself. Later he went to the village of these two men in the mountains of Kiri (Douentza) and there he learned the knowledge of a *bonngobi*. Next to the knowledge gathered with the Sonrai, he also learned with a *moodibo*. The latter was a maternal uncle (*kaw*).[16]

Respect for learned men

Individuals have their preferences for specific *moodibaabe*. This is linked to their past experience with a certain *moodibo*, and with their affiliation (kin, friendship, residence). Some *moodibaabe* are experts acknowledged by the whole community, Jallube and Riimaybe alike, and even over the border of their own village: for example Moodi Yuwgo, who was discussed above. This respect is related not only to their knowledge, but also to their age (seniority is authority), and to lineage membership, e.g. Buya is the oldest member of the Torodbe lineage, he is an 'old man', and he knows a lot. There are also men who call themselves *moodibo* or *bonngobi* but who are not esteemed as such by the community, because they are not so erudite and may not even be called '*taaliibo*' (as is the case with Aamadu Yaaje). They do not operate in Serma among their kin and acquaintances, but always outside Serma where they are not known.

In general a *bonngobi* does not receive as much respect from ordinary people as a *moodibo* does. *Moodibaabe* who have proven to be good are highly venerated. However, *moodibaabe* are not considered to be holy persons, although they may become one, as happened to Moodi Yuwgo. Some *moodibaabe*, descendants from the first *moodibaabe* in the Hayre, are also venerated after their death. Their tombs are in Bumban. The old father of the Imam of Dalla is not a saint, although the behaviour of people towards him might imply it. When they present themselves to him, they take off their shoes and bow their heads, and they hope to get some of his *barke* simply by sitting near to him. Also Jallube from Serma visit him from time to time.

How the people venerate a *moodibo* is illustrated by the following case. Aamadu Muusa, a *moodibo* from Bunndu Jaabi, a Ceedoowo, stayed in Serma, Wuro Boggo, for a few days. For one night he was lodged in our hut, because we were not there, but when we returned he went to another hut. In total he stayed for four nights. Of course we went to greet him. He was sitting on a mat, the horse's saddle[17] near to him, in the middle of a circle of bowls of milk. Each day women brought him milk, and millet for his horse. The inhabitants of Wuro Boggo were delighted with his visit. After his stay in Wuro Boggo he went to Debere where he stayed at Bura Bilaali's house, in the mud-brick house of our assistant, who had to sleep for a few nights in the house of the oldest son of Bura Bilaali. Mirjam went there to interview this important *moodibo*, and sat with him under the shelter in front of his house almost the whole afternoon. Meanwhile many people came to visit him. Mirjam and the *moodibo* had hardly any time to talk to each other. Fatumata Aamadu and her niece came along. Their heads covered with a cloth, eyes lowered to the ground, they sat down for a while with the wife of the *moodibo* (one of his four wives, the daughter of Hamma Aljumaa) inside the house. Then they left. Abdramaane Hamma dropped in with a load of millet for Aamadu. This was his gift of honour to the *moodibo*. So despite the scarcity the villagers did their best to receive this *moodibo* in a honourable way.

Another way to honour famous *moodibaabe* is to give them a girl in marriage. In Douentza we met the second wife of Alu Hamma Lennga, who was Imam of the mosque in the *nouveau quartier* in Douentza. She was a Jallo from Serma, named Dikko. She was very young and Alu could have been her father. Her family lived in Serma and she wanted to get a lift from us to

return to her family. That was how we came to know her story. Her parents divorced when she was very young. She lived with her mother after the divorce, her father travelled a lot, thus her mother was able to decide whom she should marry. She sent her to Manugu to stay with Moodi Yuwgo, then already a very old man. In fact she was given to him, but this 'marriage' was never consummated. When Moodi Yuwgo died, Alu Hamma Lennga, a son of a brother of Moodi Yuwgo, asked if he could 'inherit' Dikko. And so it happened. When Dikko was only 14 years old she was married by Alu. He did not pay anything to her nor to her family. Dikko told Mirjam how difficult it had been to be married to an old man when she was only 14 years old. She was frightened to sleep with him, especially when her first two children died after birth. One day she ran away from Alu and came to us for help.[18] The marriage was a nightmare, and Dikko was really unhappy. When Mirjam asked her mother why she had given her daughter to a *moodibo*, she answered that this was a very good thing to do. It would bring the whole family nearer to God and Diko would be better off as a wife of a *moodibo*, because of the status of her husband. From the viewpoint of the 'givers' the 'gift' of women to the *moodibaabe* may be compared with the 'gift' of boys to learn at the Koranic school. Both boys and girls are given to the Islamic community, which will benefit the family in one way or another. The difference is that the girls leave their village for good, and become almost the property of the *moodibo* they are given to, whereas a boy is free to go where he wants after he has finished his studies. A girl who divorces a *moodibo* will never find another man, because everyone will be scared of the *moodibo*'s curse. Both practices derive from respect for the *moodibaabe* and the desire to share in their *barke*.

Moodibaabe and insecurity

In his work a *moodibo* uses all the knowledge he has gathered from books, about plants and herbs, and about the invisible world, in order to protect people against illnesses, to cure them, or to protect the harvest against pests. One of the central issues is how to mediate with the invisible world, where most evil originates. The invisible world is inhabited by *jinnaaji* (*jinns* in Arabic). The ordinary people know about these creatures only that they can bring luck or misfortune, that they are everywhere, and most importantly, that the *jinnaaji* must be avoided as much as possible. Only *moodibaabe* are able to 'communicate' with these creatures. When we touched on this subject with *moodibaabe* they spoke of the *jinnaaji* only in relation to their work as healers and 'magicians'.

Bukari Alasunna explained what the 'other' world, the world of the *jinnaaji,* looks like when we were discussing the causes of illness of people in Serma. Bukari assured us that the 'modern' doctor could not cure all illnesses and especially not two illnesses that lead to madness, *henndu* and *haandi*. These illnesses are caused by *jinnaaji*, and appear frequently among Jallube and Riimaybe. The *jinnaaji* causing these maladies are everywhere: there are more *jinnaaji* than people, Bukari said. He distinguished different groups of *jinnaaji*, who can be divided into good and bad *jinnaaji*.[19]

Bastien (1988), who explained the Bamana images of the *jinn* world, points out that among the Bamana it is believed that the world of the *jinns* mirrors the world of human beings, i.e.

the society of the Bamana. Thus the *jinns* are divided into castes, ethnic groups, nations, etc. in the same way as human societies are (Bastien 1988:153). Likewise, in the representation of the world of the *jinnaaji* by Bukari, Fulbe society with its social hierarchy and its power relations can be recognized. Furthermore, although the world of the *jinnaaji* is invisible, some groups live among the people, in the same place, where they have villages, which they inhabit just like human beings. They are really part of the human universe. And in some cases people may meet them, which entails the risk of going mad (cf. Bastien 1988:154).

A very good *moodibo* can ask the *jinnaaji* for good things. In this sense the *moodibaabe* are real intermediaries between the invisible world (including Allah) and the ordinary people. But the work with *jinnaaji* is very difficult for the *moodibaabe* and only very advanced scholars can handle it. To make contact a *moodibo* has to retreat for seven days and recite verses of the Koran. This is very dangerous, because the wicked *jinnaaji* will come and try to do the *moodibo* harm, which can only be avoided when the *moodibo* controls the verses and sayings which help to keep these *jinnaaji* at a distance. A *moodibo* who is not able to do this and goes into retreat risks being killed. This retreat is called *kalawa* in Fulfulde (*khalwa* in Arabic). Bukari knew some *moodibaabe* who had suffered this fate and he fears to go into retreat himself. He approaches the *jinnaaji* only indirectly, via the names of the days of the week which correspond to the chiefs of the *jinnaaji*. This practice is also perilous, and therefore he tries to avoid this work as much as possible.

Buya Bukari was the only *moodibo* in Serma who had direct access to the *jinnaaji*. We were told this explicitly, but we came to know of it through his practices. One of the stories about his abilities in this domain concerned the stopping of a bushfire. Bushfires are a regular phenomenon during the dry season, and are directly linked to *jinnaaji*. When we witnessed such a fire it became clear why it was related to *jinnaaji*. At night the fire really looked like a devil, it looked so aggressive that one could easily imagine that the fire was possessed by *jinnaaji*. *Moodibaabe* can help to extinguish the fire. Buya Bukari did so on one occasion, as we were told. He stood before the fire and recited some Koranic verses. The fire shrivelled up.[20]

However, most *moodibaabe* practices are based on petitioning Allah (*yaagude Allah*) with the help of several types of charms (*talkuru*). These are used by the *moodibaabe* in several fields. For instance fighting millet pests, lack of rain, swarms of birds and locusts, outbreaks of worms and beetles. These plagues are sometimes ascribed to the work of *jinnaaji* or even to God, but in some cases they can be handled without making contact with the *jinnaaji*. During the rainy season the *moodibaabe* are often asked to do something against these plagues. In this way they help the cultivators and herdsmen to control the bush.

In Dalla as well as in Serma we saw the *moodibaabe* working on charms (*talkuru*) against these types of plagues. To protect a field against plagues of worms and beetles the *moodibaabe* write texts on a potsherd, or on a piece of a calabash. These fragments must be hidden in the ground in a corner of the field. A text written by Bukari to chase away the crickets reads as follows in Fulfulde: *'Ya'a lamndo ya halku ya babaati a tayyu caggal majji bonnu boccoode majji, baru pamari majji, baru mawdi majji'* (ask, .., go locusts, cut their back, destroy their eggs, bury their children, bury the adult ones). Against worms he has the following prescription: he writes a *talkuru* (charm), in which he writes the names of members of Mohammed's family. The farmer has to bring this *talkuru* to his field and attach it to the millet

stalks.

Against all types of sicknesses of the animals the *moodibaabe* have texts that they can write on an *aluwal* (a wooden blade on which *moodibaabe* write Koranic texts), this text must then be washed and this water must heal the animal. They may also write for the animals a *talkuru* which is placed by the *gargasaabe* in a leather case and attached to the horns of the animals. In every herd we saw at least one animal with a *talkuru* attached to its horns.

If the rains hold off for a long time and the harvests are in danger of being lost, the people may ask the *moodibaabe* to hold a rain ritual, in which they will ask Allah for rain. This they can do in several ways.[21] The ritual is performed by all the men in the village under the leadership of a couple of *moodibaabe*. Sometimes people provide a goat to be sacrificed at the ritual, and money is collected to present to the *moodibaabe*. Women are not allowed to participate in this rain ritual. The *moodibaabe* leading rituals of this kind were Bukari Alasunna and Buya Bukari. The *moodibaabe* and a large number of men from the village take the goats to an open place next to Wuro Kaaral, where a small graveyard is indicated by patterns of small stones. The people buried here were respected persons. The *moodibaabe* told us that they were the first *moodibaabe* who settled in Serma in the last century (see story about Manugu, above). An old man, Hamma Bama from Wuro Kaaral, however, confided to us that these were the graveyards of the *mawbe ndongo*, the people who lived in Serma before the Fulbe (see chapter 3). Whoever is buried there, the place is sacred for the people in Serma, and it is therefore endowed with a special force which makes it the proper place for the conduct of important rituals. The rain ritual consisted of several acts. First the *moodibaabe* walked over the graves touching them with a wooden stick and saying prayers, while the other men sat aside. After this the *moodibaabe* read some verses from the Koran and the other men listened. Finally, the two goats were slaughtered by the Jallube and skinned by the Riimaybe, roasted, and subsequently eaten half raw on the spot.

Another form of rain ritual is that performed by women. They all contribute a little money, which they give to an old woman who has studied the Koran. In the case we heard of, Fatumata Aamadu from Wuro Kaaral performed the ritual. This old woman asked Allah for rain by reciting some prayers. It may also happen that people simply collect some money and give it the *moodibaabe* whom they ask to pray for rain.

Moodibaabe may also individually ask for rain. How this is done was explained by Bukari Alasunna. One evening Bukari sat in front of his hut and, without anybody having asked him or paid him, he said to his wife: '*Mi noddan kammu*' (I will call the rain), whereupon he retreated and recited a formula. He knew that Allah listened. That night an enormous thunderstorm startled the people of Serma, and the rain that followed was the heaviest of the year. The strange thing was that the rain did not come from its normal direction, the east, but from the south.

Moodibaabe are also healers. They cure all types of illnesses, from inflammation of the eyes to guinea worm. Madness caused by *jinnaaji* is the special domain of *moodibaabe*. But they also heal illnesses caused by *haasidaare* (jealousy, wrath) or witches (*sukunyaabe*). Their curative techniques differ considerably depending on the type of illness. E.g for madness the help of *jinnaaji* may be called upon, while for an inflammation of the eyes herbs are used, together with Koranic texts washed in water, which the patient must drink or use to wash his

or her eyes. Water over which the Koranic texts are spoken may also have the effect of curing people. In chapter 13 we will further elaborate on this aspect of the practices of *moodibaabe*.

These domains of assistance are not exclusive to the *moodibaabe*. Dogon and Sonrai are also consulted, especially when the power of the *moodibaabe* seems to fail. For instance, when the rains held off in 1990, a group of Fulbe from Booni went to the Dogon who live in Duna (next to Booni), and asked them to perform their rain ritual which was considered to be much more effective than the rainmaking of the *moodibaabe* that year. For plagues they may also go to people other than *moodibaabe*, though we never encountered examples of this. Protection is also sought from the *moodibaabe*, e.g. for a newly born child, against illness or against other dangers. The variety of sources people use to find protection is exemplified by the charms which children get when they are young. An example: the grandchild of Ada Adama, a beautiful child, wore a necklace of various small things, including *hayre mawbe ndongo* (the stone of the old inhabitants of the region), which contains power to help the child reach a goodly age. They found this stone on the path from Debere to Wuro Boggo, the place where the *mawbe ndongo* must have lived. During the time of the *mawbe ndongo* these stones were soft and edible, they were their food. Everything these *mawbe ndongo* have given is good and has a certain magical power. Another charm is *makki,* which helps to protect a child against illness, such as *henndu* which is caused by a bad spirit, and it protects the child against too much gossip (*hururuy*), so that this cannot kill the child. *Makki* is a type of wood, from a tree (*Khaya senegalensis*) that does not grow in the Hayre, but further to the south. *Magaami* is an amulet made by the Wodaabe[22] bought on the market in Booni who are considered as real magicians. It helps the child to get his teeth without too much trouble. The necklace is also hung with amulets and charms of the *moodibaabe*.

Moodibaabe and other healers may not directly ask payment for the services they provide, but the patient or his or her family is expected to give what they can span, according to their wealth. Of course the *moodibo* expects to receive something. Nevertheless in many cases that we witnessed, they did not receive anything, because the people they helped were too poor, or because they were close relatives (see also chapter 12).

Islam and local political and legal organization

Political and legal functions of the *moodibaabe*

With their control over the magico-religious complex discussed above the *moodibaabe* have a very central role in the organization of the daily life of people in the Hayre. In the domain of their magico-religious functions the modern state has introduced modern means, such as modern health care (see chapter 13), veterinary care (see chapter 14), and 'modern education', but these are still less important than the services a *moodibo* can provide. Also in the political and legal spheres of social organization the *moodibaabe*'s knowledge is crucial, or at least it was until the middle of the 20th century. Especially the *moodibaabe* in Dalla and the other Islamic centres refer to this period as that of their loss of influence. In general the role of *moodibaabe* in legal and political spheres was eroded during the colonial period (Moreau 1982,

Harrison 1988, see chapter 2); and in some aspects of Islamic law, like the institution of *zakat*, they have never played a prominent role. Thus the *moodibaabe* in the bush, whose influence began to take shape at the end of the 19th century, have always felt the competition of the legal and political organization of the state, first with the French colonial state and nowadays with the Malian Republic. However, these powerful states have not succeeded in abolishing the role of the Islamic clergy in legal and political matters at local level. The state may even have strengthened this role, by being too powerful. The inhabitants of Serma seem to be scared to involve the governmental bureaucrats in their conflicts and problems.

In the past the Islamic leaders of the community (including the Imam, but also other *moodibaabe*) were important as Kadi (*alkaali*), in cases of conflict, inheritance, or marriage. Under the colonial regime the administration of law was concentrated in the courts of justice at the level of the *cerde*. In these courts of justice everyone was judged in accordance with the body of law he recognized, be it French secular law, Islamic Malikite law, or customary law. *Moodibaabe* were appointed to administer law for the Muslims who appeared in the court. When, after independence, secular law was introduced and the last vestiges of Muslim law, which had already been marginalized in the colonial period, were removed from the courts, the people involved in conflict could repudiate the *moodibaabe*'s judgement without sanction, and seek a new decision in the secular state court. In Dalla and Booni many *moodibaabe* still study Islamic law and still give advice to people in accordance with Malikite law, e.g. for the contracting of marriages. However, they no longer have power to impose their judgement on the parties. They experience this loss of power as a denial of their expertise. The *moodibaabe* in Serma expressed the same opinion on this subject.

An important difference between the *moodibaabe* in Dalla and Booni and those in the bush is the attitude of the people towards them. In Dalla the villagers live much closer to Douentza, the state court, where they have relatively easy access if they have problems. The *gendarmerie* also knows very well what is going on in Dalla. The *moodibaabe* in Dalla have, therefore, very little to say in conflicts over land, and problems over the payment of taxes. In the bush people (especially Jallube) live far from the administrative centre (perhaps not physically but certainly ideologically), and the administration hardly ever comes to the bush. Most affairs are never reported to the administration. The role of the *moodibaabe*, and other informal leaders is, consequently, much larger, and people in Serma will always ask the *moodibaabe* for advice. According to Buya Bukari, the Imam of Serma, the people of Serma will always first consult him in case of conflict, and only if they do not agree will they consult the chief of Booni, who also has the power to judge within their community. The last recourse is to the State court, but this step is hardly ever taken by the people of Serma. People trust their *moodibaabe* because they are 'learned men', and part of the community. This makes them part of the conflict as well as arbiter.

Other domains in which the *moodibaabe* still play a central role are marriage, inheritance matters and rituals. The way marriages are contracted illustrates the fact that the *moodibaabe* in the bush have a more central role in the community that the *moodibaabe* in the Islamic centres, near to the administrative centre. All marriages we encountered in the bush, Serma, were contracted according to Islamic rules and Fulbe custom without any involvement of the 'modern' administrator. In Dalla marriages are contracted at the government office in

Douentza, before the Islamic part of the ceremony is held. Only these marriages are registered as 'legal' according to Malian law. The 'bush marriages' do not fall under Malian law, so for instance rights in case of divorce cannot be claimed by the parties before an official court of justice. Conflicts in Serma are mostly settled without the intervention of the state.

Conflicts, or other legal problems, are solved not only in accordance with Islamic law in Serma. *Al'aada*, i.e. customary rules, are very influential, and they are at least as much valued as Islamic law. The *moodibaabe* combine both systems in their functioning as legal advisors, just as they do in their magico-religious tasks. This is not difficult, because they are learned men as well as members of the Fulbe community. In some cases the rules of *al'aada* are the opposite of the rules as prescribed in Malikite law, especially those concerning the rights of women in marriage, divorce and inheritance matters. These contradictions between Islam and custom are further discussed in the chapters 9 and 11.

Islam and social security, *zakat*

An important institution within the Islamic community is *zakat*, or *jakka* in Fulfulde. It may be defined as a social security mechanism, because it is explicitly meant to redistribute wealth in society, and to alleviate poverty. In the Koran *zakat* is mentioned as one of the five pillars of Islam. It is an expression of devotion to Islam/God, and must be paid yearly by every member of society. It forms the basis of the Islamic principle of charity. A related religious institution is the giving of alms, *sadaqa*.[23] The amount of goods or money paid as *zakat* is not fixed in the Koran, but a general norm was defined at a later stage of history. The Imam collects and redistributes the *zakat*. In most Islamic societies *zakat* has developed into a form of income tax (Schacht 1913, Waardenburg 1984: 100-102).

In the Hayre, *zakat* as a tax on income was probably introduced during the Diina. The historical data are scanty on the levying of this tax at the level of the state, during the Diina, the Futanke empire and the colonial state. It is not known if it served as a means of redistributing wealth at the level of the community. In addition to *zakat* several other religious gifts were introduced, such as the *muddu* (*zakat-al-fitr*), which consisted of one *mud* (a measure at that time) of millet per capita to be given after Ramadan (Diop 1971:32, also Bâ & Daget 1984). The big *zakat* consists of a gift of 10 percent of the harvest and 2.5 percent of all other wealth one owns. In modern Mali *zakat* levied by the government no longer exists, and its functioning is limited to the level of the community.

In Serma *zakat* is an important institution for the redistribution of wealth. Two forms of *zakat* are distinguished, the *zakat* of the harvest, and the *zakat* of the animals. Of every ten loads[24] of millet a person harvests, one load is reserved for the *zakat*. If the harvest does not reach these ten loads, no *zakat* has to be paid. The *zakat* on animals is paid after the month *haaram*. If one owns 30 cows, one gives as *zakat* a bull of two years old; over 60 cows, the *zakat* is a heifer of two years old; for every 40 goats and sheep the amount is a she-goat or ewe. Another form of *zakat* is the holding apart of one fistful of millet from each bowl of millet one eats before the harvest. This can be compared with the *muddu*. The payment of the *zakat* is explained in the yearly sermon from the Koran, given by the Imam of Serma on the

occasion of the feast of*id-al-adha* (or *layya* in Fulfulde, or *tabaski*). He explains then that paying *zakat* is an obligation for every Muslim. It is, however, not clear who is responsible for the collection of the *zakat* in Serma, though officially this should be the Imam. Consequently there is no one who sees to it that the *zakat* is collected and redistributed in a proper way (see further chapters 9 and 12).

Rituals

Id-al-adha: layya

The leadership of the *moodibaabe* in the Muslim community, and their central role in the blending of Fulbe custom (*al'aada*) and Muslim orthodoxy (*juulde* or *assilamaaku*), is also clear from the way the rituals are performed. To be able to contract a marriage, or to give a name to a new-born child, or to bury a person, the intervention of the *moodibo* is indispensable. Without his blessings, and other interventions, these rituals have no power, i.e. the child does not become a member of society, a marriage is not recognized by the community, and the dead person is not properly buried. In Islamic rituals the role of the *moodibo*, in most cases the Imam, consists of leading prayer and giving moral speeches. These rituals are always accompanied by dances and food sharing, which belong to Fulbe custom. During these rituals the people of Serma experience their community both as a Muslim community and as a Fulbe community.

On 23 June 1991 we celebrated *layya* (the feast of *id-al-adha* (Arabic) also called *tabaski* in Mali) in Serma together with the inhabitants of Wuro Boggo and more precisely with 'our family'. Long before this *layya* women began to fatten an animal for *layya* (a *layyaari*). This animal, in most cases a goat, gets all the water in which the millet is washed and the residue from the pounding of the millet. These animals are kept near the hut and do not leave with the herd. Weeks before *layya* women talked about these animals in a competitive way. Within our family it looked like a competition between the co-wives and between daughter- and mother-in-law. We were also involved in the preparations. Weeks before *layya* some inhabitants of Serma began asking us to bring spices and rice from town to prepare a proper *layya* meal. We brought a lot of rice. Many people could not afford it and bought on credit, partly because the date of *layya* happened to be in the middle of the period of scarcity, i.e. the beginning of the rainy season. We were also asked by Yaaya Aamadu, our hostess, to bring their *wuro* from the Tiile to their rainy season camp, Wuro Boggo, by car. The camp was too near to the Riimaybe village and they feared that all the Riimaybe would visit them during *layya* and eat all their meat. We transported their belongings the day before *layya* (Abdrumaane Hamma's father also) to Wuro Boggo, where we were the first and only family to arrive. Girls were continually asking for new clothes, because they could not go to the dance without a beautiful outfit. Abdramaane Hamma eventually bought his daughter Mariamma a *saaya* (dress), which was much too small. Hamma Aljumaa was happy that one of his daughters was just betrothed to the son of his sister so that they would pay for her outfit. Yaaya Aamadu hoped that her son Aamadu Maane and his two wives would be back with *layya* from their stay on the Seeno. For

her *layya* was a festivity to be 'celebrated' with the *wuro* complete.

On 23 June the communal prayer was attended by all the men, and circumcised boys, of Debere and the cattle camps. Everyone wore his finest clothes, which meant for many of the men that they washed their only set of clothes. The Imam gave a 20 minutes sermon, after which he led the prayers and blessed the people (*duwaawu*). He was the only officiant at the ceremony.[25] Women were observing the prayer from a distance and there received the blessings at the end of the prayer. The people who could afford it slaughtered an animal. The decision to slaughter an animal, however, was not based only on the material means a family had, for religious zeal and piety also played an important role. Two examples may clarify this statement. Ay Bukari, a poor woman from Nguma, bought a *layyaari* with the little money she earned from her work in Booni. For her this was really expensive, but as a good Muslim she felt obliged to do so. In Koyo Muusa, the husband of Dikko Maane did not buy a *layyaari*, nor did he slaughter a sheep or goat of his own herd, while his family is relatively wealthy. He found this too expensive in these difficult times.

Young men helped slaughter the animals. In Wuro Boggo Hamma Kunga (a *taaliibo*) and Adama Tummbuga (a Diimaajo) came to slaughter the goat of Abdramaane Hamma and our goat. Sambo Allaaye, who lives near Abdramaane Hamma in Wuro Boggo, slaughtered his goat himself. A *layyaari* is presented as a family animal, fattened by the woman of the house. The eldest son of the family, Aamadu Maane, who was on the Seeno-Manngo with the herd, ate the *layyaari* fattened by his first wife. His second wife overfed her goat by giving him too much millet, so that he died. By contrast with other occasions, the roasting and eating of the *layyaari* is a family celebration: Everyone participated in the preparation of the meal and its consumption. When we brewed Arabic tea, we were all sitting together. The sons also came along to eat their part, but only in the evening, because during the day they had to herd the goats and sheep. The *gargasaabe* family also enjoyed eating meat and tea with us. We were all very glad to have some meat after weeks of scarcity. *Layya* came at the right time. One part of the goat was kept apart for the next day's lunch; rice with meat sauce. Part of the roasted meat was kept apart to divide among their people (kin, affines and friends). The division of the meat and the preparation of the 'good' food were done on the second day of *layya*. We had so much meat that we could not eat it all, and we prepared some to preserve it for a longer period.

The division of the *layya* meat is a special story. Contrary to what we expected, Yaaya Aamadu took only a small part of the meat and she cut it into very small pieces (of some 2 cubic centimetres). The pieces were displayed on a large calabash cover (*mbedu*), and with this she went to the various people to whom she wanted to give a piece. She gave some to her family in Koyo, to the *moodibaabe*, the Imam and Bukari Alasunna, to Bura Bilaali, Waddijam Saalu and some old women, and to the inhabitants of Wuro Boggo who lived around Debere on their fields. That day we saw many women walking through Serma carrying a *mbedu* with meat. We wanted to reserve a larger part of our goat for the people we knew very well, the people we could reckon to be among our 'kin'. Helped by Yaaya Aamadu we also ended up with a wooden bowl with small pieces of meat, which we carried through Serma to visit all the people to whom we wanted to give a share of our *layya* meat. Some young married women were cooking a *layya* meal for the *waalde* of their husbands, sometimes with the help of their

Diimaajo friend.

The first and second evening of *layya* the youth of Serma, Fetesambo and Petegudu held their *layya* festivity (*fijorde*), with music and dance, south of Debere. We went there in the hope of seeing and hearing Jallube dance and music. But the cassette players of the herdsmen from the Inner Delta dominated the festivity. The best singers of Serma were on the Seeno-Manngo with their animals or were not yet back from the migration to the Bandiagara plateau. The next day the adolescents of Wuro Boggo assured us that they also did not like the festivity

The name giving ceremony, *lamru*

Seven days after a child is born he or she is given a name. This is the name giving ceremony, *lamru* in Fulfulde, an Islamic ritual. The way the ritual is held is also a mixture of Muslim orthodoxy and Fulbe custom.[26] The *lamru* is a ritual in which the affairs of women and men are strictly separated. Only in the Islamic part of the ritual is the gender border crossed to some extent. We had ample opportunities to observe this ritual, and it is not performed in the same manner all the time: the *lamru* for the first-born is the most important. There is dance and music for several days, a bull may be slaughtered, and many outsiders will attend the festivities. If the father is not there when it is time for the *lamru* of his first born, the big festivity will be held when he returns. On the day of the *lamru* itself only the Islamic ritual is held, the men of the *suudu baaba* of the father replacing him. For the children born after the first, the *lamru* is less substantial.

Buraima Bubaare's *lamru* was held in September. Buraima was not the first son of Bubaare, and the *lamru* was a simple one. Mirjam went to the hut of Jeneba (Bubaare's second wife, and the mother of the child) with a wooden bowl with millet. Han sat outside with most men of Wuro Boggo and a few men from Fetesambo and the Imam, Buya Bukari. Inside the hut Mirjam sat with some women from Wuro Boggo. Dikoore Bukari shaved the head of the child. When the first lock of hair was cut, it was put on a *mbedu* and together with a ring (from the mother) it was given to the men outside the hut. The men blew over the hair and said a blessing (*duwaawu*) in silence. After this a goat was slaughtered by Abdramaane Hamma, and the *gargasaajo* butchered it. Bubaare whispered the name of his son in the *moodibo*'s ear, whereupon the Imam, Buya, named him aloud. He also named the animal, a cow of a few years old, which he gave his son. Buya spoke a *duwaawu* and everyone washed his or her face with his words. For this occasion Han was also asked to say a *duwaawu* which he did in Dutch, we all washed our face with his words. Hamma Aljumaa also spoke a *duwaawu* and again we washed our faces with his words.[27]

After this part of the ritual, the men went into the bush, to a small pond south of Wuro Boggo, with the slaughtered goat. Alu Gargasaajo further butchered the goat. The animal was roasted and eaten on the spot. If there had been a Diimaajo, he would have done all the work and have had the right to take the neck and the intestines home. The *moodibo* got the fillet.[28] Some young men who came along and stayed on the sidelines were not allowed to join the party; they got the intestines and offal and then left. The back and one hind leg were reserved for the women, who divided it among each other (*maamiraabe, yaayiraabe and goggiraabe of*

the child, and women of the same camp). These parts were not roasted. The women cooked the meat in the sauce. In the meantime the hut of Jeneba was visited by many women. They came from all the camps and from Debere to greet the mother and the child and to bring a small present.[29] This continued the whole day. In the evening no dance or music party was held. The next day we received Mirjam's part of the *lamru*, after the redistribution of all the gifts.

Some women told us about the *lamru* of their first born held before 1985, when there were more cattle. It is clear that in the past the gifts of animals to new born babies were much larger, and for the *lamru* itself more animals were slaughtered, i.e. bulls and sheep. There was much meat to share, the *fijorde* (dance and music) continued for several days. This contrasts markedly even with the few *lamruuji* (sg. *lamru*) that we celebrated of first born children. We have never seen a bull slaughtered, nor a big *fijorde*, though we were told that one *lamru* of this importance was held while we were on holiday.

No difference is made between girl or boy in the celebration of the *lamru*. However, the large *lamru* festivities we participated in were all of boys, and the examples from the past that we were told of were also of boys. Perhaps it makes no difference, but we were not able to confirm this.

From these descriptions it is obvious that the role of the *moodibo* is essential in these rituals. Without the *moodibo* there is no ritual. The *duwaawu*, in the case of the *lamru*, and the prayer and sermon, in the case of *layya*, are essential to make the ritual valid. His presence also reflects the feeling of belonging to the Muslim community. These two rituals are, however, also occasions to celebrate Fulbe society as such. They reflect the social relations in society, like the division between Riimaybe and Jallube. It is remarkable that during the prayers of *layya* this division is totally absent. Only in the division of labour afterwards this aspect of society returns, more strongly so in Dalla than in Serma.

The division between the sexes is very prominent in both rituals. This may well be an Islamic interpretation of gender, but is more likely a Fulbe interpretation. Women are not excluded from the rituals. They participate in the *duwaawu* of *layya*. In fact they participate also in the prayer but from a distance. During the *lamru* they have their own domain. The division of meat from the *layyaari* was totally in the hands of women, which symbolizes their central role in the maintenance of social relations. Women are also responsible for the preparation of good food during *layya*.

Rituals are also occasions in which tensions between people may evolve into conflict. An example is the division of meat at the occasion of *layya*. On the namegiving day of the son of Bubaare, Hawa, the half-sister of Yaaya Aamadu, came to visit the *lamru*. A scene developed between the two, because Hawa was still very angry with her sister about the last *layya*, almost a year ago. She thought she had not received her share in the *layya* meat of Yaaya Aamadu. Yaaya assured us later that this was not true. Yaaya Aamadu was outside her hut, very agitated and, quite out of character, screaming at her sister. Hawa was lying on the ground under the only tree in Wuro Boggo, shouting like a mad person, quite out of her mind. It was a frightening scene. Yaaya Aamadu thought it would be very difficult to get on good terms with her half-sister again.

The meat from the *lamru* is divided according to prescribed rules, though they are not very strict. This, together with the exchange of animals, is clearly a part of the *lamru* derived from Fulbe custom. The *fijorde* is abhorred by most *moodibaabe*, who say that this is against all Muslim laws. However, not to have a *fijorde* is impossible for the Fulbe.

The rituals described above, and the other rituals we shall examine in the next chapters, also reflect something of the scarcity of the last decennia. During *lamruuji* we have never witnessed the slaughtering of a bull. The pieces of meat distributed at *tabaski* were very minimal and in fact only token gifts. The *fijorde* were very small, and people said that it was a problem to finance a big *fijorde*. The youth, however, liked it. Yet, the Islamic part of the ritual seems to be the most essential. The *fijorde* and other, not *per se* Islamic parts of the rituals, are the first to be abandoned.

Religion of the Fulbe

Ritual is part of performance. If one of the essential aspects of African religion is performance (van Beek & Blakely 1994), then it seems justified to conclude from the rituals described above that the religion of the Fulbe is an amalgam of custom (*al'aada*) and Islam (*juulde*). This dialectic between custom and Islam is also shown in the role of the *moodibaabe*. They are not the only religious specialists, but must compete in knowledge (*anndal*) with *bonngobi*, old men and women, and with Dogon and Sonrai specialists. *Anndal* is symbolic capital. However, *moodibaabe* are very central to the life of the Jallube and Riimaybe of Serma. Their share in healing, social work, rain making, ritual is much larger than the contribution of the other specialists. In their function of *moodibo* they combine *al'aada* (Fulbe custom) and *juulde* (Islamic rules and values), always searching for a balance between the two. Further they guide the moral order of society. In fact without *moodibaabe* there is no religion and no Muslim community. The part Islam has played in the religion of the Fulbe in the bush is not the result of an Islamic movement in the Hayre, and is clearly distinct from Islam in the more orthodox Islamic centres. The history and functioning of Islam and its leaders, the *moodibaabe*, indicate that the form Islam has taken in Serma is also a response to the insecurities of daily life. Islam became deeply engrained in the local community only in a period of political insecurity, when the Fulbe elite, the Weheebe, lost its political prominence under the colonial and the Malian state. The political and moral vacuum and absence of political leadership (see chapter 4) was filled by *moodibaabe* at the local level, where they play a crucial role in keeping the community together. They do this not only by providing leadership. In the services they render to the people the stress is more on solving the ordinary problems of the common people, than the implementation of the correct interpretation of Islamic doctrine. They offer a remedy for ecological and social insecurities inherent in the pastoral (and agricultural) way of life in the Sahel, in the form of charms and benedictions against all kinds of evil. They provide ways to establish and maintain the most essential social relations, such as kinship by the name giving ceremonies and marriages. The austere rituals they provide in these domains are easy to maintain even in difficult circumstances in contrast to Fulbe ceremonies, which require much more investments from the people.

Though the services of *moodibaabe* and the social relations of the Muslim community may not have immediate material effects, they help to give people an understanding of their world and to soften the effects on the mind of their state of insecurity. At the same time the Muslim community provides alternative social relations and frameworks for solidarity across pre-established social and ethnic boundaries, in the form of institutions like *zakat*, networks of *moodibaabe*, and other ways to encounter social insecurity. These latter aspects of Islam are worked out in chapters 12 and 13.

Notes to chapter 5

1. The different varieties of Islam that exist in the Hayre, a so called peripheral region in the development of Islam, show that to discuss Islam in dichotomies, putting West African Islam on the side of the little tradition, or black Islam (Monteil 1980), contrasted with 'orthodox' Islam and the great tradition, is meaningless (see also Stewart 1985). The variation on both ends of the scale is enormous, and this division repudiates the richness and uniqueness of Islam in West Africa, deeply rooted as it is in history (Moreau 1982:40, Holy 1991:1-9).
2. Some authors state that in nomadic societies Islam is always a mixture of custom and belief, because of the nature of nomadism. The Islamic frame of reference does not supply enough knowledge for the nomadic life style that is so interwoven with ecology, and therefore other belief systems exist alongside the Islamic belief system (Tapper 1984, Lewis 1966, Stenning 1966). However, in this sense nomadic people do not differ so much from cultivators. This mixture of religion and custom may better be seen as a typical aspect of the Sufi tradition as it was formed in West Africa, than as specific for to the lifestyle of nomadic people.
3. Islamic scholars are called *moodibaabe* (sg. *moodibo*) in Fulfulde. The French term which is often used in literature is *marabout*. We will not use this term. When we write Moodibaabe, with a capital m, then the social category (or Islamic clergy) descending from the first *moodibaabe* in the Hayre is meant. In this chapter we will refer mainly to learned men who are active in their craft.
4. According to Marty the two important Koranic schools in Dalla at the beginning of this century were led by Tijaniyya *moodibaabe* (1920:215). In censuses of Koranic schools in the Hayre conducted by the French in 1903 and 1915 all *moodibaabe* who led Koranic schools in Dalla, Naani, Looro, and Booni were reported as members of the Tijaniyya order. In 1915 Naani had two *moodibaabe* leading a school who were of the Qadriyya order. [Archives Nationales Bamako, Fonds Anciens, 4E-80: *Renseignement sur les marabouts et personnages réligieux, Cercle de Bandiagara 1907-1918*] Moodi Tawhiidi, who brought Islam to Dalla, was said to be of the Tijaniyya order. This may have been expressed in the opposition of the Fulbe of the Hayre to the Diina, whose ruler Seeku Aamadu was a member of the Qadriyya order. However this is not clear, and as we saw in chapter 2 this opposition was not so firm and united. Today, informants assured us, it makes no difference, some *moodibaabe* are Qadriyya and others Tijaniyya. They considered their opposition to the Wahhabiyya as more important. Launay (1992:179-195) also found much indifference among the Dyula in Ivory Coast towards the existence of brotherhoods.
5. Holy (1991:9), who did research in the Islamic community of the Berti in East Africa, also concluded that for the people in the villages, people who live in the bush, the brotherhoods had no importance in daily life.
6. Looro, Naani and Nokara are also considered as Islamic centres today.
7. He was the leader of the Fulbe *jihad* in Sokoto, Northern Nigeria, in 1804.
8. This Jallo *moodibo* did not settle in the centre of Islam at that time which was Dalla, but in a Hummberbe Dogon village nearby which is Petaka. This illustrates the difference between the educated Jallube and the Moodibaabe who Islamized the elite of the Hayre. Nowadays, by the way, Petaka is an important centre of Wahhabite Islam.
9. Moreau (1982:226) makes a distinction between the knowledge based on texts and that of plants etc. The latter cannot be regarded as Islamic, according to him. For the people of Serma, however, it belongs to the same religious complex.
10. *Anndal*, from the verb *anndude* that means 'to know'.
11. Mommersteeg (1996) studied the educational system at Koranic schools in Djenné. His description is comparable

to the situation at the 'institutionalized' schools in the Islamic centres of the Hayre. Saul (1984) describes village schools in Burkina Faso and highlights the economic aspects of the Koranic school system.

12. The Islamic education can be seen as a 'formation totale' (Santerre & Mercier-Tremblay 1982).
13. In the beginning, Buya probably felt our presence as a threat to his status as someone who knew a lot about the world, and he may have suspected that we came not only to watch and learn, but also to bring Christianity to the Fulbe.
14. The Jelgoobe belong to a Fulbe clan living in northern Burkina Faso. The Jelgoobe and the Jallube are linked to each other through their great-great-grandfathers who were cross-cousins.
15. An interview about the knowledge of trees and herbs revealed that his knowledge of herbal medicine was very limited.
16. In Dalla we met some Riimaybe *bonngobi*.
17. This is an indication of wealth. If one is able to own and, more difficult even, to feed a horse at present, one must be very wealthy.
18. This was a very delicate situation. Alu Hamma Lennga was an important informant for Mirjam, and she did not wish to offend him. At the same time we could not but disapprove of the way he treated his wife, or at least her position. We tried to help Dikko, though we knew this entailed running the risk of losing a valuable informant. Alu turned out to be very understanding. One day Mirjam discussed the problem with him. His version of the story was different. Of course he laid the blame on Dikko, but we were on speaking terms and did not have to choose for one party; we listened to Alu and supported Dikko. Eventually we brought her to Serma, so that she could stay with her mother for some time.
19. In these descriptions we have never heard about the angels. Probably they were also called *jinnaaji*. Bastien (1988:166) remarks in this sense that among the Bamana the terms for angels and *jinns* are often confused and their different tasks are not discerned by the people. Angels are conceptualized by many Bamana as *jinns*.
20. *Jinns* as fire is a very common idea in the Islamic world (MacDonald 1913).
21. Mommersteeg (1989) describes a rain ritual which was carried out by a *moodibo* in Djenne. This is a different form of rain ritual than that described in this chapter.
22. Wodaabe are a Fulbe clan who led an almost purely nomadic existence in Niger, Nigeria and Cameroon. The droughts ended this way of life for many Wodaabe groups (Bovin 1990). Wodaabe are also herbal healers and especially young people (small families, or women) travel long distances to gather herbs and to sell their 'medicine'. The number of people engaged in these practices is bound to increase because of the loss of their nomadic pastoral way of life.
23. Sura 9:60 'Alms shall be used only for the advancement of Allah's cause, for the ransom of captives and debtors, and for distribution among the poor, the destitute, the wayfarers, those that are employed in collecting alms, and those that are converted to the faith. That is a duty enjoined by Allah. He is wise and all-knowing' (The Koran 1974).
24. One load is a bundle of millet spikes bound together with millet stalks, containing 12-20 kilo of grain when threshed.
25. In 1990 we attended *layya* in Dalla. The differences with Serma were considerable. Men wore embroidered clothes. And besides the Imam, the chief also gave a sermon and prayed before the people.
26. According to Hamma Bama, an old man from Wuro Kaaral, the *lamru* was the only ritual that was still held as it used to be, while other rituals had eroded enormously due to poverty.
27. When the *duwaawu* is spoken people hold up their hands, in order to 'catch' the words. A *moodibo* who says the words enforces this by blowing over or spitting in his hands, so that the medium is created that 'carries' the words to the others. Then they bring their hands with the words in it to their faces, i.e. to internalize the words.
28. The division of meat, when bulls were slaughtered for the *lamru* in the past, ran as follows: the back was for the *waalde* of the mother; the sides of the animal were for the *suudu baaba* of the father; the lungs went to the *maamiraabe*; one hindleg for the *maccube* (male slaves) and one hindleg for the *horbe* (female slaves); the head was for the *dendiraabe*; and the fillet for the *moodibo*.
29. If the child has *goggiraabe* (paternal aunts) they will give a special present. They give a silver bracelet, soap and some cloth.



6

What it Takes to be a Pullo, *Al'aada and Juulde*

Loss of custom?

An important aspect of social relations are the social and moral codes, and the ways in which these contribute to the formation of people's identities. In chapter 2 the historical development of these codes was discussed in relation to the identity of social categories. The main markers for status were *ndimu*, *yaage*, and values derived from Islam. In this chapter these sets of behavioral codes will be worked out with respect to gender, age, kin categories and social care. They are also relevant for contact with the supernatural world, Allah and spirits, as described in chapter 5. In this normative framework the Fulbe make a distinction between Fulbe custom, *al'aada*, which comprises *ndimu* and *yaage*, and Islamic rules, referred to as *juulde*. The context in which these rules, norms and values take their form is of course no longer the same as the historical context in which they were developed. People interpret the historically rooted concepts in the context of today. In this chapter the dominant norms, rules and values are described in their actual context. Such a description gives insight into the motivation of people to act as they do, and also into the way their individual and social identities are constructed. The interpretation of these identities comes explicitly to the fore when people describe and value differences between the past and the present. The changing content of these normative frameworks is clearly exemplified by a conversation with old women we recorded during our fieldwork in Serma[1].

(...) Fatumata: 'You already know that we had slaves in our families. There was enough to eat, many animals, we lived in peace. If a person had *semmbe* (force, wealth) everybody respected this. If one had a large *suudu baaba* and many children one was free to live as one liked.
Today, even when one's *suudu baaba* is very big, no one respects another. In the past we knew how to respect, how to fear, and we knew what friendship was about. Today friendship does not exist, just like confidence. We had enough milk, enough butter. We were in our houses in peace. Today the women have gold and silver. But they have experienced hunger. Yes, that made them unfortunate'.
(...)
Dikko: 'Listen and understand. In the past, a betrothed woman did not speak with her future husband, she avoided him in public as much as possible, and did not speak with her future family-in-law [i.e. she respected the rules of *yaage*]. Today the betrothed persons must present themselves before the *commandant*, where they face each other and speak to each other, in order to get married.'[2]
Fatumata: 'In our time, if parents married a girl to a certain boy, the girl would not speak with the family of the future husband.'
Dikko: 'Today a woman has no respect for her first husband. They have presented themselves in public,

everybody knows they love each other.'
Fatumata. '*Yaage*, isn't it finished?'
Dikko: 'There is no *yaage* any more'
(...)

This complaint is often heard in the Hayre nowadays: 'there is no *yaage* any more'. The women of today no longer behave in the same way that their mothers did. Among the most important changes in behaviour is their attitude towards the others, i.e. their husbands and their family-in-law. Fatumata commented in the interview that the young women do as they like. Some even move to Abidjan. This kind of behaviour would have been impossible in the past, when life was rich. For these women the roots of this change are located alike in the impoverishment of the people, and in the influence of national politics and modernity (changing family laws and influence of life in the city). This reasoning may also be turned upside down: because the rules of *yaage* are no longer followed in a proper way, things go wrong. In the conversation customary values are enforced. The implication of the conversation is that these changes are negatively valued by these old women.

In the oral traditions *ndimu* is continuously reinforced. It contains rules for behaving like a noble, for being part of *ndimaaku* (the nobility). Today the discourse on nobility and *ndimu* is very much coloured by Islam and social status. As will be described in this chapter, the Riimaybe internalize certain elements of *ndimu* and try to climb up the social hierarchy in this way. Their attitude reinforces elements of *ndimu*, as defined in oral traditions, as being part of Fulbe identity. The Jallube cling more than ever to their *ndimaaku* status.

As was described in chapter 5, Islam is an essential element of Fulbe daily life and the organization of a community. This is also expressed in a strong adherence to Islamic values, *juulde*, which differ from *al'aada* in the sense that they are not exclusive to the Fulbe. Islam is important for many other groups too. In the interview with the old ladies cited above, Islam was also mentioned. When our assistant asked them (on his own initiative) if these young women did not follow Allah, the women replied that a person who does not follow Allah does not consider anyone (i.e. is immoral). Islamic attitudes, following Islamic rules of conduct, are part of *ndimu* and *yaage*. Between *al'aada* and *juulde* their is a dialectic relationship. Both give people a view of themselves, give them clues to their identity, and for the interpretation of the supernatural world. The last aspect is more prominent in the perception of Islam than in the perception of custom.

The changes in the content of normative frameworks, and their interpretation by the people as a 'loss of custom', are closely related to the impoverishment of the last decades. The rapid transformations in the lives of the people lead to confusion, expressed in the sense of the loss of some central elements of culture, and a strong adherence to the ideal of *ndimaaku* which can no longer be followed. These processes may lead to a reinterpretation of the people's identity and the roles that are related to it.

In this chapter we shall not examine all the changes in these normative complexes, and in the identity of the Fulbe in the Hayre, because these issues will return again frequently in the following chapters. The focus is on the content of *yaage*, *ndimu* and *juulde* for the Jallube and Riimaybe. In examining this, it will become clear how important these concepts are for social behaviour and for definitions of identity. The exclusivity of Fulbe identity in the Hayre

contradicts the supposition that there is a common frame for Fulbe identity all over West Africa, as sketched by many authors on the Fulbe. This discussion is first presented in relation to the situation in the Hayre. This is followed by a description of the normative complexes based on *al'aada* and *juulde*.

Pulaaku, the study of Fulbe identity

Fulbe identity is a favourite subject for their ethnographers. Something in Fulbe culture has attracted westerners for a long time, and this has resulted in many studies on the character of the Fulbe, which were indeed themselves instrumental in creating a Fulbe identity. As early as the 15th century the Sonrai kings had developed a special attitude towards the Fulbe in Central Mali. In the 19th/20th century French administrators did not differ in this respect (see chapter 2, cf. Tauxier 1937). In an article on 19th century writing on the Fulbe, Williams (1988) showed how the image of the Fulbe was created in the ideologies of Europeans of that time. The racist theories which dominated discussions in Europe at that time situated the Fulbe at the top of the racial hierarchy. From this scientific racism discussions about the origin of the Fulbe sprouted, and it created a basis for a special position of the Fulbe in ethnographic writing on West Africa (cf. Harrison 1988, Salamone 1985).

This attitude created a special interest in Fulbe 'civilization', and a search for the identity of the Fulbe as expressed in their social and moral codes. The first studies on this subject appeared in the 1930s, when Reed (1932) wrote about Fulbe identity which he named *pulaaku*, and the term appeared for the first time in an English-Fulfulde dictionary (Taylor 1932). Stenning (1959:55-57) and Dupire (1962), writing about nomadic Fulbe in Nigeria and Niger, also called the social and moral code so typical for the Fulbe *pulaaku*, or *laawol pulaaku*. For outside observers this feature set the Fulbe apart from other groups in West Africa. In her book based on comparisons between different groups in West Africa Dupire (1970) extends the term *pulaaku* to all Fulbe societies in West Africa. She translated *pulaaku* as *'manière de se comporter en Peul'* (Dupire 1970:189). *Pulaaku* has become the equivalent of Fulbe identity in West Africa. In more recent work on sedentary as well as nomadic Fulbe the term *pulaaku* is used in this sense. Vereecke interpreted it as follows: *pulaaku* are 'the morals and virtues of the Fulbe which distinguish them from other peoples, at least in their view', it is a 'symbol of Fulbe culture and heritage as well as a legal code' (Vereecke 1989:4).[3]

In these studies *pulaaku* is seen as a general concept that can be applied to all Fulbe societies in West Africa. As is stated in the introduction of a recently published collection of essays on Fulbe identity, 'Assuming the importance of this concept and its associated behavioral codes [*pulaaku*] - throughout the Fulbe world - one may expect to find many similarities in the general form and underlying meaning of various social and cultural aspects of the Fulbe' (Azarya et al. 1993:1). The basic idea is that *pulaaku* includes rules for behaviour, for the self-presentation of a Pullo, who is said to have a very restrained and introverted character and a highly developed sense of respect for members of the same society and for strangers, and who is very much attached to cattle. Fulfulde terms indicating these features and used in this ethnographic literature are *hakkiilo* (intelligence), *semteende* (restraint), *tedeengal* (respect),

munyal (modesty), to phrase the ones most frequently used. It may be true that some of these traits are found in all Fulbe societies, but the emphasis on this homogeneity of the Fulbe overlooks the importance of the differences, which may be the result of contact with other cultures, of the specific development in time and place of a group of Fulbe.

The literature on Fulbe identity does not deny these dynamics, but they are covered under the cloak of *pulaaku*. For instance there have been studies of the influence of state formation, impoverishment and sedentarization (Azarya 1988, 1993), of recent political transformations (Bierschenk 1992, Vereecke 1993), of the demographic position of the Fulbe (Ogowa 1993), and of Islam (Vereecke 1989, Azarya 1993, Dupire 1970), on the identity of mainly urban Fulbe. In these studies the transformation of *pulaaku* for a whole group is emphasized, and little attention is given to the role it plays for individuals in these cultures, e.g. for old and young, for people of different status groups, for men and women. This is strange since identity interpretation and the use of identity assets may vary greatly for different people. Only Vereecke, in an article on Fulbe in a Nigerian town, analyses how changes in *pulaaku,* and in its interpretation through the impact of Islam, influence the social position and interpretation of the identity of particular people, in this case women (Vereecke 1989, see also 1991). In this chapter we will focus on these individual differences.

Islam is seen by these authors as something external which affected the Fulbe customary rules but is not at the very basis of society. However, Islam has been the religion of the Fulbe in the Hayre (and in West Africa) for centuries, and therefore we find it difficult to separate Fulbe custom from Islamic rules and attitudes. Of course there are differences, but at the same time they form an integral part of Fulbe identity, especially so in those Fulbe societies which have a strong history of Islamization, in the ideology of society at least, as in the Hayre. As we shall see in the following chapters, the rules of *al'aada* as well as of *juulde* are changed and influenced by daily practices, and people sometimes stress one rather than the other. This dialectic relationship is essential for understanding the Fulbe identity which is constructed by both.

Not all ethnographic literature on the Fulbe subscribes to the universality of *pulaaku*. For example Dognin (1975:299) remarks in a footnote, '... *ce code n'est pas unique mais varie avec la localisation et l'organisation sociale des groupes*'. One of the differences which he stresses at the beginning of his article is the place where people live, a sedentary village or the bush, and the degree of mobility that is linked to this. Bierschenk (1992), in a discussion with Guichard (1990, 1992), argues that the concept of *pulaaku* as defined in ethnographic literature on the Fulbe cannot be transplanted so easily to other regions where Fulbe live, such as Borgou in Benin. Further he remarks that *pulaaku* is often taken for granted, but that research into its meaning in the local context has received too little attention (Bierschenk 1992:516).

The notion of *pulaaku* and its associated concepts led to considerable confusion in our fieldwork. During fieldwork carried out in the 1980s among Fulbe on the Bandiagara plateau in Mali, we wondered why the Fulbe never referred to these terms, but, as it was not the subject of our research, we did not give it a great deal of attention. In the Hayre, however, we made it a research issue: did *pulaaku* indeed have such a central place in Fulbe culture and did it represent the moral and social code of society?

It appeared that the term '*pulaaku*' was given a very different meaning. For the Fulbe in the

Hayre, *pulaaku* refers to Fulbe society as a whole, including all social categories. There is no reference whatsoever to rules of behaviour, or to the special character of the Fulbe. This finding is supported by some other authors. Breedveld (1995) found similar answers among her respondents in Maasina. Riesman (1977:127) gives as a supplementary definition of *pulaaku*, 'the group of Fulani men possessing these qualities (the qualities appropriate to the Fulani)'. The idea of community is included in this definition. There are many synonyms for the components of *pulaaku* in the Maasina and Hayre dialect of Fulfulde; some of these are derived from Arabic or from other African languages (Tioulenta 1991). When we explicitly asked people to explain these terms, they were translated as general characteristics of humans which were positively valued. For example, a Jallo from Debere translated the term *munyal* as characteristics of human behaviour which we would label 'modesty'. It is a highly valued individual characteristic, and very hard to achieve. It is also something one cannot discuss openly. Moreover, it is so difficult to achieve that there are hardly any people who possess it. Islamic piety, he assured us, is part of it. The only woman who was mentioned as having *munyal* was a Diimaajo, and she died long ago. Does this absence of *munyal* mean that the Fulbe in the Hayre are not good Fulbe? It does not; the only conclusion which can be drawn is that *munyal* is a personal characteristic which makes an individual admired.

All that has been written on *pulaaku*, moral codes and nobility takes into account only the 'ways' of the nobles. In the Hayre and Maasina it is not only the nobles who constitute Fulbe society. In this respect the modern ethnographers closely follow their colonial predecessors in considering the nobility only and disregarding the lower status categories. Something similar is the case with the Tuareg: most studies consider only the noble Tuareg, while there are few publications on their Bella, or Iklan (Gallais 1975, Bernus & Bernus 1975, Peursum 1994).

It is not our goal here to deny that the Fulbe have their own culture and specific character. It is, however, not so homogeneous as is suggested in Fulbe ethnographic literature, and the traits mentioned are probably not so unique to the Fulbe only. The elements of a specific history, e.g. influence of Islam, contact with pastoral and sedentary neighbours, incorporation in states, are all factors which influence the social and moral code of a specific group of Fulbe, as was shown in chapter 2. Especially in modern times the Fulbe have taken very different paths of development in which their identity has changed. Recently new groups of Fulbe have emerged, as there are merchants of 'modern' goods, salaried herdsmen, ecological refugees. The influence of the droughts and modernization on the division of Fulbe society must not be underestimated. It seems, therefore, more fruitful to examine all the differences between Fulbe groups all over West Africa, and between social groups within Fulbe society, as they have developed recently and as they had already existed for a long time, than to search for their common identity (Botte & Schmitz 1994).

Fulbe custom: *al'aada*

Nobility: *ndimaaku* and *ndimu*

In the literature *pulaaku* is presented as the rules for behaviour of the Fulbe, in most works identified with the nobles. For example, Riesman interprets *pulaaku* as the rules for morally correct behaviour for the noble people only. These nobles take the non-free, nowadays the Riimaybe, as their negative mirror (Riesman 1977:127-130, 1992). For him Fulbe are only the noble people, and Riimaybe are apart. In the Hayre this is not the case. Aamadu Ba Digi explained in his story that at the time of the Weheebe invasion of the Hayre *pulaaku* consisted of three *lenyi*: *lenyol Arbe*, *lenyol Barinkoobe*, *lenyol Jallube*. But with the development of society *maccube* and nowadays Riimaybe have also become part of *pulaaku*, just like Jawaambe and Nyeeybe. However, this does not mean that they are equal; now as in the past social hierarchy is expressed through the rules of *ndimaaku*, *ndimu*.

Ndimaaku and *ndimu* are concepts related to the development of the social hierarchy in the Hayre. As we have seen in chapter 2, the main distinction in this social hierarchy was made between the free and the non-free people. The Diina emphasized this distinction and gave it a specific direction and cultural meaning. This structure is still valued nowadays, despite the political and social changes. *Ndimaaku*, the nobility or free people, includes the Weheebe, Moodibaabe and Jallube. Jaawambe and Nyeeybe are linked to the nobility and have acquired this status from them. At the lowest level of the social hierarchy were the *maccube*, or non-free people, nowadays called the Riimaybe. The free and non-free together form *pulaaku* (Fulbe society). *Ndimaaku* is associated with the respective occupations of the three elite groups, *laamu* (power, Weheebe), *alsilaame'en* (Islamic community, *moodibaabe*), *jawdi* (cattle, Jallube). The complex of rules and ideas linked to this is called *ndimu*. Nobility is reflected in the division of labour, religious piety, endogamy, wealth, and associated rules for behaviour.

The written documents on the history of Dalla, the first chiefdom of the Hayre, the *tarikh*, is also presented as a status object for noble people. Their long history, written down by the Moodibaabe and recited by the Nyeeybe, proves their nobility and their position vis-à-vis other ethnic groups in the Hayre.[4] For example, Sonrai also have a *tarikh* of their own, and are therefore also considered as noble. Dogon and Hummbeebe have no *tarikh*, which illustrates their non-noble status in the eyes of the Fulbe. In the *tarikh* of the Hayre, as we have seen in chapter 2, the Riimaybe do not play an important role, neither do the Jallube. However, the Jallube recognize the *tarikh* of the Hayre as theirs. They situate themselves in it, as they were also important warlords and skilful soldiers (cavalry). Riimaybe are differently related to the *tarikhs*, for they were the objects of this military and political prowess. Nevertheless, in the course of history they have become inextricably entwined in these *tarikhs*, be it only that they try to reformulate them to contest their validity. A Diimaajo in the Gandamia argued that it was mere nonsense put together by the Weheebe to reinforce the elite's power. Nevertheless, the majority of Riimaybe refer to the *tarikh* to explain Fulbe history, and their own roots.

The development of *ndimu*, the complex of rules related to the division between free and non-free people in society, cannot be separated from the integration of Islam in the Hayre. Together with the development of the social hierarchy in society, Islam has given more

importance to all social categories, the Riimaybe included, especially after their emancipation from slavery. It has become an integral part of *ndimu*. Being a good Muslim is associated with being noble. The Islamic history of a certain social category is used nowadays to claim a special status for that social category, e.g. the Weheebe maintain they were the first who converted to Islam and that therefore they are still higher in status than Riimaybe and Jallube.

This idea of nobility is thus claimed not only by the noble Fulbe. The Sonrai and the Tuareg in the Gurma are also recognized as nobles. Social categorization in both societies follows similar lines as in Fulbe society (see Bonte 1981, Olivier de Sardan 1984, Bernus 1990). Tuareg chiefs are also endowed with a *tubal* as a symbol of power (Bernus 1990). These three ethnic groups have always lived next to each other, and the interaction between their cultures and people may have led to these similarities.

Ndimaaku is preserved by the rules of endogamy. Nobles marry nobles only. In general this rule is still followed. Weheebe broke this rule only for political reasons (see chapters 2 and 4). According to the genealogies of the Weheebe of Dalla they follow the rules of endogamy more strictly nowadays, which may be a result of their loss of power. The difference in status which has grown up between the various groups of nobles, leading to the political and economic marginalization of the Jallube, has led to a redefinition of endogamy among the Jallube. They have a very strong ideology of endogamy, stressing their 'purer' condition, which is probably aimed at raising their noble status. Endogamy has become for the Jallube, more than for the other subgroups of society, a feature of their identity. Riimaybe are also highly endogamous, but this is much more a consequence of their position and the lack of alternatives than a conscious strategy. The importance of endogamy for the expression of group identity may also explain another social phenomenon which highly impressed us at first: the extensive and profound knowledge of genealogies. The Jallube, Seedoobe, had no difficulty at all in recalling their genealogy of seven generations deep (genealogy of Aluure). For the Weheebe the recitation of the genealogies by their *griots* during ceremonies and festivities is a necessary exercise. It shows not only the importance of the chief because he has many people, but also the continuity of his dynasty and family. Riimaybe have no deep genealogies as yet, for they remember only three generations. Their 'lineages' are (not yet) very deep, which is again another marker of their lower status.

The opposition between social groups as implied in *ndimaaku* and *ndimu* is also expressed through the material wealth of both groups. In the past the nobles divided the booty. Slaves were not allowed to possess anything, not even their own children. Cattle are the most important symbol of wealth, which was reserved only for the Jallube and Weheebe. The impoverishment of society, and especially of the pastoral groups, leads to downplaying this element of *ndimaaku*; this is probably a conscious strategy of the Jallube and Weheebe in order not to lose their social status, because in many cases Riimaybe are materially richer than the nobles. This element of *ndimaaku* can be clearly recognized in ideas about labour and poverty.

Ndimu prescribes the division of labour, i.e. the attitudes towards, and the actual execution of, all kinds of work, in daily life today as it did in the past. As was discussed in chapter 3, there is a clear division of labour between Riimaybe and Jallube. This division is related to ideas about cattle, milk and millet. The preference of the Jallube and Weheebe for cattle rather than millet can be related to *ndimu*. For Riimaybe millet has gained the status of identity

marker. When a Diimaajo woman was asked what milk signified for her, she answered: '*Mi wanaa bii kosam, gawri tan nafata*' (I am not a child of milk, only millet is useful). On the same question for millet she responded: '*Gawri safaare yonki, so a nyaamaay, a maayi*' (millet is the medicine of the soul, if one does not eat millet one dies). When the same questions were posed to a Jallo woman, she answered: '*So pullo hebaay kosam o maayata law, so o hebaay kosam yiata fey*' (If a Pullo has no milk, he or she will die soon, and if he or she has no milk, his eyes will not see[5]. With regard to millet she replied that they had to buy it and that was all. Other features the Jallube relate to milk are that it gives a woman her beauty, that it is the only thing that gives a person, or a family, respect, or with which respect towards another person or family can be shown. Without milk a Jallo falls ill.

The preference for labour related to this attitude is exemplified by the work allowed for women. A Jallo values work with cattle much higher than work on the land. Consequently a Jallo woman will never work on the land. It is even forbidden terrain for her, because of *ndimu*. It would be a shame for her, for her husband and both their families, if she worked there, and they would suffer feelings of *yaage*. Selling milk is a legitimate reason for her to enter the public sphere. And as we saw in chapter 4, milk gives women a central place in the social constellation in society. Milk is the working, social, and ideological domain of Jallube women. Weheebe women, who are associated with *laamu*, are allowed neither to work with milk, nor to work on the land. Their realm is the household, preferably inside the walls of the compound. According to Islamic law they are not allowed to enter the public sphere without good reason. Riimaybe women can do all the work they want. However, they will not occupy themselves with work on milk, with the exception of goats' milk in some cases.

These rules for women's behaviour in society are very much valued by women as they derive their status from them. They are an indication of their noble status comparable to the status of men in society. The suggestion by some authors that the strict following of the social and moral code in society (*pulaaku*), plus Islamic rules for behaviour, results in a reinforcement of the subordinate position of women vis-à-vis men in society (Walker 1980, Vereecke 1989),[6] cannot be maintained when analyzing women's own ideas. A Jallo woman would lower herself to the status of a Diimaajo by working in the field, or by neglecting seclusion where milk is no longer important, as in the situation of the Weheebe women. There are, however, other changes in society that do lead to a decline in the social status of women vis-à-vis men. These will be discussed in chapter 11.

Another example of prescription of behaviour by *ndimu* concerns the gathering of food in the bush. Gathering is considered shameful for Jallo men and women alike. Bubaare Aamadu explained their attitude towards food-gathering as follows. If he went out to gather bush products (like wild rice, wild fonio) he would be ashamed (*yaagaade*). People would talk about him and regard him as a poor Jallo, which is a contradiction with *ndimu*. If a rich Jallo enters the bush to gather, the others will say that he wants the poor to die because he takes away their food for the hungry season. Besides if he met anyone who was a stranger to him in the bush while working, and not herding animals, he would be ashamed (*mi yaagoo*), because this would show his poverty. If Jallube must gather out of deer poverty, they will leave it as much as possible to the youths.

The necessity of cultivation nowadays poses the problem for Jallube men that they have to



do work which is considered very shameful and beneath their noble status. However, working in the fields (*ngese*) is not as strongly tabooed as gathering in the bush. The fields are considered as something in between *ladde* and *wuro* and therefore they can work in them, because they are not located in the public sphere. In a way by this definition of the fields they hide their activity of cultivation from the public. In fact the Jallube have been working their fields for a long time, and by many families fields are turned into *wuro* by building huts on them where they can eat, and by living on their own fields at least for a couple of months in the dry season. Weheebe will hire people or leave the work to their Riimaybe who work their land; they take their share when it is time for harvesting.

Differences in nobility are also related to food. Cow's milk is considered a 'delicacy'. It contains strength, promotes health, and has medicinal qualities. Milk is linked to beauty, and beauty is again a feature of the nobility. The Jallube and Weheebe have an ideal of beauty for men as well as women. A light skin, a long nose, a tall stature, a slim body, a thin face, and white teeth are part of this ideal type of physical appearance. Women with these features are often the subject of the songs young men sing during festivities. However this image is an ideal which is no longer congruent with reality. Especially Weheebe and Riimaybe have grown more alike in physical appearance. The Weheebe have intermarried for a long time with Riimaybe, Sonrai, and Jallube. Some Riimaybe women exhibit the physical qualities that are ascribed to Jallube women only. Riimaybe have taken over the ideal of the elite, and their admiration of long noses and light skins (cf Riesman 1992:16).

In rituals the framework of the social hierarchy can be recognized. *Ndimaaku* and its related rule complex, *ndimu*, and *yaage* are clearly demonstrated. We will elaborate on this further in the next chapters, and here give only some illustrations. All social categories eat separately

from each other during a festivity. The Riimaybe get their separate plate, as well as the Jallube and the Weheebe (the anthropologists and their assistants also got their own plate). The same counts for division of kolà-nuts and cigarettes, if there are any to divide. Among the Jallube this division goes even further. Their share is subdivided among the (sub) lineages, cattle camps, *waalde*, and men and women. Riimaybe perform the necessary labour during the ceremonies. The Riimaybe women prepare the food, they pound the millet, collect wood, and do the cooking. The Riimaybe men do not slaughter the animals which are eaten: this is done by a noble and proper Muslim. However, the skinning and butchering of the animals is the work of the Diimaajo. Only in explicit Islamic rituals, like *layya*, do the groups unite in prayers. In these rituals the division is much more gendered and less hierarchical.

These are the rules with respect to *ndimu* as they are stated. However, history takes its own course and nothing is unchangeable. The most important transformation in the definition of *ndimu* has taken place among the Riimaybe. They have become free people which makes them in principle part of *ndimaaku*. They tend to redefine the attributes ascribed to them as Riimaybe in an *ndimu*-like way, exemplified by their definition of millet, which is gaining the same status for them as milk has for the Jallube. Furthermore the Riimaybe have become more and more integrated into the Muslim community. For the Riimaybe Islamic piety has become a vehicle for their rise to a free status. A redefinition of status attributes related to *ndimu* and Islam opens possibilities for the Riimaybe to bridge the status gap between them and the nobility. However, these are recent developments that have become stronger with the impoverishment of society, including the disappearance of cattle which are also an important element of *ndimu*. Cattle (wealth) and power are the attributes that are at the roots of *ndimaaku*, and with their disappearance over the last decades Riimaybe, Jallube and Weheebe become more equal.

Another means the Riimaybe have to become part of *ndimaaku* is to make their own identity through a reconstruction of their origins. An example is the introduction of patrilineal descent. Some Riimaybe families have also retraced their original *suudu baaba* back to the regions where they were captured in the past. In their interpretation of the history of the Hayre the Riimaybe of Serma and the Gandamia claim their rights as the first inhabitants of the Hayre. This gives them a right not only to the territory, and thus to agricultural land, but also to a status as first inhabitants, and thus superior to the others. Another reinterpretation of history is the contention by some Riimaybe families that they belonged to the *koma galuuje*, the people who sought refuge under a Fulbe chief, who could protect them against the aggressive bands of Mossi, Tuareg, etc. They became soldiers and servants by their own free will.

Among the Jallube another tendency appears. Instead of being transmitters of change they hold very strongly to *ndimu*, related to their occupation with cattle and milk, and to the endogamy rules. They claim to be better conservers of their nobility than the Weheebe and they have therefore become, in their own view, more noble in the course of history. This ideology obscures the fact that they are politically and economically marginalized on regional and national levels. Furthermore it hides the truth of their being cultivators instead of proud cattle herdsmen. They do indeed recognize this tendency in their own community, but then they blame the youth.

Weheebe of the chiefs' families keep strongly to their role as rulers, which they can use in their strategies of survival. From the history it became clear that their power was great enough

for them to have had and still have the means to exploit their people. They use *ndimu* in their own self-interest. On the other hand the Weheebe (chiefs) have integrated into the modern administration, which is a 'new' attribute of their higher status, and a source of power to keep this status.

Ndimu concerns rules and attributes that are linked to relations between social categories and to the acquisition of social status. A person is also ascribed a certain social status because of his or her membership of a certain social category. *Yaage* concerns rules and norms of social behaviour in relations with an individual. It implies rules for behaviour between individuals, based on kinship and residence. Both concepts give a definition of socially accepted behaviour for a Pullo. A person who breaks the *ndimu* rules will be ashamed and feel *yaage*. Thus *yaage* is an important component of *ndimu*.

Yaage

The meaning of the term yaage

Just like *ndimu*, *yaage* can be found among neighbouring groups of the Fulbe in central Mali. The word *yaage* is borrowed from the Soninke language (Tioulenta 1991:352). The Soninke were among the first settlers in the Inner Delta of the Niger. Olivier de Sardan (1984:35) explains the same concept in Sonrai culture, called *haawi*, as an expression of the relationship between nobles and slaves. The Dogon have a concept *dogo* that can be translated as *yaage*. For them it is an individual characteristic and not directly associated with social relations (van Beek 1983). The Iklan in Burkina Faso (province Oudalan) have such a concept, which they label *tarakit* (Peursum 1994). However, the Fulbe stand out in this culture area, in that they value the rules of *yaage* very highly and have made it an essential part of their culture and identity, much more so than Sonrai, Dogon or Iklan. Besides, Dogon and Iklan are not considered noble by the Fulbe.

In literature the concept of *yaage* is translated as shame, reserve, shyness, respect, fear, *la honte*, restraint (Riesman 1977, Tioulenta 1991, Breedveld 1995).[7] So that it indicates an emotion felt after a person acted or showed behaviour which is taboo. The women cited at the beginning of this chapter used it in a different manner. When they said that there is no *yaage* any more, they referred not only to this type of behaviour, but also to the set of rules related to it. No *yaage* means that the rules have no force any more. Thus *yaage* is a concept covering the rules as well as the emotion felt when a person transgresses the rules.

Yaage is an integral part of Fulbe life in the Hayre. It is something into which people have been socialized from birth, and is deeply internalized. It contains rules of behaviour towards people to whom one is socially related. In explaining the content of *yaage* people of Serma used the verb *hulde*, '*ada hula gorko maa*' (you 'fear' your husband). Which may best be compared with the biblical use of 'to fear' in the phrase 'to fear God'. To fear in this context refers to respect and not so much to shame or fright.

Yaage relations characterized by *hulde* are relations which may be strained in one way or another, but which have not yet become, or do not have to become, problematic. The best strategy for avoiding troubles or problems then is to avoid in public those people towards

whom one has *yaage*. Avoidance is an essential element of behaviour described as *yaage*.[8]

Thus *yaage* is expressed by a certain kind of behaviour, including the avoidance of someone in public; for instance when one is walking and recognizes a person to whom one has *yaage,* it is necessary to step off the road for him or her. Partners having a *yaage* relationship do not talk to each other in public, and in extreme cases not at all. The bed of a woman for whom one has *yaage* is forbidden territory, and in some cases the whole *suudu* may not be entered: both are regarded as out of bounds. One should not speak very loud. A relationship characterized by *yaage* implies that these people will never eat together, nor touch each other in public. It is unthinkable to demand a gift in a *yaage* relationship. In all these instances avoidance is essential. These feelings for each other produce an emotion that includes respect, but also tension as we will see below. This emotional aspect of *yaage* is further expressed in the verb *yaagaade*, which means to feel *yaage*, after a person broke the code of *yaage*. This verb is of the middle voice, indicating that a person is afflicted with the emotion and is doing it to himself. The Jallube stress that *yaage* is something from *al'aada* (Fulbe custom), although Islam is part of it in the sense that one has *yaage* for Allah, and that someone who does not behave in accordance with *yaage* is not a good Muslim.[9] This indicates the narrow relationship between *al'aada* and *juulde*.

Social relations characterized by yaage

Towards whom and by whom is this attitude related to *yaage* shown among Fulbe in the Hayre? In the interview with old(er) women introduced at the beginning of this chapter, it was stressed that *yaage* is disappearing. Nevertheless most people in Serma were very aware of *yaage*. Young women speak of their attempts to teach their children an awareness of *yaage*, considering themselves the transmitters of these rules. Young men tried to convince us that *yaage* was still potent. Some old men concluded that *yaage* no longer existed, especially among the younger generations. By this comment they refer always to the men who left the Hayre during the last decade, to the people who no longer care for their parents, and to the loss of respect between husband and wife. All these different views on *yaage* point to a difference in interpretation of the rules of *yaage,* and to changes of the content of *yaage* between men and women and between the generations. Here we will explain the code of conduct as prescribed by *yaage*, and leave these differences for later chapters.

Yaage does not exist between siblings in the wider sense (*sakiraabe*) when they are young. With age this changes. For the oldest brother there develops a certain respect, but this is not a strong form of *yaage*. Sisters who have come of marriageable age are respected by their brothers. Cousins who are betrothed to each other enter into an avoidance relationship. Grown up *sakiraabe* (who have not married each other), are broadly equal in status although the respect for the oldest brother will never alter. For one's mother, on whose milk one survived the first two years, respect is felt, but not in the sense of *yaage*. This is an easy relationship with hardly any taboos, the only exception being that a son may not show himself before his mother in the company of his wife. Between *yaayiraabe* (mother's sisters), *kaawiraabe* (mother's brothers) and *goggiraabe* (father's sisters) on the one hand and their *bibbe* (children) on the other there is no *yaage*. *Yaage* is also absent between people of the same age and sex, the *waalde*. They share the circumcision, marriage and birth of children which removes all

differences between people.

The communication between a father and his grown-up sons, especially the eldest son, is strongly marked by *yaage*. They avoid each other in public, they never speak to each other, nor will they share the same room. This kind of behaviour between our host, Abdramaane Hamma, and his oldest son, Aamadu Maane, greatly astonished us. In fact they managed together the herd and cultivation of the fields, and it seemed absurd not to communicate about this. In some cases we were the intermediaries between father and son. When Aamadu Maane thought it necessary to feed the animals some salt, he asked us to bring a sack of salt from Douentza, without telling his father. When we delivered the sack he asked us to tell his father that we had bought him a sack of salt. A few weeks later, Abdramaane Hamma called us and commanded us to tell Aamadu to show us 'the goat'? When Han asked 'how will he know which goat?' Abdramaane Hamma simply said 'he will know'. We are almost certain no other intermediaries were used in this case, for there is also a *yaage* taboo on having it widely known with whom one does commercial transactions. This relationship is practised also between the sons and their *wappaybe* (father's brothers), though in a less strict manner.

Between husband and wife there is a typical *yaage* relation. They avoid each other absolutely in public. They will never argue with each other when people are around. They will never eat together from one bowl or in one room. In public they will always sit apart. Our presence and behaviour as man and wife in Serma provoked reactions of amazement in our neighbours, but because we were strangers they accepted it. Later we discussed our behaviour and their behaviour, a confrontation which gave us all insight into each other's cultures. The following cases illustrate this confrontation of customs and highlight one aspect of the *yaage* relation between husband and wife.

We had our own hut where we slept together and where together we had breakfast (with boiled milk) and dinner, both consisting of the same millet dough, in the evening fresh and prepared by the daughter-in-law of Abdramaane Hamma, in the morning the left-overs of the evening mixed with boiled milk. In the evening we ate from the same *la'al* (wooden bowl) outside our hut after we drank tea with some neighbours. Breakfast we ate from separate bowls inside our hut. With this behaviour we only partly adhered to rules of *yaage*. When it is dark it is possible to eat outside as one is invisible in the dark, by day it is better to eat inside. The ritual of our eating habits was constructed stepwise with our integration into Serma. In the beginning of our stay we were strangers and strangers are served apart, later we formed our own *wuro* where we should eat. As husband and wife, however, we were not allowed to eat together, nor to call each other by name or talk openly in public. These were very difficult aspects of the Fulbe culture to follow, especially because we did fieldwork together. We were so used to talking and discussing things with each other, e.g. when loading the car we simply had to do that. During the rest of the day we operated separately and this was obviously a way to avoid the difficulties of behavioral adaptation to Fulbe culture. One morning Ay, a daughter of Abdramaane Hamma, passed our hut after she had relieved herself in the bush. She stopped briefly at our hut. We were eating our breakfast. She said to Mirjam how could she eat before her husband? Even from the same *la'al*? Fortunately Mirjam could reply that we ate from separate bowls. This made the situation a little more acceptable to her. After this then followed a short discussion on the difference between us and the Fulbe. Our way of living together as

husband and wife was amazing for Ay, and she could not hide her aversion from it.

There is *yaage* not only between husband and wife but also between men and women of the same social category and of marriageable age. Part of the code of behaviour between such people is the rule that young men may flatter a beautiful woman whom they love. The men show this woman their respect, comparable to the courtly love one finds in European medieval texts.

One evening Hamidu from Wuro Boggo, a son of Hamma Aljumaa, and a couple of his comrades went to Coofya, where they wanted to visit a beautiful girl. Hamidu admired this girl very much.[10] They went there and sat outside the hut of the girl. They asked her to come out that they might talk a little with her. Normally she would do so, and sit apart from the boys, who would flatter and praise her beauty. Instead the mother of the girl sent the boys away, for she did not like them. This event had a sequel. The mother of the girl had violated the rules of respect and demeaned the regard of the boys for her daughter. She realized that she made a mistake and sent a gift of cigarettes and cola nuts. The boys in their turn wanted to break all bonds with her family, i.e. to ostracise them. In practice this would mean that in case of a birth, a marriage or a death they would not attend. They called on the other young men to do the same. If they had done so, the girl's family would have had little choice but to leave Serma, for they would no longer be considered as Fulbe by others. After ample discussion, and some pressure from people in Debere, such as several Riimaybe and the Beweejo representative of the chief, the young men decided to forgive and accepted the pacifying present. The girl had again to endure their courtly advances.

The general rule is that the *yaage* between husband and wife is extended towards the in-laws, *esiraabe*. In-laws must be avoided at all costs. However, there is a difference between the various categories of in-laws. For a young woman the relation with her mother-in-law is characterized by *yaage*. They do not speak in public, nor do they eat together. This relationship has some of the characteristics of the relationship between father and oldest son, because the daughter-in-law is obliged to do a lot of work in the household of her mother-in-law, especially when she has just arrived in the household. Hence the mother-in-law, who in fact runs the household, must be able to communicate with her daughter-in-law. For this relationship behaviour according to *yaage* is a quite impractible ideal conduct for the people. In almost all cases this relationship was differently structured. A woman and her mother-in-law, who shared the same *wuro* for a longer period of time, were in most cases on very good terms with each other. This may be brought about by the fact that the daughter-in-law has children, and they have lived together for a number of years, which makes a shared life much easier. However, when the daughter-in-law has no children behaviour is much more in accordance with *yaage* rules. For a woman her sisters-in-law are not included in the *yaage* relationship, because they are commonly at the same time age-mates and therefore belong to the same *waalde*, for which the *yaage* rules do not hold. These women often become each other's friends, if they happen to live near each other. The relationship between a woman and her son-in-law is very different. They behave strictly according to the rules of *yaage*, which is easier since they do not live in the same *wuro*.

A father-in-law does not communicate with his daughter-in-law. When she brings food, she will leave the food outside the hut where he sits, and say only a few words to indicate that the

food is there. However, when she has lived for a long period with the family and has given birth to a few children, this relationship becomes more informal and they may speak to each other. The relation of an older man with his son-in-law is also one of *yaage*, and more strictly so than with the daughter-in-law. The public relationship of a man with his sister-in-law is comparable to that with his wife, though less rigid. She can be seen as his 'classificatory' wife.

The distance of the kin relationship between husband and wife influences the content of *yaage* between the *esiraabe* (affines). The greater the distance, the more the relationship is characterized by *yaage*. At the same time relatives of a couple may share the same *waalde* (age-group) or lineage. The more distantly persons are related to the couple, the more these other relationships and their codes of conduct characterize their daily interaction. Over time the *yaage* aspects of an in-law relationship may also become less dominant, especially when children are born from the marriage union. The *yaage* relationship between *esiraabe* may also be influenced by other kin relationships they have. For instance one's father-in-law can at the same time be one's *kaw* (mother's brother) which removes part of *yaage*. This was for example the case in the relationship between Bubaare and his son-in-law Hamma Kunnga. Hamma was also the son of the sister of bubaare, and thus Bubaare was also Hamma Kunnga's maternal uncle. These two relationships are strongly contrasted. In their relationship the content of the mother's brother/sister's child relation (*kaw-biddo*) was dominant.

Maamiraabe (grandparents) are very much respected. This respect is extended to all old people in the society, including those to whom one is not linked in kinship terms. The behaviour towards old people is characterized by *yaage* rules, but these are less demanding than those in the relations discussed before. When the father enters into this category of old people the relationship between him and his children becomes less strained, even with his oldest son.

Between *reworbe*, strangers or relatives who are distantly related, a *yaage* relation exists. It is not possible to eat at the house of a *dewordo*, nor to speak to him or her in public. This is much more so if the *reworbe* are man and woman. The relationship between members of the different social categories is uncomplicated (especially between Riimaybe and Jallube). The depth of the *yaage* relation between *reworbe*, is illustrated by the following event.

One day we brought a woman from Koyo to Wuro Boggo. She asked us if she could come with us, because she had to walk back to Lennga and this would help her a little on her way. When she arrived at Wuro Boggo she behaved like a crazy person: she seemed to be overcome by fear and was paralysed on the spot. It was very difficult to get her out of the car, and we had to resort to force. We were amazed, because in Koyo she had been a very reasonable and kind person, and this change of personality within seconds seemed impossible to us. Eventually she left the car and she sat down near an empty hut. She sat there, her head covered with a cloth, and seemed confused and frightened. Mirjam tried to speak to her, but she did not answer. It was already late in the afternoon and she could not reach the next camp before dark. She had no other choice than to stay in Wuro Boggo, which in the end she did. The next morning very early we saw her again, and she was a little more open. We offered her something to eat. She said that she could not eat nor drink in Wuro Boggo. She left for Lennga on foot.

Yaaya Aamadu, the wife of our host, explained what had happened in this woman's youth. She had been in love with Bubaare, who lives in Wuro Boggo. She wanted him so much that

she is still overcome by *yaage* in his village. In fact she could not stay in his village. Staying overnight in a village where one feels much *yaage* is however preferable to staying the night *ley ladde* (in the bush). Another explanation given to us was that this woman is a Tamanke, and the Tamanke have much *yaage* for Seedoobe. Tamanke and Seedoobe were both politically powerful lineages and marriages between these two lineages were strategic. This could also explain the *yaage* relationship between them.[11]

Another example illustrating the *yaage* between *reworbe* is the story of Hamidu from Wuro Boggo, a son of Hamma Aljumaa. He told us about his stay in the Inner Delta among another Fulbe group (Barri), where he herded the cattle during the dry season. He was very hungry, but at the same time he felt much *yaage*. These feelings inhibited him from eating very much. One day when it was dark he thought he could eat as he liked, and he decided to join the group of young men who were sharing a bowl of millet dough. Nobody would see him, so he thought. However, at the moment he took a fistful of food from the bowl, someone shone a torch showing his act to all the others. At that moment he had felt very much *yaage*. Everybody listening to Hamidu's story roared with laughter.

Within all these social groups with *yaage* relations the separation between the spheres of men and women is remarkable. The content of the *yaage* relations varies between men and women. And a *yaage* relation is much more profound when it is between a man and a woman. In general it can be stated that between a man and a woman in Fulbe society in the Hayre there is always *yaage* involved. The strength of this relation depends on the second type of social groups to which they belong. Women and men form two separate social spheres in Fulbe society of the Hayre.

The separation between the social categories is another division in society that is illustrated by *yaage* rules. In this case it is the absence of *yaage* that is significant. Between Riimaybe and Jallube or Weheebe there is no *yaage*. Our assistants, who were both Diimaajo, had no problems in talking to Jallube, while Jallube among each other, or vis-à-vis Weheebe, would not speak about many things, like wealth, or their feelings. With regard to our own position in society this aspect of *yaage* also meant that we could not integrate too closely into one specific lineage or family, because the *yaage* relations that we would build up with others in this way would hamper our research. Nevertheless this happened to a certain degree. We were associated more with Jallube than with Weheebe, and more with the people from Serma than with outsiders, and Mirjam became a woman, and Han a man in Fulbe society with all its implications for our social roles.[12]

If one breaks the rules of *yaage* one feels emotions of *yaage*, *yaagaade* (*o yaagoto*). This applies not only to the field of the social relations discussed so far, but also to behaviour in general. For instance insulting someone in public, or doing work that is not allowed to one's social status (see *ndimu*). Besides the emotion one feels it leads also to gossip in the community (*hururuy*), and someone who is the object of gossip must feel *yaage*. If this is not the case one is not worthy to be a Pullo.[13]

The meaning of yaage relations

Social relations characterized by *yaage* differ from relations without *yaage*. In the following the specificity of social relations characterized by *yaage* is analyzed. This clarifies the meaning

these relations have in the context of Fulbe society, or the Jallube and Riimaybe community.

Dupire's interpretation of *semteende* approaches one of the meanings *yaage* relations have ir the Hayre, '*La honte charactérise les relations humaines qui mettent en jeu des intérêts et des droits réciproques et particulièrement entre parents agnatiques et certains alliés*' (Dupire 1970:189-190). In the Hayre the group of people that falls under the code of *yaage* is not restricted to the patrilineal kin, but it refers to a much larger group. The rules are defined within their social context. They exist between people who have social obligations towards each other, where these social obligations lead to tensions and stress between the two parties. The relationship between father and oldest son is the most striking example. Despite the fact that both may be heads of families, share one herd and cultivate the same land, their relationship may easily degrade into conflict. Avoiding each other then is a fairly good strategy to circumvent this inherent conflict. In fact it is a problem of authority. The reciprocity of this relationship is to be found in the fact that the father must give his son animals, for if not his son will separate from the household and leave his father without security in old age. To ease the tension of the relationship they must avoid each other. When the father has grown older and has joined the elders, this relationship becomes easier. This is directly related to the fact that then the father has no further 'rights' in the herd, and that his authority over his sons diminishes. The animals are all in the hands of his son(s) now. The social obligations between them no longer lead to conflicts.

The tense relationship between *esiraabe* (affines) may probably be regarded as in its essence a conflict over the women. The bride-takers are indebted to the bride-givers. This will be explained further in chapter 11. This *yaage* relationship also has to do with authority relations within the household (between woman/girl and parents-in-law) and the authority problem they have regarding the daughter who married the son-in-law, or the son who married the daughter-in-law. This is a relationship full of tension. This same tension may play a role in the relationship of *yaage* between husband and wife (cf. Dupire 1960). However, in this relationship another element of the *yaage* relationship comes to the fore, namely the aspect of equality. As we argued before, men and women are each other's equals, each having her or his own domain. Avoiding each other is an effective means to avoid the inherent authority conflict that exists in such a relationship.

These tense relations call on another important emotion that is very important in the life of the Fulbe, and especially for the Jallube. This is jealousy, *haasidaare*. The relations we discussed above are relations between people who are potentially each other's rivals. Jealousy is an emotion which reveals the very complicated attitude of the Jallube towards authority, wealth, beauty and success. They may call on the help of the *moodibaabe* to make charms in order to defeat another who is more successful in life. An example of this is the case of the *bonngobi* Hammadu Allaaye, described in chapter 5. Jealousy is related to gossip (*hururuy*, or bad mouth). Both may lead to grave conflicts between individuals and groups, that had better be avoided. Thus *yaage* is one of the social mechanisms by which inherent conflicts of interest are eased and solved.

The explanation of *yaage* by tension is confirmed by the analysis of the relations in which no or only little *yaage* exists: between members of the same *fayannde*, towards old people, to one's maternal aunts and uncles, and between Riimaybe and Jallube or Weheebe. For the Fulbe

Booni and Serma, a circle made of branches, where travellers to or from Booni can pray. Bukari Alasunna maintains this mosque. The mosque in Serma is situated in the middle of the village. The building is large and taller than the surrounding houses. The exact period in which this mosque was built is not known; probably it was built in stages. Although the mosques are very much present in space, the number of people that pray in the mosque is limited, even at Friday prayers.[14] In the rainy season camps of Serma there are mosques that are difficult for outsiders to discern. In the corners in Wuro Kaaral and Wuro Boggo which were indicated as mosques to us, we never saw people pray.

Riimaybe as well as Jallube say their daily prayers. The five daily prayers (*juulde*, *salât* in Arabic) are *fajiri, salifana, laasara, futuro, hiiri*.[15] Praying is the first thing people do when they wake up in the early morning. It has become something that people do automatically five times a day, or so it seems. Old women pray six times a day, including one extra in the morning between 8.00 and 12.00 o'clock, called *adua*. Especially old women keep strictly to the daily prayers. One day we visited Jeneba in Nguma. She fell on her knee the other day and could not walk or bow, so she had a problem with saying her daily prayers. Instead of kneeling and bowing herself, she took a calabash cover on which she put some earth to touch with her forehead, instead of kneeling and bringing her forehead to the floor. Old women are not the only people to pray. Every evening, while we were preparing tea, and some people of Wuro Boggo would join us, at sunset (*futuro*), everyone would pray. Washing their hands and faces with sand, men and women turned to the East, and called on Allah, the women in their huts and the men outside.

The reasons why people pray vary from person to person. A Diimaajo woman said about this: '*Juulde aduna nafa, pati a naati yiite*' (to pray is good for people, because it saves you from going to hell). We had the impression that prayers, especially the afternoon and evening prayers, also helped to keep the bad spirits away, which some people confirmed. The hours of the daily prayers have become points of reference in the day to indicate time. To our question when did they return from transhumance, people always gave an answer referring to the Islamic months, and not, as we expected, to one of the four seasons or when the rains started.

About the confession (there is no God but Allah and Mohammed is his prophet, which is said in Arabic) people were quite clear. Any one could become a Muslim at any time by saying this confession. For white people it was very easy as they did not have to follow the other obligations, therefore many people (and not only *moodibaabe*) tried to persuade us to convert to Islam, which we always refused, claiming that we could not, being Christians.[16] It would have been unacceptable and unbelievable for people if we had been honest and said that we doubt the existence of a God, and that therefore we did not practise any religion.

The pilgrimage (*hajj)* has never been a real option for most people in Serma and in the Hayre, neither in the past nor in the present, because of the lack of material means, but also because of an absence of tradition. Some *moodibaabe* from Manugu made the *hajj*. In Serma we met one woman who had made the *hajj*. She was the mother of Hammadu Booyi, the veterinarian from Lennga. Obviously the son paid for his mother's voyage. We were told about some men, no longer alive, who made the voyage, for example the uncle of Bukari Usmaane from Manugu. These men have become holy in the eyes of the people of Serma, and where they were buried rain rituals were held. Among the Weheebe more people went on pilgrimage

to Mecca. We met two women in Dalla who told us about their life in Mecca. They considered their stay as really close to Allah, despite their work as servants ('slaves') in the house of the Saudis. Among other groups of Fulbe in West Africa the *hajj* is much more institutionalized; for example among the Bokko Fulbe in Nigeria, where the pilgrimage to Mecca is a prerequisite for obtaining power in the local level politics in modern Nigeria (Hickey 1980). Six percent of the people who arrive in Mecca are Wodaabe (mBororo's), nomadic Fulbe, who travel overland in family groups (Birks 1977).

During the month of Ramadan (*koorka*) we were in the Netherlands, and therefore we have no data from our own observations on the attitude of people towards this aspect of Islam. However, the stories of people and practices we observed during other seasons indicate that Ramadan is taken rather seriously among the Fulbe in the Hayre. During the cold season (December to February) many people were fasting for the days which they missed in the month of *koorka*. Others told us openly that they did not fast, because they had to work too hard in order to feed their family, which they considered an acceptable excuse for not participating in the fasting. The fasting is defined as being very difficult, and if it can be avoided people do so. Abdramaane Hamma did fast, so he said, but he betrayed himself as a less strict Muslim. He asked if he could have our water container which was packed in cloth so that the water in it is kept cool through evaporation from the wet cloth. Abdramaane said this would serve him very well during Ramadan. He would then hang the container full of water in the middle of his hut, so that near *laasara* he could take a gulp of cold water. *Laasara* is around four o'clock, and not the end of the fasting day! All the same, most people admitted that fasting is a necessary duty of a good Muslim.

These are the rules which people keep in order to show their Islamic piety. However, Islam is not only something shown to others: it is, like *al'aada,* part of people's reasoning, and part of their explanation of the world. For the Jallube Allah's will cannot be evaded; He brings prosperity, He brings misfortune, and human beings cannot change what He wants. This became clear from the way people discussed wealth and the problems they encountered with the droughts. The remark 'one day Allah makes you rich, another day he makes you poor' is very characteristic. When a person dies it is said, '*saatu makko wari*', which means his/her time has come and we can do nothing about it, because it is Allah's will (*Alla saabi*, Allah knows). Another example is the way people perceive the deterioration of the bush, which they ascribe in large part to Allah's will, and only if Allah wishes will it improve. The answer a woman from Wuro Boggo gave us to the question why she thought the bush was dying may be typical: '*ko sabi ledde maayi, aduna maayan, Alla anndi. Dewtere Al'ura'aana, moodibaabe mbii*' (why does the bush die, or the society/world die? Allah knows. The book of the Koran explains it, say the *moodibaabe*). This gives the impression that the Jallube feel subjected to Allah's will, which indeed they are to a certain extent, leading to a form of passivity in acceptance of the misfortune which has befallen them in the last decades. On the other hand they actively call on Allah for help in any situation. An example is the formulas of greeting and blessings that have no power without calling on Allah. Allah is everywhere at any time and he may or may not help you. To a certain extent a person can influence Allah's attitude towards him or her by fulfilling the Muslim obligations and by behaving as a good Muslim, which also implies behaving according to *ndimu* and *yaage*. However, Allah's will is Allah's will.

Manipulation of the supernatural world is not possible through Him, but only through influencing the Islamic spirits (*jinnaaji*), and witches or bad persons who are part of the universe of Fulbe cosmology (see chapter 13). This manipulation is the realm of the *moodibaabe*. However, this manipulation is limited, e.g. treating certain illnesses, and influencing relations between people, fall under it, but only if Allah agrees.

Although people have their own opinions and religious experiences, they all consider themselves good Muslims. According to their *moodibaabe*, however, the Jallube and Riimaybe of Serma do not keep strictly to the Islamic rules and, therefore, cannot be considered as good Muslims. Some Jallube *moodibaabe* were very blunt about this, as the following quotations make clear. 'The Jallube neglect Islam: before the daily prayers they do not wash themselves in a proper way; during *koorka* they do not fast; they do not know the rules of Islam, and they do not even know how to pray (*juulde*) properly.'[17] Another *moodibo*, a Jallo from the Durgaama who lived in Debere and was married to a Jallo woman from Fappittoo, was not convinced of the Islamic piety of the Jallube: 'The fact that they do not show the *futte* (cattle 'given' by husband to his wife at marriage) to their wives is not according to Islamic rules (see chapter 11); that they love festivities with dance and music (*fijorde*) is not allowed in proper Islam. At least they have no charms as the Barrinkoobe still have. On the other hand there are hardly any people who do not pray. Almost everyone fasts in the month of Ramadan. Nevertheless, despite all this some *moodibaabe* do not consider them good Muslims. They follow the rules of Islam but they do not know, they are neither Muslims nor pagans. And this is really a problem, because Allah does not like people who follow Him without knowing'.

The Jallube themselves, however, feel that they strictly follow Islamic rules and Islamic religion (*juulde*), but only in those instances where it is not in conflict with *al'aada*. The Jallube feel they must adhere to both sets of norms. It may be due to the crisis that the balance between *al'aada* and *juulde* has shifted to the latter, which some Jallube regret. For the Riimaybe, *juulde* has become more important because they had no *al'aada* as slaves. For them it is much easier to become a Muslim, which in principle is open to everyone, than to become part of *al'aada* in which they are confronted with the old social hierarchy. For the Jallube the following of Islamic rules is not free in this sense. On the contrary they feel themselves to some extent compelled to follow Islam, because it offers them an alternative means to control the extreme insecurities that have recently entered their world. On the other hand *juulde* and *al'aada* are also blended, as was shown for the concepts of *ndimu* and *yaage*. This attitude towards Allah and Islam lacks spontaneity, as Riesman (1977:188-194) observed among the Jelgoobe in Burkina Faso. The relationship between the Jallube and Allah is the opposite of a free relationship. They may be forced to turn to Islam and to accept the *moodibaabe* as middlemen in their community, because of the crisis. In the past Islam was an asset of power for the elite, who also used this power vis-à-vis the Jallube. However, the Islam that the Jallube accepted in the course of the 19th and 20th centuries had another source than the Islam of the elite; this probably made it easier to integrate Islam into *al'aada*, because it did not force them to submit to their elite, and allowed them to keep their equal status. Nowadays Islam has become an integral part of the Fulbe's daily life and world view. It has become indispensable for understanding why things happen as they happen. Together with *al'aada* it forms the basis of Fulbe cultural understandings in Serma. Nevertheless, it is always recognized that Islam

came from outside via Torodbe, Weheebe and Moodibaabe from the Inner Delta, and therefore it is not the same as, and will never become equal to, Fulbe custom, *al'aada*. They are bound in a dialectical relationship.

Fulbe identity, a dialectic relation between *al'aada* and *juulde*

To be a Pullo means internalizing rules of *ndimu*, *yaage* and *juulde*. This entails that a person develops a certain attitude towards society and towards the world outside society. *Al'aada* and *juulde* reinforce each other and are at the same time different. In the process of change the meaning of both *al'aada* and *juulde* is changing, and becoming different for each social category.

The Riimaybe have internalized Fulbe custom, and they turn increasingly to Islam. Both processes that have led to their integration in Fulbe society, *pulaaku*. In general the Fulbe admit that *juulde* has become more important for them, probably because of the difficult situation, which is also seen as one of the causes of the loss of *yaage,* as the old ladies, cited at the beginning of this chapter, stated. This search for an explanation may have led to a growing importance of the reasoning and services of the *moodibaabe*.

In daily life, and as identity markers, *al'aada* and *juulde* manifest themselves differently. This may be the result of the later introduction of Islam into Fulbe culture, but this remains a matter of debate. *Ndimu* and *yaage* are more of the people, of the human world, whereas *juulde* is associated with Allah, with the 'other' world. This 'other' world, however, imposes itself on the daily existence of people, even so much that *al'aada* cannot be separated from *juulde*. Not only is the identity of the Fulbe marked by this dialectic, but also the rules concerning access to natural resources, rituals, and daily life are a mixture of both. *Al'aada* and *juulde* relate to each other as the sides of a balance, in some cases turning to the side of *al'aada* in others to the side of *juulde*.

This chapter described the meanings of social relations, and of social behaviour in its cultural context, which are essential for the interpretations of Fulbe identity in the Hayre. There are differences between the social categories, but they all adhere to the same values though in varying degrees. This typical identity and the way people cling to it makes a person a member of Fulbe society, *pulaaku*. These rules indeed form the basis of the social, moral and legal code of society, as they are formed by the specific history of the Fulbe in the Hayre and by their social and physical environment.

Notes to chapter 6

1. Interview with Fatumata Aamadu (aged 70), Mariamma Usmaane (aged 72), Hawa Bukari (aged ± 65), Dikko Aamadu (aged 50), Jeneba Aamadu (aged 45) in Wuro Kaaral. Dikko and Jeneba are daughters of Fatumata Aamadu. August 1991.
2. Today Malian citizens must marry before a government official in town. Marriages contracted in the village, with the *moodibo* as witness, are not recognized by the Malian state. However, in practice, during our stay, no one married before the *commandant*, marriages were contracted in the village as they had ever been. In such

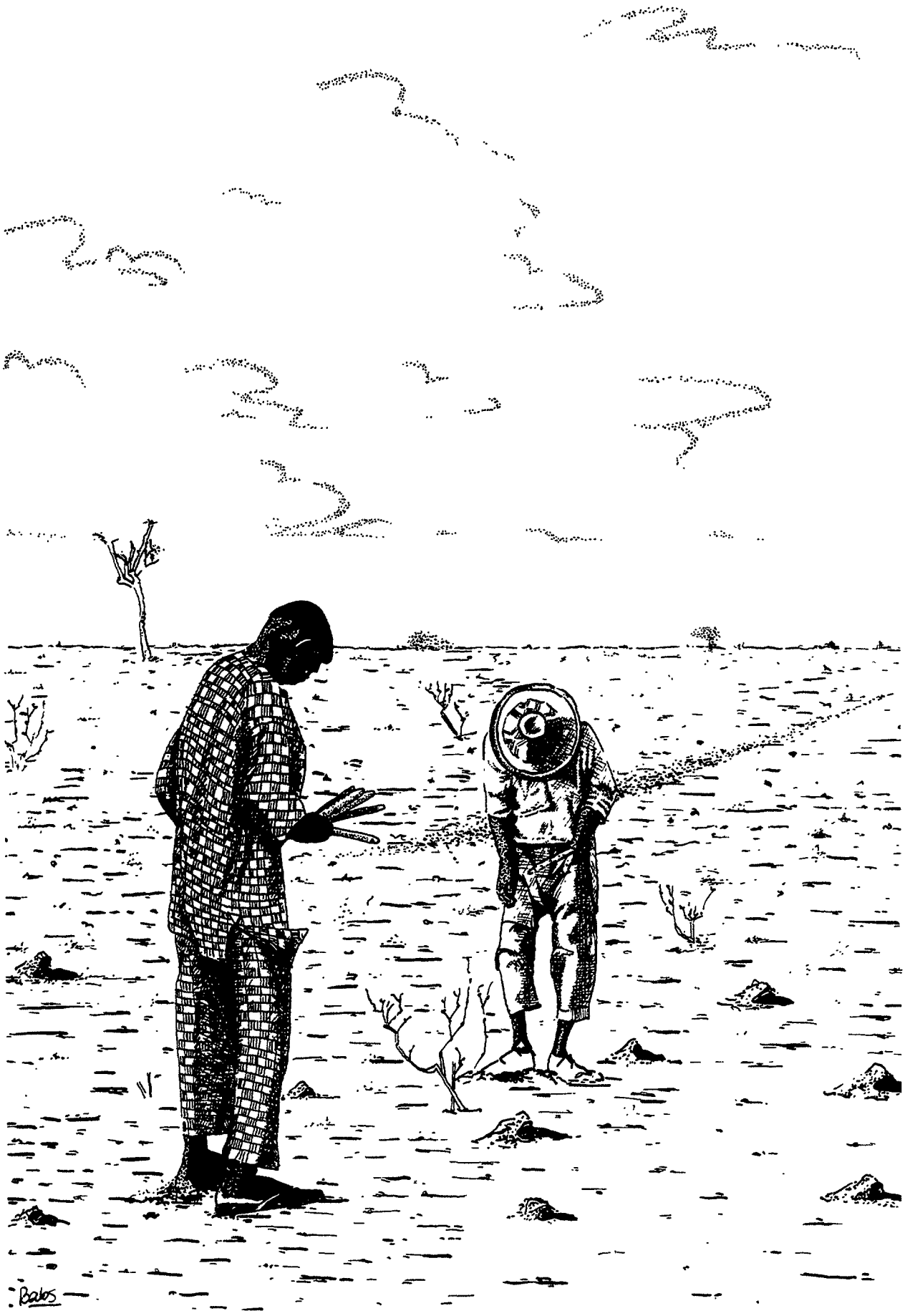
ceremonies man and woman are separated until the ceremony is over. Some marriages are indeed contracted in town, as some informants told us.

3. Similar views can be found in Riesman (1977), Kirk-Greene (1986), Bocquené (1986), Grayzel (1986, 1990), Eguchi & Azarya (1993).
4. See chapter 2, note 142.
5. By this she means night-blindness.
6. As they say is inherent in the translation of the word *debbo*, which means woman in Fulfulde, see chapter 4.
7. *Yaage* then comes close to the meaning of the term *semteende* as used in other literature (see Dupire 1970, Riesman 1977:133-134, Bocquené 1986).
8. This behaviour is part of the shame complex as discussed above for the Dogon and Sonrai. It is also found among other African peoples such as the pastoral Maasai in East Africa (see Scruton et al. 1986) or the Ewe of Ghana (see Wierzbicka 1992). The fact that such rules for behaviour are found among such diverse groups again raises the question whether this is indeed typically Fulbe, or whether it is not better just seen as typically human
9. If a person does not keep to *yaage*, and does not bother about the consequent gossip and backbiting, then he or she has no *yaage*. It is also said that *alsilaame'en yidaa neddo ko walaa yaage* (the Islamic community does not accept someone without *yaage*), and someone who has no *yaage* will not enter paradise after death.
10. Hamidu was by then already betrothed to another girl of Fappittoo.
11. Aisatu Hammadu was also Tamanke (from the family of Bukari Sambo in Koyo, and wife of Aamadu Maane, the oldest son of Abdramaane Hamma). She married with Aamadu Maane, who is Ceedoowo. In Wuro Boggo she behaved with more *yaage* than Ay, (the other wife of Aamadu Maane) did, although they were in the same position towards their *essiraabe*. Did the lineage membership make this difference? When we asked them they denied it, and said it was the character of Aisatu who was indeed very Pullo.
12. These roles were somewhat moderated when we were recognized by the *moodibaabe* as *moodibaabe* from the West. Weren't we also looking for knowledge and couldn't we also write and read?
13. Part of *yaage* is also not showing another person how rich or poor one is, not showing emotions, not giving explicit information on earnings, or on number of cattle; (here the translation of *yaage* as 'restraint' is very useful.
14. This is in contrast with Dalla where the mosque is full of men at the time of Friday prayer.
15. These are Arabic loan words according to Marty (1920:228).
16. Although we do not practise this religion, and are only Christians by birth, we told people that we were from a Christian family and were part of a christian culture (which is no lie).
17. Alu Hamma Lennga from Douentza, Imam of the mosque in the *nouveau quartier*.

Part III

The Present

Dealing with Ecological Insecurity


Babos

7

Farming and Herding Practices and the Role of Hazard

Insecurity and the use of natural resources

The central focus of this chapter will be the variety in farming and herding practices of the inhabitants of Serma, and the role of hazard in their agricultural undertakings. The role of hazard and insecurity in day-to-day practice in farming and herding is seldom addressed in descriptions of farming and livestock production systems. Rather, risk and uncertainty are laid down in probabilities, and land use strategies are appraised for their capacity to prevent hazard and to avoid risk. Detailed studies of what people really do when calamities occur have rarely been conducted in agronomic and ecological research. Among other things this may be due to the specific discourse used in agronomy to describe a farming system. Normally specific data are collected over one agricultural season, and analyzed with the help of statistics, within the framework of a model specifying the most basic cause-effect relations in the farming system. With the help of this statistical analysis these relations are quantified, so that predictive statements can be made about, for example, the relations between soil fertility, rainfall, labour input, crop varieties and productivity of the farming system. A similar procedure may be followed for livestock production. Progress in the predictive capacity of these models is made by further refining the relations between the variables in the model, and by adding new variables (Scoones 1995).

In this chapter we will adopt another procedure. The reasons for this choice are various. The first is that in models the role of hazard for the individual farmer at local level is filtered out of the system, or reduced to a stochastic occurrence. Conversely the experience of an individual farmer or cultivator cannot be taken as a proxy for the predictive capacity of a model. The second reason is that there is an implicit assumption in a model that despite the oscillations in the values of its variables, the correlations and the cause-effect relations remain essentially the same from one agricultural season to another. Stated otherwise, there is no essential difference between the observation of this year and the next. This assumption has never been tested in a thorough manner. One of the problems in the research setting of Serma was that it was hardly possible to detect a set of routine procedures, more than was discussed in chapter 3. Dealing with uncontrollable and unforeseen events seemed more characteristic for the system than the system itself, and more determinant for the outcome of cultivation and livestock keeping activities. We might call this system 'externally controlled' (cf. Ellis & Swift 1988). Even in the agricultural seasons of 1990 and 1991, which will be discussed in this chapter, and which

were characterized by relatively moderate climatic circumstances, numerous factors were not under the control of the Jallube and Riimaybe.

The third reason for focusing on daily practice is to give more attention to the variety in land use strategies at local level. As will be shown, decision-making is based on day-to-day observations rather than the structured processing of information over a number of years. In studying this another logic in what we might call an agro-technological behavioral domain will be uncovered. This logic is better labelled the 'art of muddling through', rather than a typical winning scenario. The variety of situations in which people find themselves gives rise to a multiplicity of possible solutions to the problems cultivators and herdsmen have to solve. Given the multitude of strategies and their improvised nature, a crucial role is played by cultural understandings of the ecological environment, and societal factors such as normative complexes like *al'aada* and *juulde* discussed in the preceding chapter, is crucial. People do not just make rational decisions based on the 'best technical means' at their disposal, they do so within social and cultural frameworks. This may lead to radically different strategies of individual cultivators, and herdsmen, who nevertheless belong to the same society, dispose of a similar resource base, use the same ecological environment, and share a common history.

The rest of this chapter is subdivided into seven sections. In the first one the role of cultural frameworks will be shown, by comparing the strategies and decisions of a cultivator and a herdsmen. In the four following sections a variety of strategies developed by the inhabitants of Serma will be presented. In each section one of the agricultural seasons (see chapter 3) of the period July 1990-June 1991 will be discussed. In the sixth section the differences with the rainy season of 1991 will be treated. In the last section the findings of this chapter will be put in a broader framework.

Two cases of natural resource use strategies

A herdsman: Bubaare Aamadu Jallo

At the time of our fieldwork Bubaare belonged to the more wealthy Jallube, who inhabit Wuro Boggo, the most southerly rainy-season settlement in Serma (see map 3.2 and chapter 4). He lost most of his herd in the drought of 1985, but he managed to save some animals. In 1990 his family disposed of around 30 head of cattle, some goats and some sheep. In the same year, 9 of his cows calved, yielding a considerable amount of milk to feed his family. Nevertheless he had many sources of worry in this particular year. Due to the bad situation he has many dependants to feed. Apart from his two wives and unmarried children he had to take care of his married daughter plus two children, because her husband, a nephew of Bubaare, has no means to take care of her.[1] Further a son of a deceased brother lived with him and herded his cattle. This made the total number of people in his family 15 persons. Only three of these were able to work on the fields: Bubaare himself, his oldest son and his nephew. Bubaare was already quite old (57). His son and nephew on the other hand were still quite young. The adult women of the family, like all Jallube women, did not work in cultivation.

He started sowing his fields in the middle of June, but the seedlings perished several times,

due to dust-storms, which sandblasted the frail plants, and covered them with sand. Normally, one or two sowings would be sufficient. This year six were not sufficient. He did not succeed in establishing an adequate number of plants on the 3 fields he possessed. He, his son and his nephew cultivated the parts of the fields covered with millet seedlings twice. This did not require much work, as there were few weeds because of the lack of rain. Apart from some locusts just before the harvest and a plague of birds there were no major disasters for his crop. However, due to the bad start of the season he only harvested 25 loads of millet, about 335 kilos, sufficient for two months subsistence for his family of 15 people. Bubaare has no reserve stock of millet. The year before, in 1989, the whole crop was destroyed by locusts. Luckily he had bought a ton of millet at a low price from the Hummbeebe of Duwari, who expected a bumper crop and sold large quantities of cereals before the harvest. They were completely surprised by the locust plague. Nevertheless, Bubaare had to sell 11 of his young stock. He marketed 9 bulls and 2 heifers of two years old in the course of the dry season, which was more than were born in that period.

In 1990 he did not want to sell animals, so after the harvest he rounded up his milch herd plus calves to go to Duwari, though he does not like to go on transhumance, because, as he says, it is a lot of work; the children go hungry and thirsty and the whole household has to be moved. The unproductive animals were left with the Bana'en, his nephews, who live next door in Wuro Boggo, and the family left for Duwari. He hoped that his wives and daughter would be able to barter milk for millet with the Hummbeebe of Duwari.

In December we also pitched our tent in Duwari to see how the people of Serma fared over there. Mirjam accompanied Ay, the daughter of Bubaare, several times when she went to Duwari to barter milk. It was a depressing experience. She had too little milk to barter for sufficient millet. Each day she collected 3 kilos of millet, too much to die, too little to survive. Bubaare sold an animal, but he was barely able to buy a sack of millet (100 kilos). The Hummbeebe were unwilling to sell, as they were also in short supply, after the bad agricultural season. According to Ay, Bubaare's first wife, it was even worse after we left Duwari. They were not able to sell their milk any more. Further the quantity of milk produced by the animals diminished, because of the bad quality of the pastures. The price of millet rose to FCFA 150 per kilo. She saw the Hummbeebe eat leaves and locusts. So when they heard millet was being sold in Booni they returned to Serma.

When back in Serma they settled on their field in Yaraama. In the meantime the last three cows stopped producing milk, so that they had to eat millet dough with water. There was no money for kola nuts, for Ay had to rely on the revenues from the milk. Bubaare sold in total 5 animals to provide the family with food, and they lost one animal because of a disease. These animals sufficed to feed the family for approximately half a year, which still leaves a gap in the supply of food. This gap was partly filled by the sale of milk and partly, as was indicated in the conversations with Ay, by abstaining from consumption.

Though the family of Bubaare was in the top 20% in our wealth-ranking exercise (see chapter 3) they were certainly not in an enviable position. He and his family had a hard time in the dry season of 1990-1991. His herd was large enough and reproduced fast enough to allow a number of sales per year. On the other hand the composition of his herd, a large number of milking cows and young animals with hardly any unproductive cows and full-grown

bulls, was out of balance. It would have been more efficient to sell older steers or barren cows as he did in 1990-1991. But with these five animals, which he saved by selling 11 young animals in 1989-1990, the saleable part of his herd was finished for the next couple of years. Now he will have to deplete the future reproductive capacity of his herd, which was badly needed given the number of people who will have to live on this herd in the future.

Bubaare was also forced to consume two other resources, soil fertility and labour power. Soil fertility was a major concern for him. Since 1985 he has spent too little time with his herd on his own fields. The average productivity of his fields was 99 kilos per ha in 1990, which was partly due to late planting and little rain, but also to lack of nutrients in the soil. The three fields, $\pm$ 3 ha, that he worked consisted of sand with just a little loam and clay. Of these fields only one, at Yaraama, received a little manure each year, because this is where they used to settle on returning from Duwari. The other two fields have not received a day's quantity of manure since the drought of 1985. The inflow of dung from passing livestock was little, because the fields were located far from the water reservoirs. He had not gone on transhumance for 18 years before 1985. He further exhausted the labour force of his family by buying as little millet as possible in order to save the reproductive animals in his herd. When the family returned from Duwari they had all lost a considerable amount of weight, himself included.

Realizing all this Bubaare opted for a different strategy in the growing season of 1991. He sowed his fields as in 1990, but he did more. When the rains at the beginning of the rainy season seemed promising he gathered the men of Wuro Boggo together, and proposed making fields on a deserted campsite (*wiinde*) of Wuro Boggo, some 300 metres from its present location. There was plenty of manure in the soil, because they had deserted the place only three years ago. The site lay in a depression, and the soil contained some loam and thus would retain more moisture than the sandy soils of the dunes. The rains started early and abundantly he argued, and they would have a good harvest. The other men agreed and they divided the site.

Bubaare was right, but it was a close escape. To save labour Bubaare hired a plough and camel to plough the soil and remove all the weeds before sowing. In this way weeding would not be necessary. The others cleared their field by hand and sowed the millet. Everything went well, the millet was growing fast and the fields were the best in Serma. Only, the rains stopped early. On the 18th of August the last big shower fell. From then on it did not rain for six weeks. Everybody was holding his breath. A good crop was standing on the fields, would it ripen or not? It did ripen, but the harvest was not as good as it could have been. Bubaare harvested about 1150 kilos. His other fields produced more than double the amount of 1990 (238 kilos of millet per ha). His field on the deserted campsite produced nearly 400 kilos (500 kilos per ha).

Encouraged by this success Bubaare decided not to leave for Duwari, even though the harvest had been good there and marketing the milk would be easy. Instead he settled on his least productive field, 1.5 kilometres south of Debere, with his livestock, to apply manure to the soil and restore its fertility to some extent.

A Cultivator: Bura Bilaali Tambura

Bura's family consists of 12 persons, including his elder brother who is disabled, a daughter-in-law, 2 grand-children, 3 unmarried daughters, 2 wives, 2 sons and sometimes his widowed sister. Moreover he received lots of guests in his house like wandering traders and *moodibaabe*, a member of his family from Douentza working with us, and some elderly Jallube women who have sought refuge in Debere. At any time of the year somewhere between 15 and 18 people ate at his house, often including Han, who regularly had lunch at his house.

Though the family possessed a small herd of cattle and 30-40 small ruminants they were not rich in livestock. The cattle provided the family with some milk, but since 5 milch cows plus their calves died in 1989 of a tick-borne disease, and since about 30 of their sheep and goats died of a mysterious new illness, coming from the south, the family's fortunes have changed considerably. The livestock were kept in a small camp east of the fields around Debere. The small ruminants are herded by his youngest daughter. In the rainy season the cattle were left to wander around and were sometimes herded by Bura's nephew, who was living most of the year in the camp with his family and his herd of goats.

The real wealth of Bura's family was millet and the labour force. In contrast to Jallube women, Riimaybe women and girls work on the fields, so his family's work force for millet cultivation numbered 8, instead of 3 as in the case of Bubaare. The fields of the family were among the best maintained in Serma. They were located on the dunes as well as in the depression, marking the border between the Seeno and the Ferro. The family disposes of 7 fields, including 3 of Bura's older and disabled brother. Of these 7 fields, 3, almost 10 ha, were cultivated in 1990. The others were left fallow, because soil fertility was too low to yield anything. In 1990 the harvest on the biggest field was almost 1900 kilos (424 kilos per ha). The field on the dunes yielded only 80 kilos (22 kilos per ha). The millet did not grow, because of the dust-storms and the low soil fertility. It was much easier to establish millet plants in the field in the depression. Dust storms had less impact here, for the sand was mixed with loam and was not blown away, so that the millet plants were not so easily buried. Nevertheless he had to sow 4 times and the fields on the dunes failed completely. Moreover, the field in the depression yielded a lot of sorghum that was planted at a late date and matured on the residual moisture in the soil.

Further the women of the family had fields of their own, which they cultivated in the time that was left after the family fields had been worked. His first wife Dikel cultivated a field together with her son. She harvested almost 200 kilos (900 kilos per ha) from her tiny field. What was really a difference from Bubaare was the care Bura devoted to his crops. While one could regularly find Bubaare conversing with the men who gather under the shelter in Debere, Bura was hardly seen in Debere in the cropping season, except for an hour or so in the morning, when he had breakfast in his compound. The rest of the day and the night he spent on his fields 500 metres to the west of Debere. During the day he supervised the work of his sons and daughters, while his daughter-in-law or one of his wives prepared lunch at the compound. At night he slept under a shelter in the middle of his field to guard the crop against wandering herds of livestock and elephants in search of food. With his antique muzzle-loading rifle and locally produced gunpowder he chased away the animals, but he could not prevent an

elephant eating some of his ripening sorghum. One of his sons, Aamadu, slept in the camp west of the fields to oversee the livestock during this period. When the birds attacked the fields in September 1990 Bura mobilized his whole family to chase them away, and was clearly successful for the damage was negligible.

Another measure of Bura's care for his crop is how much he invests in taking precautions to ensure good crop growth. Our assistant, who is classified as Bura's brother, told us that Bura visited a *moodibo* in Douentza and promised him a calf if he would ensure of a good harvest. So, the *moodibo* did, and he sent two of his pupils, long before the harvest in August, to cash in the promised reward for his services.

One of the major problems Bura experienced was the wandering herds of the Fulbe, belonging to the Jallube of Serma as well as to outsiders from Duma and even the Inner Delta. Especially around harvest time in 1990 there were severe problems. Everybody was eager to harvest as fast as possible, because of the threats of locusts, birds, beetles and elephants, and sheer hunger. As soon as the harvest was finished the herds were admitted to graze on the stubble. Bura's family was late with harvesting, for they had more to harvest and they preferred to have the millet ripen properly so that it would not spoil. They risked, however, much damage to the ripening millet and sorghum from these wandering herds.

As a result of all these efforts, and despite the various attacks on the crop, the harvest of 1990 was the best in five years, and as a result the family did not have to buy cereals during the dry season. Because Bura wanted to save his animals he sent his oldest son to Bamako to look for work to earn the money needed for paying the poll tax (FCFA 2,250 per person between 15 and 50 years old). The boy did not find any work, and he sent a message at the start of the growing season that he had not even managed to earn the money for the return trip.

Another source of wealth for Bura's family was the water reservoirs they possess in Debere. These cisterns held water for most of the dry season, and they enabled the family to remain in Debere the whole year round. They yielded sufficient water to supply a herd of cattle with water for some time. In the past a herdsman with his cattle settled on one of his fields. Now it was difficult to find a herdsman to settle near Serma, because the people of Serma hardly buy any milk, on which the herdsman with his family intends to live. Instead Bura invited the herd of his relatives from Duna, near Booni to spend some time on his fields, which they gladly accepted, because the water supply in Booni was very tight. Bura's own livestock remained in Serma as usual, guarded by his second son and youngest daughter.

Bura himself spent the dry season '*dabbunde* and *ceedu*' at a leisurely pace. He was at ease, for there was sufficient to eat. He repaired his houses and granaries and had his sons make loam bricks for building a new house, so that they would be housed in the future too. He sought wood of the *kojooli* tree (*Anogeissus leiocarpus*) to make doors for these houses. He received guests, who were numerous in his compound, for he is a respected man and the rumour that there was food in his house spread fast. Instead of selling cattle as he did in 1988-1989 and 1989-1990 (one and three head respectively), he saved his animals to compensate for the loss the year before. His second (unmarried) son was able to stay at home, while he had left the year before to earn some money in the gold fields in Burkina Faso, where he earned FCFA 15,000, sufficient to pay taxes for the whole family.

The large harvest enabled him also to give 4 loads of millet to each of his wives, so that

they would have some capital to undertake small trade, as most Riimaybe women do. Further Dikel and Talaata gathered and marketed swamp rice and other bush products, and prepared soap from potash and the oil from wild dates (*Balanites aegyptiaca*), the seeds of desert melon and animal fat.

Endless questions and dilemmas

The two cases show how different people and their families may be, while operating under the same ecological circumstances, and belonging to the same socio-political unit, Fulbe society. Given their position in society they have very different ideas about the ways in which they confront the hazardous circumstances in Serma and beyond. These are closely related to conceptions of status and identity like *ndimu*, *yaage*, and Islamic values. This becomes clear in the different activities the families undertake to gain a living, in the varying degrees of mobility of these families, and in the ways they manage livestock. However, they also have much in common. Both families try to solve a quite fundamental problem, i.e. how to procure sufficient food in this hazardous environment. Millet, the staple food, is the focal point of all activities for both families. Bura's family opts for the direct production of staple food, by producing as much as possible. Bubaare's family has a different approach to this problem. They invest most of their labour in livestock production, and the marketing of livestock products, in order to acquire millet. As a result they seem more dependent on all kind of outside factors such as the goodwill of the customers for their livestock products.

Also similar for both families is the fact that if anything dominates the agricultural activities, it is the large number of contingencies generating numerous questions that have to be answered and dilemmas that have to be faced. There seem hardly any fixed answers, because not only the climate is unpredictable, but also the outside world, and the cereal market. It is important to note that Bubaare and Bura are in fact the rich, those who still have sufficient assets in people, land and livestock to try their luck in cropping and herding. However, the difficulties they have to face are many. Should they, for example, reduce the intensity and productivity of cereal cropping, by reducing the fertility of the soils they cultivate and by the clearing of new bush-fields, and hence be forced to invest more labour in cereal cropping? Or should they gamble and try to keep soil fertility as high as possible, counting on the return of abundant rains, and cultivate small fields that are highly productive? Maybe they should do both, but do they have sufficient labour available to do so?

The answers to these questions are also very relevant to the strategy to follow outside the rainy season. If one is staying in Serma during the dry season to produce manure for one's field, it means that one has to subsist on one's own stock of millet, instead of bartering milk, or to sell livestock to buy 100 kilo sacks of millet at the market in Booni. How will the prices of millet and sorghum move on the market? And the price of cattle? How is the harvest in the rest of Mali? Will prices stay low for most of the year, or will they skyrocket because of the bad weather? The choices to be made if there are few or no livestock are different again. Can the family subsist on the harvest? Or do we have to send away family members so that they earn money and are fed elsewhere? Will they come back next year? If they have nothing where

should they go to? Is there any work somewhere, or might they obtain a herding contract for an urban or agricultural livestock owner, and on what conditions?

At each moment in time there are new facts and new options to consider. In each situation a new map of the possible scenarios to follow has to be constructed in the minds of those who take the decisions. In the following five sections, a description will be given of the ecological and economic conditions, and the variety in responses of the people in the course of the agricultural seasons of 1990-1991 and 1991-1992. The season of 1991-1992 will only be briefly addressed, just to assess the differences with the preceding season. This description will be fairly detailed to get a taste for the complexities of the problems people have to encounter, and to see what the relevant categories for analysis are for the next chapters.

The rainy season (*ndunngu*) of 1990

A bad start

We started our fieldwork in Serma in the middle of July 1990. Until the day we arrived only 16 mm of rain had been recorded in Serma in the month of July. The day we arrived it rained 8 more millimetres. The rainy season was terribly delayed. Sowing should have been finished, but only one or two fields around Debere were covered with seedlings. There was no fresh green grass in the vicinity of Serma, nor on the Seeno-Manngo, where the dry season pastures on the pasture management scheme around Bunndu Naange were still in use, and the herds had not yet returned. Normally the scheme was closed as soon as surface water in pools was available, in the middle of June or the beginning of July. Time began to press for the people of Serma. The rains would last only two more months, which would hardly be sufficient to sow and weed a crop of millet. Would the rains last long enough to allow the millet to ripen?

Our stay could hardly have begun in a worse situation. People were hungry, and anxious about the rains. The day after we arrived the people indeed tempted their luck once more by sowing their fields, which were soaked with the 8 millimetre shower the day before. They hoped that this time the rains would not fail again, and that the dust-storms, which destroyed the earlier sowings, would stay away at last.

Fields

The villagers have different options where to sow millet. They distinguish two soil types. As the village and the fields are located at the border of the Ferro and Seeno-Manngo, this distinction is quite marked. This location gives the villagers access to the clayey ferruginous soils (*kollongal*) of the Ferro north of the village and the sandy soils of the Seeno-Manngo (*seeno)* south of the village. The border between these soil types is quite marked as the sandy soils are eolic Pleistocene deposits overlying the footslopes of the Inselberge that constitute the mother material of the Ferro. Only in small depressions in the border area can intermediate soil types - sand with a limited amount of clay minerals and silt - be found. Within these soil types

there is of course further variance. Depending on slope and altitude, there are differences in texture and water holding capacity among the sandy soils of the Seeno-Manngo. On the Ferro there is more variation. Soils vary from very heavy clayey soils in and near ponds, having almost vertisolic properties, to sandy to loamy soils, which are hardly productive because of the formation of crust and the heavy run-off.

Table 7.1: *Overview of possible fields types and their actual use*[*]

	kollongal Ferro (clay)	*seeno* Seeno-Manngo (sand)
permanent cultivation with application of manure (*ngese*)	(x)	x
intermittent cultivation on deserted campsite (*wiinde*)	-	(x)
bush-fields in a fallow system	(x)	(x)

[*] - : not practised; (x) : no longer or hardly practised; x : practised and of actual relevance

The second distinction the villagers make in relation to the choice of fields is type of management. There are three types of management: 1- permanent cultivation with application of manure (*ngese*); 2- intermittent cultivation with application of manure on deserted campsite (the *wiinde*); 3- bush fields in a fallow system (*peyye*: from *feccude*: to cut). From one to three there is a decrease in intensity of use. Put in a matrix (see table 7.1) we have then six possible management types.

At present not all these cropping systems are practical options. The most widely practised cultivation system in 1990 was permanent cultivation with the application of manure on the sandy soils. There was only a small area on the Ferro under permanent cultivation, which by the way was on a comparatively light soil (1 field, $\pm$ 4.5 ha). The other possibilities have fallen into disuse and one of them, intermittent cultivation with the application of manure on the Ferro, has never been practised at all as far as we know. Only when the Jallube expect heavy rains and a good season do they clear the fields on a deserted campsite (*wiinde*). In practice they only do this when the rains start early and the seedlings on other fields are firmly established by the end of June.

So in practice the choice of fields is limited to fields under permanent cultivation. The fields are located around two centres at about 4 kilometres distance from each other. The smaller cluster of fields is around the only permanent well, and is called Yaraama. The second cluster of fields can be found south of Debere, a semi-circle around the pond and the water reservoirs (see map 3.1). These fields may be subdivided into two sub-groups, one consisting of a number of fields with heavier soils in the border area between Ferro and Seeno-Manngo, and the second consisting of the fields on the dunes of the Seeno-Manngo with sandy soils, called Tiile. These locations around permanent water points are not chosen by accident. When the animals

pass the empty fields on their way to the water reservoirs or the well they leave their droppings, so that the fields are manured in this way. At the same time families who have settled with their animals on the fields have the water for the household at hand. The clustering of fields at these two sites further diminishes the risks of damage by wandering herds. Lastly, having two cultivation sites at a certain distance also lessens the risk of crop failure. If the rains fail on one site, they may be better at the other site. Rainfall variation in the area is such that 4 kilometres can make a considerable difference (cf. Holy 1988). For example in September one or two small showers may save your crop from drying out.

The Jallube prefer in general to cultivate the light sandy soils of the Seeno-Manngo. The Riimaybe prefer the heavier soils, which are more fertile according to their judgement, because of the clay and silt, so that they have a better water retention capacity. Working two soil types as Bura does may also be regarded as a strategy to reduce uncertainty. When the crop shrivels on one soil type, it may survive on the other. The soils on the Ferro with a much higher fraction of clay and silt are no longer farmed, because it is said that the millet becomes desiccated too quickly on these soils in the dry spells during the rainy season.

The choice of soil type is also dependent on the amount of labour the family is able to mobilize. Clayey soils require more and harder work for cultivation. The Jallube have little labour available, because women and girls do not work on the fields and labour has to be devoted to the herding of the livestock and therefore prefer light sandy soils. For example, the only Riimaybe/Bellaabe family that works a field of 4.5 ha on the Ferro consists of two married couples without children. Apart from working on the fields they have no other obligations. During the cultivation period they settle on their field to devote themselves completely to agriculture. This is in marked contrast to Bubaare, who with his small work force of three, cultivates 3 ha (3 fields) with light sandy soils.

Field preparation

The only field preparation farmers in Serma undertake is the cleaning of the fields if necessary. Mostly the animals that cross the fields on their way to the underground water reservoirs or to the wells have removed so much of last year's agricultural debris that no cleaning is required. Another reason for field preparation may be the amount of natural regrowth of trees that occurs on the fields. On some fields this is indeed a problem, but on most fields tree densities are so low that hardly any cutting is needed. Ploughing is rarely practised. In other places on the Daande-Seeno some farmers and herdsmen plough their fields with the help of camel traction, but these cases are exceptions rather than the rule. For most people the investment in a plough with camel traction was too high. A couple of men in Serma experimented with this technology, but gave up. It was too difficult to keep the camels in good condition. One herdsman reported that he lost 7 ploughing camels before he quit. It was also said that they gave up ploughing, because they needed to apply much more manure after ploughing to restore soil fertility. It seems that weeding and ridging with a plough mobilizes more nutrients for plant growth, than cultivating by hand, which scratches only at the surface of the soil. Most people did not have sufficient animals to compensate for this extra drain on

soil fertility. After ploughing plant growth is more abundant and more soil moisture is needed by the plants. This leads to an additional drain on soil moisture plus extra evaporation because of the disturbance of the soil, which is not desirable under drought conditions.

Crops and seeds

The main crop in Serma is pearl millet (*gawri*, *Pinnesetum typhoides*). Hardly any other crop is grown in the village. Some Riimaybe cultivate some beans (*nyebbe*, *Vigna unguiculata*) and some sorghum (*bayeeri*, *Sorghum bicolor*). Riimaybe women and one Jallo woman sometimes try to grow minor crops like groundnuts, sesame, and melon, but these crops all failed in the period of our fieldwork. The growing of sorghum is more risky than millet. It is sown later because of its higher demands on soil moisture, and it ripens on residual moisture in the soil and the plants after the rains have ended. It needs a growing site that remains moist for some time after the last rains. On the other hand sorghum is able to survive inundation for a couple of days, while millet cannot. As a result it cannot be grown in the light sandy soils of the Seeno-Manngo, nor on the heavier soils on the Ferro that desiccate too quickly. Only on the soils of the border area has it a chance of survival. The timing of planting and harvesting is so different from millet that at harvest time the sorghum remains too long in the field while the livestock has already been admitted to graze on the stubble. Someone cultivating sorghum risks losing his crop in this way.

The one-sided nature of cereal cropping in Serma is clearly connected with the limited choice of field types. For someone cultivating on the Ferro, sorghum would be a better choice than millet as a crop, because it resists better the temporary inundations which occur frequently there. The absence of mixed cropping is remarkable. Gavian (1992) reports, for example, that in similar conditions in Niger mixed cropping is the rule and results in a much greater harvest both in dry matter and in yield in cereals. However, it is not made entirely clear under which climatic and edaphic conditions mixed cropping is practised.

Consequently, the provenance of the millet seeds is the key decision that has to be made with respect to crop mix. The only millets that can be grown in this region with a reasonable chance of success are short-cycle millets, with a maturing time of between 60 and 90 days after sowing. According to the people of Serma there are important differences between millet varieties. The provenance of seeds is considered important. The cultivators, Jallube and Riimaybe alike, distinguished three types of seed: *aawde Seeno (aawde Yirma)*, *aawde moodibaabe* and *aawde Taabi*.[2] The seed types have distinct morphological and agricultural properties. The *aawde Seeno* variety is characterized by loosely packed long spikes (*bokkoreeji*), somewhat conical in form. They are said to mature in 80-90 days and are well adapted to the sandy soils of the Seeno-Manngo. In general they are used when the rains are early, which is not so often nowadays. The Serma people consider its maturing time too long under the present rainfall conditions, and fear desiccation at the end of the season if the rains cease too early. The *aawde Taabi* is the most preferred seed type when the rains are late. This seed type is characterized by short densely packed cylindrical spikes (*singedeeru*) and is said to mature earlier and to be more drought resistant then the *aawde Seeno*. The seed derives its

name from the Dogon village located at the top of Mount Taabi, 15 kilometres from Serma (see chapter 2). These seeds are sown when the rains are late or when earlier sowings have failed. The *aawde moodibaabe* is an intermediate form of seed, in both the morphological and the agricultural sense. It derives its name from the *moodibaabe* (of the lineage Torodbe), who were the first occupants of the village and supposedly brought these seeds with them.

Some people keep seed stocks of all these varieties. When harvesting seeds they look for the purest form of the preferred seed type in a morphological sense, because the different varieties tend to grow more alike over the years. Within the seed types there are many sub-varieties, with different colours of seeds (*pulinti kado, gilooji*), and other morphological characteristics. These properties are expressed in further generations, but do not seem to affect the agricultural properties of the seeds except for degenerated plants (*sunuri*). These sub-varieties all have different names but descend from a common stock of seed. It seems that the genetic variability within the stock of seed is quite large. This would also explain the fast genetic erosion of seed stocks of different provenance. Cultivators in Serma say that the soil makes the millet become like the *aawde moodibaabe* in a few years.

Some people keep other types of seed in stock. These are also called after the place where they come from, e.g *aawde Kooro, aawde Banamba* (region of Koulikoro), *aawde Taapu* (northern Bandiagara plateau). In Dalla cultivators keep and use yet other provenances of seed. They use seeds of the Riimaybe and Sonrai in the mountains (*aawde Hayre*).[3] Social networks are the principal means of acquiring seeds from outside the region. The seeds from Taapu were bought by an old Jallo via his relatives, who settled there a couple of years ago. The seeds from Banamba were sent to Hamma Aljumaa by his younger brother. Seeds may be obtained from friends and relatives in the region. Some Riimaybe have good contacts with the Dogon of Nebbe, who gave them seeds in 1990, when their stocks ran out. Jallube also buy seeds in the villages where they settle for the dry season. However, when establishing plants is difficult and stocks run out, seeds have to be bought at the market in Booni. The most popular seed is that of Taabi, which was bought at a price slightly above the normal market price for millet. Riimaybe women regularly buy seeds for their own private fields. They may spent up to FCFA 1,500 on seeds.

Sowing and weeding

Sowing is mostly done just after a rainstorm to make the best use of soil moisture. Some Riimaybe sow before the first rains, but this is considered very risky by most Jallube, who keep smaller supplies of seeds. A light shower may already provoke germination and when subsequent rains are delayed the seedlings will die. So, most people prefer to wait for a big rainstorm so that soil moisture is sufficient to enable the seedlings to survive the longest possible dry spell. Erratic rainfall, dust storms, and a prevalence of insect pests, such as termites, locusts and ants, caused a high rate of failure of the seedlings. Some cultivators gave up because of lack of seed and lack of money to buy more seeds. Others were discouraged by the fact that they had to resow five times, or considered the season too far advanced to do any more sowing, and devoted their energy to the weeding of the fields where some millet plants

managed to survive.

When millet was sown in an advanced stage of the growing season, a number of cultivators combined sowing and weeding in one cycle. First the soil was worked and earth bunds and ridges were made, while the weeds were removed. Subsequently the millet was sown in these ridges. This system of weeding and sowing is called *dampitiri* (noun) or *dampitaade* (verb). It is said that the millet germinates faster in this way and also ripens faster, which is quite likely, because there is no competition with weeds any more, provided that the soil remains moist for most of the time.

The first weeding cycle serves several purposes. The main purpose is of course the removal of weeds. Despite the small amount of rainfall and the short growing season weed growth is very abundant. If weeding is not done in time, the competition of the weeds for nutrients and the water is so severe that the growth of the millet is retarded and suppressed, and eventually the crop is lost. In this instance the millet produces only empty spikes if it survives at all. The second purpose of weeding is to reduce the number of seedlings. Only three seedlings are needed per planting hole, whereas 10-20 grains are deposited in the hole. Further there are always a considerable number of wild shoots which have to be removed, for these plants produce bad spikes (*sunuri*) that fall apart while ripening and produce millet with a bitter taste. While thinning the millet plants one may also remove from the planting hole all kinds of root-suckers, that may threaten the survival of the seedlings. A final purpose of weeding is to increase the water infiltration capacity. The topsoil is disturbed and earth bunds are created next to the clumps of plants, so that water infiltrates better in between. In general the necessity for doing this on sandy soils is less than on soils with clay minerals that easily silt up when rainfall is heavy, leading to increased run-off and erosion. Most cultivators in Serma start weeding as soon as possible, for the later they start, the heavier the work, because of the intensity of weed growth and the more the negative impact of weed growth on crop production.

The availability of labour and food is an important determinant for crop production. Some people gave up their fields or part of them because they were not able to work all the land. A Bellaabe family, who cultivated the large field on the Ferro, were not able to finish the whole field. They gave lack of food as a reason. Bura's family abandoned part of the field in the depression, because of lack of strength (*semmbe walaa*) and lack of money to hire labourers. The weeds were growing too high and the soil was too heavy to do it all. No use was made of a plough in this situation for reasons outlined above. An extra reason for not using a plough when weeding is the fact that after 5 to 6 times of resowing the initial planting pattern in rows is lost. In this situation a plough is likely to do more damage than good.

When the rains are delayed in the period of the first round of weeding an awkward dilemma may pose itself. On the one hand weeds are competing with the millet for soil moisture. On the other hand weeding also causes a loss of precious soil moisture, and worse even, the boring, sucking and eating fauna of the soil will devote their attention exclusively to the fragile millet plants. According to the cultivators in Serma, normally most of the soil fauna dies, when rainfall is abundant, because soil temperature decreases and the seedlings are sufficiently vigorous to withstand the attack of the root-suckers. When, on the other hand, there is little rainfall and consequently little plant material, the pressure on the millet plants increases. Fields that remain unweeded, for whatever reason, have to be considered as lost. The millet is either

overgrown by the weeds or remains unproductive, because of lack of moisture.

At the beginning of August there were several heavy showers. In the course of one week almost 200 millimetres of precipitation were recorded in Serma. For the moment the problem of rainfall was solved. Probably the rains were rather randomly distributed. On a trip at the beginning of September to villages 20-40 kilometres to the east and southeast of Serma, we saw surrealistic pictures of people weeding fields where the seedlings were ankle high, whereas the wet season was about to end. We visited villages which were surrounded by bare sand dunes devoid of any vegetation. There were no pastures in these areas. For these villages and camps the season had to be reckoned a total loss. Where we stopped we were confronted with people shouting at us that they were hungry, showing us what they were eating, leaves and desert melon.

The flowering and harvest period

If the weeding has been finished and the millet seedlings have gained sufficient robustness and have become plants, there are relatively few pests that threaten the crop, provided that the rains continue. The second crucial period for the growth of millet is the flowering period. Lack of soil moisture in the flowering period has a very negative impact on crop production. Because of the heavy rains at the beginning of August soil moisture was no problem until the second half of September. To remedy the situation, it was decided to hold a rain ritual (see chapter 5), which did not produce the desired results. The women were disappointed. In the past the men would not have made it home in dry clothes after a rain ritual. Now, it took more than a week before the first drop of rain fell on the fields of Serma.

When the spikes began to appear new problems emerged. In the flowering period attacks of locusts, beetles, stem-borers and caterpillars pose an important threat. Against these four attacks there is no immediate defense possible, except binding together the spikes of a clump of millet plants to prevent access of the insects. This is however hardly effective. The only resort people have in case of a severe attack of one of these pests is the benedictions and charms of *moodibaabe*, *bonngobi* and Dogon specialists. These measures are, however, only effective if applied before the attack, and then only if implemented in a collective way. In many cases the herdsmen and cultivators lack the means and the money to consult these experts, so that this option is also unavailable.

In the ripening stage insects still pose a threat to the crop. When this period approaches people get somewhat nervous. In 1988 the millet had been attacked by beetles, of a species they were not familiar with, which caused considerable damage. When beetles were spotted at Yaraama there was a sense of alarm. In 1989 the whole harvest was eaten by locusts, against which no defence was possible. Through the entire wet season of 1990 the number of locusts present in the bush and near other villages was watched with anxiety. The main threat in 1990 came not from these sources but from a new pest, unknown in these numbers before, birds. In September 1990 millions of birds began nesting in the trees surrounding the fields at Serma, predominantly *Acacia raddiana* and *Balanites aegyptiaca*. The people of Serma responded in three ways: 1- by destroying the opportunities for nesting in the trees by cutting the branches;

2- by chasing the birds from their fields from dawn till sunset; 3- charms of *moodibaabe*. The first measure was not very effective, because the destruction of trees[4] was not organized and, therefore, not systematically executed, apart from the physical incapacity of the population to destroy all thorny trees within 5 kilometres distance from the village. The second measure was probably the most effective. People who did not chase the birds lost their harvest, which would have been meagre anyway, completely, whereas those who chased the birds managed to save the majority of it. Whether the third measure was effective is hard to say, because, as the inhabitants of Serma observed, charms and benedictions were distributed on an individual basis, which made them less effective.

All the men of our camp were at any one time involved in chasing away the birds from the fields. Normally in the afternoon Debere would be full of Jallube men, chatting together under the shelter. Now uneasy calm reigned in the hamlet. The Jallube men did not allow their women and daughters to join their efforts, even while they were not able to protect all the fields. A number of women were very eager to help their men, because they feared the consequences of another bad harvest. Because of this some fields were lost to the birds, since they were located at considerable distance from each other and there was no-one available to chase the birds. One day we decided to go to Yaraama to see Hamma Aljumaa, who was very busy day and night on his field chasing away the birds. While walking to Hamma's fields we ran into a man from Fetesambo. He seemed very depressed. Most of his millet had been eaten by the birds, for he had been absent for a couple of days. His other field in Fetesambo did not even germinate. The charm against the birds given to him by a wandering *moodibo* failed to work just as it did against the locusts. We found Hamma Aljumaa frantically beating with a stick on an empty 10 litre drum, which had once contained 'soy bean oil: a gift from the people of the United States'. All the millet spikes were bound together in clumps, as he explained, to block the access of locusts, beetles, and birds which were all present. Apart from this the field looked reasonable compared to the rest, no doubt thanks to the efforts of Hamma, while his sons Hamidu and Buraima were taking care of the other field.

At this stage of the season mammals pose a final threat to the standing crop. Because of the bad rains the elephants of the region did not continue their trek south to the border of Burkina Faso as usual, but remained in the research area.[5] Normally they are not after the millet, but are much keener on desert melon, which grows abundantly on pastures as well as on the fields of Serma in years with little rainfall. The amount of desert melon in the area with fields was even higher than usual, because a lot of people had given up their fields when they failed to establish growing millet plants. In passing through the fields the elephants caused considerable damage to the crop. The second species of mammals posing a threat to the crop is cattle. Because everybody is busy cultivating at this period of the year the herds are left wandering and occasionally enter the fields. A reasonable herd may destroy a field in a couple of hours. At least two Riimaybe families suffered damage because of herds wandering through their fields. One of them found a herd of a Jallo from Serma on his field and just chased the animals away. Bura's field was invaded by a herd of a Pullo from Duma, a large village of Fittoobe at 20 kilometres from Douentza. He claimed FCFA 15,000 as compensation from the herdsman, of which FCFA 10,000 was paid in the end.

Livestock

This problem of damage by animals, cattle mainly, is largely the result of the little attention that is given to the herding of livestock in the rainy season. Even in a year like 1990, with bad rains, there is sufficient pasture, though sometimes somewhat patchy. The herdsmen, despite the fact that they are responsible for the herd, are often obliged to work on the fields too, so that the herds are left untended during the day. The disadvantage of this way of herding is that the cattle tend to eat less than when they are being supervised all day. When the sun gets hot, they seek refuge in the shade of trees. Night herding is not required, because of the high quality, and high protein content of the herbs and grasses. Only the most industrious herdsmen graze their animals for a few hours each night. Herds from outside Serma, owned by tradesmen and civil servants, who started to visit the area after 1985, are often herded at night. These herdsmen, however, often fall asleep or go back to their lodgings after some hours, not aware of the fact that the animals have entered a field.

Before the droughts most family heads used to send part of the family, one or two of the elder sons, with or without their wives, with the cattle herd to the salt lick north of Booni at Durgama. At present this is rarely done. People prefer to buy salt. The labour power of the sons cannot easily be spared in the weeding season, with the growing importance of cereal cultivation. Further, most of the herds have become so small that it is not worth the trouble to go on trek to Durgama. The money spent on salt is easily recouped by the extra production of cereals in this way. Only the owners of somewhat larger herds still undertake this trek, but then only with the cattle herd, and not with the goat herd.

The small ruminants are always supervised by a herdsman, most often a young boy aged between 8 and 16 years. Depending on the composition of the flock the animals are either taken to the Ferro, if goats predominate or to the Seeno-Manngo, if sheep predominate. Goats are browsers and feed mainly on the leaves of trees. Sheep are grazers and prefer annual and perennial grasses. Rotational herding on the Seeno and the Ferro also occurs. Most herds of small ruminants are, however, dominated by goats. Sheep herding is considered risky, because sheep are less resistant against disease and shortage of water, and are more demanding with respect to the choice of forage, of which the supply is often less than adequate.

The Riimaybe have various ways of taking care of their livestock. In general they have smaller herds of cattle than the Jallube. Some Riimaybe have their animals herded by the Jallube of Serma, or of Fetesambo. Often this concerns only one or two animals. The one cow of Waddijam Saalu's husband is taken care of by Muussa Alu of Wuro Kaaral. Two other Riimaybe families entrusted a considerable number of animals, herds of about 10-16 animals, to Jallube families in Wuro Kaaral and Fetesambo respectively.[6] One of the Riimaybe regularly went there to milk some of his animals. The herd of the other Riimaybe family was herded too far away for his family to have regular access to the milk. Bura is the only Diimaajo in Serma who manages his own herd of cattle. For this he has created his own cattle camp west of the fields around Debere. In the rainy season his nephew Mina lives there with his family, because his fields are nearby and he keeps an eye on the animals at the same time. During the day the cattle are also left wandering around, to return in the evening when they are milked. Often a son of Bura spent the night in this camp to watch the fields, for it is nearer than the hamlet.

Milk production is at its peak in the wet season. Most cows give birth to a calf in the hot dry season. Those families who have some milch cows are clearly better off, for they are less dependent on purchasing millet to supplement their diet. There are, however, only two families who are able to subsist on milk alone in this season. All the other people have to survive on additional millet in their diet, or to buy grain when their stock is exhausted. Even when there is not sufficient to eat, not all the milk is consumed fresh (*biiradam*), with the evening or morning meal. Milk is the responsibility of the Jallube women, and they have to cover many needs with it. Some of the milk is saved for these other purposes and left for the night to go sour (*kosam daaniidam*: the milk that slept). To obtain a good quality sour milk some buttermilk of the day before is added. In the morning the sour milk is churned and the butter (*nebam*) is separated from the butter milk (*kaadam*). The *kaadam* is either bartered for millet or sold to buy spices for the sauce accompanying the millet dough in the evening, or added to the *cobbal*, a gruel of pounded millet, spices, and sour milk, that is eaten at lunchtime. The revenues from the milk may also be saved to buy household utensils, some cloth, benedictions of a *moodibo*, some medicine for the children and kola nuts. The butter may also be sold, but is more often stored to be sold at a later stage. There is always a tension between the needs of the calf and the needs of the family for milk as a basic foodstuff and the women's needs. Especially in the rainy season, when a lot of labour is required for the chores on the fields, the demand for food is high. If, however, too much milk is taken from the cow, the health and the survival of the calf is endangered and in consequence the reproduction of the herd. Sheep are not milked. The Jallube dislike goats' milk, but they milk the she-goats for the children. The number of goats is limited, so that the contribution of goats' milk to the diet is limited.

Gathering

During the rainy season a number of gathering activities may be undertaken, more or less depending on the food situation. Wild fonio (*paggiri*), desert melon and all kinds of herbs are gathered in order to supply extra food, but also to enrich the sauce and the meals in this season. *Paggiri* is gathered during and after the rainy season. During the rainy season it is gathered in an unripe state, by sweeping a basket through the grass, so that the grains fall into the basket. This way of gathering is practised by Riimaybe women as well as Riimaybe men. Other products which are gathered in the dry season and subsequently stored may also be eaten in case of food shortage. Among these are the wild rice (*maaro*) and the *giigiile*. Most of these products are gathered by the Riimaybe, but sometimes also Jallube women and children may undertake gathering activities. Leaves of plants are gathered to add to the sauce. In case of hunger these leaves may also be mixed with some millet, *giigiile*, or cooked desert melon, and form the basis of the meal.

The leaves of *oro* (baobab: *Adansonia digitata*), a necessary ingredient for the sauce accompanying the millet dough, are gathered by the men, Riimaybe as well as Jallube. Often they have to spent much time finding some trees left in the neighbourhood of Serma. Our host, Abdramaane Hamma, gathered *oro* when he was passing some baobab trees on his way to Monndoro, where he would go to arrange administrative affairs for the Fulbe of Monndoro.

Farther to the south, near Duwari, there are still some stands of baobab, which are heavily exploited. Relatives living around Duwari are mobilized to gather and dry the leaves in the rainy season, and a whole transport network is developing carrying the sacks of dried leaves to Serma on the back of donkeys, and on the roof-rack of our car.

The gathering of wood for cooking has recently become harder work. In the years after 1985 there was never a problem finding dead wood around Serma. So many trees died that the supply of wood was plentiful. By now it has become clear that these dead trees are not producing any more wood. Wood production has dropped significantly and the area needed to supply Debere and all the camps has grown larger. Wood resources will, however, by no means be exhausted, by the present population in the area.[7]

The post-harvest season (*Yaawnde*) of 1990

The harvest (*kettal*)

If all goes well by the end of the rainy season, the first unripe millet can be harvested (*muumri*). This millet has to be roasted before being eaten and is of a specific type of spike called *kasoori gorko*, which is considered to yield the best and most nutritious millet. After the *muumri* has been eaten, soon the *sunuri*, the millet from the wild shoots, ripens, and this has a bitter taste. After that all the other varieties of millet ripen in their time. If sorghum is grown, it ripens on residual moisture in the plant and the soil a couple of weeks later than the millet, and is therefore more vulnerable to damage by wandering herds in the harvesting period. The pressure of the herds in the harvesting season may be one of the reasons why so little sorghum is grown in Serma. It is simply too risky. Furthermore, people were very anxious to harvest, because they feared another attack on their crop after the bad rainfall, the pests and the birds.

The problem of herds damaging the millet fields becomes more urgent in the harvest season. The Jallube tend to harvest very early. They are keen on driving their animals into the fields just after the harvest to get the best share of the crop residues, especially in a year with bad rainfall when there is little good pasture available. Besides there were many Jallube who did not have anything to harvest, because their fields failed to grow. They had no interest at all in keeping the herds out of the fields. Instead it was whispered that they drove their animals into the fields of others on purpose, out of mischief and envy (*haasidaare*) that they had no harvest. Some fields were also suffering from drought, so that the taste of millet would be bad anyway. The inhabitants of Serma have a special name for millet that is almost ripe but dries out before becoming completely ripe. They call it *dukaari* or *buka*. The taste of this millet is comparable to that of *sunuri*, the millet that is harvested from the wild shoots. Lastly the elephants were still in the neighbourhood of Serma, and were foraging on desert melon in the fields of Fetesambo and Serma from time to time. In several instances they even entered cattle camps (Koyo and Nguma), upon which the inhabitants could do nothing but flee.

So there were many reasons to harvest quickly. As a result people who were late or had a lot to harvest ran considerable risks of having their fields invaded by the herds. Bura was very

agitated at this time. He was always patrolling his field with his locally made muzzle-loading rifle to chase away cattle, birds and elephants. We found him once preparing gunpowder by mixing charcoal with nitre. The people of Fetesambo called us several times to chase away solitary elephants, which were damaging their crops with our car. In Serma, the sorghum field of a Diimaajo woman was completely eaten and ravaged by an elephant. The sorghum field of another Diimaajo woman suffered the same fate, when the herd of a Jallo entered. The remains, stalks and unripe grains, she gave to her goats. She did not claim compensation, because she did not want problems with the Jallube. Otherwise they would not buy all kinds of necessities any more from her. Among the Jallube there were hardly any reports of damage by herds, though it is sure some fields were spoilt by herds of others. Probably most problems were arranged with the help of middlemen and not made public. Moreover, as long as the damage is not too great, they are not inclined to ask compensation from a fellow herdsman. For many of them the harvest was so small that they soon finished, and were safe from damage.

Gathering

The post-harvest season, and to some extent this may continue in the cold dry season (*dabbunde*), is also the season for gathering wild grains and tree fruits. The main products that are gathered are wild fonio (*paggiri*: *Panicum laetum*), wild rice (*maaro*: *Oryza* spp.) and the fruits of *Boscia senegalensis* (*giigiile*). In the post-harvest season, when the grains of the wild fonio and the rice have fallen to the ground, the soil is swept with a broom. All the dead material is gathered and the grains are sifted from the rest of the plant material. This process is very laborious and is only done by Bellaabe and Riimaybe women, and sometimes by impoverished Jallube women.

Maaro or wild rice grows spontaneously in the pond near Debere during the rainy season. When the pond has fallen dry and the grains are dropping, the women collect the grains by hand and by sweeping the soil, collecting the grains as well as the straw. After this a laborious process starts of sifting, cleaning and pounding the grains, so that all the dirt and seed hulls are removed. Other wild grains like 'cram-cram' (*kebbe*: *Cenchrus biflorus*) are not collected. The work of collecting 'cram-cram' is considered too laborious, though it is known that Bellaabe collect these grains in the area.[8]

The revenues from gathering activities may be considerable. Some Riimaybe women gathered each more than 50 kilos of wild rice in the 1990-1991 season. A Bella man living in Debere told us that he gathered wild fonio for five and a half days and that the amount gathered sufficed to feed his family of five for a month. Jallube men and women hardly ever gather wild grains, because of the taboo (*yaage*) on this kind of labour. They prefer to buy the rice and fonio from Riimaybe women who are willing to sell. On closer inspection there are however a considerable number of impoverished Jallube who gather wild grains. The origin of the taboo on the gathering of wild grains is not very clear. Other Fulbe living in the south and the east, and the Foulankriyaabe of Hommbori are less hesitant to gather in the bush (Marie & Marie 1974, Gallais p.c.). Older women contend that the Jallube also gathered wild grains in the past. Only when a market was opened in Booni around 1940, and cereals became available on the

market, did the Jallube stop gathering these products. Now only the poor who are not able to buy cereals at the market enter the bush.

Fruits of trees are gathered in wide variety. Among these one species stands out as a source of food. These are the fruits of *Boscia senegalensis* (*giigiile*), a hardy shrub, that produces nutritious, though poisonous, fruits. These fruits are gathered during the dry season when they have ripened. They can be stored for years and form a reserve for years of famine. To be digestible the fruits have to be decorticated and soaked in water for three days to let the poisonous substances dissolve in water. After this the fruits have to be cooked for a long time. Often they are mixed with some millet, *paggiri* or leaves of herbs to lessen the bitter and somewhat oily taste. The knowledge of women is crucial in this operation, because they know how to remove the toxin. The same taboo that applies to the gathering of wild grains applies to the gathering of *giigiile*. Jallube will rarely admit that they gather *giigiile*, though from hearsay and observations one can conclude that as with wild grains, a considerable number of impoverished Jallube indeed gather *giigiile*. The fruits are also traded, but because of their taste and low nutritional value compared to wild grains the price is considerably lower than that of cereals.[9] Other fruits of trees that are gathered occasionally for human consumption are: *edi* (*Sclerocarya birrea*), *kelli*, *gursoohi*, *cibooli*, (all *Grewia* spp.) *tanni* (*Balanites aegyptiaca*), *jaabi* (*Ziziphus mauretania*). In the past the fruits of *oro* (*Adansonia digitata*) and *jabi* (*Tamarindus indica*) were also gathered, but these species have died out in the vicinity of Serma. Especially children gather fruits when they play in the bush. Herdsmen do not eat when grazing the animals, but they pick fruits to suppress their hunger.

Thus, gathering is an activity of the poor and the young. In the past the Riimaybe were poor, because they had no livestock and were tied to the Jallube and Weheebe by bonds of slavery. They are still considered poor, because they lack *ndimu*, though they may be richer in material wealth (*jawdi*) than the Jallube. A Jallo who goes out in the bush to gather bush products is in fact admitting he/she is materially poor, and loses *ndimu* because of this.

Transhumance (*eggol*)

When the crop residues on the fields are finished, and a forest of stalks remains, it is time for decision-making concerning the planning for the rest of the year. Do we stay in Serma or do we leave? If we leave, where do we go? Normally the people would have some rest after the harvest: not so this year. The alternatives were carefully weighed by the Jallube men, who take the decisions.[10] Information is gathered on the quality of the pastures in various areas. The tidings on the harvest in Dogon and Hummbeebe villages that fall in the orbit of transhumance are meticulously assessed. There was urgency in taking the decisions, for many people had little grain in stock. They could not afford to wait for a long time, because that would exhaust their supply for the whole rainy season of next year, when millet would be precious on the market. Bubaare was not the only one who harvested for just two months. Among the Jallube as well as the Riimaybe many families were confronted with a large cereal gap. The Bana'en, the five sons of the late Usmaane Aamadu, who were managing land and livestock together, could not make up their mind and kept on hesitating until February whether to go to Tula or

not. Dikoore Bukari, the first wife of Sambo, the second oldest of the brothers, declared that her husband probably would decide not go to Tula because 'he has never been there before, and does not dare'. In the end Bana, the oldest, went to Tula with his family, while his four younger brothers lingered in Serma.

In the past the inhabitants of Serma used to go north in the dry season to water their animals at the wells and springs at the foot of the mountains in Booni, Nokara, Naani and other places. Each group of pastoralists had its own destination or home base, depending on their relations with the permanent inhabitants of these villages (see also Gallais 1975). Today the situation has changed completely. In Naani there is hardly any water in the dry season, because of a drop in the water table. In Booni, the arrondissement capital with around 2,000 inhabitants, the same problem occurs. From January on the population literally suffers from thirst, because of the limited capacity of the wells. The borehole in town should be equipped with a motor-driven pump but the machine is often out of operation (see also chapter 14).

Two other places were the main destinations for the transhumance. For most Jallube Duwari was the most logical destination. Many had long-standing relations with inhabitants of Duwari. However, the capacity of Duwari to receive and feed pastoralists was limited, considering that harvests failed all the time (see also chapter 11). Since the beginning of the droughts the Jallube had been looking for new destinations. Although transhumance movements fragmented during and after the droughts, Tula and Wayre became favourite stops on the transhumance. Tula and to a lesser extent Wayre have recently grown bigger, because of the government wells that attracted more cultivators to the villages. As a result the number of fields to be manured increased, and the market for the bartering of milk for millet expanded.

However, most people were hesitant to go on transhumance. How to gain a living with a few cows, and a dozen goats? How to survive in Serma on the other hand? As it appeared their hesitation to undertake the trek was based on sound empirical observation of the situation in the rest of the cercle. Harvests were bad everywhere in the cercle Douentza, and the neighbouring cercle of Koro south of the Seeno-Manngo, and even the whole of Mali and the north of Burkina Faso. In many areas the pastures were reported equally bad. In areas where less rain had fallen than in Serma, the pastures were worse, because of lack of rain. In areas with more rainfall such as Tula and Wayre pastures were also bad. Going there was also risky, because it was expected that all the Fulbe pastoralists in the Hayre and even beyond would try to settle in the vicinity of these two villages. Cereal supplies over there were not sufficient after all for the whole region.

For Hamma Aljumaa, whom we introduced in chapter 1, there was but one alternative. He and his family departed for Duwari the moment they finished the *sunuri*. They wanted to save the rest of the harvest for the next rainy season. If there is nothing to eat in the rainy season, a person cannot work on his/her field and thus will not have a harvest. He did not want to sell more animals from his depleted herd. So the only option was to go to Duwari to subsist on what fate, and their friends and relatives (their Kummbeejo affines) would bring them. For others such as Bubaare, this decision was not so clear. Would the revenues from the sale of milk outweigh the extra labour spent on watering the animals in Duwari? The wells in Duwari are 80 metres deep by the way. Would the decline in condition the animals would inevitably experience in Duwari outweigh these revenues, or would it be better to sacrifice one animal

on the market to keep the others in good condition? He solved all these dilemmas by taking only the calves and lactating cows, leaving the other animals behind with the Bana'en, so that they would be kept in good condition on the pastures of Serma, while the other cattle were made productive. I did not hear of any compensation to the Bana'en for this service, after all Bubaare is the oldest of their minimal lineage of the Seedoobe. Hamma Kunnga, Bubaare's son-in-law, who is also the son of Bubaare's cousin and a practising *moodibo*, intended to go to the area of Sevaré to earn some money with his craft. His three animals are in the herd of Bubaare. Further, he left half of the harvest of his fields (11 loads out of 22) with his wife Ay, who gave it to her father, so that, as Hamma Kunnga remarked, 'he will take care of his daughter without selling her or my cattle'. The second wife of Hamma stayed behind in Debere, and received the other half of the harvest.

Other families split up like the family of Bukari Aamadu, the founder of Koyo. The oldest son of Bukari, Hammadu, stayed in Serma to take care of Bukari and his wife, and settled on a field at Debere with a flock of small ruminants. The cattle joined the herd of Sambo, the second son and the richest man in Serma, who left with his brother Usmaane and Muusa for Wayre, where we found them all in good condition in January. They were having a good time, because the Hummbeebe in the village purchased a lot of milk and gave plenty of millet in return. The other inhabitants of Koyo, the families of Allaaye Hammadu and Aamadu Bura Totoodu, both cross-cousins of Sambo, followed his example. Allaaye took up herding a flock of goats for a Kummbeejo in Wayre. Aamadu and his small family subsisted on the barter of milk from their own small herd in Wayre.

Nuclear families also split up. Hamidu, one of the sons of Hamma Aljumaa, disappeared after he made it known that he wanted to leave for the Inner Delta to look for work. He left his wife behind, a girl still, who was pregnant with her first child, and living with her own parents in Fappittoo. The child was born in his absence. Hamma was very worried about him, for Hamidu is not one of the brightest. Remember Hamma had already lost two sons in this way. There were many more of these young men, often still boys, who went away. Sometimes they would come back, sometimes they spent years 'abroad', many stayed away forever (see also chapter 9). It was hard to make contact with them. It seemed they had moved away from normal society and slid into a hidden existence. They hid from every official, also from us. Han once tried to have a conversation with such a herdsman, who reportedly came back every year to cultivate a field in Debere. He just disappeared, saying he wanted to get himself a kola-nut. Han never saw him again, though he must have stayed in the neighbourhood at least two more months. At another occasion Han had a long conversation with a boy at night, whom he could not see.[11] He was quite open and said he came back every year to Wuro Kaaral to work on the field of his family. His parents were dead and he just came back to provide the remainder of his family, a younger brother and a grand-parent, with millet. As soon as the harvest was over he would go back to the Inner Delta, to take up work as a herdsman.

Some families left on transhumance without any livestock or with too little livestock to subsist on. We already saw an example of this above, namely Allaaye Hammadu, who followed his cousin Sambo to Wayre, without any possessions. Another herdsman from Coofya went for the third year to Sangana, near Dinannguru, in the cercle Koro, with his two cows and three sheep, where he herded some livestock for the Hummbeebe of Sangana. His only work was to

follow the herd. In return he was allowed to consume the milk. The Hummbeebe drew the water for the animals from a deep well with the help of a camel. Haidu Muusi, and his family from Urfina, went to the neighbourhood of Bandiagara, just as the two years before. He was always able to gain some work in herding animals, though never sufficient to allow the family to save something to invest in his own herd. Instead after the drought of 1985 his herd decreased in size, due to the numerous sales of animals he is obliged to make each year to buy cereals. It seems that most of the people we followed in this season had some idea where they were going to, although their movements look very haphazard.

The families who stayed in Serma were clearly those who disposed of more animals. One example is the family of Yero Alu. Though they were many, Yero was able to meet the demands of the family more or less. The four sons worked for him, and his wife, Jeneba, was a very resourceful person, who worked very hard. She used to walk to a distant Dogon village to sell her milk, which yielded far more cereals than anywhere else (more than 6 kilos of sorghum per trip). She also gathered all kinds of bush-products like *pagirri* (wild fonio) and *giigiile* (the bitter fruits of *Boscia senegalensis*) herself or she sent her youngest son Muusa. In this way she was able to save from the revenues of the milk, which she invested in small stock to fatten and sell with profit. According to their son, the yield they reaped from their fields in 1990 was reasonable because they had decided to split up the fields of the family. From then on each son worked for himself, when already married, or for his father when unmarried. The harvest was stored in separate granaries. Laziness would thus impinge directly on the animals of the lazy person. They kept the herd together, and it is taken care of by Muusa, the youngest of the four.

Abdramaane Hamma from Wuro Boggo, our host, also lingered in Serma. An important reason for staying was the condition of Ba Yobbi, his father, who was too old to go on transhumance. He needed a day to walk the 3 kilometres from Wuro Boggo, where they spent the rainy season, to Debere where they resided in the dry season, and he could no longer bear long rides on the back of a donkey. While we were in Serma we moved him from Wuro Boggo and Debere and vice versa with our car. In Debere the family normally settled on a field adjacent to Debere. This field was saturated with manure, according to local standards. It was decided to corral only the goats here. The cattle herd of the family remained in Wuro Boggo under the care of the oldest son Aamadu Maane and his wives, who were the only inhabitants of Wuro Boggo in this season.[12] Another reason for leaving the cattle herd on the Seeno-Manngo at night was the cold that began to be felt at night at the end of the post-harvest season. The fields were devoid of any vegetation, so that night temperatures are lower than on the pastures of the Seeno-Manngo. This reason was only put forward by the larger herd owners, such as Sambo Bukari of Koyo, and the Bana'en and Abdramaane Hamma of Wuro Boggo, who had an adequate supply of manure on their fields.

Manure

All the other inhabitants of Serma had to solve the problem of soil fertility somehow. Numerous families settled on their own fields for the manure. Those who went away or had

no livestock, or gave their livestock into the custody of pastoralists, had to seek another solution for the manure problem. Most Jallube who went on transhumance or did not possess livestock simply did not apply manure to their fields. Ultimately this leads to a depletion of the fertility of the soil, when the field is not regularly manured by passing animals.

The Riimaybe were dependent on pastoralists from outside Serma to manure their fields, except for Bura who received the herd of his relatives from Duna, near Booni. Jallube from Serma preferred to settle on their own land. Serma is not a very attractive place to reside even temporarily for a pastoralist, because there are few people buying milk. They are either poor, or they have milk from their own animals. Most herding families who settled in Serma did not stay for a long period, because they were on their way to somewhere else. They came from camps around Serma, such as Fetesambo or Petegudu, but also as far as Kerana, near Dalla, or Monndoro, 50 kilometres to the southeast. There were also Bellaabe coming from the Gurma among them, who wanted to have a place to settle in the region to gather the remnants of the wild rice, wild fonio and cram-cram.

If they settled on the field of a Diimaajo, they were given a load of millet and sometimes a meal of millet dough. The most important payment for settling on a Diimaajo's field is, however, access to the water reservoirs in the bed of the pond. Most Riimaybe families owned a considerable number of water reservoirs, on average more than Jallube families. The reason for this is that Riimaybe excavated numerous reservoirs with their own hands in the past. If the Jallube wanted to excavate reservoirs they hired Riimaybe, which is probably the reason why they have fewer reservoirs. Reservoirs were also rented to others, who had insufficient water. One Riimaybe family disposed of 8 reservoirs, but the herd on their fields was very large, so that water had to be bought from other people. In the post-harvest season the water in a normal reservoir changed ownership for FCFA 3,000-3,500. In the hot dry season (*ceedu*), the water table is lower, but water may be so precious in this period that it may be sold by the bucket for FCFA 25.

The cold dry season (*dabbunde*) of 1991

Duwari

For numerous Jallube this was the most difficult season. Everybody suffered from colds. Hardly anyone in Serma disposed of a blanket to cover himself against the cold during the night. People really had to endure a lot, especially when they were malnourished. Fires were kept burning during the night as much as possible, which is a considerable risk; a straw hut may burn down in a few minutes. This happened in several instances in the past, causing grave casualties and once even the death of five children.

When *dabbunde* arrived, we decided that it was time to see how our acquaintances fared on their transhumance destinations. We concentrated on Duwari, where a number of families were present. The other destinations we visited were the villages of Tula and Wayre, because these were relatively new destinations. Only with the drought of 1985 had the inhabitants of Serma started to frequent this area. This was peculiar, because Tula and Wayre belong to the territory

of Dalla. The location was therefore doubly interesting, because we would also be able to meet Jallube of Dalla in Tula and Wayre. We did not try to contact people on other transhumance destinations. By chance we met someone from Fappittoo at Bamgel at the foot of the Bandiagara escarpment, when we made a trip there to see if there were many pastoralists near Dogon villages.

Our stay in Duwari, although it lasted only four days and some day visits, was very important. Some of our experiences there have been described in chapter 1. We discovered more about the life of the life of the poor Fulbe, who migrated from Serma for good, and about the life of the herdsmen and their families when on transhumance. We began to see what it meant to be a Pullo, when not in a Fulbe area, and especially what it meant to be a poor Pullo in such a context. The Jallube who resided permanently in Duwari can be divided into two. Just as in Booni, Douentza, and Sevaré, there was a rural proletariat living on the margins of villages like Duwari and Dinannguru. The situation of these people is discussed in chapter 12. A second group of poor inhabited the bush at some distance subsisting on the herds of the Hummbeebe. The latter group was joined during the dry season by independent herding families such as those of Hamma Aljumaa and Bubaare from Wuro Boggo. They all competed for the same resource, access to the market for cereals against milk. They all relied on good relations with their *njaatigi* (host), especially after the drought of 1983-85. Sometimes these relations were established long ago, in other instances they were newly created. These relations can hardly be called a bond between two independent individuals. Rather they have nowadays the characteristics of patron-client relations.

Hamma Aljumaa has settled on the fields of his *njaatigi* in Duwari for 32 years, but the relationship has evolved considerably. In the past Hamma was accompanied by his brothers Aamadu and Maamudu. The latter has left for the Ivory Coast. Aamadu has found another *ajaatigi* in Duwari lately (see below). In the past Hamma was a welcome guest, for the cattle of his family brought fertility to the fields of his host. He gave him millet, a rope, and a leather sack for drawing water at the well of Duwari. Often he sent his children to help the Fulbe family with drawing water, for the well is very deep and the work arduous. In 1990, however, the gift of millet consisted of a small load (+ 12 kilos) and twice a gift of 2 kilos. Hamma's *njaatigi* also had a bad harvest, and Hamma brought only a few head of cattle, plus the only cow of his brother Aamadu, which was gestating. He was not accompanied by his brothers any more but by Sambo Allaaye, who is a nephew of Bubaare and Abdramaane Hamma, and in the accompany of his wife and sister. He brought along two milch cows plus calves. And their life was harsh. At the end of our stay Sambo asked us to take his wife back to Serma to live with her mother. She was pregnant, and life in Duwari was too heavy for her. Thus, the contribution of Hamma Aljumaa to the existence of his *njaatigi* in the form of animal manure has decreased considerably. In return the latter decreased the amount of grain he gave to Hamma Aljumaa. Still, both talk with respect about each other, though it is clear that there is tension between them. Between many other Fulbe and their *njaatigi* even this respect has gone.

The Jallube complained that the Hummbeebe were much less generous than they used to be. They did not help with watering the livestock any more, and the youths molested the women when they were trying to market their milk.[13] All the Jallube with whom we discussed this subject said they disliked their stay in Duwari and that they wanted to return to their home

village or camp as soon as possible. The Hummbeebe on the other hand said they mistrusted the Jallube, whom they all considered as opportunistic, unreliable, and sneaky. They were convinced that all Fulbe stole cattle if the occasion presented itself. One Kummbeejo explained that in the past Fulbe, who were the guests of the Hummbeebe, stole their children to sell them as slaves. Now they did the same with cattle. 'One day you think you are one and one family and the next day they cheat you'. From earlier research (de Bruijn & van Dijk 1988) we know that this mistrust has probably increased with the drought of 1983-1985. Both Fulbe and Hummbeebe lost most of their animals. The difference between them was that the Hummbeebe confided their animals to the Fulbe, so that they had someone to blame for their losses. Probably lots of animals belonging to the Hummbeebe were sold by the Fulbe to buy cereals for their family. Often the Hummbeebe did not receive compensation for these animals from the Fulbe. The herdsman and his family often just disappeared, out of fear of repercussions or out of shame that they did not manage to keep the animals alive or a combination of both. The Hummbeebe also suspect that their animals did not receive the same attention as the animals of the Fulbe. The Fulbe on the other hand claim that the situation was so critical that they could hardly have acted in any other way, and that they gave animals to townsmen and cultivators who were able to take care of them.

As a result of this mistrust, those Fulbe from Serma who keep animals for the Hummbeebe of Duwari are not allowed to graze these animals at their home base. The impoverished pastoralists herding animals for the Hummbeebe are now obliged to settle in the neighbourhood of Duwari. Aamadu Aljumaa, the younger brother of Hamma Aljumaa, is one of them. He has only one cow left, which is herded by Hamma, so that he has some milk if the cow has a calf. His family further disposed of some goats, and managed the sheep and goats of Hamma when he was in Duwari. In addition they herded the goats and sheep of a Kummbeejo, 6 goats of which 4 she-goats produced offspring and 10 sheep of which 2 had lambs. The owner of the flock of small ruminants wanted them to stay in Duwari.[14] Aamadu is allowed to keep the milk of the goats, on which he and his family subsist. The owner of the flock, who is now Aamadu's *njaatigi*, provided him with a rope, and a sack. He even supplied the labour to draw water for the goats and sheep, Aamadu's own animals included. Each day the Kummbeejo sent one of his children with drinking water to Jigooru where Aamadu and his family made camp. Aamadu did not want to settle on the field of his former *njaatigi*, for there is nothing to eat for the small goats which were not able to browse all day in the bush. In addition the pasture was better around Jigooru far from the village. In this way Aamadu managed to keep his own herd intact, because he did not have to sell a single animal of his own in the season 1989-1990.

Aamadu and others, who were in the same position, were clearly not happy with their situation. Aamadu said that he found living with the Hummbeebe very difficult, and that he did not sleep well because of all the worries. When discussing the problems of living in these circumstances with Bubaare, he said it was not a new phenomenon to herd animals for Hummbeebe. When someone was dispossessed in the past, he also took up herding for a Kummbeejo. However, there was a chance that you earned sufficient to return to the pastoral economy in Serma. The Kummbeejo gave millet, clothes, and tobacco, and sometimes a field to cultivate. After the drought the revenues from herding have been much less. The Jallube got only a rope and the leather sack to draw water. Sometimes they were given a field, but were

forced to move every three years in order to prevent their acquisition of permanent cultivation rights on the plot. If an animal dies a natural death there is no problem for the herdsman. But, when a Pullo loses an animal without good reason, the Hummbeebe may force him to pay back the animals even if he does not own a single coin, because they suspect the Pullo of selling the animal behind the back of the owner.

The Jallube women were not happy either. Normally they had the obligation to feed the family with the revenues from the milk. It was often extremely difficult to market all the milk, especially if the women were selling goats' milk. Sometimes they spent the whole day trying to barter a small calabash of milk, while the earnings were insufficient for the subsistence of the family. Ay, the daughter of Bubaare, sold the cows' milk in a fresh state, so that the exchange rate of millet for milk would be 1 : 1. She collected 2 kilos of millet in the morning and 2 kilos in the evening in December. Soon after, milk production declined so that she collected less millet. Bubaare had to buy a sack of 100 kilos of millet to prevent his family from starving. The daughter of Aamadu Aljumaa collected at most 3 kilos of millet per day for a family of 11 persons. Sometimes Jallube women did not manage to barter their milk at all. To supplement the income some women undertook activities such as the tressing of hair of Hummbeebe women. However, the possibilities for earning extra income were limited, because many Hummbeebe migrated to Burkina Faso for the dry season, because of the bad harvest. This small market was completely overrun by the many Fulbe women trying to make a living by marketing their milk. There were at least seven families from Serma on transhumance, and four families from Serma who settled permanently in Duwari, and subsisted on the herding of livestock for the Hummbeebe, and the bartering of milk. To these 11 families we must add the people who took refuge on the periphery of the village, who depended on begging and crafts (see Chapter 12). There were also people from other villages of the Daande-Seeno, and Foynonkoobe who normally stayed in Sari and Jimina, two neighbouring Hummbeebe villages. It was reported that these Hummbeebe villages were completely deserted after the bad harvest. It is clear that the capacity of Duwari to absorb milk and butter was soon exhausted in the dry season of 1990-1991.

Tula and Wayre

The situation in Tula and Wayre was different. In both villages the harvest had been good, for by chance both had been blessed with sufficient rainfall at the right moment. The birds discovered their fields, only when the millet was almost ripe, so that they could not do much harm. The area around Tula was hopelessly overcrowded. Although the size of Tula is half that of Duwari, and the size of Wayre is comparable to Debere, there were as many Fulbe as in Tula in Duwari, and half that number in Wayre. There were Fulbe huts as far as one could see. We collected the names of 8 families from Serma, 11 from Petegudu and Gawdeeru. Later on we discovered that more families from Serma were living in pastoral camps north of Tula. Probably they had not managed to get a *njaatigi* in Tula itself, but found it worthwhile to stay in the neighbourhood to market their milk in Tula. There were many more Fulbe from Dalla. We identified 16 extended families, consisting of more than one nuclear family. In Wayre the

situation was more relaxed. Here also many people were residing on the empty fields. In Tula and Wayre there were fewer complaints about difficulties in bartering the milk. On the contrary the Hummbeebe were very willing to buy the sour milk and the butter, and were giving plenty of millet in return. Instead the biggest difficulty was to find good quality pasture for the animals. Pastures were bad, because the last rains fell late in the season, so that the grasses and plants were able to put all the available dry matter into their seeds, resulting in hollow, innutritious stalks. As a result milk production dropped early in the season.

In the meantime cereal prices were rising gradually. At the markets in Douentza and Booni the price for a sack of millet rose from FCFA 7,500 just before and after the harvest to FCFA 12,500 in the hot dry season. There was little supply from the south, because the harvest had been bad there as well. We warned the people that they should not reckon on the supply from the south. However, most people took no precautions in the sense of buying millet when the prices were still low. Normally, the millet from the south would came on the market in December and would be brought by truck to the markets in the north. Despite the fact that the prices were high, supply was too little to alleviate the shortages.

The hot dry season (*ceedu*) of 1991

During *ceedu* the food situation grew worse. The prices remained high, and the supply did not improve. The harvest of bush products was of mixed quality. There was more wild fonio than normal. The harvest of *giigiile*, the fruits of *Boscia senegalensis*, was very low, because the leaves and flowers were eaten by desert locusts, which swarmed over the region. Many people started to return in the fasting month, Ramadan, from the middle of March to the middle of April. Our impression was that many returned because they were not able to cope in the villages where they were. Most families had the problem that their milch animals ran dry, so that their main source of income was gone. The marketing of milk and other activities such as the tressing of hair, or the fetching of water for the household, for the women, and the watering and herding of the livestock for the men, required a lot of energy and sufficient food, especially when the days become increasingly hot in *ceedu*. All these tasks required less work in Serma. The well at Yaraama and the water reservoirs in Debere are less deep. There is no milk market in Serma, so that one does not have to roam around the village to barter the milk all the time. The family of Hamma Aljumaa, for example, started eating their stock during Ramadan, little by little. They got their goats back from Aamadu, so that they were having some goats' milk to market, to buy some kola nuts and tobacco. They settled on their field at Yaraama.

Upon returning from Duwari, Bubaare also settled in Yaraama. Most families moved from the land around Debere to the fields at the well of Yaraama. The only people who remained in Debere were families with very few livestock; some, such as Abdramaane Hamma, who for other reasons were unable to move; and those who owned no land around the Yaraama well, and would not get permission to settle there. Almost all the inhabitants of Urfina, Koyo and Wuro Boggo were present.

Another point of attraction for the herds of Serma in this season should have been the

pastures of the range management scheme at Bunndu Naange. Only a couple of herds made use of the scheme. Most people considered the price of water too high and wanted to save their money to buy millet. Only when the herd is sufficiently large does it pay off to sell an animal, so that the others gain weight. This year too the pastures around Bunndu Naange were of good quality. However, the motor pump failed every time, so that the herdsmen had to take the herds back to Serma or other places around the Seeno-Manngo. Sometimes when there was no watering capacity left at Yaraama, those who did not originate from the region had to buy water at Debere, which is very expensive, up to FCFA 25 a bucket. In the end the range management scheme functioned only for 8 days (see also chapter 14). Fortunately for the herdsmen, and for the management of the borehole, the rains started very early. By the middle of June there was already enough fresh pasture and enough surface water on the Seeno-Manngo that the borehole could be closed. Most of these herds remained for some time on the Seeno-Manngo, until the chief of Booni, the head of the Pastoral Association managing the range management scheme, ordered them to go.[15]

The rainy season (*ndunngu*) of 1991

The rainy season of 1991 was marked by the difficult food situation. Cereal prices were rising again. The supply of millet became increasingly restricted. In addition to the scarcity in the south, the uncertainty about the Tuareg rebellions in the areas north of the cercle Douentza, and the riots that took place in towns like Mopti and Douentza, led to long interruptions in the already limited flow of grain to the north. This remained so for the rest of the rainy season of 1991. Sometimes there was no millet or rice for sale in the markets of Booni and Douentza; in Booni once for two weeks on end. All that was available was large quantities of roasted meat. In Serma there was also a severe shortage of millet. People had no more stocks after a zero harvest in 1989 and a bad harvest in 1990. The situation was more difficult than in the year before. Our observations were certainly biased by the fact that we knew people better than in the preceding year, so that we got to know more about their experiences and strategies for coping with the food shortage. However everything else also contributed to a difficult situation. Most people had very few livestock, so that they had few assets to sell in order to buy food. Cereal prices were very high, much more so than in 1990.[16]

The course of the rainy season of 1991 was quite different from that of 1990. In the month of May before this growing season the men of Serma held a communal ritual to promote good rains. After they had fixed a date for sowing before the rains, the first rain storm broke unexpectedly early. It was indeed as if the rains were drawn to the sky above Serma by an unknown force. Once the rains were so heavy that everything in our hut was soaked. In the morning everybody was busy with drying the contents of their huts, cold to the bone, but also filled with joy. There were also less positive signs. Enormous swarms of birds were seen flying southwards at dawn and northwards at sunset every day, people feared another unexpected disaster. The *moodibaabe* held a communal ritual against the birds, and they disappeared just as mysteriously as they had materialized.

An important indication of a difficult year is the amount of seed people have available to

start a new growing cycle after a failed harvest. In 1990 most people were able to sow five to six times before their supply of seeds was exhausted. In 1991 the first sowing was done in May. Some of these plants eventually made it through the whole season and ripened in October. Most first seedings failed however, due to drought. The fields were sown for the second time and then the rains stopped for some time. Everybody was holding his breath. Would it be the same as last year? Most people had only sufficient seed to sow two or three times. When we were in Dalla at the end of June, people were sowing anything they could lay their hands on. Especially the Weheebe had virtually no seeds left and were relying on the stocks of friendly Riimaybe or Dogon in nearby villages. In this way they collected an amazing variety of millet and sorghum seeds. Some people in Dalla were so hard pressed that they even sowed millet originating from the *cercle* of San 200-250 kilometers to the south, which they bought on the market.

The cultivators in Serma were also short of seed. In 1989 they had not been able to harvest seed and in 1990 people harvested little seed, and in many cases none at all, because of the bad and hasty harvest. The Jallube had more problems with the provision of sufficient seed than the Riimaybe. Either they had eaten the seeds because of hunger, or their stocks were depleted due to the failure of the harvest over several years. As our host Abdramaane Hamma put it: 'The Fulbe do not keep stocks of seed. They buy them on the market or for them in the sowing season, with friends (...). They sow any seeds except for the *aawde Seeno* (éfal), because this millet variety does not ripen fast enough'. Hamidu Usmaane, a Jallo living in Wuro Boggo explained that: 'seeds consist of what remains from last year. We take them out of the stock at the start of the rainy season. We do not select them beforehand'. This problem has a direct relation to control over the granary. The granaries of the Jallube are managed by the whole family. Often several people are allowed to take the millet necessary for the daily meals and share their granary, so that there is no strict control over what is consumed and what is reserved for next year's crop. Jallube women never have their own granary and have to take the millet for meals out of their husband's granary (see also chapter 9). Control over the family granary is differently organized among the Riimaybe. Here the family granaries are under the strict control of the head of the family. Bura, for example, takes every day a specified amount of millet out of the family granary. His wives are not allowed to enter this granary. In turn they have their own granaries to store their millet, which are forbidden terrain for their husband. The women also have their own supply of seed for their own fields. A Diimaajo said he kept 6 loads of seed spikes (*songorooji*), approximately 100 kilos. In this situation this was not sufficient. The 1990 campaign exhausted his seed stock completely, and he was obliged to buy seed on the market in Booni in 1991, because he harvested little good quality seed in 1990.[17]

The dispersed character of the early rains and the subsequent scattered growth of pastures caused considerable confusion. Herdsmen were not always able to go to the best pastures, because they were needed elsewhere to sow or cultivate. For a long period the pastures around Serma were bad compared to Duwari and the Seeno-Manngo. If the herdsman did not lead his cattle to the best pastures sometimes the herd led the herdsman. The cattle of Hamma Aljumaa ran back in the direction of Duwari, following the smell of fresh grass. It took him a couple of days and more than 100 kilometers of walking to recover the small herd. The herd of

Hamma Dalla, who accompanied Aamadu Maane on the Seeno-Manngo, disappeared completely. After three days most of the animals were found, but 13 were still missing. The herd of a Beweejo of Booni came to Serma on its own initiative, also in search of fresh pasture.

Lack of food was again a major obstacle to successfully working the fields. The poorer people, who had no grain in stock, had to work for a couple of days for cash in order to bring in money to buy millet to be able to work on their own fields. Allaaye Hammadu from Koyo survived by working on the fields of a Pullo in Debere. Two Riimaybe from Debere were hired by Hamma Bama from Wuro Kaaral, when he received some money from his son in Abidjan. Aama Babel, who worked on the field of Bura, did not even earn any money while working, for the labour he provided was to pay off a credit in millet he had taken with Bura in the dry season. The food he was offered at lunch was his only gain. His sons aged 5 to 17 worked with him on his own field. The boy aged 17 looked barely 12, because as Aama explained, he has always been hungry. He left parts of his fields uncultivated, but they were very densely planted. When asked whether he had no strength to work all of his field, the answer was no. He hoped that the plants in these uncultivated sections would produce wild shoots. In this way he would have a large quantity of *sunuri* ea[illegible] in the season to alleviate the hunger in his family.

The first half of August the rains were so abundant that the pond in Debere overflowed and flooded several fields between Debere and Nguma.[18] This inundation lasted for almost a week so that the crop was lost. All the other fields were growing extremely well. Because of the heavy rains the elephants, that had plagued the people of Serma the year before, left the area of Serma. They would not risk getting stuck in the mud on the Ferro. There were no locusts, caterpillars, beetles, birds, root-suckers, stemborers or other pests. People were more relaxed and it seemed that normal life was at last possible in Serma. Only people whose fields had had little manure were less fortunate. The millet plants were indeed growing, only the bigger they got the less grain they produced. In the end these cultivators ended with a smaller harvest in 1991 with good rains than in 1990 with the bad rains.

Halfway through August the rains stopped. Clouds gathered several times a week, but it did not rain, for six weeks on end. Only around the 25th of September were there some small showers here and there. By this time the millet was almost dried out. The sorghum in Serma yielded nothing. The millet survived because of the small showers, so that the 'coolness' (*buubi*) remained in the soil as the inhabitants of Serma said, but production was much lower than expected. Fields that were heavily manured and were 'hot' (*ana wulli*) burned. The fields of the *wiinde*, the heavily manured deserted camp site, which was sown on the initiative of Bubaare, did not burn because they were located in a depression, where the 'coolness' remained in the soil, and water was retained better than in the sandy soils on the Seeno-Manngo.

Because of this rainfall pattern the pastures were bad. The grasses and plants dried out before the seeds were completely ripened. In this way more nutritious hay is produced, with a higher protein content. However, the rains that wetted the dry grass in September and October and again in January had a very detrimental effect on the quality of the grass. The hay decomposed under the impact of water and burning sunshine.

After the harvest the inhabitants of Serma were at ease for the first time since the beginning

of our stay. In Booni and Douentza only *sunuri*, wild-shoot millet, was harvested, the rest of the plants failed to produce anything. In Dalla they had a bumper crop as we could observe for ourselves when we passed the fields on a trip to the mountains north of Dalla.

Discussion

Farming and herding are dominated by the incidence of all kind of unpredictable events, such as rainfall and pests. This makes it difficult for Jallube as well as Riimaybe to make contingency planning for their activities. In every era and every climatic zone there is always an element of insecurity in the yearly cycle of agricultural activities. In this case, however, insecurity is exceptionally dominant, and determines to a large extent the way people have to survive. As can be concluded from this chapter even the relatively rich whom we discussed, have a hard time coping with the uncertain situation.

In this largely descriptive chapter we hope to have made several things clear. First of all there are many land use strategies possible in a semi-arid environment such as this. The differences between Bubaare and Bura are great and cannot depend only on the farming 'system' that they 'operate'. They use and manage natural resources in the same ecological circumstances. Nor does access to resources serve as a sufficient explanation for the different strategies they follow. The families of both are about the same size, and enjoy about the same level of wealth. For both land is not a limiting factor. Both family heads enjoy considerable status in their respective communities, they are both informal leaders. Both families have or had access to a reasonable amount of livestock. The differences can only be explained by the ways in which they organize the use and management of the resources at their disposal and the way they apply their labour power. Ideologies and their membership of the pastoral and Muslim communities play a crucial role in these choices. The norms and values belonging to these communities pervade all the choices people make. One cannot understand the Jallube without being aware of their history as they perceive it, and the way they 'construct' their identities as pastoralists and Muslims. In the same manner one has to be aware of the fact that the Riimaybe have always been defined as low status people, who were forced to cultivate for others. They are not allowed to behave as Jallube and proudly to follow their own herd in the bush. Put in another way: herd following is not in their mind as a way to earn their subsistence, and to construct their identity. Their identity has been formed over the ages as that of people who cultivate the soil. Instead they entrust their herd to the Jallube or keep the animals near their homestead. The way the Riimaybe have organized their production can only be understood as standing in a dialectical relation with the way the Jallube arrange production. Their presence as a sedentary cultivating core of Fulbe society, and the fact that they perform all kind of services for the Jallube, allows the Jallube the flexibility and mobility to move around with their living resources, the cattle. In this sense the organization of Fulbe society in the Hayre has remained remarkably constant in the course of history. Cereal cultivation and livestock keeping still act as complementary strategies. However, the level of wealth enjoyed and resources available has declined since the onset of the droughts.

A second important issue is what all this has to do with the ecological environment. One

would expect the users of such a risk-prone environment to have developed very fine-tuned strategies to use and manage natural resources and to tame this capricious world. One would expect people to have a vast knowledge of the ecology so as not to be surprised by these circumstances. Instead we see a multitude of strategies used by Jallube who seem to hop over the Seeno-Manngo in a rather haphazard way, going to places where the pastures are bad, and food is lacking, not doing what rational pastoralists should do, as we know from ethnography, i.e. accumulating cattle. They cultivate the most drought-prone soils, and worse even try to apply tons of manure to these soils, so that harvests continually fail. The Riimaybe conform better to the picture of people who are working very hard to survive in a hostile environment, but they can only do so because the Jallube leave them all kinds of resources to survive at home in Serma. The Jallube leave the wild grains in the bush, they buy their spices and other necessities from Riimaybe women, and not from their own people. They pay the Riimaybe for restoring the water reservoirs, and for building and plastering their granaries. If the Jallube took their part in all these activities the Riimaybe would have a much harder time gaining a living in Serma. If the Jallube had to perform all these tasks themselves, however, they would not be able to exploit the variety of pastures and of cereal markets in cultivators' villages as they do now.

So the inhabitants of Serma have not developed fine-tuned strategies to tame the environment. They lack the technical means to do so. Rather they exploit the variety in the availability of resources, and cannot but react to extremely variable ecological conditions. Specific strategies work only under certain conditions. For the inhabitants of Serma there are no two years over the last decades in which the growing conditions and hence the productive capacity of the ecosystem were the same. A good harvest in cereals may well be offset by bad pastures and the death of weakened cattle, and the situation may well be the reverse next year. This cannot be accommodated by fine-tuning for these circumstances or the investment of more labour. People are to a large extent powerless against the whims of nature (see e.g. Spittler 1992). They can only survive by reacting to these circumstances, and each other, by reducing insecurity as it arises. The response of the Jallube is essentially a creative non-structured response to various conditions. It is based on day-to-day adjustment to climatological fluctuations, and all kinds of economic and social insecurities. Because of this they prefer to operate in small groups, each following its own course. In chapters 4 and 5 it was shown that the pastoral and Muslim communities are very fragmented, loosely defined networks. In these networks, from the lowest level of the *fayannde*, a mother with her children, to the level of the state, all kinds of strategies and ways to organize use and management of natural resources and to organize people are created. This network is held together by relations between people and by a sense of identity that exists as long as there are means to continue operating in this way (as we will see in chapters 9 and 11).

As we have seen, diversification, mobility and flexibility are the basis for these modes of resource use and management. Applying a lot of manure to a soil on the Seeno-Manngo may seem irrational, because it enhances the risk of crop failure. But when it enables a herding family to manage a herd at the same time, to market milk, and to harvest a bumper crop once in every five years, this strategy adds to the diversity of subsistence, enables the family to stay mobile, and to shift once in a while from farming and herding, and the reverse. Likewise, the

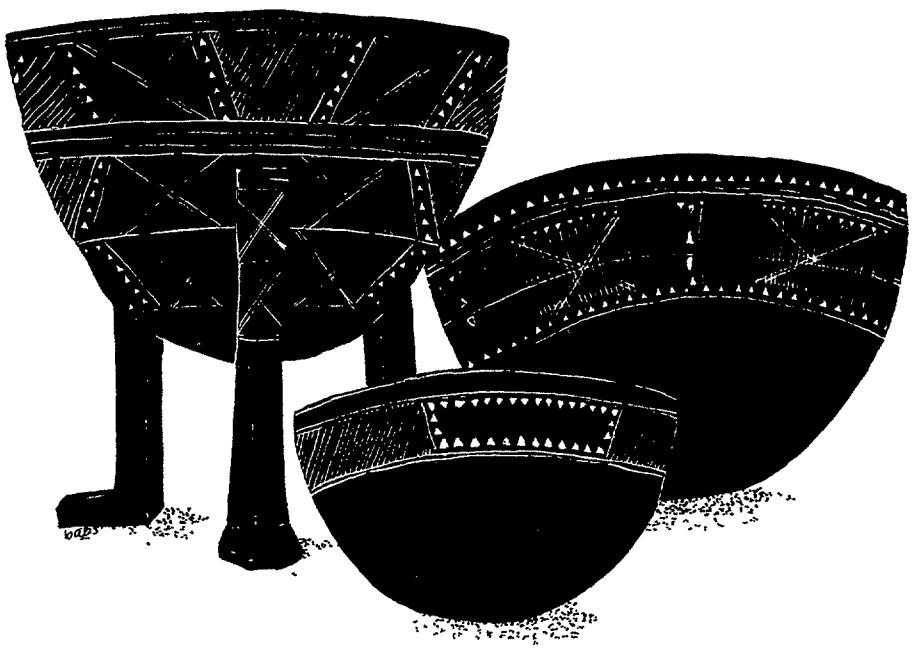
Riimaybe are oriented to more reliable harvests of cereals. Given their ideological and social background they do not have the option of subsisting on livestock for part of the year, so they have to develop other options, such as low(er)-risk millet farming with more reliable outputs, the gathering of bush-products, and petty trade. On the one hand these complexes of strategies certainly have systemic characteristics, because action in one domain has consequences for the success of other actions in other domains. However, given the large variety of factors involved in land use, its dynamics can only be understood in a larger framework, which comprises all these ecological, economical and socio-political factors. In the next chapter the dynamics of agricultural production will be scrutinized in relation to the way in which herding families survive economically, and cope with a declining resource base. This makes property relations, tenure arrangements over resources, the circulation of property through society, and the regulation of access to resources, into very important issues. These subjects will be discussed at two levels. The first level is that of the herding family, the *wuro*, which will be treated in chapter 9. The second level is that of the community in relation to the outside world in the form of other communities and the state (see chapter 10). In all these three domains insecurity as an important structuring factor will re-appear, as an explanation for the strategies people follow to gain a living.

Notes to chapter 7

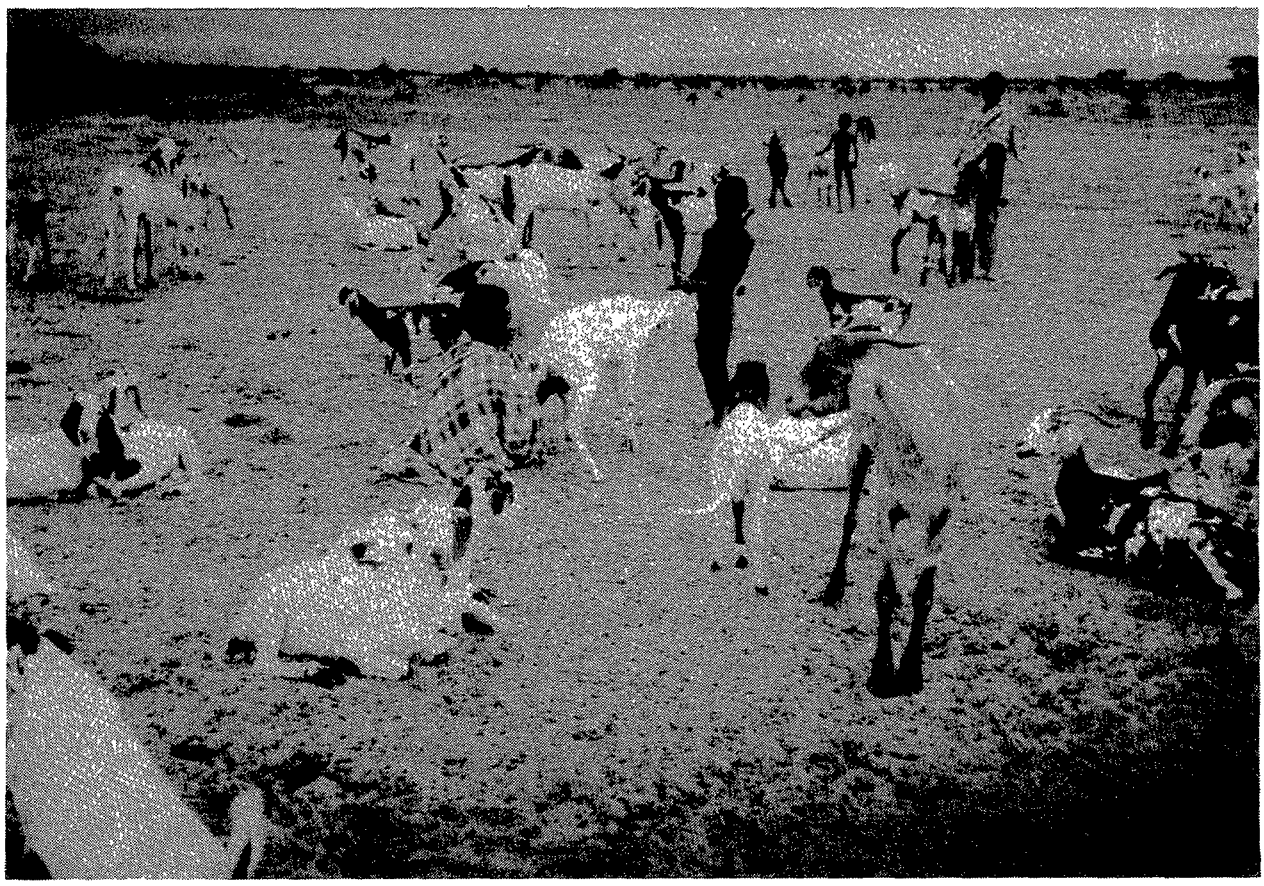
1. She also returned to her parents' house, because she did not agree to have a co-wife. The marriage had not been dissolved at the time of our field work.
2. Seeds of the Seeno, *moodibaabe* and Taabi respectively.
3. The people of Serma do not know the *aawde Hayre*. Apparently they have few contacts with Dalla and the people in the mountains.
4. By the way, the trees do not suffer much. It is like coppicing. All the trees that were treated in this way sprouted after some time.
5. The explanation for this phenomenon is that there were millions of desert melons for them to eat, and that the Ferro was not wet enough to pose a risk of getting stuck in the mud.
6. One of them obtained most of his cattle, by the way, by purchasing cheap during the drought and feeding grass he gathered in the bush to help the animals through the drought.
7. Cissé (1990) estimates the standing volume in this region at 4.12 $m^3.ha^{-1}$ on average over the Ferro and Seeno-Manngo, of which less than 1 % is exploited, which poses no threat at all to the sustainability of wood production in the area.
8. The thorny seed hulls of 'cram-cram' are very difficult to remove, and render the gathering and cleaning work very unpleasant and labour intensive. A family may spend the whole day on gathering, cleaning and preparing a meal of "cram-cram" seed.
9. When the fruits of *giigiile* appear on the market in Douentza, people say that famine has really started. This happened indeed in July 1991, see also below.
10. This does not mean that women do not have any influence on the decision whether to stay or leave.
11. Han did not put on his torch for fear he would leave.
12. Cooking was done in the camp near Debere, so that the food was cold when it finally arrived in Wuro Boggo.
13. We never witnessed this ourselves, these were all stories and hearsay.
14. Aamadu finds this a stupid position, because last year he sent one of his children with his own goats to Burkina Faso, where the situation for goats was better, and did not lose a single animal, while the small ruminants of the Hummbeebe in the vicinity of Duwari were dying in scores.
15. We spent a couple of days at this location approximately 6 kilometres south of the borehole. The pastures were

excellent and the cows were producing ample milk It was the first time we experienced a situation where people were able to live on the produce of their herd, and what a pastoral existence meant if there were sufficient animals. There was enough milk to live on, and if they got a taste for millet, one of the women went to Yirma to barter some sour milk. (See also chapter 13).

16. We transported as much millet as we could get to Serma to sell at a subsidized price. Eventually our vehicle broke down, and we had to go to Bamako 900 kilometres from Serma for spare parts. We also bought millet for old people to help them through the season. Some of them complained that they found no one prepared to buy it for them in town, and sometimes they were cheated by others
17. In 1991 there was also a high demand for seeds from hairy spikes (*cuubi*). The hairs protect the seeds from birds, because they form a threat to the birds' eyes.
18. In other places in the cercle the situation was not so good. In Douentza and Booni the rains were less abundant. In Douentza there was hardly any field with growing crops. It seemed that the rains bypassed Douentza. Every time a rainstorm approached Douentza it blew away to the north or the south. In Dalla the season was regarded as the best in decades.







8

The Dynamics of Agricultural and Pastoral Production

The analysis of agricultural production

Methodologies for analyzing agricultural production

In this chapter an analysis will be undertaken of agricultural and livestock production in relation to the dynamics in the ecological and economic situation. In most agro-ecological and agro-economic research the dominant theoretical perspective is systems theory. In this perspective cropping, biological production of range land, and livestock keeping can be analyzed as separate subsystems. For each of these subsystems similar methodologies have been developed: for cropping Farming Systems Research and Development (FSR&D) (Norman et al. 1981, Shaner et al. 1983); for primary production of range land Production Primaire au Sahel (PPS) methodology (Penning de Vries & Djitèye 1981, Breman & de Ridder 1991), and for livestock production systems Pastoral Systems Research (PSR) (IDRC/ILCA 1983).[1] These methodologies are aimed at predicting the dynamics of agricultural and biological production, in order to arrive at sounder plans for intervening in agricultural production. It is attempted then to condense all kinds of biological and agricultural production processes into predictive models, and to establish regular patterns and statistical means to characterize farming strategies. Agricultural systems are reduced to homogeneous sub-units with concepts such as recommendation domain and agro-ecological zone. These concepts assume the intrinsic homogeneity of the farming cropping and livestock systems, which is directly related to system output. Given the same agro-ecological and socio-economic conditions, no significant differences in system are expected (de Steenhuijsen Piters 1995:11). However, in real life a difference of 50% between the predictions of agricultural and biological production made with the help of models and the real outcome is no exception (Diarra & Hiernaux 1987, Toulmin 1992). Most researchers take this as an acceptable margin, whereas it suggests that there is a lot we do not know yet, or that the data base on which the calculations are based is sloppy.

A more general criticism of systems approaches to agriculture is that they are a-historical, and a-political (Brouwer & Jansen 1989). Others have pointed out that, for example, Farming Systems Research is not an analytical approach for understanding basic processes in agriculture. 'It is a *framework for ranking* [italics in original] the elements of a system, not an approach to elucidate relations between the different elements, and between the different scales of interaction' (de Steenhuijsen Piters 1995:11). Moreover, little work has been done on situations where cropping, livestock keeping and gathering were integrated into one strategy of resource

use and management. Most work recently done in this domain elaborates on the systemic interactions between farming and livestock keeping at regional and agro-ecosystem level (see van Keulen & Breman 1990, van der Graaf & Breman 1993, Kessler 1994).[2] Studies at farm level have been oriented towards the design of a closed mixed farming system, which has been shown to be an illusion in the Sahel ever since its inception by French colonial veterinarians in the 1940s (Landais & Lhoste 1990).[3]

Models also suggest that farmers or herdsmen take decisions with the same models in mind, or at least should do so in order to use their resources in a rational way. Anthropological models of decision making (e.g. Barlett 1980) try to condense this process into formal models, assuming that actors make rational choices, and have all the relevant information at their disposal, or can make an assessment of their probabilities (e.g. Cancian 1980). However, knowledge of something is not the same as using it (Richards 1985). The likelihood of a certain amount of rainfall or the occurrence of a pest is of little help when the rainfall fails, or interacts differently with the environment than expected, or when the crop is destroyed by locusts. These events are to a large extent unpredictable. Their occurrences and consequences are, however, the most important determinants of biological and agricultural production in Serma, and consequently determine the chances for survival for its inhabitants, as was shown in the preceding chapter. Probabilistic calculations of hazard may be helpful in clarifying the general characteristics of farmers and herdsmen, but they have no explanatory value for the day-to-day decisions of local actors to cope with insecurity. Rather we will concentrate on variability in crop and livestock production in this chapter as the most relevant variable for the herdsmen and farmers in Serma, and how variability has structured the organization of the use and management of natural resources and the ways in which people seek to gain a subsistence.

Sahelian agro-pastoral production systems have been studied more extensively at farm level in recent years by Delgado (1979), Toulmin (1992), and Gavian (1992). In all these three studies the relation between crops and livestock is studied. Manure is in all cases the key to an understanding of the success of the agro-pastoral production strategy. Delgado (1979:105-114) tries to construct a 'typical' Fulbe farm, using mean values for the relevant parameters from the households in his sample. Gavian's (1992) study is wholly devoted to an analysis of manure flows between the cropping and the herding systems. The study of Toulmin (1992) finally, is much more ambitious and tries to develop a model in which investments in wells, livestock and farming equipment are correlated to cereal production and household size.

All these models are based on thorough empirical research in which huge amounts of data were collected and analyzed with linear programming techniques. Basically all studies conclude that there is a positive correlation between the amount of manure applied and the harvest figures of millet. Hence the application of animal manure is a viable way to maintain soil fertility under Sahelian conditions. Further, there seems to be a positive relation between the amount of labour invested in crop production and the amount that is harvested in semi-arid circumstances. In some cases, such as the Berti in the Sudan, labour is the principal constraint for crop production. Berti cultivators always sow more fields than they will be able to cultivate, just in case the rains are good and the crop can survive on its own. In less favourable rainfall conditions only those fields, which are cultivated yield anything (Holy 1988). A similar strategy is followed by Somali agro-pastoralists in the Bay region of Somalia (Massey 1987). Investment

in labour-saving agricultural equipment such as ploughs with oxen teams is, in combination with manuring, the principal means for increasing millet production among Bamana farmers (Toulmin 1992).

What all these models and descriptions have in common is that they specify relatively simple relations between crop, soil, human labour, nutrients, technology, and crop production. Crop production strategies are seen as the outcome of decision-making processes aiming at an optimal combination of inputs in view of the agro-ecological and technological constraints present in the area. This assumption is present in what may be labelled the standard agro-economic or agro-ecological paradigm, and in most theorizing about peasant production (see also Boserup 1965, Ruthenberg 1980, Netting 1993). In short, peasants or farmers make 'rational' decisions in order to achieve an optimal relation between labour and other inputs, and a production level that meets their objectives.

This view rests on a number of assumptions that need some clarification in order to make the reasoning in the next sections more clear. First of all this paradigm concerning agricultural production assumes that these relations exist in the empirical world. While we cannot refute this assumption, for there is a vast corpus of literature supporting it, we hope to show that these links might be more complex than generally assumed. An example of this is the connection between labour input and harvest in 1990. In this year the connection between labour and harvest was lost. Labour input in weeding was low because the most of the sowings failed. So the harvest did not fail because little labour was applied to the crop, on the contrary for many people the harvest had failed already because of difficulties early in the season. Harvest expectations were so low that cultivators did not apply any more labour to their fields. The causal connection between labour and production was thus the reverse in this case, contrary to the assumption in standard agronomic paradigms.

A second hidden assumption in these decision making models is that the harvest and the crop produced is indeed a reflection of the intentions of the cultivator (Ortiz 1980:189), and the result of the decisions taken. If not, farmers and herdsmen are supposed to change their strategies. It seems, however, rather bizarre to assume that in a given society persistent crop failure is the result of the cultivator's intentions and of the decisions that are taken by the farmer. A more moderate and fitting viewpoint was voiced by Ortiz when she stated that individuals decide on the basis of a wide range of past experiences, rather than on a vision of the future, while these recollections of the past depend to a great extent on our intellectual concerns in the present (Ortiz 1980:188), e.g harvest expectations.

A third assumption which is made is that the most important decisions concerning the cropping season are taken in advance and that there is some regularity in these decisions, because the decision-makers dispose of perfect knowledge about the alternatives. This set of propositions seems highly improbable given the course of the growing seasons in Serma that were described in the preceding chapter. Most key events were in principle unknowable in advance. Consequently key decisions also have to be taken in the course of the season. Decisions are taken as sequential adjustments as the season develops with regard to the uncertainty each year (Watts 1983).

A fourth assumption which is made is that what is measured this growing season can be measured next year too, and that the results in terms of theoretical statements and relations

between system components will be the same. The differences between the course of events in the season of 1990 and 1991 in Serma indicate otherwise. If the data had been gathered in 1988 the general picture of cereal cultivation in Serma would have been far more positive, and probably different relations between inputs and output would have been found. Toulmin (1992) encountered a similar problem. Although rainfall and crop production in the seasons that her data cover did not differ much, there were nevertheless found to be considerable differences in estimated marginal value products of each production factor at the mean from one year to the next (Toulmin 1992:121). So, for example, in one year one hour of labour yielded more extra production of millet than in the next year despite similar conditions.

A final assumption is that the area sown is equal to the area worked and harvested, so that that area is an indiscriminate indicator of the strategy of the farming unit. As has been shown in the preceding chapter there may be a vast difference between the amount of land owned, sown, worked and harvested. In various circumstances other factors may be the main limiting factor. Area owned is only an indicator of potential production.

The data base

A sound analysis of agricultural production starts with a valid data-base. Some insight into the way the quantitative data used in this chapter were obtained is therefore indispensable. The description of the role of hazard in natural resource management in the preceding chapter already hides to some extent the state of chaos, and the anxiety of people about the course the agricultural seasons were taking. At times we talked with people who were very insecure, almost desperate about what to do. The descriptions in that chapter, moreover, concern the relatively well-off, those who were still farming and herding. It does not tell how people without access to labour, livestock or land make a living. Given the conversations we had in other agricultural seasons, this was no different in other years. Most people did not have a standardized pattern of decision-making each year. Of course, a number of decisions were taken anew each year in the same period, but the information that had to be taken into account, and the personal situation of the decision-maker, might differ enormously.

Consequently the problems in gathering consistent sets of data were immense. A major cultural factor involved was the fact that people were very reluctant to talk about the 'wealth' they possessed. A favourable remark by the interviewer or his assistant about, for example, the number of cattle or children (labour power) would cause the person interviewed to close up like an oyster. This phenomenon may be explained as fear of the tax-collector as is often said in the case of pastoralists, but it goes deeper than that in this case. People obviously experience *yaage* (shame), loaded with fear and suspicion that somebody may become jealous and try to destroy their wealth, by magical means or in another way. This jealousy, locally called *haasidaare*, plays a prominent role in all kind of conflicts.[4] When people owned only a few animals, the discussion of animal ownership was much less of a problem. Attempts to count animals in the camps and to record all kinds of data were met with extreme suspicion. Men who were willing to provide this data did so with a barely audible voice. Never did they provide information unasked, every bit had to be asked for afresh. We never pressed anyone

to answer these questions, in order not to run the risk of losing their confidence. So we had to resort to a wealth-ranking exercise and question people about each other, which is not a very sensitive strategy for research to acquire data on ownership of livestock, but probably the most reliable in this case. Our experiences also made us wonder about livestock researchers who gather detailed data concerning herd structure and ownership categories, by surveys which may last from a couple of days to a couple of weeks.

In order to have a reference set of data a number of fields were surveyed, and their owners questioned on cropping history, tenure, crop management, and harvest figures. This survey was not by any means meant as a random sample, nor were the respondents selected in an orderly way. Rather they were selected from the families we knew best, so that an idea could be formed about how they managed to make ends meet. Further the management of trees in fields was investigated, in order to have some indication of their role in these drought-prone circumstances. There has been considerable debate with respect to the beneficial effects of trees on soil productivity and the functioning of the agro-ecosystem in general (see Kessler & Breman 1991).

Most people were clearly less hesitant to talk about crop production than about their wealth in animals. However in this domain many other problems were encountered. In the first place many fields failed completely in 1990 and to a lesser extent in 1991, so that for most fields no production data could be gathered over both seasons. Information about the amount of land that did not produce anything was hard to obtain. In general the cultivators did not feel like going to these places. For them it was not relevant. Secondly, it is easy enough to measure a field, but then how much of it was sown, produced seedlings, was worked, etc.? Should we calculate productivity over the area sown, worked or harvested? In many cases it was not clear how much was sown or cultivated. A similar problem appeared at harvest time. Crop production had to be estimated on the basis of the number of loads of spikes that were carried home. The variation in these loads was tremendous, depending on length of the millet stalks, which were used to bind the loads, and the quality of the spikes. Moreover, sometimes the harvests of one or two fields were not bundled, because of the bad quality of the spikes, but transported in baskets to the granary. In 1990 a lot of millet also went to the village in baskets, because it needed additional drying. It proved impossible for people to recollect how many baskets were carried home, because all kind of kin came to help, instead of the field owner carrying home the loads on the back of a donkey.

The aggregation of data at the level of the family or production unit proved equally difficult. There was a clear difference in the organization of millet production between Jallube and Riimaybe in Serma. The Jallube have all kinds of organizational arrangements for millet production. All the men of a *wuro* normally work family fields. Mostly the sons work. When elder men work, they work on separate fields. Production may be stored in a common granary, but also in separate granaries, when they work separate fields, even if they belong to the same *wuro*. Riimaybe families work a number of fields with the whole family, men, women, and children. At the same time individuals, mainly women, but sometimes also men, may work on their personal fields helped by their children. The harvests of these personal fields are put into separate granaries. Lastly, but very important, a major obstacle to collecting consistent data was the problem that a number of families, Jallube as well as Riimaybe, changed their

organization in the course of the two seasons that were observed. In one case of a Jallube family, in one year production data were obtained for the *wuro* as a whole, without the specification where the harvest was produced. In the dry season of 1990-91 they decided to split up the *wuro* into five sub-units. In 1991 fairly detailed data could be collected for four sub-units of crop production per field. Only the head of the fifth sub-unit refused any cooperation. A comparison of both seasons became much more difficult in this way.

Data on labour input were not systematically collected. As can be concluded from the description in the preceding chapter the labour devoted to cereal cropping was not of the same order in the seasons of 1990 and 1991. In 1990 most labour was spent on sowing, and chasing birds, while comparatively little labour was needed for weeding. It became also clear in 1991 that the cultivators had been less motivated in 1990 than in 1991. In the growing season of 1990 they were almost apathetic. In 1991 the people were in general hungrier, and consequently less effective while working, but given the favourable rains they were more willing to work. Further it was obvious that in 1990 most of the answers, when people were asked to recollect hours of work on the field, were either based on social desirability or reflected the intentions of the respondent rather than the actual working hours. This was different in 1991. The men spent most of their time in the growing season of 1990 in Debere where they gathered for a chat after their work. In 1991 the fields were far more frequently visited than in 1990. The number of people spending their time in Debere was clearly less.

This problem of commensurability also applied to data on manure management. The amount of manure deposited on fields is obviously a function of the numbers of animals that are stalled on a field over the last five years (Toulmin 1992). The question remained, however, how to establish the number of animals stalled on the field, and for how long? Were they taken to graze at night and for how many hours? What was the composition of the herd, cattle or small ruminants? How did they spread the manure over the fields? According to the cultivators there is a big difference between goats' dung and cattle manure. Goats' dung is 'hotter' than cattle manure and leads to earlier drying out of the soil and the crop during a drought period. It also appeared that on many fields some parts were heavily manured, while other parts hardly received any manure at all in an attempt to spread the risk of over-manuring and under-manuring.

Data on tree cover on the fields proved equally difficult. The number of trees on fields was in general small, with most of these trees smaller than 2 metres in height, so that they would better be classified as shrubs. However, as soon became clear the cover with shrubs can hardly be taken as an indication of a specific farming strategy. The cover with shrubs may be reduced from one year to another from 300 per ha to zero, when the cultivator decides to cut them down as they begin to form a menace. So they were merely tolerated as long as they did not form a nuisance. There was one cultivator who left the shrubs on his field for he feared to be fined by the forest service if he cut them down. Others said they cut the shrubs down every two or three years for precisely the same reason. If the shrubs were too large they would be considered as trees, and consequently it would be worth fining the cultivator who cut them down.[5]

As a result of all these considerations, which were mostly appreciated while doing the fieldwork, it was decided to shift the focus of the fieldwork with respect to data on agricultural

production. It was considered more important to understand the dynamics of cropping and livestock keeping, and the ways the farmers and herdsmen were thinking about it, than to put all our efforts into the gathering of data of questionable quality far removed from daily reality, and hence uninteresting. Moreover, the gathering of quantitative data was a considerable burden for people in this situation. We did not want to bother them with what they most probably considered stupid questions, while they were fighting for survival. Lastly we lacked the necessary means to hire the assistants needed to do the job for us. It would have been impossible to do it all with the restricted manpower we had at our disposal. Bringing more assistants into Serma would also have caused extra unrest, apart from the difficulties of housing and feeding them in this situation.

Although we attributed our failures to establish a firm methodological basis for data on agricultural production to the difficult situation and our own (dis-)ability - which fieldworker does not have doubts? -, the issue re-appeared when analyzing the data we eventually collected. We tried to devise some sort of framework for the statistical analysis of some quantitive data. There arose a major problem in fitting the assumptions and cause-effect relations inherent in such frameworks of agro-pastoral production systems to the descriptive data presented in the preceding chapter. It was because of this that the subject of variability and insecurity in crop production presented itself as the most viable way to carry forward the analysis. The analysis that follows in the next section is based on the assumption that, in the circumstances of our research area, the internal dynamics of cropping have less explanatory value for the way cultivators try to produce cereals than the external ecological and societal factors impinging on the crop and the cultivator. The field, the *wuro* and the herd are in principle open systems and ruled to a large extent by external dynamics. In the course of this chapter only those data will be used to which we attribute sufficient reliability, or which could be estimated with satisfactory precision. First, crop production will be analyzed at field level and at the level of the herding or farming family, then the livestock production will be analyzed from the perspective of its contribution to the income of the inhabitants of Serma, and its relation to the biological production of the pastures. In the third section the ways in which families make ends meet, with respect to food consumption, will be reviewed.

Crop production

Rainfall

The amount and distribution of rainfall are of crucial importance. As we have seen, the start of the rains and the moment of first weeding are considered by the cultivators to be very critical. Once the rains start early, the seedlings are established and the first weeding cycle begins and sufficient moisture in the soil is available, a crucial phase has passed. The start of the growing season in 1990 was extremely bad. Up to the beginning of August there was only 74 mm of rainfall, and numerous dust storms were recorded in Serma. As a result weeding was delayed until the second week of August. In other places even until mid-August. In this period a considerable soil moisture deficit was built up. According to Agnew (1990:283) the total soil

moisture deficit in the growing season (i.e. potential minus actual evapotranspiration) provides the best explanation of millet yields in the zone of 200 to 500 mm rainfall. He established an empirical relation between the size of the seasonal moisture deficits and the timing and duration of dry spells. In addition to a critical period in the growth of millet during the establishment of seedlings and first weeding, Agnew notices that deficits of longer duration occurring in the flowering season of the millet (August) are closely related to production losses for millet (Agnew 1990:283). This relation, however, can only be detected where mean annual rainfall is between 200 and 500 mm and a total soil moisture deficit of more than 200 mm occurs (Agnew 1990:290). Consequently, there is a relation between annual rainfall and production losses. These production losses are, however, more severe when dry spells occur in the sowing and flowering periods for millet.

The fact that harvests failed almost continuously in the 1980s and early 1990s in the Hayre is thus consistent with the observation of Hesse and Thera (1987) that the decrease in rainfall over the last decades has mostly occurred in the month of August, during the critical flowering period of millet. In both seasons that were covered by the fieldwork a dry spell occurred in August. In 1990, 193 mm of rainfall was recorded in a single week after the third of August. After these enormous rainstorms hardly any precipitation was registered until mid-September. The bad harvest from the fields where the crop continued to grow after the bad start of the growing season may be explained by this dry spell. In 1991 a similar dry spell occurred from August 18 until September 25. Fortunately the rains had been very good in the months before, so that there was a lot of moisture stored in the soil. Nevertheless it must be assumed that production losses occurred. Despite the fact that the harvest of 1991 was much better than in 1990, people were still disappointed. They expected more.

Ironically, in most models of Sahelian farming rainfall patterns do not appear as an explanatory variable, because they cannot be quantified. Total rainfall figures are used as an input in these models, but the pattern of rainfall is seldomly used as an explanatory factor. Differences between regions expressed in differences in total annual rainfall are used for comparative purposes, but the variation from one year to another is hardly ever taken as an explanation for crop production figures. All the same, erratic rainfall patterns cannot be held solely responsible for all the ills experienced by the people of Serma. When soil moisture deficits drop below a certain threshold, 200 mm, other factors such as soil fertility, pests, diseases and farming practices become more important for explaining production losses (Agnew 1990:288). However, the relations between rainfall and the occurrence of variations in these factors also remain obscure.

Soil fertility

Much research has been devoted to understanding the role of soil fertility in Sahelian agricultural production. In general Sahelian soils are poor in nutrients and low in organic matter, so that the possibilities for plant growth are limited. Nutrient availability is more limiting than rainfall for plant growth when annual rainfall exceeds a value of 300 mm (Breman & de Wit 1983). This is illustrated by the fact that if adequately supplied with dung, and under

favourable rainfall conditions, indigenous cropping practices may result in harvest figures as high as 2,300 kilos per ha for red sorghum and 950 kilos per ha for millet on well-manured fields of Fulbe in southern Burkina Faso, where the rainfall is about 950 mm per annum. In contrast, when no manure is applied productivity drops to 81-198 kilos per ha for different crop mixes (Delgado 1979:78). Toulmin gives figures of 1,000 kilos of millet per ha for fields adequately supplied with dung and 200 kilos for bush-fields in a fallow system without any addition of nutrients, for a village north of Segou with a long-term mean of 600 mm rainfall per annum (Toulmin 1992:73).

So the application of manure is of paramount importance for maintaining high levels of crop production. This problem is dealt with after the harvest. However, as was often explained by cultivators in Serma, soil fertility is a mixed blessing. The soils which are cultivated by the people of Serma are in general very poor, and nutrients have to be replenished to ensure that soil fertility does not drop below acceptable levels. On the other hand too much manure makes the crop more susceptible to droughts during the rainy season. If there was much manure in the soil and little rain the millet 'topples' earlier than on less fertile soils. Hence cultivators were 'afraid'[6] to cultivate well-manured soils. This was very clear in the case of the deserted camp sites (*biile* sg. *wiinde*). Although there were many uncultivated *biile*, which were well manured before they were deserted, not a single location was cultivated in 1990. The only one that was cultivated in 1991 was located in a depression with a soil having a higher than average clay content, so that the soil moisture retention capacity was optimal. That soil fertility is indeed a mixed blessing is clearly illustrated by the example of Aama Babel, one of the poorest Jallube in Serma. His field is located next to the mound of Debere. As a result of this location all the household waste, goats dung, potash and other debris that gathers there works itself down onto his field. In the past this was a favoured location, especially for someone who like Aama Babel has no livestock of his own. Over the past decade since 1980, however, this village waste was a bane, because every year Aama's millet 'toppled' except in 1988. In 1991, under good rainfall conditions he harvested 80 loads, more than 1300 kg on his 1.5 ha.

The opposite case, low soil fertility and good rainfall produces equally disastrous results. All the nutrients available are invested in vegetative growth of the millet plants, so that nothing is left for the grains and only empty spikes are produced. This phenomenon has become widespread since 1985. A lot of people have no animals or only a few animals left. On the one hand most people strive to lower the fertility of their fields, because of the risk of burning. On the other hand fertility may not drop below a certain level, for this limits the possibilities of a good harvest. Both Jallube and Riimaybe try to attune in to this phenomenon by conscious manipulation of the fertility of the soil. Often they apply manure to one field and not to another. They also divide fields in sectors, which they treat in a different manner with respect to the application of manure. However in this situation of declining rainfall, depleted herds, and few assets to invest in the soil, their capacity to control fertility is rather limited.

The agronomic literature on cereal cropping in the Sahel hardly offers an explanation for the 'burning' of crops. Several authors mention its occurrence (Toulmin 1992, Gavian 1992)[7] but do not elaborate on a possible explanation. The only feasible explanation is that improved soil fertility leads to more vegetative growth of the millet plants. As a result water use is increased and water resources in the soil are exhausted at an earlier stage. A second explanation may be

that higher soil fertility narrows the water retention trajectory. The cultivators in Serma make a difference between goats' dung and cows' dung in this respect. Goats' dung is 'hotter' and causes the crop to 'burn' earlier than cows' dung which is 'cooler'. Fussell et al. (1987:260) make a somewhat hazy statement on this subject: 'Improved fertility *may or may not* increase water use, but it does improve water-use efficiency' (emphasis authors'). They report up to 75% more total dry matter and grain yield when fields were well fertilized with organic manure. Unfortunately they do not specify the rainfall pattern, but only the total amount of rainfall under which these results were obtained. Neither do they define water use. Is it per ha or per kilo of dry matter? In another paper Fussell (n.d. page 6) reports an increase in the use of water for fertilized fields. These results contradict each other. Given also the observation of others under farming conditions (Gavian 1992:29, Toulmin 1992:72), and the experience of the cultivators, we must conclude that fertilization is relevant for the use of soil moisture by the crop, though we cannot yet exclude the influence of soil type, because none of the authors mentioned provides data on this.

Organic manure also has positive effects on soil quality, e.g. on the physical properties of the soil. Most soils that are cultivated in Serma are the sandy substrates of the Seeno-Manngo. These soils are light and contain very little clay (see Hiernaux et al. 1984). The advantage of these soils is that water infiltration capacity is high. There is no water erosion, and hardly any run-off. There are no impenetrable layers in the sub-soil, so that millet plants root deeply and can use a large water trajectory. On the other hand water retention capacity of these light soils is low. The application of organic manure certainly has a positive effect on this last variable. Chemical fertilizers are not used in Serma. Moreover, organic manure gives a better structure to the top-soil, so that wind has less erosive impact.

The soils in the intermediate zone between Ferro and Seeno-Manngo are more clayey, and may have a somewhat higher natural fertility, though it is also reported that the soils of the Ferro are very old and weathered and almost devoid of any nutrients. In any case, if not too clayey and if well drained their physical properties are better than those of the sandy soils of the dunes, though they are in general less deep. However, they are heavier to work, and consequently require more labour.

Labour input

The cultivation of millet is the task demanding by far the most labour in the rainy season. The sowing of millet should preferably be done in one or at most in two days. After a heavy rainstorm early in the rainy season literally everyone is busy with planting millet in the fields. If necessary even the Jallube women contribute to the sowing of millet by putting seeds in the holes which are made by the men. By far the largest portion of agricultural labour is invested in cultivating of the soil in the first cycle of weeding. Among the Riimaybe the whole family is mobilized to undertake this work. The men go to the field early in the morning, the women following at noon after they have prepared the meal. After some rest around noon, work continues until late in the afternoon. Among the Fulbe the men work the fields. Children are employed in the work by Jallube and Riimaybe as young as possible.

As can be concluded from table 8.1, Bura Bilaali's family is clearly an exception in Serma, among the Jallube as well as among the Riimaybe. They cultivate 0.85 ha per capita, which is more than twice as high as the mean for all the others. The difference may be attributed to the composition of his family. The ratio between workers and consumers in this family is much higher than in any of the other families. The amount of land cultivated per worker varies enormously between Riimaybe and Jallube. The Jallube compensate for their lack of agricultural labour by cultivating more land per worker.

It was to be expected that during the rainy season the workers would be very busy with working the millet fields to produce as much as possible of the most important product for their survival. In most studies of West African agriculture it is asserted that it is hardly possible to have conversations with people in the cultivation season. This is not the case in Serma. Given the wide variety in area cultivated per worker in various regions of West Africa (see table 8.3), however, this is not so surprising. There are few indications that labour input per ha or the cropping system itself varies systematically from one region in the Sahel to another, or that cereal cropping in one region is far more productive than in another. So the variation in cultivated areas per worker and per capita must have a different non-agricultural, yet unknown origin. In Serma, where people cultivate average amounts of land as compared to other population groups in the West African Sahel, it was not difficult at all to have conversations with people during the cropping season. At any time in the cultivation season one could find a number of men under the shelter in the centre of Debere, where they would gather to engage in conversation. On the fields there were always moments when people wanted to relax, and were ready for conversation, especially if we took up the hoe ourselves from time to time. The youths were only intermittently occupied with tilling the soil. Regularly they gathered in Debere to brew tea with herdsmen from the Inner Delta, who were passing the rainy season with their herds on the Seeno-Manngo. The amount of land the Jallube work per worker is relatively high if compared to other groups in West Africa. The Riimaybe perform very moderately, but they work the heavier soils, and they have also their private fields.

The mean area cultivated per capita for the Jallube shows little variation (see table 8.1). It seems they cultivate a minimum amount of land per capita, because they have to feed their families. Among the Riimaybe the area cultivated per worker has less variation than the area cultivated per capita. It seems that they adjust the amount of land to be worked to the number of workers, and invest more labour in the same piece of land. The eventual difference between both categories in amount of land that is worked per capita is moderate. Assuming that the inhabitants of Serma aim at producing sufficient staple food from the amount of land they cultivate we may calculate, at what level of productivity subsistence level is attained. If we set the mean cultivated area at 0.40 ha, it would follow that the subsistence level of 300 kilos of millet per capita would be secured at a production level of 750 kilos per ha, which is not unrealistic when the soil is well manured and the rains favourable for the growth of millet. This may have been the situation in the past. However, as can be concluded from table 8.2, this level of productivity may be regarded as an unrealistic goal under present circumstances.[8] In 1991, which was the best year in a whole decade since 1980, with the exception of 1988, the

Table 8.1: *Mean area (ha) cultivated per worker and per capita for Jallube and Riimaybe in Serma and their coefficients of variance (CV in %) (pooled data 1990 and 1991).**

Mean area cultivated (ha)					
	per worker	**CV**	**per capita**	**CV**	**N**
Jallube	1.70	35%	0.34	18%	11
Riimaybe	0.95	26%	0.45	36%	9
without Bura Bilaali	0.93	28%	0.40	25%	8
Total	**1.37**	**44%**	**0.39**	**33%**	**20**
without Bura Bilaali	1.38	44%	0.37	29%	19

* In these figures the private fields of women are not included, because the harvest from these fields does not enter the common pool of millet for the family

Table 8.2: *Mean crop production (kg), per worker and per capita in 1990 and 1991, and their coefficients of variance (CV in %)*

Mean crop production (kg)					
	per worker	**CV**	**per capita**	**CV**	**N**
1990					
Jallube	212	27%	56	52%	5
Riimaybe	261	43%	136	56%	7
Mean over 1990	240	40%	103	71%	12
1991					
Jallube	676	33%	127	30%	6
Riimaybe	393	*	180	*	2
Mean over 1991	606	38%	140	55%	8
Mean over 1990/1991	**386**	**63%**	**118**	**55%**	**20**

* not calculated, because of the low number of observations

two Riimaybe families of which we have data produced 60 % of their subsistence requirements, under the minimal variant of 300 kilos per capita. The Jallube in both 1990 and 1991, and the Riimaybe in 1990 produced less than 50 % of subsistence requirements, and the Jallube in 1990 even less than 20 %. We may conclude that only if the Jallube and Riimaybe cultivated twice as much land per capita and per worker, would they be able to produce sufficient millet for their subsistence. This is however not realistic, because even though they are not fully occupied

Table 8.3: *Area cultivated per family, per worker and per family member (ha) for Fulbe and other ethnic groups in West Africa*

			cultivated area		
country	**ethnic group**	**year**	**per family**	**per worker**	**per capita**
Mali	Bamana*	1980	26.5	3.53	1.46
(Segou)		1981	28.6	3.94	1.57
Burkina Faso	Mossi	1977-1978	2.46	0.83	-
(South)	Fulbe	1976-1977	3.85	0.67	-
Niger	Zarma	1990-1991	10.3	2.29	0.75
(South)	Fulbe	1990-1991	3.2	0.84	0.26
Burkina Faso	Mossi	1970-1976	5.17	-	0.47
(Northwest)	Fulbe	1970-1976	1.69	0.97	0.26
Niger-Filingué	mixed	1980	6.9	2.40	0.90
Niger-Madarounfa	mixed	1982	2.2	0.60	0.31
Central Mali	Riimaybe	1990-1991	-	0.93	0.40
(Hayre)	Jallube	1990-1991	-	1.70	0.34

(sources Delgado 1979, Marchal 1983, Swinton et al. 1984, Gavian 1992, Toulmin 1992, and own data)
* most people use a plough with ox traction for ridging and weeding

in the rainy season, they do not have the time for this expansion of production. Besides, the physical condition of the workers does not allow so much work.

So it seems that among the Jallube, in families with a high consumer/worker ratio (4-5 consumers per worker), more land is cultivated per worker than in families with a low consumer/worker ratio (2 consumers per worker), as among the Riimaybe. This would lead us to conclude also that considerations with respect to risk and crop failure hardly play a role in the decision concerning the area to be cultivated, but rather the consumer/worker ratio and the amount of labour and land necessary or available for the production of sufficient food under favourable conditions. This is very remarkable in a situation where risk and insecurity is so prominent. Later on an argument will be presented as to why risk and insecurity with respect to crop production do not play a role.

Variability in crop production

For the analysis of variability in crop production the data on crop production were split over the years (table 8.4) and according to production site (table 8.5). The sites were chosen according to soil quality and geographical considerations (see map 3.1). Yaraama refers to the fields around the well at Yaraama. The zone around Debere was subdivided into two subunits: Debere, with the fields with some clay in the soil in the transition zone between Ferro and Seeno-Manngo, where most of the large family fields of the Riimaybe of Debere are concentrated; and Tiile, consisting of the fields on the dunes of the Seeno-Manngo, where the soil consists of sand only.

Due to the adverse conditions in 1990 most cultivators harvested far less than they envisaged. Most of the crop was lost through pests, erratic rainfall, dust storms, and the ravages of elephants. As the people in Serma say '*aduna fuu ana "jiidi gawri sanne*' (the whole world - animals and insects included - badly wants millet). In the data there is a clear bias to the fields which yielded something. Those fields where the harvest had been nil were omitted or in some cases not mentioned, as appeared later. In 1991, in contrast, there were hardly any fields that failed completely, except the fields that were inundated after the rains in mid-August.

When looking at crop production it is clear that in 1991 the average harvest was better than in 1990. The mean productivity in 1990 was 305 kilos per ha, while in 1991 mean productivity was 408 kilos per ha (see table 8.4). The figure for productivity ($\underline{p}$') in 1990 is surely too high, for 1990 only the fields that yielded anything were included, so in fact the differences in productivity are even higher. Moreover the large difference between $\underline{p}/\underline{x}$ (mean production corrected for field size) and $\underline{p}$', (mean production based on the number of observations) for 1990, indicates that small fields were more productive than large fields. Consequently the real production over the fields which were sampled was much less than 305 $kg.ha^{-1}$. All the other differences between the values of $\underline{p}$' and $\underline{p}/\underline{x}$, are much less, indicating that there is no effect of field size.

When the data are divided over the locations of the field, and those of 1990 and 1991 are pooled, there are no big differences between the various locations. except for the *wiinde*. The productivity of the soil of the only *wiinde*, which was well manured and endowed with good rainfall, indeed approached 750 kg of millet per ha. From the comparison between 1990 and 1991 it becomes clear that especially on the Tiile, which accounts for more than 60 % of all fields in Serma, and where the fields with the sandy soils are located, productivity of the soil in 1990 is very low. The difference between $\underline{p}$' and $\underline{p}/\underline{x}$ is again very high, which means that the productivity corrected for field size is even lower. As is shown by the high productivity of the *wiinde* the soils of the Tiile also have a high potential when climatic conditions are favourable. The fact that on the Tiile productivity of the soil is not higher than in other places, may be an indication that soil fertility has declined due to the lack of livestock to manure these fields. The coefficients of variance for all these figures are, however, very high, so that no definite conclusions can be drawn.

So we have large differences in crop production from one year to another on the sandy light soils. There are indications that the oscillations on the heavier soils are less pronounced, but caution is warranted given the limited database. If we compare the figures on crop production

with the per capita production and the area cultivated by Riimaybe and Jallube, the conclusion is justified that there are two different cultivation strategies, which have a very direct link with norms concerning nobility (*ndimu*) and labour. The Jallube work in general the light soils of the Tiile, for they do not want their women to work in cultivation. They therefore have to work these light soils, since otherwise, they would not be able to work twice as much land as the Riimaybe. They invest large quantities of manure in these soils, which are very poor.

Table 8.4: *Mean field size ($\underline{x}$ in ha), production per field ($\underline{x}$ in kg), per ha ($\underline{p}/\underline{x}$ in kg), and productivity in ($\underline{p}$' in kg.ha^{-1}), and its coefficient of variance (CV in %) of millet fields in Serma in 1990 and 1991*

			PRODUCTION		PRODUCTIVITY		
year	**location**	**mean field size ($\underline{x}$)**	**per field $\underline{p}$**	**per ha $\underline{p}/\underline{x}$**	**per ha $\underline{p}$'**	**CV %**	**N**
1990	all	1.85	435	235	305	80%	25
1991	*wiinde*	0.38	216	568	656	51%	5
	rest	1.00	399	399	408	49%	23
	all	0.89	366	411	452	56%	28
total		**1.34**	**367**	**274**	**382**	**67%**	**53**

Table 8.5: *Mean field size ($\underline{x}$ in ha), production per field ($\underline{p}$ in kg), per ha ($\underline{p}/\underline{x}$ in kg), and productivity ($\underline{p}$' in kg.ha^{-1}) and its coefficient of variance (CV in %) of millet fields at different cultivation sites in 1990 and 1991*

			PRODUCTION		**PRODUCTIVITY**		
location	**year**	**mean field size ($\underline{x}$)**	**per field $\underline{p}$**	**per ha $\underline{p}/\underline{x}$**	**per ha $\underline{p}$'**	**CV %**	**N**
Tiile	1990	1.52*	214	141	281	98%	16
	1991	0.99*	370	374	402	49%	16
	pooled	1.25	292	234	341	74%	32
Debere	pooled	2.55	931	365	381	49%	9
Yaraama	pooled	0.89	331	372	377	45%	7
Wiinde	1991	0.38	216	568	656	57%	5
total	**pooled**	**1.34**	**367**	**274**	**382**	**67%**	**53**

* The differences in mean field size between 1990 and 1991 have to be attributed to the fact that just before the growing season of 1991 a family of five brothers and their nuclear families decided to split their fields. The fields on *biile* (plural of *wiinde*) are always very small.

If they did not do so these fields would produce very little or only empty spikes. This is indeed a high-risk strategy, for in years with little or badly distributed rainfall the crops on these light sandy soils are the first to 'burn' and 'topple'. However in good years the rewards are high, because then soil productivity is very high as is testified by the productivity of the *wiinde*. The more clayey soils that the Riimaybe cultivate run less chance of crop failure. However, when rainfall is good stagnant water accumulates, and this impedes the growth of the millet.

This does not mean that in a given year with low or high rainfall a Jallo or a Diimaajo may expect a good or a bad harvest. The variability within the groups of data is very high. For the individual farmer or herdsman, the cultivation of millet remains a kind of lottery. The strategies Riimaybe and Jallube seem to follow can thus not be regarded as risk avoidance strategies, because risk cannot be averted, rather they are strategies aiming at the randomization of risk. The Riimaybe aim at limiting variability in crop production by choosing the clayey soils. The Jallube consciously enhance variability, in order to solve their problem with the provision of labour. They gamble that harvest failures will be evened out by bumper crops. However, the necessary conditions, good rainfall and sufficient livestock to replenish soil fertility, have been lacking for a long period, so that their strategy is imperilled.

Mono-cropping

In the literature on cereal cropping in the Sahel there is considerable evidence that multi-cropping systems of millet-sorghum and millet-cowpea are far more productive than a mono-cropping system of millet. Production in grains and dry matter may be more than 50 % higher in multi- and relay-cropping systems (Fussell n.d., Swinton et al. 1984, Lowenberg-de Boer et al. 1991, Reddy et al. 1992, Sivakumar 1993). Multi-cropping is also recommended as a risk avoidance strategy. Grasshoppers, stem-borers, head-miners and beetles do little damage to specific cultivars of sorghum in the Hayre, but much more to millet. On the other hand sorghum is less drought resistant than millet. Cowpea binds nitrogen in the soil and may have a positive effect on the growth of millet, if sown some weeks after the millet (Sivakumar 1993). In Niger, where cereal cropping is conducted under similar circumstances as in Central Mali, 73 % of the cultivated area was cropped in a multi-or relay-cropping system (Swinton et al. 1984). It is therefore surprising that the people of Serma sow only millet, and no sorghum nor beans, except for a few individuals. In Dalla most of the fields were sown with a combination of sorghum and millet in 1991. In Douentza most land was sown with millet. Toulmin (1992) reports that in the village where she conducted her survey only millet was sown. This variety in crop choice indicates that specific circumstances matter, assuming that the cultivators in each of these regions make a conscious choice. The problem is that we do not know under which circumstances a multi-cropping system is more successful than a mono-cropping system.

To stick to Serma, we can think of a number of reasons why people might grow millet in a mono-cropping system. First of all there is an organizational reason as was shown in chapter 7. The risk of damage to the sorghum crop is high, because it is harvested later than millet, and the Jallube drive their cattle into the fields as soon as possible. This is probably not the

main reason. If intercropping were more productive than mono-cropping it would also be possible to protect the crop, for this would be in the interest of the Jallube too, if they also grew sorghum. More important is probably the fact that on the sandy soils of the dunes the soil moisture regime is the most limiting factor on the growth of crops. After the last rains there remains very little residual soil moisture for crops like cowpea and sorghum to ripen. In the only case we recorded of sowing sorghum, it was sown on the clayey soil of the intermediate zone between Ferro and Seeno-Manngo, where residual soil moisture is available. When cowpea was sown in association with millet, of which one case only was observed, the cowpea was sown in a depression between two dunes, where the soil was more clayey than on the dune itself. The cowpea nevertheless suffered severely from drought. The harvest was about equal to the quantity of seeds that were sown. This is confirmed by observations at the Bandiagara escarpment, where the Dogon also cultivate a variety of soils (van Beek & Banga 1992). Here multi-cropping is practised only in the depression adjacent to the escarpment and in dune valleys, and not on the dunes (van Beek p.c.).

Trees

As can be concluded from table 8.6, the number of trees on cereal fields was extremely low. Management practices indicate that this was a conscious strategy. Most trees and natural regrowth were cut back once every one to three years. Though the number of trees on fallowed areas is much higher, it should not be concluded that the tree density of these areas is the normal condition. Rather these areas were left fallow because they are located in depressions and were easily flooded in the rainy season, because of recent changes in the hydrology of the region. The conditions for the growth of trees are thus far better in these fallowed areas than elsewhere, e.g. on the dunes, or in higher locations on the Ferro.

Cultivators saw hardly any beneficial effect of trees on crop growth. They observed that the soil under trees like *Faidherbia albida* and *Acacia raddiana* is often more fertile than the soil elsewhere. They attributed this phenomenon to the fact that livestock feed on the pods of these trees and spent much time there resting under their shade. While there they deposit dung, which is responsible for the higher soil fertility (cf. Kessler & Breman 1991). However, they also noticed that under drought conditions the crops under these trees perform less well because of the competition for soil moisture. So they cut these species back as soon as possible, especially *A. raddiana*. Both species have very extensive lateral root systems.

Other tree species, such as *Anogeissus leiocarpus*, and *Piliostigma reticulatum*, are said to provide too much shade to allow crop growth. Often people leave one or two large trees of these species as a cool shady resting place. Species like *Ziziphus mauretania* and *Boscia senegalensis* are sometimes left standing for their fruits. As can be seen in table 8.6 and 8.7 there are very few trees in the height classes 2-5 metres and > 5 metres. As recent research indicates, the cutting back of the trees is very sensible in these circumstances. Soil tillage and windbreaks at various distances did not significantly affect crop production in three consecutive years at experimental sites under similar conditions in southern Niger (Leihner et al. 1993).[9]

The most remarkable observation concerns the amount of natural regrowth on specific fields.

As can be concluded from table 8.8, natural regrowth mainly occurs on the fields with heavier soils in the transition zone. According to some of the men working these fields, this

Table 8.6: *Tree numbers (#) and tree densities (ha^{-1}) on agricultural land for different size classes, and location in Serma*

location	area surveyed	< 2 metre		2-5 metre		> 5 metre		total	
		#	ha^{-1}	#	ha^{-1}	#	ha^{-1}	#	ha^{-1}
Tiile	38.07	214	5.62	47	1.23	7	0.18	268	7.04
Debere	31.88	483	15.2	48	1.51	26	0.82	557	17.47
Yaraama	8.77	100	11.4	13	1.48	1	0.11	114	13.00
Fallow	2.51	192	76.5	179	71.3	13	5.18	384	152.9
Wiinde	2.32	25	10.78	1	0.43	1	0.43	27	9 11.64
Total	**83.55**	**1014**	**12.14**	**288**	**3.45**	**48**	**0.57**	**1350**	**16.16**

Table 8.6: Idem, without *Calotropis procera**

location	area surveyed	< 2 metre		2-5 metre		> 5 metre		total	
		#	ha^{-1}	#	ha^{-1}	#	ha^{-1}	#	ha^{-1}
Tiile	38.07	198	5.20	46	1.21	7	0.18	251	6.59
Debere	31.88	279	8.75	47	1.47	26	0.82	352	11.04
Yaraama	8.77	82	9.35	13	1.48	1	0.11	96	10.95
Fallow	2.51	192	76.4	179	71.3	13	5.18	384	152.9
Wiinde	2.32	24	9 10.24	1	0 0.43	1	0.43	26	9 11.21
Total	**83.55**	**775**	**9.28**	**286**	**3.42**	**48**	**0.57**	**1109**	**13.27**

* *Calotropis procera* was excluded because it occurred in a few fields only in high concentration, where it indicates that the soil is exhausted.

regrowth is sometimes so vigorous that it has to be cut back twice a year. The surprising thing is that regrowth occurs, and very vigorously, despite the fact that the pressure of livestock is very high, especially of small ruminants in the neighbourhood of the water reservoirs and the Riimaybe hamlet, and on a dry season route for the livestock from Ferro to Seeno-Manngo. Apparently, Sahelian trees are able to withstand intensive exploitation and are still able to

Table 8.7: *Number of trees per size class (#) and percentage of total (%) on fields in Serma, for various tree species*

	< 2 metre		2-5 metre		> 5 metre		total	
species	**#**	**%**	**#**	**%**	**#**	**%**	**#**	**%**
Acacia raddiana	222	21.9	90	31.3	5	10.4	317	23.5
Balanites aegyptiaca	181	17.9	111	38.5	15	31.3	307	22.7
Calotropis procera	239	23.6	2	0.7	-	-	241	17.9
Combretum glutinosum	79	7.8	18	6.3	1	2.1	98	7.3
Ziziphus mauretania	65	6.4	15	5.2	7	14.6	87	6.4
Boscia senegalensis	46	4.5	-	-	-	-	46	3.4
Guiera senegalensis	36	3.6	-	-	-	-	36	2.7
Acacia seyal	15	1.5	11	3.8	-	-	26	1.9
Piliostigma reticulatum	20	2.0	3	1.0	2	4.2	25	1.9
Faidherbia albida	18	1.8	5	1.7	1	2.1	24	1.8
Anogeissus leiocarpus	8	0.8	3	1.0	11	22.9	22	1.6
Combretum aculeatum	21	2.1	1	0.3	-	-	22	1.6
others	64	6.3	29	10.1	6	12.5	99	7.3
Total	**1014**	**100.2**	**288**	**99.9**	**48**	**100.1**	**1350**	**100.0**

Table 8.8: *Number of fields on which natural regrowth was noted (n) in Serma for different species and different locations, compared to total number of fields surveyed (N)*

Location	**Debere**		**Tiile**		**Yaraama**		**fallow**		**Wiinde**		**Total**	
N	**19**		**34**		**8**		**4**		**6**		**71**	
# of seedlings Species	<20	>20	<20	>20	<20	>20	<20	>20	<20	>20	<20	>20
Acacia raddiana	6	3	5	-	1	1	1	-	1	-	14	4
Ziziphus mauretania	6	2	2	1	1	-	1	-	-	-	10	3
Balanites aegyptiaca	5	1	2	-	-	-	1	1	1	-	9	2
Piliostigma reticulatum	3	-	3	-	-	-	-	2	-	-	6	2
Guiera senegalensis	1	2	1	-	-	-	-	-	-	-	2	2
Combretum glutinosum	-	-	1	-	1	2	-	-	-	-	2	2
others	19	1	5	-	-	-	5	-	-	-	29	1
Total n=	**40**	**9**	**19**	**19**	**1**	**3**	**8**	**3**	**2**	**-**	**72**	**16**
n/N	**2.1**	**.47**	**.56**	**.03**	**.38**	**.38**	**2**	**.75**	**.33**	**0**	**1**	**.23**

Livestock production

The milk economy

In the preceding section some ideas were presented about the dynamics of cereal cultivation, and the proportion of subsistence requirements that is made up by the cultivation of millet. For most people the gap between subsistence and production is quite large. The Jallube had to provide almost 80% of their calories from sources other than home-grown millet in 1990, and 50% in 1991. The Riimaybe were less hard hit by the cereal crisis, but still had to provide 40-50% of their food from other sources. Let it be understood that these are averages, and specific many individuals might be able to produce enough. This means, however, that there are also individuals and families who produce even less than the average.

An alternative source of food is livestock giving milk, and the marketing of milk and animals in order to procure food. In this section the scope for filling the cereal gap with livestock products is reviewed. The herds of cattle and small ruminants are the most important of these sources. Cattle and goats supply the people of Serma with milk in most seasons. In the rainy season when the grass is fresh and nutritious, milk production is at its peak, declining steadily during the dry season from October to June. In the hot dry season (*ceedu*) milk production for human consumption is almost nil, as most milk is left with the cows and the nanny-goats for the calves and kids. This decline in milk production coincides with the growing scarcity of food as the dry season advances. Fortunately, when food scarcity is at its peak in the growing season, milk production increases.

It is relevant to ask what the contribution of the milk is to the diet of the people of Serma. For most Riimaybe this proportion is quite limited. Only Bura Bilaali's family managed the herd by themselves. Since we ate there regularly[10] we know that most of the milk was consumed by the family. The sour milk (*kaadam*) was added to the *cobbal*, the millet gruel. Sometimes the butter was added to the sauce. More often it was converted into soap, another basic necessity, which was always in short supply. Among the other Riimaybe only one family had regular access to part of their own milk (see chapter 7). All the other Riimaybe families had to buy their milk, which the women did, when they had sufficient cash from their trade activities, or when they had saved some millet from the contributions of their husbands or their own granaries.

Given the number of cattle most Jallube families own, the contribution of milk to their diet must be limited. In table 8.9 the distribution of access to cattle is summarized. In this table not all the animals of herd owners outside the village are included, so that we missed probably 50-60 head of cattle. A total of about 1,000 head of cattle in Serma is a very likely estimate, though probably optimistic. We should keep in mind, however, that 35 families, who dispose of fewer than 15 animals, have hardly any milk at their disposal. Moreover, most of the milk produced by the two large herds is not available for consumption in Serma for most of the year. During the rainy season the greater part of these herds is pastured far away from the village on the Seeno-Manngo. In the dry season these herds are taken to the pastures north of the mountain range, because of the higher quality (protein content) of these pastures. So we can estimate the number of cattle in Serma at 700 in the rainy season. In the dry season the same

number is available for milking, but then many families go on transhumance with their animals, so that probably fewer than 500 head of cattle are present in the dry season.

In 1987 milk cows constituted about 47 % of Fulbe herds in the fifth region of Mali, of these, 75 % calve each year, and 63.3 % are in milk at any given time (RIM 1987:110). Wilson (n.d.) estimated the calving rate at 66 % for herds of the Seeno Fulbe before the drought. The figures of RIM are quite high, which may be explained by the relative understocking of the region and in particular the Seeno-Manngo after the drought. The cows in 1987 were well fed and reproduced more rapidly than in other areas, which is confirmed by the observations of the herdsmen in Serma. If we take 700 as the number of cattle available for the people of Serma during the whole year, there are about 330 milk cows in Serma, of which on average around 210 animals are milked. This means that there is around 300 litres of milk available for the whole village, from almost nothing in the middle of the hot season to about 400-500 litres in the period August-September.

Table 8.9: *Distribution of cattle over ownership categories in Serma*

# of cattle per family	# of families	# of cattle this category	% of total
± 200	2	400	40%
± 50	1	50	5%
25-30	6	165	17%
15-25	9	180	18%
5-15	7	70	7%
1-5	25	75	8%
-	12	0	0%
	missed	60	6%
	62	1000	100%

(source: wealth-ranking excercise conducted by authors)

An alternative to own consumption of milk is the marketing of sour milk and butter for cereals. The excess milk in one family may be sold to another, so that redistribution of milk is taking place to families who have little or no access to livestock. For gifts of milk see chapter 12. The magnitude of this activity is, however, limited. Estimates of the milk market in Serma are difficult to make. Most of the trade takes place in the compounds of Riimaybe women, who also act as intermediaries and keepers of money. Measurements were made by Mirjam in the seasons *yaawnde* (October) 1990 and *dabbunde* (January) 1991, but often the Jallube women refused to have their milk measured in the presence of others. The measurements were stopped because of the unwillingness of the women. In the season 1991-1992 no measurements of milk were made, because there was hardly any milk on the market (see below). As can be concluded from table 8.10, in which the results are summarized, the milk market in Serma is insignificant. This is mainly a problem of supply. On average only 8 women from 62 families

were bringing milk to market. Among these women there were often one or two women from Fetesambo or Petegudu, the neighbouring cattle camps. Most women, if they marketed any milk at all, saved milk and butter over two or three days.[11] It seems fair to conclude that only the women from the richest 20-25 families were able to market any milk at all. Often the butter was kept apart to sell in quantity. A whisky bottle of clarified butter sold for FCFA 750. We used to buy this butter ourselves for friends in Douentza and for our own consumption, but often we had to wait a long time, despite the fact that we paid a higher price and saved the women a walk to the market in Booni. The women spent the revenues from these larger transactions on large items like household equipment, clothing, or the preparation of marriages for their daughters (see chapter 11).

Table 8.10: *Summary of data on milk (sour milk and butter) marketing*

date of measurement	**total turnover (FCFA)**	**# of women**	**revenue per woman (FCFA)**
2 October 1990	1185	8	140
10 October 1990	1575	13	121
12 October 1990	1430	8	179
21 January 1991	385	7	55
23 January 1991	625	4	156
Mean	**1040**	**8**	**130**

It is clear that the revenues from milk cannot make good the cereal gap. For most women they are not even sufficient to cover the cost of the spices and salt for the sauce eaten with the millet dough, and the gruel. When the family goes on transhumance and is living in the neighbourhood of a cultivators' village, the women are expected to contribute to the food supply of the family through the barter of milk. Two measures of sour milk are bartered for one measure of millet. For fresh milk the exchange rate is one to one, but this trade is very difficult, because the milk spoils very quickly. A very limited income indeed. Most women did not manage to obtain more than a few kilos of millet each day. As we saw, in a bad year such as the season of 1990-1991 many cultivators from Duwari migrated to town, so that there is simply no one to barter with. Cereal stocks were also limited, and after a while the remaining Hummbeebe refused any longer to exchange milk for cereals, and instead gave money, which lost its value very quickly when the price of millet rose from 75 to 115 FCFA per kilo.

The marketing of animals

With regard to the quality of the diet, the health of the family and especially the children, the female side of the economy, and the position of women in their husband's family, high milk production is crucial. There are, however, opportunity costs in trying to get as much milk as

possible from the cows. The more milk is extracted from the herd, the more the growth of the calves is inhibited, and the higher their mortality. This may eventually undermine the productive base of the family as a whole. This is a major concern for the men. They have the responsibility for supplying the family with cereals for most of the year, in which they obviously fail, considering the meagre harvests. Milk marketing can fill the cereal gap only to a very limited extent. The rest of this gap has to be filled by the sale of animals. Men thus have an interest in holding down milk extraction to levels that do not endanger the growth and health of the animals in the herd. They do this by controlling the milking of the animals. Women hardly ever milk the cows, not even the animals they own. In this way the men are better able to control the growth of the young animals.

The marketing of animals to buy cereals is a fairly recent phenomenon, and may have had a serious impact on herd management and the role of women therein. According to the elders and women in Serma, money came into regular use only in the 1940s. French currency was introduced much earlier, but the collection of the poll-tax and the cattle tax lay with the chiefs and not with the pastoralists themselves. The pastoralists paid their taxes to the chief in animals, who subsequently marketed these animals on their behalf. He kept for himself the profit and the percentage he was entitled to by the French. At least such was the procedure in the neighbouring chiefdom of Hommbori (Marie & Marie 1974). Thus money and the trading systems in animals and other commodities were confined to small urban/rural centres and did not penetrate the countryside. Monetary transactions were monopolized by the elite. In these trading systems the Jawaambe were of course important agents on behalf of the political and commercial elites. Neither was there much trade in cereals. Animals, (predominantly male) were bartered for grains and craftsmen were paid in bulls and cereals for making beds, saddles and other items. This began to change in the 1940s, at least in the chiefdom of Booni, when a market was established in the arrondissement capital Booni. With the improvement of transport cereals began to appear on the commodity markets, and the rural population learned to handle monetary transactions. The exchangeability of livestock for money dates from this period, as well as the making of silver and golden jewelry for the women. Before that time they had only copper jewelry. When the harvest failed there was no recourse to the market in the Hayre itself. In 1948 the French began to organize the transport of millet from neighbouring areas when the harvest failed. The importance of this change for the agro-pastoral economy over this century can hardly be overestimated.

In the context of the herding family and the relation between the *wuro* and the *fayannde,* or between the husband and wife units, the exchangeability of livestock for cereals may have led to a shift in orientation of the men away from the production of milk to the production of meat. Waters-Bayer (1988) argues that this is the main reason why men have taken control over the milking of the animals in Central Nigeria. Jallube women in Serma also complained that their men have become lazy. They prefer to sell animals rather than working the fields. There might be some truth in this, though the selling of animals is no alternative for families which have no livestock. The subject of control over labour and livestock will be further discussed in chapter 9.

Pastures and herd productivity

There is another potentially negative trade-off between the productivity of the herd and the quest for millet by bartering milk in cultivators' villages. From the perspective of optimal herd management, i.e. the best growth and the highest possible milk production, the animals should be grazed on the best possible pastures. Within the area covered by the transhumance of the Jallube, the quality of the pastures varies enormously. The herdsmen of Serma do not consider the number of dry kilos per ha as the best yardstick of good pastures, but use instead the quantity of milk which the cows produce as the main indicator of the quality of the range. This depends to a large extent on the composition of the dry matter, and predominantly the percentage of crude protein, vitamins and trace elements. One of the main problems in herd management at present is a disease called *bernde*, probably a tick-born disease, which is aggravated by all kinds of dietary deficiencies (see e.g. Ongoiba 1952, Leeflang & Ilemobade 1977).[12]

Given the lack of food, the Jallube prefer to go to villages where the harvest was good. In these areas the rain was in general better, so that the amount of biomass present on the range is also quite high. However, in most cases the pastures around these villages are of poor quality, because of the low protein content. Numerous families returned to Serma from Duwari, Tula and Wayre, their transhumance destinations, halfway through the dry season, because their animals 'ran dry'. The pastures in the neighbourhood of Serma were of better quality. Most people had left a small stock of cereals behind. Because of their untimely return they finished their cereal stocks too early in the season, leading to problems later on.

The low quality of pastures under good rainfall conditions may be explained by the impact of late rainfall on crop growth and the growth of pastures. As we have seen there were dry spells at the beginning of the growing season and in August. These dry spells had a severe impact on the growth of millet. In many places the impact on the growth of pastures was also negative, because the seedlings of grasses and herbs died. However, in those areas where this did not happen, the grass had a very short cycle, and was of excellent quality. It dried out before it was at the end of its vegetative cycle, when the percentage of crude protein was still quite high. In those area where the rainy season lasted longer, and the millet managed to complete its vegetative cycle, the grasses received too much rain at the end of their growing period, and the amount of crude protein dropped, so that the quality of the feed was negatively affected. The grass becomes 'hollow' as the herdsmen explained.[13] The animals survive on it, but milk production is negatively affected. Both millet and grasses transfer carbohydrates and proteins into their seeds. While this makes for a better harvest of millet, it has a negative impact on the feed quality of the range. So there is a negative trade off between the millet harvest and the quality of the range. Paradoxically the Jallube are forced to select bad pastures, because they have to go to areas with a good millet harvest. This negatively affects the health and growth of their animals, so that they are not able to survive in this way.

Even worse is the impact of late rain, when the grasses and other vegetation are already dry. The quality of the feed is very negatively affected by a late shower, because of rot and weathering. This explains the low production of milk in the post-harvest season of 1991. After the dry period from mid-August to the end of September the forage was already dry and of

excellent quality. The subsequent rains at the end of September, and the beginning of October, did a lot of damage to the range, but had a beneficial effect on the standing crop of millet. As a result, pastures were bad all over the Seeno-Manngo. Livestock lost weight and diseases began to appear in November (see also Chapter 10). So in 1991 the quality and not the quantity of the range became a limiting factor, just as the necessity to go where the millet is limits the choice of pastures and imposes limitations on herd productivity.

Primary production of pastures on the Ferro and Seeno-Manngo

It is commonly assumed that overstocking of pastures is also a reason for low productivity and leads to degradation. The herdsmen of Serma observed, for example, that after the drought of 1983-85, when livestock densities were reduced drastically, the calving rate of the cows increased because they were relatively well fed, and the range was of good quality because rainfall was in general lower than before the drought. This argument raises a problem with respect to the management of herds and pastures before the droughts. How did they manage the herds and pastures in the past, and how did they manage to keep four times as many animals alive in the same area? Did this result in degradation of the range, so that the carrying capacity has been lowered to the effect that only these 1,000 head of cattle can be sustained on the pastures of Serma? Five arguments will be presented to prove that there is no evidence for degradation, and that far more animals can be kept on these pastures.

In the first place, before the droughts there was on average more biomass present on the range than nowadays, because of the higher rainfall, so that it was possible to keep more animals alive than today. Possibly the quality in the form of the amount of crude protein in the feed was less. Secondly, the problems of the quality of the range, and of excessive pressure on the pastures in the neighbourhood of Serma, were solved by the movement of herds to the north of the mountain range into the Gurma during the growing season for the annual salt cure. As a result more feed was left on the Seeno-Manngo and Ferro for the dry season. Nowadays most herdsmen do not trek to the Gurma, because it is not worth the trouble with the few animals they have. Only the two large herds regularly trek to distant pastures, and some combined herds of large families. Thirdly, not all the animals were and are present in Serma, during the dry season. There were always families trekking to cultivators' villages, such as Duwari, Dinannguru and so on, where less livestock was present on a permanent basis. Fourthly there is evidence that the pastures of Serma are able to sustain far more animals than the 1,000 head of cattle now owned, or the 500-700 head of cattle pastured on the range by its people. Fifthly, in the past there were patches with high quality feed composed of perennial grasses, which produced fresh regrowth for months into the dry season.[14]

The last two arguments need additional explanation, because these issues address a number of current discussions in range science (see e.g. Boudet 1978, Breman & de Ridder 1991, Behnke et al. 1993, Scoones 1995). Firstly, the capacity of the available pastures to sustain the herds in Serma will be assessed, and subsequently the nature and composition of the dry season pastures. It will be argued that the quality of the range depends primarily on climatic conditions not under the control of the people of Serma.

Table 8.11: *Rainfall (P), total primary production (TPP.ha^{-1}) for various vegetation types at ILCA's test sites, and estimated carrying capacity per ha (TLU)**, and for the pastures of Serma, and their coefficients of variance (CV in %)

	Ferro (N=3)				Seeno-Manngo (N=4)				Total (N=7)				carrying capacity	
	P in mm	TPP. ha^{-1}			P in mm	TPP. ha^{-1}			P in mm	TPP. ha^{-1}				
year		trees	herbage	total		trees	herbage	total		trees	herbage	total	ha^{-1}	Serma
1984	192	318	36	354	199	108	234	342	196	198	149	347	0.048	576
1985	n.d	1559	410	1969	n.d	124	632	755	n.d	739	537	1276	0.175	2100
1986	229	793	410	1203	175	146	672	818	198	423	560	983	0.135	1620
1987	168	227	420	647	146	98	673	771	155	153	564	717	0.098	1176
1988	318	572	987	1559	259	127	1608	1736	284	318	1342	1660	0.227	2724
1989	270	1010	1096	2106	191	45	738	783	225	459	891	1350	0.185	2220
mean	235	747	560	1306	194	108	759	867	212	382	674	1055	0.145	1740
CV(%)	23	60	66	49	19	30	55	49	20	51	55	41	41	41

(Sources of data: Hiernaux et al. 1984, 1988, 1989, 1990; Diarra & Hiernaux 1987)

* TLU = Tropical Livestock Unit. A standard animal of 250 kilo 1 head of cattle = 0.7 TLU, 1 goat or sheep = 0.1 TLU and 1 camel = 1.0 TLU.

If we assume that all the villages on the Daande-Seeno use the pastures east and west of their settlements in a similar way, and that livestock density along the east-west axis does not differ systematically,[15] we may take the area available for the herds of Serma as extending to half the distance from the centre of the village to the centre of the next settlement. These are Petegudu and Fetesambo, which are both located at approximately 5 kilometres. The available area for Serma is thus 5 kilometres in the east-west direction. The depth of this is taken as the maximal distance from the water points in Serma that the herds may cover on a two-day herding trek. This distance is, somewhat arbitrarily, set at 12 kilometres. The total area covered by the herds of Serma thus becomes 5 x 24 = 120 km^2, or 12,000 ha. To estimate the dry matter, the production of the Serma pastures was calculated on the basis of the surveys of the International Livestock Centre for Africa (ILCA) in Bamako, which covered a number of sites in the vicinity of Serma in the years 1984-1989. The results of these measurements are used as a proxy for the dry matter production of the range land around Serma. In table 8.11 the results of these calculations are presented, as well as the number of livestock which can be sustained on this territory on the basis of this dry matter production. No quantitative data were available for the quality of the range.

From table 8.11 it is clear that the 12,000 ha used by the people produce on average 1,000 kilos of dry matter per ha per annum, if the conditions do not systematically differ from those at the test sites of ILCA. With this dry matter on 12,000 ha it is possible to feed 1740 TLU or 2,175 head of cattle plus 2,175 small ruminants. The present stocking rate is far below this level. When we take into consideration that a significant part of the livestock population is 4-5 months away from Serma on trek, even more livestock can be kept by the people of Serma. At present much of this excess capacity for feeding animals is exploited by herds from the Inner Delta, which frequent the area in the rainy season and for some time after.

However, the variation in feed production is very high. The primary production of dry matter fluctuates in the period 1984-1989 from around 350 kilos per ha to 1650 kilos per ha in 1988, with all kinds of figures in between. The coefficient of variance of this figure was calculated at 41 % of the mean production, which is far higher than the coefficient of variance for the rainfall figure, which is of the order of 20-22 %. The variance in primary production must, however, be solely attributed to the rainfall patterns in these years, because the measurements were made on the same test sites in all the years, so that site conditions are not an explanatory variable.[16] So total annual rainfall is a poor measure for primary production. The rest of the variance can only be explained by taking the pattern of rainfall and other climatic circumstances into consideration. Lower rainfall does not necessarily lead to lower primary production. In 1987 rainfall was lower on all 7 ILCA test sites than in 1984, but primary production on six out of these seven sites was more than 1.7 times higher. The timing of rainfall in 1987 was much better than in 1984 (see also de Leeuw et al. 1993).

This brings us to the relation between dry matter production, overstocking and degradation of the rangelands. The figures indicate that serious overstocking is possible in those years where drought conditions and rainfall pattern lower pasture production to a minimum level. In 1984 only an estimated 816 TLU could be fed on the range of Serma. If the inhabitants of Serma actually owned 3-4 times as many animals as at present, demand exceeded feed supply by three to one. In addition many animals from other regions frequented the area, and the

pastures around the boreholes on Seeno-Manngo, which overlap with those of Serma. One can now appreciate the disaster which developed in this year. The question is, whether this overstocking causes degradation of the pasture land, in terms of lower dry matter production, and changes in species composition. Degradation would be proven if primary production declined after 1984, as a consequence of persistent overstocking before, and serious overstocking during the drought years. In response to the understocking after 1985 primary production would have to climb again from 1985 onwards.

There is no evidence for a decline in dry matter production just after 1985 as well as a steady rise some years later in the data presented in table 8.11 including the data for the specific sites, given the almost random oscillations of dry matter production after 1984. With respect to changes in species composition the evidence is more complicated. De Leeuw et al. note that low rainfall leads to a decline in species diversity. Especially longer-cycle grasses fail to reach maturity to set seed. In the long run this results in a higher proportion of dicotyledons, which are less appreciated by cattle (de Leeuw et al. 1993:146). The measurements inside and outside the sample sites indicate contrary trends. On one site important changes in the species composition of the vegetal cover are noted, dicotyledons are taking over from grasses, indicating for a decrease in quality. This cannot be due to the impact of overgrazing, because the herdsmen fled the fighting of the Burkina-Mali border war in 1985 (Diarra & Hiernaux 1987). The changes might, however be due to the lack of grazing. Grazing pressure on this and other sites is low over the whole period monitored, compared to the years before the drought.[17] In locations with very high grazing pressure, around boreholes in the Senegalese Ferlo, the opposite phenomenon was observed. In the course of every dry season the vegetation cover was completely destroyed. In the first 250 metres around the borehole the vegetation is replaced by nitrophilic species, which are not eaten by the livestock (a loss of 19 ha). In the next two kilometres (2,000-2,500 meters from the borehole: 1237-1943 ha) there is an increase in the proportion of grasses, and a decrease in the share of Leguminosae. This change in species composition is attributed to the dung the animals deposit in this circle. Outside this circle this effect is no longer felt and the situation returns to normal. The only disadvantage of a high stocking rate is that more feed is destroyed due to trampling (Valenza 1975).

The disappearance of perennial grasses such as *Andropogon gayanus* is also often used as a measure of degradation of the quality of the pastures, and is often attributed to the impact of overgrazing. On the Seeno-Manngo there are indeed no perennial grasses left. According to the herdsmen they constituted the main source of feed for the animals in the post-harvest season and the cold dry season (*yaawnde* and *dabbunde*) in the past, because of the production of fresh regrowth. Staff of the livestock service in the area attribute the change to overexploitation and burning of the grasses. This is confirmed by exploitation experiments with *A. gayanus* (Cissé & Breman 1975, 1980). It has also been noted that during the drought of 1968-1973 perennial grasses have receded enormously in the Sudano-Sahelian zone (Cissé & Breman 1980, Anon 1981). Hiernaux et al. mention the occurrence of some residual clumps of perennials at a couple of sites in the research area in 1984 (Hiernaux et al. 1984), which may indicate their regression in the recent past.

However, the evidence that the deterioration of perennial grasses and their subsequent failure to reestablish themselves is due to overexploitation is flawed. The herdsmen of Serma have a

totally different explanation for the disappearance of the perennials. They ascribe this change in vegetation to lack of rain, and, most remarkably, to the ban on the use of fire. In their opinion the use of fire is essential to maintain the vitality of the pods of perennials. In an anonymous report prepared for ILCA and the Livestock service in the region of Mopti it is concluded that the burning of perennials in 2 out of 3 years is *not* harmful (Anon 1981:45). In the same report the high resistance of *A. gayanus* to intense grazing in the rainy season is noted (Anon 1981:37). In the experiments in which the detrimental influence of grazing was supposedly proven, the exploitation techniques used did not involve grazing, but the repeated shearing of the grasses. It is well-known among herdsmen in the Sahel, and also among farmers in the temperate zones, that repeated mowing is very harmful to the sod, in contrast to grazing, which rather stimulates the growth of grasses.

At the end of the 1970s the perennials disappeared definitively from the Seeno-Manngo. According to the herdsmen they died after a sudden rainstorm in November 1979, when they literally grew themselves to death. After this date they have been absent from the vegetation of the Seeno-Manngo. Only on the Ferro are there a few isolated clumps, at well-watered sites. These stands are exploited by the women at the end of the rainy season to make sleeping-mats.[18] Their return to the Seeno-Manngo seems to be hampered by two factors. The first reason is related to the vegetative strategy of perennial grasses. A premature rainstorm may induce the germination of 85 % of all seeds of perennials after one day and 98 % after two days, at least under laboratory conditions. Probably this fast germination gives the perennials the chance to establish themselves before the annual grasses get the chance to overgrow them. If a dry period occurs after this first rain, and the seedlings die, the seed stock in the soil is exhausted so that a second boost of seedlings is not possible.[19] This factor inhibits the establishment of seedlings under erratic rainfall conditions. In contrast only 46 % of the annual grasses have germinated after two days, so that when drought occurs a sufficiently rich stock of seeds is present for a second generation of seedlings (Granier 1975:226). The second factor that hampers the return of perennial grasses is the fact that young plants are less drought resistant than old clumps (Anon 1981:33-34). It was recently reported that *A. Gayanus* is re-establishing itself on the Seeno-Manngo, south of Petegudu, and southwards in the direction of Koba, after a number of years with good rainfall (Douma et al. 1995).

On the basis of these data we may conclude that there is no evidence that the pastures of Serma have degraded as a result of overstocking, even while their productivity has diminished due to the disappearance of perennial grasses. In an average year more than twice the present number of livestock owned could be sustained, if they were to stay in Serma all the year round. Given the grazing strategies of the large herd owners and the families, who go on transhumance in the dry season, a still higher number of animals could be sustained by the people of Serma. Most range scientists would, however, recommend a stocking density adapted to the productivity of the range in a drought year, to prevent degradation (Boudet 1978, Klug 1982, Lamprey 1983, Breman & de Ridder 1991). However, there is no evidence for any degradation due to overgrazing. According to Sandford (1983), under variable rainfall conditions there are considerable opportunity costs attached to such a conservative grazing strategy as is recommended by range scientists. In a year with good rainfall the majority of the feed

resources would not be used.[20] In contrast the possibility cannot be excluded that the quality of the range might deteriorate as a result of the lack of grazing. Sandford, therefore, argues that an opportunistic grazing strategy, in which stocking rates track plant production, is more appropriate and efficient (cf. Scoones 1995). Ellis and his colleagues further showed that large variations in primary production from one year to the next, and volatile changes in livestock numbers, need not be detrimental to the long-term productivity of the ecosystem (Ellis & Swift 1988, Ellis et al. 1993:39). Given these conclusions, there would be no reason at all not to increase the stocking densities of the pastures around Serma, and there are no ecological benefits to be found in attempts to change the current opportunistic grazing strategies of the herdsmen of Serma. However, the presence of herds from the Inner Delta on the Serma pastures in the rainy season may inhibit the growth of the Serma herds in the long run. But here we enter the domain of tenure of pastures and the politics of development. These subjects will be taken up in chapters 10 and 14.

How to make ends meet

The stagnation of herd growth

It has been established that an increase in herd size for the population would be a viable option, and not in any way harmful for the ecological environment. Since the drought year 1984 feed resources have been sufficient in all years for more than twice the present number of livestock in Serma (see table 8.11).[21] So the feed resources have not been an impediment to the growth of livestock numbers. Nevertheless, a large number of families have experienced a stabilization of their herd size at the present low levels or even a decline of their herd. Only those people with a large herd recorded growth. The reasons for this stagnation are various, the most important being livestock diseases and the need to buy food.

We have little data about the incidence of livestock diseases. A frequently occurring disease was *bernde* (see above). Hamma Aljumaa, for example, lost five animals in the dry season of 1989-1990, while Bura Bilaali lost five cows, plus the calves which he did not manage to keep alive. Abdramaane Hamma also lost one cow in 1991 to this disease. In the case of Hamma Aljumaa the loss of five head of cattle equalled almost 50% of the herd, so this was a major disaster. For Abdramaane Hamma one cow was a minor loss. Herds of small ruminants are even more vulnerable to disease. The keeping of goats and sheep is often recommended as a way to recover from drought, because they reproduce faster than cattle. However, the risks are also much higher. Contagious diseases may wipe out these herds in a short span of time. Therefore most people in Serma prefer to invest in cattle.

The main impediment to the growth of the herd is the need to buy food grains. From the many conversations about what happened in the dry season of 1985 it appeared that most people did not lose their cattle due to lack of pasture, but because they sold the animals to get food. During droughts or in other situations leading to food shortage pastoralists are often adversely affected by changes in market conditions. Cereals often become more expensive, because of short supply or speculation, while the prices for livestock drop because of an

increase in supply, and the fact that people substitute livestock products with cereals (Swift 1986). In 1985 the price of millet rose to approximately FCFA 15,000 per sack of 100 kilos in Douentza, though we heard that in the Gurma far higher prices were paid, up to FCFA 30,000. At the same time the price of livestock dropped dramatically due to a drop in demand, and the bad condition of the animals offered on the market. In Douentza the price for a full-grown bull dropped from about FCFA 90,000 in 1981-82, before the rainy season of 1982, to about FCFA 20,000 per animal in May 1985 at the height of the drought. The number of animals offered on the market rose from an average of about 500 per month to around 3,000 per month. The number of animals actually sold dropped from one half to roughly one-third of the animals offered on the market. Similar trends were observed for heifers (Hesse 1987).

These prices were, however, official prices. We were told in Serma that people sold their animals locally for far less money, just to get rid of the burden, and hoping that the new owner would manage to keep them alive. Calves of two years old and heifers changed hands for FCFA 1,000-1,500 a piece. Sometimes animals were given away to cultivators, civil servants or Jawaambe. One night when we were brewing tea in Duwari with Hamma Aljumaa, he pointed to an enormous bull in a herd of the local Hummbeebe which was passing by, and said that this bull once belonged to someone in Serma, who had given it to his host in Duwari in 1985. So official market prices may not reflect the amount of money which people in the bush receive for their animals.

Table 8.12: *Millet and livestock prices and exchange rate of millet and livestock for various seasons in 1990 and 1991*[22]

AVERAGE LIVESTOCK PRICES								
		millet price	bull	heifer	kilos of millet per			
year	season	(100 kg)	(FCFA)	(FCFA)	bull	σ_n	heifer	σ_n
1990	rainy	8,893	50,071	31,786	541	92	343	52
1991	dry hot	12,500	68,653	36,231	549	67	290	44
1991	rainy	12,500	59,833	37,278	479	95	298	32
1991	p-harvest	6,438	60,750	35,250	953	107	552	71
Mean		11,000	61,348	35,455	577	167	335	95

As can be seen in table 8.12 these crisis conditions did not prevail in 1990 and 1991. At any time a full-grown bull would be worth more than 400 kilos of millet, except at the end of September 1991 when the exchange rate fell to around 300 kilos (one observation). These exchange rates are somewhat biased in favour of the pastoralists. In reality they were lower in the bush. As the price of millet we have taken the official price at the government warehouse in Douentza. Market prices were FCFA 2,500 higher in the period from mid-July to mid-October. The prices collected for livestock are probably the maximum prices, as can be deduced from the prices inhabitants of Serma got for their cattle on the local markets (see below). The number of animals presented on the market in 1990 and 1991 was also far less than in 1985, because the people possessed fewer animals in 1990 than in 1985. This kept the

price up. The animals were also in much better condition, and remained so for the whole period, because there was no lack of pasture. All the same the average price level for livestock is lower than before the drought in 1981-82, the more so if we consider that the prices for basic foodstuffs have risen.

Meanwhile fundamental changes have taken place in the Malian livestock sector. The main regions for livestock keeping are no longer the northern and central parts of Mali, but the southern regions. Traders from the coastal countries who come to buy livestock are able to buy sufficient animals in the south, and no longer attend the markets in Central Mali. This depressed the price of livestock in the research area. Further there was the problem of the import of cheap frozen beef originating from the European Union and Argentina, which also depressed prices (Ruben et al. 1994). This problem has been solved now, with the devaluation of the FCFA in January 1994. From September 1990 onward there was downward pressure on the price of livestock, because of the Tuareg rebellions in the north of Mali. These factors together explain the fairly constant and low price of livestock. The prices are determined more by political and international factors, and the conditions of the animals, than regional fluctuations in supply and demand as suggested by Swift (1986). The exchange rate of millet against livestock is more dependent on the supply and the price of millet than anything else in the research area in the years we monitored.

The high price of millet for most of the period was a result of the bad harvest of 1990, and probably of the political unrest at the beginning of 1991.[23] Moreover, the transport of cereals to the markets of Douentza, Booni and Hommbori was often interrupted, because of fear among southern millet traders that their trucks would be captured by rebel Tuareg. As a result there was no millet on the market in Douentza and Booni for weeks. The reserves kept by the government at the official lower price were far too small to cover the deficits.[24] Ordinary people had no access to these stocks, for the *Commandant de Cercle* permitted sales only to civil servants. So in this case, with international trade dictating the livestock market, and in a situation of political insecurity, livestock prices may not be a good indicator of (near) famine conditions.

Marketing strategies of the Jallube

Market conditions in the area make it difficult to have a reliable source of income from the sale of livestock. The erratic supply does not guarantee that one can buy a given quantity of cereals at any time. To obtain cereals one first has to market livestock. Credits for the purchase of cereals in the expectation of higher livestock prices hardly exist. Mostly the sale of livestock and the purchase of millet is done on the same market day. People are only able to keep their money if they entrust it to others, for example a trusted Diimaajo such as Bura Bilaali or Waddijam Saalu.

Except for a few female-headed households, the task of marketing livestock and the acquisition of cereals is the task of the male head of the family. Through the decisions he takes with regard to the choice of animals to be sold he has an enormous influence, in fact, determines to a large extent the composition of the herd, while he may not even own an

animal, because of the property rights of his family members in the herd (see chapter 9).

Just as any pastoralist, the Fulbe man in Serma preferably sells unproductive barren cows, and full-grown bulls. On close inspection of the herds in Serma there are hardly any of these animals in most of the herds. The age structure is very much biased towards young animals of one to three years old and lactating cows. There are two reasons for this. In the drought years all the unproductive animals were sold or perished. Secondly, if any of the remaining animals reaches maturity or grows unproductive it is almost immediately sold to cover the family's needs for cereals. If no unproductive animals are present, preferably young animals like two and three year old bulls are sold. When this category is exhausted even heifers are sold. These sales are of course considered as a loss. The animals do not require much extra herding labour. A mature bull may fetch three and half times as much money as a two year old bull. A heifer is now unproductive, but may yield up to 7 calves in the future and hundreds of litres of milk in the course of its lifetime. Sometimes even lactating cows are sold. The strategy of planning sales is thus not aimed at maximizing monetary revenues, but at conserving the animals with the maximum immediate exploitable productivity, i.e. lactating, which may form the nucleus of a new herd (see also Maliki 1988). These animals are called *aawdi*, seeds. This new herd is essentially a family herd, and in principle all considerations with respect to the culling strategy override the interests of individual family members or the mother-child unit, the (*fayannde*), in the herd. Of course the great authority of the family head or patriarch (cf. Bassett 1994) gives rise to abuse and discontent (see further chapters 9 and 11).

Another factor influencing the timing of animal sales is *yaage* and its obverse *haasidaare*, jealousy. In economic terms the sale and purchase of animals are best done just after the harvest. Cereal prices are low and the livestock is in good condition and fetches a good price. Most people wait, however, until their millet stock is exhausted. Obviously *yaage* partly explains this phenomenon - a Pullo should rely on his own means and not on the market for his subsistence but also attachment to the animals - a Jallo does not like to sell his animals-, and the Jallube perceptions of trade and property. A good harvest or a fine herd are regarded as the result of hard work and Allah's benevolence. Trade on the other hand is 'just luck' and beneath the dignity of a noble. In the past this occupation was wholly the domain of the Jawaambe. This has changed somewhat, but in general the Jallube of Serma are half-hearted traders.[25] Moreover, other people would claim their 'share' in the profits from trade. If someone speculated successfully on the cereal market, bought 15 sacks of millet for a low price, and stored it in his granary, his kinsmen and kinswomen would come and demand their share. If he harvested the same 1,500 kilos from his own fields they would be much more hesitant.

Cereal deficits

Nevertheless gambling on the market can be very profitable. In 1989, just before the harvest, cattle prices were high, and cereal prices dropped in the expectation of a bumper harvest. Bura Usmaane from Wuro Boggo sold one bull for FCFA 40,000 and bought 8 sacks of millet for FCFA 5,000 each in Duwari. A week later locusts ravaged the harvest, so that nothing was left

and in a few weeks the price of a sack of millet rose to FCFA 7,500, and the 8 sacks of millet represented a carefree dry season. He left the stock with his host (*njaatigi*) in Duwari. Every time he finished a sack of millet he borrowed a donkey to get another sack, as if he bought a new sack every time he went to Duwari. In this way he avoided the demands of his relatives and neighbours.

Things may go differently as the example of Bubaare Aamadu shows. He sold 11 two-year-old bulls and heifers to fill the cereal gap in the same season, the whole generation of young animals of 1988. In the dry season of 1990-1991 he had to deplete his herd in much the same manner. This is reflected in the composition of his herd. His family owns 30 animals, of which 16 are milk cows, more than 50%; of these 9 to 10 have a calf at any given time of the year, so that there are only five or six animals of other categories than cow or calf. Let us review for a moment how he spent the money, and how he managed to fill the cereal gap for his family of 15 persons. The family needs 7 kilos of millet per day (0.47 kilo per capita per day, or 170 kilo per capita per year),[26] if we assume that one-third of the required calorie-intake is covered by milk from the cows, which is unduly optimistic. If 10 cows produce milk, they may produce at most one litre a day for each person. In the post-harvest season of 1990 milk production was already dropping and may be estimated at 0.75 litres per day per cow, meaning that for each of the members of the family half a litre of milk was available, which is far from sufficient. Moreover, part of the milk was bartered for millet during their stay in Duwari. The estimate of the returns from this barter 3 kilos per day is also quite optimistic. By March when the family returned to Serma, only three cows were yielding any milk. The rest were dry. In the course of the dry season Bubaare sold five head of cattle in order to cover the expenses for millet. Their millet balance thus looks as follows:

Millet needed: 365 days, 7 kilos a day for 15 persons	2555 kilos
Millet harvest 1990	335 kilos
Bought 13 sacks of 100 kilos	1300 kilos
Bartered in Duwari 100 days, 3 kilos a day	300 kilos
Given by his son-in-law for the subsistence of his daughter (see chapter 7)	147 kilos
welcome gift of *njaatigi* (host) in Duwari	13 kilos
subtotal	**2095 kilos**
Deficit	-460 kilos

Bubaare spent in total FCFA 151,000 on the purchase of millet. He earned this money with the sale of 5 animals:

a bull of 8 years old in Booni for	FCFA 36,000
a bull of one year old in Duwari	FCFA 16,000
a cow of 12 years old in Yuba (Burkina Faso)	FCFA 36,000
a heifer of 3 years old in Yuba (Burkina Faso)	FCFA 30,000
a bull of 3 years old in Booni	FCFA 33,000
Total budget	**FCFA 151,000**

So in this case five animals were converted into 1500 kilos of millet or 260 kilos per animal, which is much lower than the official market prices. The sacks of millet cost between FCFA 9,000 and FCFA 11,250, which leaves some money to buy some clothes, kola nuts and tobacco. Nevertheless there remains a cereal deficit of more than 450 kilos or 30 kilos per capita, under the generous assumptions that we have made, and this deficit can only be covered by abstaining from consumption.

Bubaare is relatively rich. The cereal balance of Hamma Aljumaa was even more deplorable. His family has hardly any milk, at most one litre a day. Because they have no milk we estimate a greater need for cereals, not 0.5 kilo per capita, but 0.67 kilo per capita per day (= 245 kilo per capita per year). We also assume that during the year on average one member of the family was absent.

Millet needed: 4.67 kilos 365 days for 7 persons	1,705 kilos
millet harvest 1990	800 kilos
3 sacs of millet	300 kilos
bought in small quantities	200 kilos
gifts of the *yaatigi* in Duwari	19 kilos
subtotal	**1,319 kilos**
Deficit	-386 kilos

This family survived on less than four fifths of its calorie requirements. We must add that we were supporting them a little as they were our neighbours, and that their son-in-law in Duwari probably gave them more support than the 3 sacks of millet he sold below market price. Hamma Aljumaa managed to sell only two cows in this period and to buy one calf back. The revenues and expenditures of this family look like this:

one cow sold in Duwari	FCFA 40,000
This money was spent on:	
3 sacks of cereals	FCFA 22,500
a ewe plus young	FCFA 3,800
millet in small quantities	FCFA 13,700
one cow sold by his son Maamudu in Yuba (Burkina Faso)	FCFA 32,500
This money was spent on:	
amenities by Maamudu	FCFA 2,500
a calf of two years old	FCFA 25,000
millet in small quantities	FCFA 5,000
Total budget	**FCFA 72,500**

The first cow yielded more than 400 kilos of millet, but they got the millet below market price from their son-in-law in Duwari. In addition Maamudu gathered wild fonio in the rainy season to supplement the diet of the family.

Aama Babel from Wuro Kaaral had one cow with a calf of his own. He herds six head of cattle for a civil servant in Booni. Among these animals were two cows. So he has some milk to barter when on transhumance. We do not know how much he harvested in 1990, but we may take his harvest in 1991, which was much higher than in 1990. They have some milk so that we may take the consumption requirements as somewhat less than 0.67 kilo per capita per day (228 kilos per capita per year). Some of his seven children are very small so that we reckon five children instead of seven, but he also has to support his mother, which makes the total number of people to feed eight.

Millet needed: 5 kilo for 365 days for 8 persons	1825 kilos
harvest 50 loads (60 loads in a ton in 1991)	833 kilos
bartered on transhumance	100 kilos
bought in small quantities for FCFA 24,500	250 kilos
borrowed from Bura Bilaali	35 kilos
subtotal	**1218 kilos**
Deficit	-607 kilos

This family has a deficit of more than 75 kilos of basic food per capita or almost one-third of their calorie requirements. No wonder the children do not grow. They managed not to sell their last cow, because this would have meant the end of their existence in Serma. Another drought year would be the final blow, and would have posed Aama Babel and his family the choice between starvation or migration. Aama never considered leaving, because he has to take care of his old mother. The income of this family was composed as follows:

one donkey	FCFA 7,500
2 goats	FCFA 5,350
one she-goat plus kid	FCFA 2,800
one goat	FCFA 1,500
one goat	FCFA 1,500
wage labour (with Byra Bilaali)	FCFA 5,000
Total	**FCFA 23,650**

The heads of most Jallube families are thus no longer able to provide their families with basic food. They have to make the difficult choice between capitalizing on the herd and thus undermining the long-term viability of the family, and thus their part of the *suudu baaba*, or starving a little bit more every year in the hope that sometime in the future things will get better.

In these figures we have not yet or not completely accounted for the cash earnings of women. The contribution from the sale of milk is rather limited, because of the small quantities of milk. Moreover, in the past the women were allowed to keep part of this money. Now they are expected to bring in the basic food. Apart from the revenues from milk, some women have other sources of income. They make calabash covers and sleeping mats, if raw materials are available. These are, however, very labour consuming tasks, with very meagre returns, and not for all women. They may also tress the hair of women from the villages they frequent during the dry season, but not all women are able to tress hair, and not all earn money with it. Demand for the calabash covers, sleeping mats, and also hair tressing is limited. It seems unlikely that they earn sufficient to cover a substantial part of the cereal deficits.

Despite the limited possibilities, women who were particularly skilful in all kinds of income - or food - generating activities may contribute significantly to the income of the family. Jaba, the second wife of Bubaare, did a lot for herself and her children in this respect. She married Bubaare in order to live a decent Jallo life. Jaba's former husband left and she divorced him. She was forced to leave Serma to earn a living. Her father died, and neither her mother nor her uncles had enough wealth to help her. In Douentza she lived for a few years as a prostitute. Bubaare married her to get her out of this shameful situation as a pauper in town. Bubaare, however, could not offer her a living. So in large part she had to take care of herself and her children. In town she learned to tress hair, and she became a skilled hairdresser by Jallube standards. Luckily for Jaba the new hair fashion for Jallube and Hummbeebe women is the town style of hairdressing, so that Jeneba had many clients, not only during the wet season in Serma, but also in the dry and difficult season when she and the rest of Bubaare's family went on transhumance. In this way Jaba saved the little milk she received from Bubaare for her three small children.

Jeneba and Yero from Urfina were moderately wealthy. Their children have grown up and were trying to establish their own families, which was very difficult with the herd they had at their disposal. So far, the sons live with their parents. One daughter of Jeneba was not yet married and lived with her parents. The youngest son died in 1991, 9 years old. Jeneba had other concerns in life than most Jallube women. She wanted to survive and try to give her

children a good future. In the dry season she often left the camp in search for *gigiile*, to build up a store of famine food. However in the years that we lived in Serma she did not go, because the fruits did not ripen. She also collected wild fonio in the dry season. Sometimes she walked all the way to Nebbe, a Dogon village 15 kilometres from Serma, to barter her milk. There were so few pastoralists in the neighbourhood of this village that she obtained much more cereals here than anywhere else. She did not keep to the strict rules for a Jallo woman when her children's future was at stake. Besides she had more privileges as a woman with grown-up children, being less bound to the status of *ndimu*. Nevertheless her behaviour was considered a little strange, and she was the object of gossip.

Among the Riimaybe there are also a number of families which have difficulties in making ends meet. Cereal production per capita is somewhat higher, but they own on average less livestock to sell to buy cereals. When the harvest fails they leave the village to look for work somewhere in order to survive. One Bellaabe family we got to know only in 1991, for they had been away for two years. In 1989 they left after the harvest failed. The woman and children returned for some time in 1990 to sow the fields, but when the seedlings were sandblasted a couple of times they went back to Douentza. They worked as labourers in Douentza, and then went to Tula to look for work, after they heard the harvest had been good there. Mina, a son of Bura Bilaali's sister Waddijam, started wandering with his family and flock of goats after the harvest of 1990 failed. The seven of them survived on wage labour, the marketing of goat's milk in Booni, and the sale of goats. In the course of the dry season of 1991 Mina sold 11 goats and 1 ewe for FCFA 32,100. Later on we heard that these were not his goats nor those of his wife, but of his mother and aunt, both sisters of Bura Bilaali.

The contribution of Riimaybe women to the well-being of the family in times of hardship is crucial. They work as labourers, engage in petty trade, and make soap, mats, and other products. Dikko Booyi survived the difficult years after 1985 by seasonal migration to Dogon villages in the Daande-Seeno. She worked as hard as a man, probably harder. Dikko is a very strong woman, at least she was during these years. Her husband did work in the same villages, and sometimes in other villages. Next to this seasonal migration they worked in their fields in Serma. Dikko also had a field of her own from which she harvested a lot of millet. All those years Dikko engaged in petty trade, alongside all the other work. They survived these difficult years fairly well, with their seven children. Their situation changed in the last few years. Their herd of goats was stolen. The health of Dikko and her husband no longer allowed them to work as hard as they wished. Although they lived relatively well their granaries remained empty. No work meant no food for them. Dikko was pregnant for the 8th time in 1991, which again diminished her strength. However she found another job, tattooing Jallube women's lips and gums, *sokkude*. As a Diimaajo woman she was allowed to do this job, which is done by a few women only, and therefore pays well. For the tattooing of one Jallo girl she received 500 CFA, the same as for one day's labour by a man. This work brought her through the difficult seasons. In the meantime, she and her husband could not get along any more, and they started to live separately. Dikko and her children had the hardest time ever. They ate only a dish of water, some milk and the pellicles of the millet for lunch, but they survived and continued to live in Serma.

Conclusion

In this chapter we have tried to give more insight into the dynamics of agricultural and pastoral production, and their consequences on how the inhabitants of Serma have to make ends meet. The variety in rainfall and growing conditions makes it difficult, if not impossible to make any predictions about crop production. Even within one cropping zone the variety is very high, even though that conditions are more uniform. In response to this climatological insecurity the Riimaybe opt for a relatively low-risk strategy, by cultivating soils which are more reliable producers, while the Jallube follow a high-risk strategy. The well-manured light soils which they prefer to cultivate, because of labour shortage, are more drought-prone, and consequently production fluctuates more heavily. They may compensate for this by the products of the livestock they own. However, when we analyzed livestock production it appeared that, given the distribution of livestock among the people, only a few people are able to extract a considerable amount of food from the livestock they own. This is not due to a lack of productive capacity of the natural environment. Rather the average production of the pastures and the trees would allow a much more intensive exploitation. Neither is there any indication that this production capacity will become degraded at the present intensity of exploitation, nor that it has been decreasing as a result of its utilization by the people of Serma. Even when the wildly oscillating production of biomass drops below one-third of the quantity needed to sustain the livestock present on the range, no degradation can be demonstrated in the following years.

Normally livestock numbers would begin to rise after such a disaster. This did not happen in Serma after the drought of 1983-1985. Important factors which inhibit the growth of the herds in Serma are the persistent crop failures after the drought, due to pests and again drought, and the decline in soil productivity, because of lack of animal manure. Consequently, the people of Serma have to sell scores of animals to buy millet for their staple food. With these sales they must undermine the long-term viability of their enterprise. Even relatively wealthy families accept cereal deficits in order to save as much of their herd as possible. In addition the market conditions adversely affect the terms of trade of livestock vis-à-vis cereals. These terms of trade are the result of political unrest, the fundamental changes in the livestock sector of Mali, and the way international trade is organized, rather than a lack of demand and too much supply. All these data, however, have relevance only for functioning family based production units, and throw some light on the relation of the capricious ecological environment to the survival of these units. They explain to some extent how some people manage to maintain a viable unit, and why some people or families give up and leave the area. However, they cannot differentiate between specific categories of people, on gender lines or with respect to age, or social status. Those people who remain in production, the family heads and some of the successful women we followed in this and the preceding chapter, are somehow able to control the assets needed in this environment. Inevitably individuals or groups of people will be dispossessed in this situation of chronic shortage and increased resource competition. The data discussed here do not answer the question how resources are distributed over society, and how production is redistributed among the individuals in the various social units which were distinguished in chapter 4. Property and tenure regimes are crucial for understanding this process, and will be the subject of the next two chapters.

Notes to chapter 8

1. We will not consider methodologies like 'Farmers First' (Chambers et al. 1989) and Participatory Technology Development (Reyntjes et al. 1992) here, because they do not claim to be analytical methodologies, and are development oriented. The methodologies mentioned in the text claim to be analytical tools.
2. Another example is the research reports of the Centre of Agro-Biological Research in Wageningen on agricultural production systems in the fifth region of Mali (see Cisse & Gosseye 1990, van Duivenbooden & Gosseye 1990, Veeneklaas 1990, Veeneklaas et al. 1990).
3. Some studies at farm level will be discussed below.
4. An important observation in this respect is that we have never seen anyone in Serma in the middle of someone else's herd. Herds were observed only from a distance, e.g. when they were watered.
5. The question whether they are really fined or not is irrelevant here, because in their perception the staff of the forest service reason in this way. Mostly, however, they were fined collectively regardless of the number and severity of the transgressions of the forestry code. This makes it much more attractive to break the law as a collectivity (see also van Beek & Banga 1992).
6. *Mido huli*: the verb *hulude* (to be afraid) does not only denote fear but also has a connotation of respect: fear out of respect (see chapter 6)
7. Toulmin (1992:72) mentions its occurrence. The short-cycle millet which is sown on well-manured soils risks being 'burned'. It is for this reason that the Bamana farmers in her sample also cultivate long-cycle millet on bush-fields that may take over when the crop 'burns' on the well-manured fields. Contrary to her expectations the long-cycle millet performed better under poor rainfall conditions.
8. From the literature it is quite unclear what the subsistence level is if millet is the staple food. Requirements are set at very different levels by various authors. Marchal (1983) uses 200 kg as the annual subsistence requirement. According to Gavian (1992) the government of Niger takes 250 kg. Toulmin (1992) sets this figure at 550 kg. We will take an annual subsistence requirement of 300 kilos as the basis for our calculations. The values of 200 and 250 kg seem too low, because in the process of pounding and cleaning the millet flour there is a loss of weight. Our host family in Serma consumed two-thirds of a kilo of millet per day, which is 243 kilos per annum. They also had 8-9 milch cows at their disposal for 12 persons, so that it is reasonable to add 50 kg extra if they had to live on millet alone. This family was reasonably fed, though they were underweight by our standards.
9. But these authors did find significant differences in crop production from one year to another.
10. They were our hosts (*njaatigi*) in Debere on behalf of the Riimaybe.
11. This is the case not only in Serma. In previous research in Bandiagara, we found that there were women who saved sour milk, worth 135 FCFA, over five days (de Bruijn & van Dijk 1988).
12. According to Hammadu Booyi Jallo, a veterinarian from the region, working in Niafounke, a dose of relatively cheap antibiotics would also help. The local veterinarian nurse in Booni, however, attributes the disease to dietary deficiencies.
13. A similar reasoning is followed by dairy farmers in the Netherlands. With the increasing production per ha since the 1950s the mowing date for hay or silage has been advanced for more than a month. Now dairy farmers mow in the middle of May, when the grass has not even entered the flowering stage. Quality in this stage is superb. In the past they mowed towards the end of June. Total biomass was higher, though the quality of this hay was less than that of the hay and silage of the early mown grass.
14. Perennial grasses may produce 2.5 times as much dry matter as annual grasses (Granier 1975:226).
15. Of course herds from the villages along the Daande-Seeno graze in each others' territories. Under these assumptions, however, the grazing of outside herds in Serma, and the grazing of the herds of Serma outside the territory of Serma, will be equal. See also chapter 10 for the organizational dynamics of herding territories.
16. Some of the differences may be attributed to errors in the measurements, but these cannot be responsible for the difference of 20 % in variance between rainfall figures and primary production figures.
17. This change in species composition may also be due to the natural dynamics of the composition of the flora. It has been reported that from one year to another only 57 % of the species recurred in the vegetation (Anon 1981:30). Experiments under laboratory conditions yielded similar results (Elberse & Breman 1989, 1990).
18. They only exploit these stands well after the rainy season, when the growing cycle of the perennials has been completed and the nutrients have been stored in the roots of the clumps.

19. Something similar happens with millet, but then it is promoted by humans. Remember that sometimes the people of Serma have to sow 5-6 times to establish the millet seedlings.
20. In our case this would mean in an average year half of all feed resources, and in a good rainfall year almost two-thirds, would not be used.
21. In 1987 primary production was at its lowest, but nevertheless allowed a stocking density of 1176 TLU, the equivalent of almost 1500 head of cattle plus the same number of small ruminants.
22. The data for this table were gathered by our assistant Bura Yero Cissé.
23. Among the first policy measures of the new regime was the improvement of the supply of staple food.
24. At one time in August there were only 3 tons of millet left at the government warehouse, which should serve the whole *cercle* Douentza.
25. There are some older and poorer men who work as intermediaries on the market of Booni. Some trade in cattle, but only a few head at a time. And there are some young herdsmen who work for traders bringing livestock from one market to another.
26. This is what they actually consumed when millet was available.

9

The Circulation of Property at the Level of the *Wuro*

Introduction

In the two preceding chapters the relations between the inhabitants of Serma and the ecological environment were treated as if they only responded to ecological insecurities. They did so, as was shown, with the cultural means they have at their disposal. The variations of perceptions of ecological insecurity were a result of their ideological preferences for cattle-herding and cultivation respectively, and led to different strategies to cope with it. However, this conceptualization cannot fully explain all the variation in strategies. As was shown in chapter 8, people do not have the same opportunities to make ends meet when agricultural production fails, and they do not have the same means at their disposal to engage in agricultural production.

So, the distribution of resources, and the ways in which people organize the transfer of resources from one individual or group to another, are crucial for understanding people's strategies for coping with ecological insecurity. This is primarily a cultural phenomenon. Property relations are always embedded in and mediated by social relations and cultural norms, rules and values. In this domain ecological insecurity and multiple cultural understandings come together. Access to productive resources may be granted to some and denied to others. There may be various bodies of rules and norms in force with respect to one and the same resource. Overlapping use and property rights may exist over one resource in various temporal and spatial settings.

In general we have to assume that norms and rules with respect to access to productive resources have a more permanent character than the social relations between individuals and groups in the society they order. These in turn are more stable than the ecological conditions influencing the use and productivity of these resources. This can, for example, be deduced from the finding in chapter 8 that there is a tendency for most family heads to seek to cultivate a specific amount of land per family member in order to ensure cereal supply. The fact that they fail in this respect does not deny the existence of such a norm. Given the enormous fluctuations in cereal production this may be a way to equalize the prospects of each individual and family in relation to the ecological circumstances. Extreme caution is warranted in drawing such conclusions, because such 'statistical' evidence may be the result of all kinds of historical and political processes, at work at various levels of Fulbe society. It may even be that in these processes the rules of the game are constantly changed in accordance with changing political, ecological and social balances. Rules and norms may be manipulated to exclude specific

categories of people, and to shift the burden of ecological calamities onto them. This is in essence a political process, in which status, age, kinship, gender and other social attributes of people play an important role.

In this chapter the focus is on the process of how people get access to the resources of labour, agricultural land, water reservoirs, and cattle at the level of the *wuro*, the unit in which agricultural production is organized. It is shown how ecological circumstances interact with multiple normative systems regarding inheritance, gender, status, work, and age, and how they are manipulated. The result is a highly flexible system of property regimes and organizational forms of the *wuro*. However, in the situation of scarcity and increased competition most resources are monopolized by specific categories of people. This leads to numerous conflicts, and imperils in the end not only the economic but also the social basis of the core units of organization in Fulbe society, the *wuro*, and the *fayannde*.

The organization of work

The *wuro* and the organization of labour

The principal unit for the recruitment of labour for cultivation and livestock keeping is the *wuro*, the herding family, for the Jallube, and the *suudu* for the Riimaybe. At this level most of the directly productive activities are organized. This does not mean, however, that the men and women belonging to the same *wuro* cooperate and work together. The only case in which women cooperate in the framework of the *wuro* is that of a mother with her unmarried children. In most other instances women within the same *wuro* are not related by kinship. In the case of co-wives there is even a prohibition on being related by kinship. In all the *gure* in Serma co-wives have established their own *fayannde*, the mother-children unit, or literally hearth, and, by consequence, organize household labour separately. When a daughter-in-law has only just married into the *wuro* of her husband, and does not yet have her own house (*suudu*) and *fayannde*, she is obliged to work for her mother-in-law. When they are not related by kinship this relationship is often tense, because of *yaage* ('shame') as is common between affines, but also because daughters-in-law often have to work very hard in their husband's *wuro*. In addition the daughter-in-law is expected to do some household work for her own mother, if she lives in the neighbourhood. This may explain the preference of women for *bibbe yaaya* (matrilateral parallel cousin) marriages (see also chapter 11). In that case the mother-in-law can also be regarded as a (classificatory) mother. When the daughter-in-law has established her own *fayannde*, she gets more autonomy, and the organization of work becomes gradually her own affair.

The *fayannde* is also the unit for the processing of milk. The woman who heads the *fayannde* is also the one who divides the milk among the women in the *fayannde*, and directs the work. If she is with her unmarried daughters, the situation is relatively simple. The mother is totally responsible for all the milk and takes all the revenues from the milk. If she can she will save some of the revenues for the dowries of her daughters. If she manages the *fayannde* with her daughters-in-law, the situation is more complicated. If her daughter-in-law has not yet

established her own *fayannde* the mother-in-law still directs the work and divides the milk. However, she has to hand over the milk of the cows that are assigned to her daughter-in-law. When a woman has established her own *fayannde*, she receives the milk directly from the man who milks the cows, and has complete authority over its destination. All other household work of the women is organized at the level of the *fayannde*. Among the Riimaybe women within one *suudu* there is in general more cooperation. There is less competition between them, because their primary resource is labour and not milk. A co-wife may even lessen the burden of work for a Diimaajo woman. They often cook the daily meals in turns, so that every other day they are liberated from this task, and may engage in other work. This enables them to work their personal fields in the rainy season and to gather bush products, and make soap and mats in the dry season.

In cultivation a man works alone or in company of friends of his own age, but not with his sons or fathers (Riesman 1977:67). Herding by its very nature is a task which is performed in solitude, unless the herd is very large. Herdsmen may also help each other with the watering of livestock in the dry season. Just as in other African societies the genealogical elders (*mawbe*) command and control the labour of the genealogical juniors (*sukaabe*). How this is done in Fulbe society is eloquently described by Riesman:

> Every father with one or two sons over fifteen may leave the greater part of the mens' work to them (...) he spends a great deal of time supervising then, but not joining them (...) It is not only for supervision, however, that the *mawbe* [elders] must be there, but also to keep up the morale of the young people (...), [T]he father, for his part, must, in one way or another, convey his solidarity to his son. To do so is not a matter of obligation, but if he does not do it he risks losing the confidence of his son, who may even go as far as to break with him. (Riesman 1977:67-68).

This description is certainly true in its material effects. In Serma, just as in Petaga (north Burkina Faso), where Paul Riesman did his fieldwork, the *sukaabe* (young men) work and the *mawbe* (elder men) organize work. Personally we have never seen a father working with his son on a field or in herd management. Neither have we ever seen a father and a son interact in public about work, nor ever encountered open conflict about work between fathers and sons, or even between older and younger brothers, though this communication is far easier. If a father works with his sons, they are either very young, so that they have to learn the work, or they are working separate fields. Preferably, however, the younger sons learn the work from their older brothers.

There is reason to believe that communication about work in private is also very limited. This may lead to quite complicated situations. In order to run their common undertaking some form of communication is of course absolutely necessary. For the exchange of essential information fathers and sons need intermediaries to transmit messages and directives (see also chapter 6). There is always tension in Fulbe father-son relations. Orders are never given directly. They are always transmitted, so that the possibility of rejection, discussion and loss of face is minimized. Seen in this light Riesman's explanation seems somewhat over-optimistic concerning the motivations and ambitions of the workers and the harmony between the workers and non-workers. The absence of communication serves to avoid conflicts, rather than indicating harmony and solidarity. The men in Serma used to explain this lack of

communication by referring to *yaage* (what Riesman would label *semteende*). A father feels shame towards his sons and certainly his oldest son, of whom he is not allowed even to utter the name. Conversely a son will feel *yaage* towards his father(s) out of fearful respect will not dare to speak to him in public, and will avoid him as much as possible. They neither eat, nor converse, nor drink tea together in public.

This tension has everything to do with *ndimu* (what it takes to be noble). An important characteristic of a noble is of course that he does not need to work, except for warfare and herding, but instead is able to command and control the labour of others. If the father is a noble, the son is a noble as well. Nevertheless the work in cultivation has to be done. The Jallube are as Koné and Tioulenta (1994:3) say *'cultivateurs par defaut'*. When we were surveying fields in the agricultural season and having conversations with the Jallube men working there, they always seemed ashamed to be found there engaged in this kind of work. Especially the young males complained about the hard work and that they were not fit to do it. They would disdainfully show us their hands, pointing out the callous patches.

Much less complaint, and hardly any shame, is attached to the labour of watering the livestock. Although everybody prefers not to do it, and many use donkeys, and some even camels, to draw the water, this effort is made with pleasure. Older men participate in the work only when they have no sons, or when the well is very deep and the members of the *wuro* have to take turns in drawing water, as is the case in Duwari. Even girls may be mobilized to assist at deep wells. If this is not the case, as with the water reservoirs in Debere, the older men may sit and chat under the tamarind tree while supervising the work of the *sukaabe*, but do not command the juniors openly. In this way dignity is maintained as much as possible. If we compare this behaviour with that of the Riimaybe in Serma the point that dignity has to be preserved is even more clear. The Riimaybe are lower in status and do not have to maintain an image of nobility towards the outside world. Among the Riimaybe the father or the *hoore suudu* is clearly and openly in charge. He orders his sons and wives around in public, talks with them in public, works on the same fields and eats from the same bowl with them in public.[1]

That there is a tension between Jallube fathers and sons with respect to labour became more clear from conversations with groups of old men and young herdsmen. The old men complained that the younger generation was no longer prepared to make long rounds of herding and that consequently the cattle were not looked after properly.[2] Because there was no supervision of the herd the cattle were seeking refuge under the sparse trees, so that they grazed less and consequently put on less weight than they might. It was an observable fact that in the growing season, as well as afterwards, many youths would assemble in Debere to listen to cassettes and drink tea supplied by visiting herdsmen of commercial herds from the Inner Delta. Their elders were obviously not happy with this behaviour, which they considered as playing around (*fijorde*), but there was little they could do. There was no way to communicate the problem directly to their own sons and they could not impose sanctions. One of the old men said that if you show the young your authority (*so a fiyan suka*: if you beat your child) they just leave.[3] They are no longer willing to listen. In the past they would have stayed, even if there were only few cattle left. Another old man, two of whose sons had migrated, remarked that he could not demand anything from his sons, because there was nothing, no harvest, no

herd of cattle, he could offer them as a means of existence now and in the future.

The young herdsmen on the other hand rejected the opinion that they were lazy and did not want to herd. They complained that the old men themselves were lazy. They said that as soon as a man has three children he does not do any work any more. It was they who gave the bad example. So they have no right to criticize the young people. They stopped intensive herding in the time before the drought, and under their command all the animals died. Now it is not worth the trouble to herd the few animals that are left. If they had a herd, they said, they would be out on the pastures to lead it to the best range, for they say they prefer herding to anything else. They also have to provide their families with food, and so spend time on petty trade; they said they were in general busy with 'looking for' cereals to feed their families.

What these activities amount to was difficult to assess. Some young men were indeed involved in trading cattle, but they belonged to richer families and were backed up with capital and alternative herding labour in the form of brothers. Other young men from rich families were indeed occupied in herding. What the rest did remained largely invisible, and consisted most probably of all kinds of semi-(il)legal activities such as the trading of drugs, the smuggling of livestock, and illegal hunting.

The underlying tension between old men and young became clearly visible in the course of an incident which occurred half way through our fieldwork. A number of young men used to sleep on the shelter in Debere, where the old men used to gather after their 'work' to sit and chat. One night one of these young men urinated on top of this shelter. When the old men discovered this in the morning they were seething with anger. They felt humiliated in their own domain. The youth were called and harangued by the elders. They maintained a closed front and refused to reveal the identity of the person who committed this act, so that there was little the elders could do but levy a symbolic fine of some kola nuts.

Labour migration

Many young men migrate temporarily or permanently to look for work and money elsewhere. Some of them do this out of necessity, because their family has no work, nor resources to keep them occupied. Even if they do not earn anything their family is at least relieved of the obligation to feed the migrant (cf. White 1984). The loss is the labour power of the adolescent, which is badly needed to reconstitute the wealth of the family. In general only a few of these young migrants return, and if they return, they often come home empty-handed. Shanmugaratnam and his colleagues, for example, cite a herdsman from Booni who remarked that only one in a hundred migrants return with sufficient money to buy cattle to start a new herd (Shanmugaratnam et al. 1993:23). It seems hardly possible to save money as a herdsman working for wages (cf. Bassett 1994). Hamidu the son of Hamma Aljumaa, who spent half a year in the Inner Delta, returned penniless. He managed to save only FCFA 8,000 for which he bought a second-hand cassette player, to the despair of his father. It was sold to finance the name-giving ceremony of Hamidu's first-born son. Another son of Hamma Aljumaa, Adama, had been away for years on end, without even sending a message to his family.

Poverty is not the only important reason for young men to leave the Hayre. Although this

is not openly discussed, conflict between fathers and sons is a major cause behind the migration of adolescents. Often these conflicts concern the misuse and misappropriation of the family herd. There were several cases in which young men disappeared after a grave conflict with their father, or when they wasted the last animals of the family herd on drugs and women. This is consistent with the findings of Bassett that many migrant herdsmen in northern Ivory Coast broke with their family as a result of a conflict with their 'patriarch'. This makes remittances to the family of origin unlikely (Bassett 1994:163).

In a few cases the existence of these runaway sons was unknown to us, because they were not mentioned as family members by their relatives, probably because they had brought shame on the family, until suddenly they appeared. Allaaye Hammadu's oldest son suddenly returned after an absence of 10 years. His parents, who had endured a lot of hardship during the last years, were very pleased, because they did not even know whether he was alive or dead. The other old people in the village mocked, because he did not bring a single FCFA with him, only the inevitable ghetto-blaster. The son could not get used to village life again. His behaviour was impolite and rude, he missed his tea and urban amenities, and decided to leave after a couple of weeks. To console his father he invited him to come to Mopti, and promised him money if he came. However, he departed without leaving money for the transport. The father was at a loss: How was he to get to Mopti without identity card and money? Finally, we took him to Douentza and provided him with pocket money and money for the transport, and arranged a police permit for him to travel without identity card. His old wife was left in the village to the mercy of others. In another instance the tragic news reached an older couple that their oldest son had perished in an accident in northern Ivory Coast, while herding cattle for a trader.

The lack of success 'abroad' of these youths was caused by several factors. In general Fulbe youths refrain from manual labour. They accept only certain types of work, like herding and petty trade. In herding they have a virtual monopoly, because Fulbe are known as expert herdsmen. With some exceptions they do not have the skills needed for trading. Young Dogon, for example, are far more successful in unskilled labour, and often come back with a considerable amount of money from labour migration (van Beek p.c.). In Bamako, the capital of Mali, we found out that a rich oil merchant originating from Booni provided food and shelter for no fewer than forty Fulbe youths from the Hayre, who were all unemployed or semi-employed in selling cigarettes and sweets.[4] On the other hand they are considered unfit by potential employers to do manual labour, even if they want to, because of their physique and their reputation for laziness. Lastly, employment opportunities in town have declined considerably due to the economic crisis in West Africa. Migrant workers from other ethnic groups also encounter increasing difficulties in getting temporary jobs in town. This is also felt by the Riimaybe. In 1991 the son of Bura Bilaali sent a message from Bamako, just before the rainy season started, that he was stuck there, because he had not managed to earn the money for the return trip to Serma.

Communal labour

As a result of the migration of youth there are a number of families, the poor and the ill who cannot work, who are left without anyone to work for them. They do not have the cash to hire people to work their fields either. In principle the youths of Serma (*waalde sukaabe*) can be collected to work the fields of these people, in return for a meal, some tobacco, and kola nuts. No further payment is required. In 1989 help was provided in this way to the Imam; a Beweejo who represents the chief of Booni in Serma and collects the taxes; some older men who were sick and with the responsibility for a family; two Jallube women, Fatumata, Aamadu and Rukiata Maamudu from Wuro Kaaral; and a solitary Diimaajo woman of over 80 years old. In 1990 when the food situation was bad, only three people were helped in this way: the Beweejo, who collects the taxes, the Imam, and an older Jallo man who was too ill to work. In 1991 the enthusiasm was also low and only four fields were worked. In one case the owner of the field was away in Douentza to be cured of tuberculosis and his brother organized the communal work party. Afterwards the owner commented that the second weeding was not done in time, and that consequently the harvest was very poor.

Communal labour may be regarded as a means to supply the poor with low-cost labour power in order to help them through difficult years. It has many aspects of a social security arrangement. However, it is easy to see that this custom is not of much help to the really poor. We could have added many more people who were in the same position and did not receive any help. Why this is so is difficult to say. Probably the majority of these people did not have the means to supply the workers with food and kola-nuts, or they were not able to organize the work party because they lacked political influence. One could say that the Beweejo who collects the taxes collects his political rent by having his field worked in this way.[5] The field of the Imam is worked by the community in almost every Islamic village as a reward for his religious services. Besides, Buya Bukari, the Imam of Serma, is a respected man. All the other people that were helped were, despite the fact that they were short of labour, influential members of the community or related to these. Fatumata Aamadu, for example, is the 'mother of all the Seedoobe'. Rukiata is helped by the youths because her son, Aljumaa, is one of the most prominent members of the *waalde sukaabe*, and also one of the best singers in Serma. The Diimaajo woman is the only low-status person who is helped by the *waalde sukaabe*, but she was related (*enndam*) to an influential Jallube family in Fetesambo, who had the obligation to take care of her, and who organized the work-party.

Another instance of help between families was at the occasion of the harvest. When the spikes were cut and gathered, adolescent boys went to help their relatives, from both their *suudu baaba* and their *suudu yaaya*, with binding the harvest in loads, and carrying the loads to the granary. This is only done when the harvest is good, to lessen the work load for each family. In 1991, for example, the sons of Abdramaane Hamma, Bubaare Aamadu, Hamma Aljumaa and the Bana'en, were all binding the harvest together and helping each other at Yaraama. Among the Riimaybe this kind of mutual help was also found. In the past the harvest of every family was bound and transported by a work party of all the Riimaybe, men and women, each family in its turn. In this work only Riimaybe participated. In 1990 the work was not organized in this way, because of the haste in getting the harvest in, and its modest size.

In 1991 only the millet of Bura Bilaali was taken home in this manner. His harvest was so big he could not manage to bring it home before the cattle entered the fields. Although all the participants denied that they received any payment for this work, they were rewarded with large meals, tobacco and plenty of kola nuts, and of course they built up credit facilities with Bura Bilaali.

There is also a pragmatic reason not to extend communal work parties to all the poor: the small work force of Serma would be exhausted. The *waalde sukaabe* would have had to take care of all the poor in Serma, and a consequence of this would have been that many poor people, who have now settled in Booni, Duwari and other places, would have remained in Serma. The burden of cultivating the fields of all these people would have been too great for the youths.

It is difficult to say whether communal work parties functioned better in the past. People say so, of course, but our impression was that those people are helped who are able to help themselves in the last instance. Only one specific case relating to the past could be collected during the fieldwork. This case concerns Aama Babel again. When his father died in 1958, he was 11 years old, and he said that that year the village helped him to cultivate. The following year, however, he had to do it all by himself as a 12 years old boy, together with his younger brother, and provide food for his mother and sister. Even this account was too optimistic, as we were told later by someone else, who said that since Aama's father died just before the harvest, the village helped him only to collect the harvest and to transport it to the granary.

The labour market in Serma

Within the Hayre and more specifically in Serma the possibilities for wage labour are extremely limited. No *wuro* relies on cash as its main source of income. Most *gure* are too poor to be able to afford hired labour. For livestock keeping no one hired any labour, except the biggest herd owner from Koyo, who employed a Bella from outside the village who managed part of his herd together with one of his sons. There were a few families with cash who hired labour for cultivation. Among these were a family of Jallube of which the head traded in livestock and other commodities; a Diimaajo, who acted as intermediary at the livestock market in Booni; an older Jallo man, who was so ill that he could not work on his field - he received some cash from his son who has grown rich in Ivory Coast, but who never visited his father because of a conflict;[6] and a Jallo woman, who hired a Kummbeejo man on a regular basis to work her field.

Only in these cases did hired labour form a substantial part of the total labour required for cultivation. In all other cases, outside labour was only supplementary to labour mobilized from the *wuro* itself. Jallube as well as Riimaybe were hired, but only the poorest Jallube work for a wage, because of the shame attached to working in cultivation. Mostly they work for a couple of days on their own fields and then try to earn some money to supply their families with food. The going rate for a day's work is FCFA 500 and a meal at lunchtime. Sometimes people managed to feed their family in this way. Sometimes it did not work. Aama Babel, for example, worked for Bura Bilaali in the season of 1991 to pay off a credit of grain that he had

received in the dry season, so his only gain was his meal at lunchtime. In addition there was not always a supply of cereals for sale at a reasonable price in Serma. Under normal circumstances the wage for a day's of work suffices to buy six to seven kilos of millet, which provides a family of five for two days with two meals. However, during our fieldwork cereal prices rose to about three kilos of millet for FCFA 500, while the opportunities for employment were even more limited than usual. Employers also wanted to save cash because of the soaring millet prices.

Some Riimaybe, such as Bura Bilaali and Aljumaa Koda, who have more land than they can work, said they had hired more labour in the past. They consider this too risky at present. The chance of crop failure is high, and in that case the cash and meals invested in the labour force have to be considered as wasted. Consequently, their stocks of cereals decreased over the years, and with this decrease, their capacity to feed the hired labour and to produce a surplus also diminished.

Agricultural land

Access to land

The second resource needed to make a living in Serma is land to cultivate. Rights to cultivate agricultural land may be obtained in three ways: 1- by inheritance; 2- by borrowing or renting without transfer of property rights; and 3- the transfer of property rights through sale. During the fieldwork data on 76 transactions were gathered. Of these three, borrowing or renting land is the least popular. In two instances renting of a field was recorded, and six times the borrowing of a piece of land, for a longer period of time. In one instance two brothers swapped their fields.

In 18 cases the land was inherited from a relative. Inheritance is not arranged in accordance with Islamic rules. Among Jallube as well as Riimaybe only males inherit land. Women do not inherit land, although land may be passed from grandfather to grandchild via the mother. Hamma Bama, an influential old man, obtained land in this way. His father was from Gawdeeru and not related by kinship to the people of Serma, and he married a Ceedoowo woman. He settled in Wuro Kaaral. As his wife had no brothers he was allowed to cultivate the fields of his deceased father-in-law. Upon his death, Hamma Bama took over the land, which he inherited via his mother from his maternal grandfather (*suudu yaaya*). If, however, his mother had had brothers, he would not have been allowed to take the land. A Jallo from Petegudu, who lives in Debere, also married a woman without brothers in Serma and he also works the fields of his deceased father-in-law, which his sons will inherit.[7]

Fields which were inherited were often bought from the original owner in the preceding generation. With 50 transactions involving the purchase of land by the present owners, commercial deals surprisingly appeared to be the most important way of acquiring agricultural land. These commercial transactions occurred over a period of more than 35 years, so the beginning of the sale of land dates from at least before independence. Prices depend on all kinds of factors. The location is important. Land near the water reservoirs is more highly

valued than land at the fringes of the cultivated area. The highest price we recorded was a field of 1.74 ha near the water reservoirs, which changed hands for FM 100,000 (FCFA 50,000) in the 1980s. The relative prices vary over time. In the past they were much higher.

The inherent flexibility in these ways of transferring cultivation and property rights over land allows outsiders to settle in Serma on a permanent basis in specific circumstances. All Riimaybe families in Debere bought their fields from original inhabitants of Serma, except for some fields they borrowed from Riimaybe[8] who returned to their original village Booni. Fulbe herdsmen from outside were also able to acquire land in some instances. For example, Buralde, a Pullo of the Barri clan from the Inner Delta, who lived in Wuro Kaaral, was allowed to marry a Jallo woman from Serma, Dika, because the Jallube in Serma liked him. When there were children, as Bubaare Aamadu put it, he became a family member (*enndam*), and he was given fields to cultivate. Though he was never regarded as the owner of these fields, his sons were. His sons were related through their mothers (Buralde married several times) with the *suudu baaba* Serma, so most of the people of Serma, i.e. the male part, were either maternal uncles or cross-cousins and belonged to their *suudu yaaya*. Several *moodibaabe* were able to borrow fields from Serma people, because they are welcome guests. In-migrating Jallube who settled in Serma have to buy land. The Seedoobe of Wuro Boggo, for example, reoccupied land of kinsmen that was lying idle, and bought land on various occasions. Their own land is located in Lennga or Fetesambo, where they still have many parcels. The Tamanke of Koyo bought all their land near Debere. There is one more category of people who are able to acquire land, at least on a temporary basis, i.e. people who arrive in the village without any livestock. An example of these are Deedi and Fati, an impoverished Tuareg couple from the 'Moodibaabe' section (see Chapter 13). A family of Bellaabe also arrived in Debere in a desperate condition. Initially they survived by wage labour and tanning. They were the only people performing this activity in Serma, and consequently this was regarded as a useful contribution to village life,[9] for in the past people would have to go as far as Duwari to have goat skins tanned to be used as water containers in the dry season. Moreover, the quality of the tanning in Duwari was very bad. After a few years this family was also able to borrow a field to cultivate.

Given the transient nature of the composition of the population of Serma, especially since many people migrated after the onset of the droughts, commercial transactions in agricultural land form an almost necessary correction mechanism to keep the land fully occupied in the area around Debere. Often families migrate without leaving relatives behind to take over the land from them. Even when relatives do stay behind, those who migrate more often sell the land, in order to have some cash in hand, rather than turn it over to their relatives. This stage of 'asset depletion', as it is called by Frankenberger and Goldstein (1990), is the last stage in the progressive impoverishment resulting from drought. The fact that these migrants sold their land indicates that they had no intention of returning to Serma. If a migrant does return to Serma he has at present few difficulties in finding a piece of land to cultivate. There are always people who are temporarily away from Serma and are still undecided whether to migrate for good or to try to return. In this way Sambo Allaaye obtained land from Aamadu Aljumaa. The latter migrated to Duwari, and hoped to return, while the former returned from the gold fields in Burkina Faso, having sold all the fields of his father before he left.

The most frequently cited reasons for selling land were migration from Serma, and lack of

cash to pay taxes or other major expenditures. From the original inhabitants of Wuro Kaaral, Nguma and Coofya, the oldest hamlets, most have left for some reason since Independence (see also chapter 4). This movement is not only typical for the period after 1968, when the droughts started, but seems to have started earlier, or has always been a feature of life. Many fields were sold before the droughts and even before Independence. According to older men there were always commercial transactions, involving the sale of land. As far as we know they were also common practice in Dalla during the colonial period. In Douentza, commercial transactions involving land are routine practice. They are even registered in writing in the presence of witnesses by *moodibaabe*, who act as notaries.

Division of land in the *wuro*

Up to now we have discussed only cases in which land moved from one *wuro* or *suudu* to another. However, the transfer of rights over agricultural land also occurs within the *wuro*, e.g. from father to sons, or when a *wuro* splits up. As will be clear, the regulation of access to land is a men's affair. In all accounts about the establishment of hamlets, rainy season camps, the sinking of wells and so on, women do not play a role. Within the confines of the *wuro* and *suudu* this is the same. For Jallube the reason for not giving property rights over land to women is of course that they do not cultivate. Among the Riimaybe the women cultivate, either on the family fields or on their personal fields. However, they never obtain more than temporary title to the land, and the property rights remain with their husbands, or male kin or affines when they are unmarried or widowed. This is in clear contrast to the prescriptions of Islamic law, which gives a woman rights to half the share of her brothers.[10] In discussing these matters, men would acknowledge this and also recognize that women would probably have a right to claim compensation in the form of other assets such as livestock or money. If a woman were able to acquire property rights on land she would also be able to sell it, e.g. to her husband, if she inherited the land from her father. If her husband were a stranger this would be deemed undesirable, for the land would not be under the control of the *suudu baaba* any more. Besides, the Jallube men reasoned that their women do not need land, because they do not work on the land. A Jallo woman can only inherit land when she has no brothers nor paternal uncles. In this case she has to sell her real estate to her male relatives of the third and fourth degree. The men knew of no example.

In practice, however, Jallube and Riimaybe women, and especially old women, had access to agricultural land. There were for example several cases of older Jallube widows having access to land. These women had no sons, so the land should have gone back to the agnatic kin of their deceased husbands. The women should have remarried in accordance with the prescriptions of Islam. However, there was nobody to claim the land, or to marry these widows and prepared to take care of their subsistence. So they were left with the land, which could be worked by some relative or the *waalde sukaabe*. Any one who would claim the land would also have the obligation to take care of these old widows.

In contrast to the intergenerational transfer of livestock, agricultural land is not pre-inherited. In most cases agricultural land is not even divided when the owner dies. Just as with the

management of the herd, the cultivation of millet and the use of agricultural land by the heirs may remain a joint affair for a considerable period of time after the death of the head of a *wuro*. In this period the men of the *wuro* may buy, borrow or lease land for themselves freely, and this land enters the joint enterprise. As long as the interests of the heirs do not diverge too much, this arrangement may function smoothly for years. The case of Bubaare Aamadu and the Bana'en is exemplary in this respect. Bubaare and Usmaane, the father of the Bana'en, always formed a joint *wuro*. After Usmaane died the Bana'en felt they were working for Bubaare only, for he had many more cattle than they. Bubaare did not have grown-up sons and thus contributed little to the labour of herding and cultivation. Consequently they decided to split up the herd and the fields and to become separate *gure*. The same centrifugal forces became dominant among the Bana'en in 1991. It was difficult to keep on cultivating collectively in a situation of low rainfall. They felt that each of them would be more motivated to work for his own women and children. So they decided to split up the fields but to keep the herd together.[11] Contrary to what we expected in this situation of individualized ownership, the fields were not divided into equal halves in the first instance between Bubaare and the Bana'en, nor into five equal parts in the second instance, between the Bana'en. All the fields, whether they were inherited or bought later on, were measured and divided. Officially the oldest heir would have the first choice of all the parts, then the second oldest and so on. However, when we also measured the fields it appeared that the fields were divided in a totally different manner. According to the data Bubaare got a bit more than 2 ha in the first partition, while the Bana'en got almost 3.5 ha. In 1991, when the Bana'en divided their fields, this 3.5 ha had grown to approximately 13.4 ha because of the various acquisitions by the brothers. Bana the oldest, took 4.6 ha, Sambo, the next, more than 2.9 ha, Bura, the third. 1.8 ha and the two youngest, Hamidu and Alu, who decided to remain together received a bit more than 4 ha. In these figures all the land that they bought in the course of time is included, plus the land they cleared on a deserted campsite of Wuro Boggo in 1991. Neither did the Bana'en divide the original stock of their father into equal parts. Bana took the smallest part, having bought a lot of other land. Bura got most of his father's inheritance, whereas he bought no land at all.[12]

Table 9.1: *Field size and family structure of a Jallube extended family in Wuro Boggo*

family head	family size	number of adults	number of workers	cultivated area (ha)	cultivated area (ha) per worker	cultivated area (ha) per capita
total 1990	33	16	7	12.60	1.80	0.38
Bana	8	6	3	4.60	1.53	0.58
Sambo	10	3	1	2.94	2.94	0.30
Bura	5	2	1	1.82	1.82	0.36
Hamidu/Alu	14	5	2	4.07	2.02	0.29
total 1991*	**36**	**16**	**7**	**13.43**	**1.91**	**0.37**

* (including the land of the *wiinde*)

It seems that there are other principles at work here than simply dividing the inheritance. As far as we have information it is not divided equally according to Islam, nor in order of seniority according to Fulbe custom, but according to family size and labour power, while at the same time exclusive property rights on specific fields were not violated. So, all the brothers remained owners of the land they bought for themselves. The probable reason for this is the tendency, noted already in chapter 8, to cultivate a certain amount of land for each person to be fed in the family. As can be seen in the table, they also used this occasion to adjust the amount of land to the consumptive capacity of the units. The unit with the highest ratio between adults and family size (Bana), got more land per capita than the rest. In the other three units the children are still small, and consequently eat less. Sambo and Hamidu/Alu took less, because they have few workers relative to family size. Sambo has to work on his own for 10 people, and Hamidu and Alu with two workers for 14 people. In this way they tried to ensure that everybody disposed of the means to assure his own existence.

Water reservoirs

Another important resource consists of the water reservoirs in the bed of the pond by Debere. These water reservoirs are privately owned, and consequently privately managed. People in Serma may own anything between one and fifteen reservoirs, and these form the core of the dry season water supply in Debere. The well at Yaraama is almost four kilometres away, so carrying water from there is a considerable burden. We did not test whether the reservoirs were connected by permeable soils, so that an empty reservoir would fill automatically from neighbouring reservoirs through seepage, as was the case with a deeper part of the pond a kilometre north of Debere, which refilled at night by seepage from the water table. If the reservoirs refilled by leakage one reservoir would hold water as long as ten, the only difference being that more water leaks into ten than into one. Private property is probably the best guarantee that the reservoirs are maintained as well as possible. The organization of maintenance on a communal level is virtually impossible given the fluctuating lot of the individual families, their individualized strategies, and their highly variable demands on water.

The water reservoirs have all the characteristics of private property in Fulbe society. They are the subject of inheritance, sale, lease, and borrowing. For all the transactions two parties are involved, the owner, and the individual who buys, rents, or borrows. Except for inheritance all transactions were negotiated. The procedure for dividing the reservoirs on inheritance is officially the same as with fields. The oldest makes the first choice, then the second, and so on. So the oldest takes the best and largest reservoir. Jallube and Riimaybe women are not allowed to own reservoirs. Neither do they buy, lease or own them. They may use water and reservoirs owned by their husbands, brothers or sons. Access to water can never be refused to them, but they are not allowed to take management decisions. They can only influence the transactions. At least these are the rules. However, just as with agricultural land, old women who remain behind without relatives may keep their property. An old Diimaajo woman owned at least one reservoir. She has no access to, nor the possibility to make use of, other sources of water. She is not related to the Jallube of Serma, so she does not have the right to use their

reservoirs. Yaaya Birgi, another old Diimaajo women, has her Jallube *enndam* nearby, so she may rely on their resources.

The reservoirs are a fairly recent phenomenon. This is reflected in the way some of the men became owners of water stocks. Most Riimaybe men excavated, together with their fathers, a number of the reservoirs which they now own. Aljumaa Koda, for example, inherited two reservoirs in this way, excavated three in his own lifetime and bought another two, one from another Diimaajo, and one from a Pullo. The last one was cheap, for it had to be rebuilt after it collapsed. Two Riimaybe brothers inherited four reservoirs from their father and excavated another fourteen in the course of the years. For the Riimaybe the water reservoirs are an important source of wealth in the absence of cattle. They enable them to invite passing herdsmen on to their fields, and to offer them water for their animals, so that they can have their fields fertilized.

There is also a lively trade in water and reservoirs. Ba Lobbo, an old man in Wuro Kaaral, owns two reservoirs. At the start of the dry season he sells the use of the water for FCFA 2,500 and FCFA 2,000 to buy himself some clothes and to have some pocket money for kola nuts. Bukari Alasuna claims to have dug out three reservoirs, but it is more likely that he paid a Diimaajo to excavate them for him. He bought three reservoirs, one from an old Diimaajo woman in 1973 at the height of the first Sahel drought, and another in 1985. He bought the third from Buya Bukari, the Imam. He earned another four reservoirs with his craft as *moodibo*. A herdsman from Fetesambo gave him these reservoirs in return for interventions on his behalf with Allah, one to get back some animals which had been stolen, one to find a good place to go on transhumance, which he found eventually, one to win over a woman to marry him, of which the outcome remained unknown, and the last one to get back the cattle he lost in the drought of 1985. This was clearly unsuccessful, for the herdsman now lives in Duwari, where he has become a cultivator for the Hummbeebe. This example shows that water reservoirs, just as fields, are among the assets which are depleted before someone turns his back on Serma to seek refuge elsewhere.

One does not always have to pay for the water one obtains from the reservoirs. In general close relatives are allowed to take water without payment from each others' stock. The ten reservoirs of Bukari Alasuna are, for example, mainly used by his relatives from Gawdeeru, so that there is not sufficient water for Bukari's own animals. When Bubaare Aamadu went on transhumance to Duwari, Abdramaane Hamma, who cannot go on transhumance, used Bubaare's water, because he had to take care of his old father. He finished two of Bubaare's three reservoirs. After all they are 'brothers', despite the fact that they are rivals for the leadership position of the Seedoobe. To our knowledge no payment was given for the use of this water. When people settle in Debere temporarily, without livestock, they may freely take water for personal use as long as they stay; should they bring livestock with them, compensation is required for watering the animals, unless close ties exist between the user and the owner of the water. Bura Bilaali, for example, receives distant relatives from Booni with their animals. These are watered from his reservoirs, in return for the manure of their livestock. This is very advantageous for his relatives in Booni, for the water situation in Booni is so bad that they would have nowhere to go. As Riimaybe they have no access to the pastoral wells which were sunk by the Fulbe. When the water reservoirs of Bura Bilaali run dry, Bura's

animals are taken care of by these people, who move to the mountains to try to find water. When outsiders want to live near Debere for some time, they have to persuade someone who owns reservoirs to give them water, either by paying for it, or by manuring their fields. Passing pastoralists or traders with animals, who are only temporarily in Debere, buy their water dear. At the height of the dry season they are sometimes charged FCFA 25 for a bucket of water, or FCFA 50 for watering a camel, by the owner of a reservoir.

The circulation of livestock

Livestock and social relations

If we followed Riesman's description we would have to assume that the men constituting the *wuro* are held together by solidarity and attachment to the patrilineage. This is indeed what is stressed by Jallube and Riimaybe men alike, when discussing solidarity. In the first instance one's basic allegiance is to the *suudu baaba*, understood as the male relatives of one's father, and only in the second instance to the *suudu yaaya*, the relatives of one's mother (see chapter 4). Given the results of the preceding section, agricultural labour and work in general seem to contribute only to social discord and the breaking of bonds of solidarity.[13] Reality in this case does not seem to conform to ideology, or solidarity has been crushed under the weight of the difficulties the Jallube and Riimaybe encounter.

The *wuro* is also the unit for organizing the management of livestock. If it is decided to change the organization of herding labour, the *wuro*, managing the herd, ceases to exist. It either merges into another *wuro* or splits up into two or more new *gure*. In the former case two herds are combined. In the latter case separate herds are formed. The cultivation of cereals and the management of livestock need not be organized at the same level: Indeed one of the problems we had in the analysis of agricultural production (chapter 8) was that they are sometimes organized separately and may change from one year to another. When the Bana'en decided to split up their common fields and their granaries, they did not split up their herd. Only the milk was taken to the various *fayannde* (sg. *fayannde*: hearth) by the respective heads of the sub-units of the *wuro*. All the sub-units contribute labour to the herding and watering of the communal herds of cattle and small ruminants, in which all sub-units, and as we shall see all members of the *wuro,* have their part. To make it more complicated, these sub-units are made up of the families of the Bana brothers. Since the division of the fields the cultivation of millet was organized at this level. However, in their turn all these sub-units were composed of several *fayannde*.

The *wuro* of Abdramaane Hamma is structured differently and has another history. Up to 1985 it was composed of his family only. In 1986 he married Rukiata Maamudu as his second wife. This marriage is of a prohibited kind, and probably this is the reason why Rukiata and her son Aljumaa have kept their herd and field separate from those of Abdramaane's *wuro*. In fact Rukiata's *fayannde* acts as an independent *wuro*, also because Aljumaa her son is away quite often. He looks for herding work in places where his maternal uncles (Rukiata's brothers) have settled after the drought. Later the herd of a Jawaando from Dalla was added to the herd

of Abdramaane Hamma's *wuro*. This herd is accompanied by a salaried herdsman, who delivers the milk to the *fayannde* of Yaaya Aamadu, Abdramaane's first wife, where the herdsman also eats. So he can be said to belong to Abdramaane's *wuro*. A couple of years later Sambo Allaaye, a son of Abdramaane's eldest sister, and a brother of Bubaare, returned from Burkina Faso with five milch cows he bought with what he earned from digging gold. These animals did not enter the herd of Bubaare, his paternal uncle (*bappaanyo*), but the herd of Abdramaane Hamma, his maternal uncle (*kaw*), who is also a paternal uncle, because he is from the same lineage as his father. In most respects, however, Sambo and his wife Adama form an independent *wuro*. They definitely form an autonomous *fayannde*. Adama cooks and processes milk separately from the *fayannde* of Yaaya Aamadu and Rukiata Maamudu, and Sambo works his own field. In fact the only material connection between the families of Sambo and of Abdramaane Hamma is that the animals of Sambo are herded together with the animals of the members of Abdramaane Hamma's family. The only other tie between them is that they both belong to the same lineage, but there are other *gure* in Wuro Boggo which are more closely related to Sambo than this one.

So in addition to kinship, co-residence, and cooperation in the cultivation of land, the joint management of a herd is one of the reasons to form a *wuro*. These units are held together by the fact that each of the participants has property rights in the animals that constitute the herd, or rights to the produce of the milk, whether in cash or converted into millet, when animals are sold. Domesticated animals are not only the economic basis of existence in this way, they are also 'engaged' by the structure of relations of the human community. 'What is essential to pastoralism (..) is the *social appropriation* by persons or groups of successive generations of living animals' (Ingold 1980:133). Tenure is not confined to 'things fixed in the terrain' like land and watering points only, but applies also to 'movable property' in the form of animals. 'The pastoral animal is a vehicle in a dual sense: not only does it transport its owner's effects, it carries around his social relations as well' (Ingold 1986:168). Property relations, the transfer of property rights over livestock, and the joint management of herds are important constituents of social relations, just as kinship, residence, and so on, and may even form the basis of networks that contribute to social security. When the transfer of livestock is practised pastoralists may create networks of mutual debts and obligations that may be cashed in times of hardship (cf. Platteau 1991:119). Inequality is of course a prerequisite for any redistribution to take place.

In the literature on pastoral societies the relations of ownership and circulation of livestock are indeed depicted as important constituents of social relations and the basis for solidarity and the sharing of wealth (Evans-Pritchard 1940, Gulliver 1955, Johnson & Anderson 1988, Johnson 1991, Sobania 1991). Among the Wodaabe, who are reckoned to belong to the Fulbe, people lent each other cows under the institution of *habanae*. The borrower of the cow is entitled to three calves; the lender to be given back the animal after it has given birth three times (Scott & Gormley 1980, White 1984, 1990). These cows may constitute up to one third of a family's total herd (Maliki 1988:179). About other Fulbe groups hardly anything has been written. Bovin (1990:52) reports that these institutions have 'died out' in Liptako, which suggests that they existed in the past. As will be shown below, we should not overestimate the contribution of property relations and redistribution of livestock to solidarity in Fulbe society

in the Hayre, not at the level of the community, nor at that of the lineage, nor at any level except that of the *fayannde*.

A ritual concerning livestock: the *wulleeru*

Perhaps the declining economic importance of cattle is most vividly demonstrated by the way the *wulleeru* ritual is performed nowadays. In this ritual cattle serve primarily as prestige goods. It was held each year after the harvest, or even sometimes at the end of the rainy season, when everyone was present, as a festivity of the Jallube only. The young men who herded the cattle showed their best cows and bulls in order to compete for the title of the best herdsman. The herdsman who had the fattest bull won. This festival was at the same time a celebration of beauty, for it was always a tribute to a beautiful girl or woman, who was to be the focal point of the *wulleeru*. The festivity ended with the slaughter of a bull by the winner, dance and music. The last time this ritual was held was just before the drought of 1983-1985. Since then another festivity has been held which is similar to the *wulleeru*, bearing the same name, but in it the cattle have been replaced by goats. We attended two of these festivals in October 1991, one for the adolescent goatherds, and one for the very small herd boys. It was the first time they had been held since 1988.

The preparations for the festival started long before. In February 1991, when we went to Wayre Hawa Aamadu asked us if we would return to Serma soon, and if Alu the son of Abdramaane Hamma was still there. Despite her inflamed eyes she had not forgotten about the coming *wulleeru*, which would be held for her eleven-year old daughter in Koyo after or during the next harvest. She asked us to bring a message to Alu and his friends together with a small present. We had to say that 'they remembered', and give them some kola nuts and cigarettes.[14]

On the second day of the festivities of *tabaski* in Serma in June 1991, two sons of Abdramaane Hamma, Alu and Haidu (18 and 16 years old, and not yet married) held their own *wulleeru* in Debere by surprise. They left Wuro Boggo the evening before with the herd of goats. The next day late in the afternoon they ran into Debere blowing their whistles, with their best goats, painted blue, to have them judged by the girls. Afterwards they wanted to slaughter a goat. Initially Abdramaane Hamma did not agree with this, but in the end he had to give in. This performance of Alu and Haidu was an act of protest. They were convinced they had the best and fattest goats in Serma, but every a *wulleeru* was held somebody else won, and they wanted to be sure to win for once, by by-passing the festival in this way.

By the end of October 1991 the real *wulleeru* festival, which Hawa was referring to in February, was held in Koyo. We also went there. Many girls and newly wed women, young men (the cattle herdsmen) and boys formed two groups that gathered in the camp. The girls and young women were sitting near the hut of the girl, Fatumata Sambo, the daughter of Hawa Aamadu, to whom this *wulleeru* was dedicated. Everybody was waiting for herdsmen to come with their goats. Eventually they came from all sides out of the bush. There were three herdsmen from Wuro Boggo with their herds, one from Wuro Kaaral and one from Koyo.[15] The boys and young men rushed after the goats, which were all painted blue. When all the

goats had entered the camp the inspection of the goats started. The girls and young women threw their shawls and head covers to the boys of their preference, giving them a very colourful appearance. Two young herdsmen from the Inner Delta, who were only passing by, were invited to choose the best goats. Again Alu and his goats did not win the title, but Hammadu Aamadu from Wuro Kaaral. He also won the last time in 1988. Alu returned disillusioned to his own camp, and we shared his feelings. In Wuro Boggo everybody was sure that Alu's goats were the most beautiful and the best and that he should have won. They all agreed that the family of Hammadu had consulted a *moodibo* who had made a charm for him. There was also gossip that it was logical a herdsman from Wuro Kaaral would be selected as the best by the herdsmen from the Inner Delta. They wanted to stay on good terms with the inhabitants of Wuro Kaaral, where they courted women.

A few days later a *wulleeru* festival was held for the boys who herd small flocks to learn the craft. It was held in Wuro Kaaral, with a seven year old girl, Fatumata Hammadu, as the focal point. We went there. Only very young girls, with their finest clothes on, and their mothers, were waiting for the goat herds to come. Shortly before the herds entered the campsite young men and boys also arrived in Wuro Kaaral to attend the festival. Three boys presented their goats. Although only one boy won the title, again a boy from Wuro Kaaral, the fathers of all these three boys slaughtered a goat each in honour of their sons. The children roasted the meat of the goats, and sang while clapping their hands for the rest of the afternoon and evening. Some of them stayed on and spent the night in Wuro Kaaral.

Cattle thus have disappeared from the ritual. There are so few herds that the herdsmen do not consider that they have sufficient prestige to present their animals to the public. This clearly illustrates the decline in wealth of the pastoral community in Serma. A remarkable aspect of the situation today is that it seems, given their role in the preparations and the performance of the ritual that it is the women who try to keep the ritual alive, albeit at a different level. The older men and cattle herdsmen hardly participate, except for the slaughtering of the goats for the very young herd-boys. As can be concluded from the description it is certainly not a ritual which stresses solidarity in the pastoral community. Rather it contributes to internal strife and jealousy.

The circulation of livestock between close kin

The fact that cattle have disappeared from ritual, because of their declining importance, makes the issue of how cattle are circulated through society even more important. Access to cattle or their products is crucial for the members of a *wuro* to stay in the pastoral economy. Rules and practices for the distribution of cattle and for the mediation of access to their products within the *wuro*, and between the *gure*, are crucial not only for the continuity of the *wuro*, but also for the *fayannde* and the survival of an individual, and for the prospects of children who grow up at present and need a basis for subsistence in the future.

The ownership of livestock in Serma is highly individualized. Most livestock in Fulbe society in the Hayre are transferred from one individual to another by anticipated inheritance.[16] Ideally every child is given livestock at several occasions in its life-cycle,

beginning with the baptismal ceremony, seven days after the child is born. At the baptismal ceremony the father and mother of the child let the guests know which animal(s) they give to the child. The people present are thus witnesses that from then on the child has property rights over these animals and their future offspring in the female line. At other occasions, circumcision for boys and marriage for girls, they may also be given livestock. At present this rarely occurs, because the parents no longer have sufficient livestock. Livestock gifts at baptismal ceremonies have been drastically reduced as well. The consequences of these reductions are described in chapter 11.

In theory every member of society is able to build up a herd in his/her youth, a resource base of one's own. This is however not the case in reality. Girls are often given less livestock than boys. If the father and mother possess a lot of livestock, they will strive to give each newborn child a heifer from the stock they possess. A mother is expected to give an animal of the stock she received from her husband at marriage (*futte*).[17] When the father or mother are poor they will give more to a boy than a girl, or they will give a bull to the girl, this being only a token gift, because the bull will not reproduce on his own and will eventually be sold for the benefit of the family. To a girl, mothers are more inclined to give cattle than a father, but they also prefer to give cattle to sons, because they will care for their mothers in old age. It should be added that daughters also have an obligation to take care of their mother, and often do so. If she can a mother will always give some of her animals to her daughters. If no cattle can be given a child is given sheep or goats, or nothing.

Apart from gender, other factors may contribute to the inequality of individuals with respect to livestock. In the course of the years diseases or droughts may reduce the number of animals from the stock one has pre-inherited. If one is lucky, the pre-inherited animals will give birth to female calves which will reproduce in the future. Another factor influencing an individual's stock is the decisions by the head of the family concerning the sale of livestock. In principle he has to consult the owner of the animal involved. In practice, however, he has almost unlimited authority over his children's livestock. Consequently a girl's livestock is managed differently than a boy's livestock. It has to be noted in this context that, at the occasion of giving the animal, it is not shown to the guests present at the ceremony, which leaves room for manipulation of property rights afterwards. In one family 'only the animals of its female members' died during the droughts.

The rules and ways animals are pre-inherited or transferred over the generations serve to keep cattle within the patrilineage, the *suudu baaba*, and keeps the children, at least the sons, attached to it. At another level, however, the *fayannde* is also extremely important in the transfer of cattle over the generations, for it is there that the rights over the production, the milk, of the animals which are pre-inherited, cluster. The animals of which the property rights are relocated to the next generation of a *fayannde* are: 1- animals belonging to the father; 2- animals that are part of the *futte*, i.e. the animals given in use to the mother of the children; 3- and the animals that are the property of the mother herself. The latter two categories of property rights are difficult to infringe by the herd manager, the head of the *wuro*. He has no property rights on these animals and he has to solicit the permission of his wife he wishes to sell these animals. They are the working capital of the *fayannde* so to speak. The first category of animals are allocated to the *fayannde* as it grows in size, i.e. when a child is born. The milk

of all these three categories of animals is designated for the woman who heads the *fayannde*, because there is an intimate relationship between the property rights of the children and the milk rights of the mother of the children.

So it is at the level both of the *wuro* and of the *fayannde* where individual rights in stock and their produce are organized. The property rights in the animals at the level of the *wuro* are managed by the father, while the milk rights at the level of the *fayannde* are managed by the mother, until the child has grown up and established its own *wuro* or *fayannde*. As long as a son belongs to the *wuro* of his father, the latter takes the decisions concerning the sale and management of cattle. As long as a daughter-in-law has not established her own *fayannde,* it is the mother-in-law who takes the decisions concerning the milk. At the level of the *wuro* the father and sons, or alternatively the brothers, when they jointly manage a herd, owe allegiance to each other. The relations of assistance and solidarity between the siblings of one mother, brothers as well as sisters, and children towards their mother, have their basis in the *fayannde*, in the fact that they have drunk milk from the same breast (*enndu*), which can also be taken as a metaphor for the herd that supplied milk to this unit.

Inheritance at death is not a very important means of transferring cattle and other livestock, as most livestock is pre-inherited. It is quite normal that old people die without leaving a single animal. Inheritance however occurs when young people die. Normally animals should be inherited according to Islamic law, which prescribes that daughters receive half the share that sons receive, after the spouse has taken his/her share. All our informants were positive about the fact that Islamic law was applied in inheritance matters. Practice, however, indicates quite the reverse, and shows that there is a tendency to deny widows and daughters their share.

If a young man dies and leaves a widow with sons, the Islamic law is adhered to reasonably well. The widow is allowed to take her animals from the herd that will be inherited by her children and the rest is divided among her sons. If her husband dies without leaving male children, she is far worse off. In that case no-one will protect her interests, for there are no sons of the patrilineage for whom to reserve the animals. In one case the patrilineage of the deceased husband took all the cattle belonging to the widow and her daughters, leaving them without animals. She was not even allowed to take the animals of her *futte*. Then she tried to get her share of the fields and other assets her husband owned. This was also turned down. So, being a wife or a daughter of a man does not necessarily entail a claim on his livestock, only on the animals of the *futte*, and even these claims can be manipulated. For a woman the loss of her husband means a loss of social security as she may lose the rights to the milk of her husband's livestock. She is allowed to inherit livestock only because of her sons, if she has them.

So, in principle every individual born into Fulbe society in the Hayre is entitled to a herd of his/her own. Most of the animals a boy or a girl receives are a direct or indirect gift of the *suudu baaba*. Only if the mother has animals of her own may a child get animals from his *suudu yaaya*. Occasionally, children are given cattle by their maternal uncles. In theory these animals ensure a basis for existence. In practice, however, inequalities and even dispossession may occur depending on mere chance, the management decisions of the herd manager, and the manipulation of ownership categories.

According to (male) pastoral ideology, livestock gifts and the inheritance of animals by girls

are considered as a loss by their male kin, because they will eventually marry into another lineage and the livestock is lost to their own patrilineage (cf. Dupire 1960:87). Dupire also notes that among the Wodaabe of Niger, who are less Islamic than the Fulbe of the Hayre, a girl receives significantly less livestock than her brothers in pre-inheritance (Dupire 1962:201). The participation of a woman in the inheritance of her father is in this situation regarded as a 'concession' by her male kinsmen. A similar struggle over the management rights over livestock owned by a woman is connected to marriage, among both the Wodaabe and the Fulbe of the Hayre. The woman may take her cattle with her and put them in the herd of her husband's *wuro*, or she may leave them in the herd of her parental *wuro*. In both cases the management decisions are taken by others, either by her father or brothers, or by her husband. If she wants to dispose of the animal or to sell it for some reason, she always has to request the permission of the herd manager, who also has to execute the transaction for her.[18]

At present the way in which the rules concerning the circulation and redistribution of livestock are put into practice leads to the concentration of livestock in an even smaller group, the males, in the sphere of immediate kin. Although most of the rules concerning cattle transfers between kin and among the herding community are based on Islamic law in the minds of the Fulbe of the Hayre, the operation of the rules differs clearly from this ideal. Within the system of inheritance and pre-inheritance women have less chance than men of getting a herd sufficiently large to allow a living, or even the share they are entitled to. At marriage women are given token ownership of the *futte*, which is withdrawn at divorce, even when initiated by the husband. Marriage thus entails merely a symbolic transfer of cattle between husband and wife, as the woman will not be able to claim any of these animals for herself. She is expected to give them in pre-inheritance to her children. In this way livestock remains in the kin-group of her husband. It is worth noting that the animals of the *futte* are never shown to the bride nor to her male kinsmen, who are present at the ceremony on her behalf, and who should protect her interests. There seems to be a tacit agreement between men to ward off the demands of women. This would be unthinkable among neighbouring groups such as the Tuareg (Randall & Winter 1985), Bella, Moors and the Fulbe in the Inner Delta of the Niger and Jelgooji in Burkina Faso (Riesman 1977:82), and even among the Wodaabe in Niger, who are much less attached to Islam (Dupire 1962:239). Jallube men, the *moodibaabe* included, are perfectly well aware that Islamic law is manipulated, but they say their custom is different. Under normal circumstances, however, the position of women may well have been much better than depicted here. When harvests did not fail, hardly any cattle were sold, and herd size was bigger, she retained rights over the milk of her children's animals until her death. This gave women a much more independent position than at present.

The present mixture of Islamic rules (*juulde*) and local practice (*al'aada*) is in fact a combination of two conflicting principles. The first principle is composed by Islamic rules stressing the rights of individuals in relation to the group. The opposing principle consists of the loyalty to the agnatic kin group (a father and his sons, a group of full brothers) as the central unit of ownership of resources, and the viability of the herding family over the generations (cf. Stenning 1962). Important in this respect is the ambiguous role of Koranic scholars. In pre-colonial times they were the judges of the Fulbe chiefdoms and administered justice. They were arbitrators in colonial times in the indigenous courts set up by the French

colonial government. After independence Mali became a secular state and no appeal can now be made to Islamic law. At present no use is made of state courts in conflicts concerning cattle transfers and the transfer of other goods.[19] Koranic scholars are fully aware that Islamic rules are not followed. Some of them regret this, but are not able to do anything about it. Others defend the breaches of Islamic law on the ground that this aspect of Islam is not possible to apply for Fulbe, because it 'goes against their character', and that things have always been this way. After all they are also males and members of a patrilineage. The explanations of men referring to rules, norms and Jallube custom, may well be a recent invention inspired by the crisis situation, the droughts, and a new (manipulated) interpretation of Islamic rules.

Transfer of livestock between the *gure*

There is no transfer of property rights over livestock on the occasion of marriage. The wife's animals may move from the herd of her *wuro* to that of her husband, but they remain her property. Neither does the wife-giving *wuro* receive any livestock in property from the *wuro* that receives the woman. As a result few obligations are created between bride-givers and bride-takers at the occasion of marriage. Another way of circulating cattle within the herding community is via the Islamic institution of charity, the so-called *zakat*.[20] However, due to the mechanism of pre-inheritance, by which the formal ownership of livestock is spread over all the people of the *wuro*, and the general decline in livestock numbers, almost no one disposes of the minimum of 30 head of cattle, so nobody pays *zakat* on cattle. The same applies to goats and sheep. Although some people have built up considerable goat herds, they hardly ever attain the size that allows the payment of *zakat*. Herd size is effectively limited by the fact that goat herds are mainly kept for paying household expenses, so that off-take is high in a normal situation.

Gifts or loans of livestock to dispossessed members of society do not occur. When questioned about the possibility of helping other people in this way men said they did not know of such gifts. They even disapproved of this practice 'because someone who has lost everything should leave the village and try his luck elsewhere and not form a burden on his kin or other people.' A woman said in private that such a gift had occurred between her husband and one of his brothers. One of them had lost all his cattle in 1974 and her husband had given him a heifer to reconstitute his herd. At the time these brothers were pooling all their resources, land, cereals and money, except cattle. So they had two options at the time: either give their dispossessed brother milk each day, and sustain him for an unlimited period of time, or give him a heifer to get him on his feet again, so that he would not draw on his brothers' livestock.

This is however the only case of a livestock gift that we know of. Institutions like *habanae* (Dupire 1962, Scott and Gormley 1980, White 1984, Maliki 1988), or *ya'irae* (Hesse and Thera 1987), or the lending of cattle by maternal uncles to their nephews who are without livestock (Riesman 1977:42), were completely unknown in Serma and beyond. Even specifying institutions we found in the literature and explaining them did not elicit any positive reaction from the people. On the contrary they were very sceptical about the working and value of such institutions. What use there could be in giving livestock away was unclear to them. Probably

they did not consider the possibility of receiving any livestock, only of giving it away. What does happen more regularly is the giving of livestock products, i.e. milk. It frequently occurs that a relatively well-off family helps a poor family, or a family which is temporarily lacking milch cows, with a small amount of milk each day, to supplement their food. Daughters may bring small amount of curdled (sour) milk to their mothers when they are in need.

An intermediate form between a gift of livestock and a gift of milk is the lending of livestock to be milked by the receiver. This institution is called *diilude na'i*. At the beginning of our stay, for example, we were given a cow by our host to provide us with milk. Later on when we had bought our own cows, and were able to provide for ourselves, the cow returned to the milch herd of its owner. According to informants this is becoming increasingly rare, because there are only a few families who can afford to lend animals. Moreover, the lending of an animal means that less milk and less income is available for the women in the family. When *diilude na'i* occurs nowadays, the animal often remains in the owner's herd while milk is fetched each day. Cattle are lent from time to time, but this is more a matter of convenience, because it often concerns the animals that are not producing any milk. Bubaare, for example, left some of his livestock behind when going on transhumance to Duwari, where the wells are very deep. In this case leaving cattle behind saves labour for watering the livestock. In another case a man gave his brother his only cow to milk, in return for his brother's flock of milking goats. This swapping of animals saved both brothers considerable effort when herding the animals.

Conflict involving livestock

An important cause for conflict is control over livestock. In the preceding section we saw that inheritance of livestock may cause friction. In these cases women feel themselves victims of the manipulation of the rules by men. This does not mean that the men in Serma form a cohesive and cooperative group and do not have conflicts over livestock. On the contrary there are many conflicts about cattle between fathers and sons or between younger and older men. Remember the youngest brother of Hamma Aljumaa (chapter 1). Livestock was involved in the conflict with his sons. One of his sons sold a bull in order to have money for spending at a baptismal ceremony. His father who did not know this gave him some money for this purpose. Later on, when he discovered that the boy had sold a bull behind his back, he was so angry that he started a fight[21] with his wife, and sons, and departed. He is now in Ivory Coast and has not returned ever since. After Maamudu Aljumaa fled in this way, his sons dissipated the family herd with feasting and women.

Another old man, Aamadu Yaaye, who is now in herbal medicine suffered the same fate. Before the drought of 1983-85 he was a wealthy man. He lost most of his animals and only four head of cattle and a small herd of goats were left. His oldest son frittered this all away, and is now living somewhere between Djibo and Ouahigouya. During our fieldwork Bana came into conflict with his sons, when he misappropriated their cattle (see chapter 11). One of his sons in turn took a sheep to sell for himself to waste the money. Bana, however, followed him to the market of Booni and halfway there caught up with him. The boy left the sheep behind

and fled. A few days later he returned and no more was said about it, but we were told that in other cases a boy in such a situation would have left his family. A more depressing case was that of Sambo Hammadeeru from Nguma. The old man was ill and totally dependent on his sons. He had no control over them, and they regularly sold animals from his tiny herds of cattle and small ruminants, and sometimes even millet from the family granary. Sambo even called for public attention to his problem, but, in the absence of a living brother with some authority over the boys, nobody could do anything about it.

This phenomenon of overselling animals from the family herd in this situation of shortage is quite remarkable. It is, however, a regular phenomenon among the Fulbe, though in more prosperous circumstances. Grayzel (1986:155-158) explains this behaviour by pointing to the quest for beauty inherent in Fulbe ideology, in which freedom and independence play such a dominant role (Riesman 1977). The selling of livestock is a means to attain beauty or obtain beauty by giving the money, for example, to beautiful women, or to enhance one's status as a free and independent man by giving money to bards and beautiful women at marriages and baptismal ceremonies. Many youths also seem to spend large sums of money on drugs despite the difficult situation, and some people, though not in Serma, are said to have spent entire herds on feasts with drugs.

These feasts are not a recent phenomenon. Older men and women reported that men spent much money on beautiful women, and that they slaughtered animals just for the fun of it. Nevertheless we do not think that an appeal to Fulbe ideology, aimed at attaining beauty, freedom and independence, suffices to explain why they spoil livestock and more precisely cattle. In the Hayre the Fulbe are also renowned for their love for cattle, and their willingness to abstain from the luxuries of village life and consumption in order to hoard wealth (*jawdi*). These values have an ambivalent relation to the love for beauty, freedom and independence, which are said to be the basis for conspicuous consumption.

Yet there may be another explanation for the observed conflicts between fathers and sons, i.e. the contradiction between the fact that the greater part of the herd of the *wuro* is owned by the children, and predominantly the sons, for they get a bigger share than their sisters, while the management decisions are taken by the head of the *wuro*. All the important management decisions, from the direction of the transhumance, the sale of livestock for household expenses and the purchase of cereals to the sale of livestock for marriage payments are taken by the head of the *wuro*. In a situation of scarcity and declining livestock numbers, but also in normal circumstances, these decisions are crucial for the future of each child. Inevitably they will cause some to bear grudges against the others or against the father. In a situation where many animals die or have to be sold, individuals may feel that their rights are threatened or that others are favoured by the management decisions of the father. Moreover, the skills of the young in herding become increasingly important for the family as the capacity of the father wanes with advancing age (Stenning 1962:98). This may lead to a situation in which *haasidaare* (jealousy, wrath) may take over and may drive a son to spoil the animals of himself and others, so that others cannot profit from them either. It is easy now to see why, in the management decisions taken by the men, the cattle of sons are protected more than those of girls. Boys have to remain attached to their parents, for they will take care of their parents, and will form a new *wuro*. At the same time they are the most important challengers to the power of the father. It is

important to avoid provoking ill-will and jealousy in them. A complicating factor is of course that these grievances cannot be communicated in another way, because of the *yaage* in the relation between fathers and sons.

Herding contracts

Not all youths leave their parents, and not all the adolescents who stay with their parents sell animals without permission. Many of them sincerely try to make the best of the situation and try all kinds of work to provide their family with some sort of income, so long as the work has something to do with livestock keeping. The herding of cattle or small ruminants on a contract basis is the most important of these alternatives.

All over West Africa the livestock of sedentary agriculturalists and urban people is often herded by the Fulbe. In Central Mali the Dogon entrusted their cattle to Fulbe herdsmen (Bouju 1984). Even in the past Fulbe, who were exploiting regions dominated by sedentary agriculturalists, herded livestock on contract. Specifically the herding of livestock for noble livestock owners such as the Tuareg (Bernus 1990:153-154), Bamana kings in Segou (Grayzel 1990:38), the emirs of Kano, Sokoto and Katsina in Northern Nigeria (Dupire 1962), and the Maasina empire (Johnson 1976:486), has been a recognized practice for centuries and consequently a source of social security. It enabled Fulbe herdsmen to reconstitute their depleted stock when disaster struck them. Cattle were so precious that they were entitled to the milk of these cattle, and a bull each half year for herding 40 head. If they did their work well they were also given clothes, food grains, and tobacco.

According to informants, in the past the Jallube in the Hayre rarely herded cattle owned by non-Fulbe. If they were dispossessed they would take up cultivation or migrate elsewhere, or they would be given cattle by the chief of Booni. Nowadays the herding of cattle belonging to non-Jallube is an important means of obtaining a livelihood. This is not an isolated phenomenon. There are numerous reports that ownership relations of cattle have changed fundamentally during the droughts in the Sahel, due to changing market conditions. Urban people, traders, civil servants and cultivators have been able to buy many cheap cattle, when the Fulbe needed cash to buy cereals (Röell 1989:19). This decline in market conditions is often very severe. The disadvantage for the pastoralist is even larger if we consider the fact that milk production in a drought year is much less than normal and that marketed animals are in poor condition (see chapter 8).

The practice of herding on contract is very much resented by the Jallube themselves, because it does not yield anything extra to invest in their own herd. They often prefer to leave (cf. Bassett 1994:165), because herding on contract makes them dependent on a patron. They are not allowed to stay in their home villages, unless the cattle owner lives in the neighbourhood. Often they are obliged to manure the fields of their patron, instead of their own field, which results in a decline of soil fertility on their own cropland. Moreover, the terms of contract have been eroded by an oversupply of dispossessed herding families. At present the only gain for a herdsman in herding a patron's livestock is the milk. Often, however, the proportion of milking cows is small compared to normal herds. There is always the threat of conflict over

animals that have died or are lost. If the patron suspects neglect or theft by the herdsman he obliges him to pay for the animals that are lost, and the animals may be withdrawn without notice.

There are three important social spheres where Jallube from Serma obtain livestock to herd on contract. These social spheres have different terms of contract and are geographically separated. The first social sphere is within their own society, among the Riimaybe of Serma and the townsmen of Booni. Often these herding contracts are long-lasting arrangements between people who have known each other for a long time. Civil servants, such as the officials of the office of the livestock service in Booni, also have some animals herded in Serma. In Wuro Kaaral most of the few animals that are present in the camp are owned by the Riimaybe of Debere and civil servants. Not surprisingly the inhabitants of this camp do not leave on transhumance, for their owners do not want the animals to leave. One man said he was asked by a civil servant from Booni to take care of a gestating heifer. He gladly accepted with the prospect of having milk as soon as the heifer gave birth. He did his best to keep the animal in good condition, and he gave it salt, which he paid for himself. A week before the heifer gave birth it was taken back by the owner, without payment for the grazing, care or salt. However, a few weeks after giving birth, said the herdsman with some satisfaction, the animal died.

Wealthy members of Fulbe society also have their animals herded by impoverished Jallube. Some of the Jawaambe of Dalla and Booni have built up a considerable herd. For example Abdramaane Hamma took care of the herd of a Jawaando of Dalla. Regrettably the herdsman accompanying the herd was mentally backward, and often lost his way in the bush, or let part of the herd wander off while he took his afternoon nap. Abdramaane's son, Aamadu, regularly spent several days and walked hundreds of kilometres to track the lost cattle. It was all tolerated because of the milk that was provided by this herd. A second social sphere where people seek to obtain a herding contract is the Inner Delta of the Niger which we discussed in the section on labour relations. A third accepted way of acquiring livestock on contract is migrating to the Hummbeebe and Dogon villages south of the Seeno-Manngo and on the Seeno-Gonndo. People who have migrated to the south to the Hummbeebe villages have almost all taken up the herding of Hummbeebe animals. Being a herdsman of a Kummbeejo (sg. of Hummbeebe) or Dogon, who are considered to be pagans by the Fulbe, is a token of having lost one's independence.

Intermediate forms of herding on contract are also possible. A number of poor families with their few head of livestock leave every year for villages of cultivators to look for herds of goats and cattle to herd on contract. Often they find a herd of goats which they herd for three to five months, living off the milk and the exchange with millet. The profit for the cultivator is that the animals are helped through the difficult dry season. After the dry season these families return to their home villages to cultivate their own fields during the rainy season, hoping for a good harvest, so that they do not have to leave again next year.

Yet people do take livestock on contract, because it is the only way to survive. With the revenues from the milk they survive the dry season. The other options are to leave the area or to split up the family, and these are frequently taken. People leave both as families and as individuals.

The circulation of livestock: evaluation

We may conclude that the rules specified in Fulbe society do not allow for large-scale redistribution of livestock, certainly not in the way they are applied. The transfer of livestock from parents to children can hardly be called redistributive because parents have to be taken care of by their children in old age in any case. The chance that parents will be able to support their children if they lose all their cattle is almost nil, because they have given all their cattle to their children. Inheritance, the institution of *zakat* and gifts have very little importance as redistributive channels for livestock. Someone owning a large herd is certainly not obliged to give cattle to others, even his brothers, nor to have his herd taken care of by his kinsmen, if he is not able to manage it by himself. In fact the owner of the largest herd in Serma has half of his cattle herded by a hired Bella herdsman, although he has sufficient brothers and nephews.

This state of affairs is the result of three related factors: 1- the way in which the rules with respect to livestock transfers have developed within the framework of the political hierarchy of a Fulbe chiefdom; 2- the structure and operation of these rules at present; and 3- the structural constraints on the sharing of productive assets such as livestock in the risk-prone ecology of the Sahel, which we shall label the co-variance of risk (Platteau 1991:140).

The contrast between the situation in Fulbe society in the Hayre and the information we have from literature on East African pastoral societies, and the Wodaabe in West Africa, is quite striking. However, others have rightly pointed at political hierarchies as a source of inequality in pastoral societies. Elsewhere it has been observed that, in the process of political centralization among the Wodaabe (Jaafun) in Cameroon and the Central African Republic, the institutions with respect to livestock transfers lose importance (Boutrais 1990:83). So the absence of livestock transfer mechanisms that contribute to social security may be explained by the history and political organization of the Hayre, and the central role the chief played in warfare and the redistribution of livestock. The chief alone had the right to distribute the booty among his followers. In this way the Jallube obtained reproductive cows, where they had almost no livestock before, and the Riimaybe were given animals to slaughter for the meat. Jallube and Riimaybe became attached to the chief and still have the obligation to supply the chief with anything he wants, as informants state he is the 'owner' of all the livestock in his realm (cf. Bernus 1990:153-155). At the same time the chief distributed livestock to allies or needy people, creating patron-client relations with the population. Clearly these practices were tolerated by the French colonial government, who gave the Weheebe in the research area almost complete control over their subjects.

It is almost impossible to obtain precise data about the magnitude of these transfers in the past and present. Data about the past should be considered with caution. At present the practice of collecting tribute, as this custom may be considered, is clearly illegal under Malian law. Allegedly it happens all the time. When the chief visits a camp or a village they have to present a gift (a bull, a heifer, goats, sheep, a load of millet) to honour him. The chiefs of Dalla and Booni make a tour in their former realm every year after the harvest to collect tribute. A Riimaybe village gave for example 100 loads of millet to the chief of Booni in 1990, after a bad harvest. When a son of the chief of Booni married he collected, to our knowledge, five

bulls as contributions to the marriage feast. Not only the chiefs make these tours. The other Weheebe, brothers and nephews of the chiefs, also collect their 'gifts'. Taken together this tribute forms a considerable burden for the population. Unfortunately the chiefs, who are the best informed on this topic, did not allow us an interview. The difference with the past is that everything that is given to the chief is lost, nothing is given back to the poor. There is no loot to be divided, because raiding has stopped.

Another explanation for the absence of redistribution mechanisms for livestock among these pastoralists is what Platteau (1991:140) calls the co-variance of risks. This means that, if disaster strikes one individual, the chances that the other individuals in society are also struck are very high. In this case risk-pooling mechanisms are only viable by the spreading of risk over a wide geographical area in order to cover geographically heterogenous zones, to diminish the chance of a disaster that strikes the majority of the people (Platteau 1991:140). The orbit for nomadic movements of the Jallube in the Hayre was and is small, so that the risk of society-wide herd depletion is high. This is precisely what happened in the drought of 1983-85. The only herdsman in Serma who managed to save his herd moved out of this orbit towards the south. Most cattle (75%) which stayed behind in the Hayre perished, resulting in a wave of emigration from the area of dispossessed families and individuals.

It follows that risks with respect to livestock are highly co-varied. In this situation self-insurance by livestock accumulation and engaging in complementary activities such as cereal cropping and livestock keeping is a better insurance against disaster than redistribution of livestock. According to Platteau (1991:141) these strategies are typical for highly integrated social groups of limited size such as households or families. Consequently transfer by (anticipated) inheritance might be the most rational means of risk aversion for the individual and from a general perspective. This is indeed the case in the Hayre. The circle in which livestock circulates is limited to immediate kin.

Discussion

It has been shown that rules and norms with respect to the distribution of resources (labour, land, water resources, and livestock) between the herding families (*gure*) and within the *wuro*, lead to a very individualized complex of property relations. These rules and norms contain elements of pastoral custom, Islamic law, and of the market economy. At present these rules and norms are further manipulated, so that inequality between people increases, e.g. between men and women. On the other hand old people are sometimes left with land and water reservoirs, to which they are not entitled, because other forms of care are absent.

It almost seems that people only cooperate on the level of the *fayannde*, and the *wuro*, because they have to. They clearly prefer to form the minimum viable unit (cf. Stenning 1962), of a man and a woman plus some children. The complex of individualized rights in assets and livestock production leads to numerous potential sources of tension and conflict. The *fayannde* within one *wuro* (herding family) compete for the milk and cereals produced by the herd and the fields of the family. Fathers and sons compete for authority, and the capacity to make decisions over the herd, and their own labour. Men and women, brothers and sisters, within

one unit compete for the ownership of cattle. Women are denied access to agricultural land and water reservoirs, because they are denied the opportunity to make these resources productive by their own labour. As a consequence it is very understandable that in a context of a declining stock of resources and declining cereal production the centrifugal tendencies seem to take over at the level of the *wuro*, and become more difficult to handle.

This point is made especially clear by the struggle over labour and livestock. Agricultural land and water have not become scarce, because of the many people who have left the area, and the presence of a pastoral well in Yaraama (see chapter 10). The demand for fertile land has also decreased, because of the risks associated with cultivating well-manured fields. The principal reason for the present situation of hardship is the lack of cattle. Because of this many people, and especially the younger, have left the area, leading to a shortage of productive labour to take care of those without the material and social means to take care of themselves.

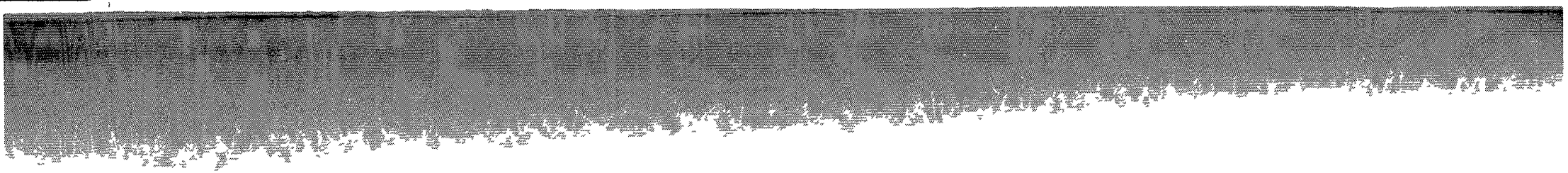
For various reasons the redistribution of livestock hardly occurs. Historically the vertical redistribution networks embedded in a political hierarchy prevented the development of internal livestock transfer mechanisms at the level of the pastoral community. Likewise, the system of slavery provided the labour for the old and infirm among the Jallube. Vertical redistribution systems and slave labour being defunct now, the annihilation of the herds has led to increased competition, and a very uneven distribution of assets over society, and also within the herding family. Women and older people have less access to productive resources, and are more vulnerable from a social security point of view (see chapter 11 and 12). The dispossessed have to turn to outsiders, non-Fulbe, to obtain livestock to herd on contract. This is not a very profitable affair, nor does it provide social security. It is, however, the only way to remain in the pastoral economy as a herding family. If this is not possible, the family falls apart. Only the poor will resort to this strategy. Most people, however, leave, indicating that without livestock it is hardly possible to function as a proper social person.

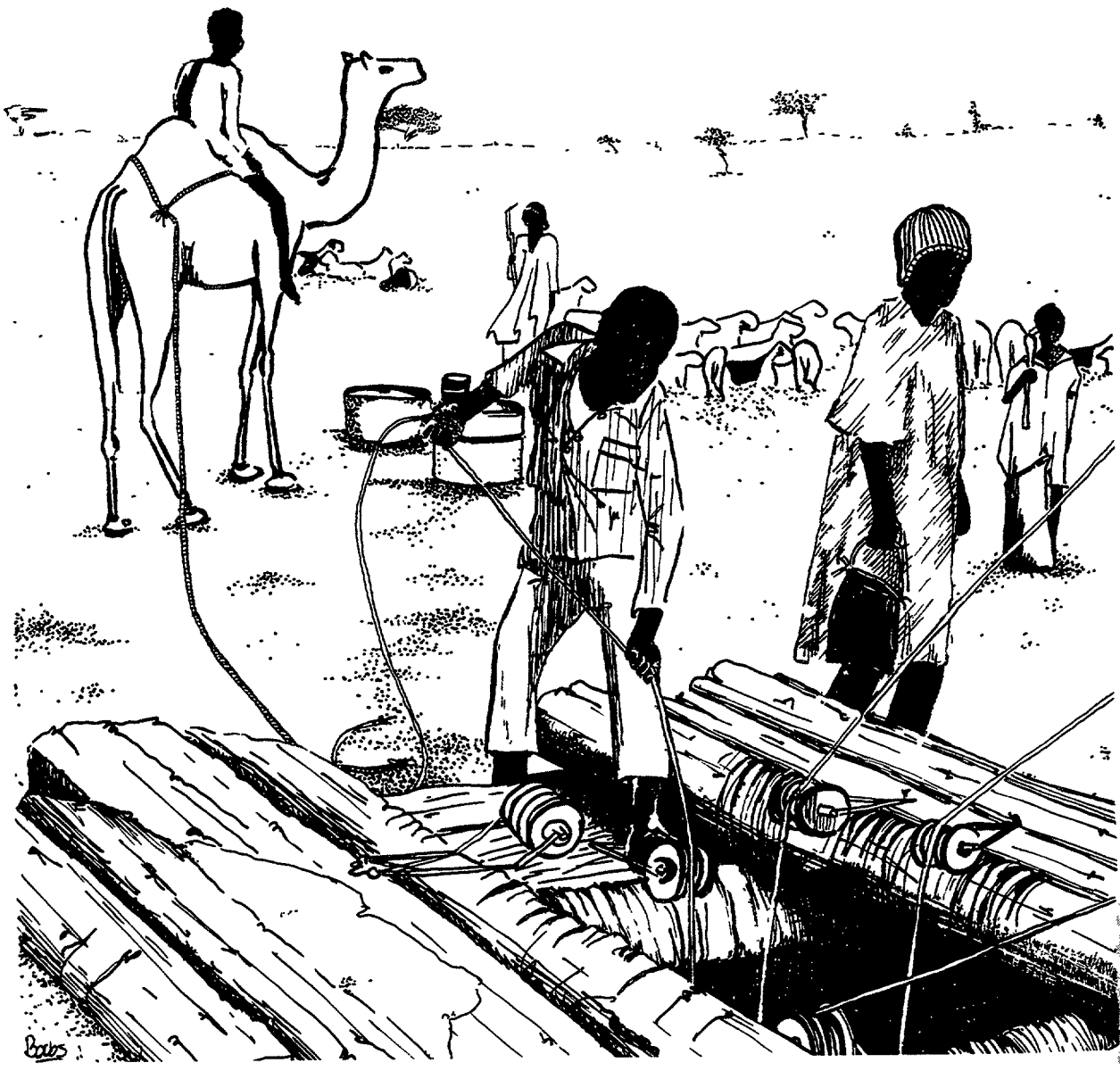
The situation in the Hayre does not seem to conform to a generally held picture of social security arrangements and livestock transfers in pastoral societies. Very few livestock transfers take place outside the circle of close kin. The pastoralist (male and female) really 'has to carry the burden on his own shoulders' (Ingold 1980:134). Women have less chance of being secure in a living based on livestock than men. The more so if one considers that women are dependent on the sale of milk for managing their household, child care and personal spending. The dispossessed have very little chance to return to the pastoral economy, and have to leave to try their luck elsewhere. Theirs is an uncertain future as the clients of urban people, cultivators of different ethnic origin and members of Fulbe society.

Ingold's dictum that 'the pastoral animal carries around the pastoralist's social relations' (Ingold 1986:168) is all too true. Social relations with respect to cattle determine to a large extent if people are able to remain in the pastoral economy. One is left with the impression that the core of Fulbe society, the herding family or *wuro*, is breaking up, as there are no animals to keep the people together.

Notes to chapter 9

1. This does not mean that there is no tension between Riimaybe fathers and sons, but we will not elaborate this subject here.
2. It is telling that the conflict does not centre on labour input in cereal cultivation, although this is at the moment far more crucial for the survival of most families in Serma than livestock keeping. Probably they do not dare to touch this subject.
3. His son, by the way, had left for Ivory Coast after a grave conflict with his father.
4. The guide assigned to us by the chief of Booni to conduct us through the region, and whom we employed as translator for some time, disappeared after we paid him part of his salary. His father, a 'brother' of the chief, asked us to bring him back, and told us to look for him at the house of this merchant. We indeed found him there. He also did not manage to find any employment. We did not force him, but he agreed to return to Booni.
5. He and the Imam are the only persons who were helped by a communal work party in all the three years.
6. This is the only case we know of where a son was successful abroad and sent money to his father.
7. His wife is a younger sister of Hamma Bama's wife, so Hamma Bama' s children could also inherit these fields. However, Hamma Bama has only (5) daughters with this woman. His only son is from another woman, and left Serma to work in Ivory Coast.
8. These are not normal Riimaybe but *koma galuuje*, i.e. Riimaybe who joined the forces of Maamudu Nduuldi on their own initiative. They were not slaves because of capture, but out of free will. As a result they have no master and are regarded as more noble than other Riimaybe (see also chapter 6).
9. Besides, they were regarded as very nice people by everyone.
10. In Jelgooji the oldest takes all and the younger sons are obliged to seek land elsewhere (see Riesman 1977).
11. They harvested very little in 1990. According to our observations, the two eldest brothers did not work at all.
12. If we can rely on what the brothers said to us no compensation in cash was paid for the unequal portions.
13. Riesman (1977), by the way, devotes considerable attention to the disruptive effects of adultery on these bonds of solidarity.
14. The conflict between Yaaya Aamadu, Alu's mother, and Hawa Aamadu about *laya* (see chapter 5) seemed to have been forgotten by then.
15. Which means, by the way, that there are only five substantial goat herds in Serma.
16. See Dupire for a more elaborate description and explanation of the system of anticipated inheritance among the Wodaabe, who are more nomadic (Dupire 1962:200-212).
17. The *futte* consists of the animals given by the husband to his wife at marriage to provide for her living. It functions as a kind of 'dowry'. See chapter 11 for a more detailed discussion of property relations in marriage.
18. As we saw above, the herd manager in reverse has to solicit the woman's permission when he wants to sell an animal of her stock for some reason, e.g. the purchase of millet for the family.
19. Why this is so would require a lengthy discussion on the functioning of the administration of justice in state courts. For the sake of brevity we must skip this issue.
20. See chapter 5 for an explanation of the amounts to be paid. The *zakat* on millet will be treated in chapter 12.
21. Hamma Aljumaa, his oldest brother, and Bubaare Aamadu had to restrain him from beating his wife and children.





10

The Tenure of Land and Control over Pastures

Tenure and territoriality

In the preceding chapters land use and natural resource management were analyzed at the level of the individual, the herding family, the *wuro* and the *fayannde*, and in relation to each other. The same was done for property relations. The use and management of natural resources is not only a simple relation between the individual users and the diverse climatic conditions they encounter and property is not a simple institution embedded in the *wuro* and the *fayannde*, even though both are rather isolated units with respect to the circulation of property and the organization of agricultural production.[1] The role of higher levels of organization in property and tenure regimes is crucial to get access to resources. As was shown in chapter 9, a *wuro*, a *fayannde*, or an individual is able to claim its resources only if its claim is recognized by others, who are in many instances the politically powerful, and in the last instance the state. An important factor in this respect is the fact that there is a plurality of normative systems, of which the most important are *al'aada* (pastoral custom), *juulde* (Islam), and in this chapter the law of the state, which can all be manipulated. Property rights and tenure regimes are thus always vested in a larger network of social relations, the community, and the state, and are the object of a political process.

Even if these resources are individually owned, there is a pressing need for coordination between individuals and herding and cultivating families to enable both to pursue their activities. If cultivators were to clear their land in a haphazard way everywhere they saw fit in the bush, the available space for herding the animals in the growing season would soon be exhausted. Both activities have to be segregated, because of the likelihood of damage to crops by wandering herds. By rules of inheritance the circulation over the generations of property in land and in water reservoirs is regulated. This is mainly an affair of the herding and cultivating family, and then mainly the men, but there are numerous other instances in which the actions of individuals or families affect the community as a whole. For example, when someone wants to clear land, when and how much may be cleared? Or when someone leaves or dies without leaving heirs behind, what is to be done with his land? In other situations people must be able to exclude others from their resources. If outsiders were able to use crop land, water and pasture at will, chaos and conflict would be the result, for everyone would rush to the best crop land and pasture. Rights of use and management of resources vis-à-vis outsiders belong to the basic constituents of a community like Serma. If the inhabitants of Serma did not have control over resources there would be insufficient basis for the community to exist. The spatial

organization and division of land between fields and pastures may be regarded as a reflection of all these coordinative efforts. The use and management of resources is thus to a large extent an historical phenomenon, and at the same time the object of a political struggle. It is for this reason that history and politics will play a prominent role in this chapter. The present situation is only a temporary and probably imperfect solution to the problems of today in a historical sequence of situations and solutions.

Beside this, there are a number of resources which cannot be managed by individuals or an isolated *wuro* in a practical manner. No individual or *wuro* is able to sink a well on its own or claim exclusive use of a given area of pastures. The investment costs for a well or the efforts to keep other herdsmen out of the pastures exceed the capacity of an individual or a *wuro* by far. What kind of organizational units then become important? Is it the patrilineage as the archetypical mode of pastoral organization, or a residential unit, such as the rainy season camp or the *suudu baaba* (community) of Serma? How are people included and excluded, and on what grounds? How to decide, who is to use what, where, and when? How to maintain these claims vis-à-vis outsiders, and the state, which also claims authority over 'vacant land' and forest resources? When a new well is sunk, how is access to the well to be defined? Who is to be admitted on to the pastures of the Seeno-Manngo? Do the inhabitants of Serma have the power to refuse someone access, and if so, for what reason and in what season?

These questions are also to a large extent historical, but have to relate to the ecological environment as well, especially in a situation of fluctuating resource availability. Should rights of access to resources be re-assessed in times of hardship or not? How is flexibility maintained, while at the same time ensuring that resources are available when they are needed? In the constitution of the relation between a population and its territory ecology meets politics. On the one hand the demarcation of boundaries with respect to territory would be very unwise given the unstable conditions of the ecological environment. The creation of boundaries would mean that one was locked in one's territory if and when an ecological calamity occurred. The necessary mobility and flexibility would be curtailed to such an extent that survival was threatened. On the other hand there has to be a way of excluding outsiders, otherwise chaos would be the result.

The interplay between the need for secure access to resources and the necessity of flexibility of their use will be delineated here by the twin concepts 'tenure' and 'territoriality'. 'Tenure is an aspect of that system of relations which *constitutes* persons as productive agents and directs their purposes, territoriality is an aspect of the means through which those purposes are put into effect under given environmental circumstances' (Ingold 1986:131). '*Territoriality engages society in a system of natural relations*' (Ingold 1986:136, italics in original). It is qualitatively different from tenure, because if denotes 'a process that continually goes on'. Social relations and tenure have a permanent character, whereas territoriality refers to a 'succession of synchronic states' (ibid.). Nature, i.e. the environmental conditions, determines possibilities for use of resources, and thus the size of the territory needed for survival, rather than that society determines the use of pastures in advance. The density and variety of resources, which vary enormously from one year to another, determine the possibilities for use, and the boundaries and surface which are needed in particular circumstances. This is essentially different from the cultivation of crops. In fields, which are held in tenure, people invest labour

or manure in these and try to control natural processes by consciously changing the vegetational cover. In the case of pasture, not the range but the (products of the) pastoral animals are appropriated. In the case of a field the land itself is appropriated. This conception of rights of access to range land allows for the flexible use of pastures. Given the uneven distribution of rainfall over the years and within the region, a shortage of pasture in one region can be alleviated by driving the animals into another village's territory if sufficient pasture can be found there.

Control over territory may be achieved in two ways. The first is by controlling the resources which facilitate or make possible the use of the territory. Water is such a resource. While nobody in Fulbe society would define a territory in a spatial sense, rights of access to water resources are very important and have a major political dimension. Conflicts among pastoralists and between pastoralists and cultivators often have their background in the management of water points. In numerous studies the importance of control over water as the source of power for pastoralists is stressed (see e.g. Thebaud 1990). The development of new water sources is seen by many as a reason for the emergence of conflicts (Horowitz 1986), and control over water has been used by governments as a political instrument to control specific groups of pastoralists and to favour others, pastoralists and cultivators (Kerven 1992).

Thebaud (1990:15-17) discerns three important principles that form the basis for the management of water resources in Sahelian conditions: 1- without a source of water the range around it cannot be used and has no value. If there is no pasture the water source will not be used; 2- the extent to which a given pasture area is exploited depends upon the capacity of the water point giving access to these pastures; 3- the difficulties involved in exploiting the water point (depth, capacity) directly impinge on the relation between labour and the number of animals one is able to water and thus to keep. In a Sahelian environment control over and/or access to water especially in the dry season is crucial to be able to survive and exploit the range. The special aspect of the situation in Serma is that there is not just one well, which everybody uses during the dry season, but that there are various sources of water, and consequently different categories of land, which do not differ in a technical sense only, but also have different regimes of control and management. Access to these water resources and consequently to grazing and cultivating is mediated at various levels of society, ranging from individuals to the community.

First we review the available literature on land tenure and control over grazing in this part of Mali and northern Burkina Faso, because it is an important source for the viewpoints of outside observers, and of the state. As will appear from the two sections which follow, the role of the state has become increasingly important in land tenure and control over pastures. In the first of these sections the recent changes in the means of control of access to various categories of agricultural land are treated. Lastly the dynamics of territoriality will be considered. As will appear in this section control over water and grazing are closely interconnected. In the course of history the structure of power, both local hierarchies as well as the position of the Jallube and Riimaybe vis-à-vis the state, has changed fundamentally.

Land tenure and grazing rights in dryland Central Mali

Rights of access to agricultural land

In the literature the management of grazing and the tenure of agricultural land is often depicted as an alternative basis for bonds of solidarity and communal organization. This may be important in the absence of solidarity bonds around the management of the herd, i.e. where the basis for this solidarity has eroded with the decline in livestock numbers (see chapter 9). The management of a common pool of resources may be the basis of all kind of social groupings, contributing to village cohesion. Gallais and Boudet, for example sketch this picture for the dryland areas in the fifth region of Mali:

> *La situation des régions sèches qui s'étendent à l'Est du Delta, plateau de Bandiagara, plaine du Séno, Gourma est beaucoup plus simple (...). Dans les régions de village, le système foncier est de type soudanien classique; propriété collective des clans fondateurs du village arbitrée généralement par un 'chef de terre', gestionnaire qui est l'ainé du clan le plus ancien du village. Ce système est à peu près admis par toutes les ethnies paysannes, Dogon, Houmbébé, Sonraï, Rimaïbé et par les Peul agriculteurs de la région. L'évolution politique a fait dans ces régions tomber en désuétude les droits fonciers auxquels ont prétendu certains chefs de territoire comme les chefs Peul du Gondo.* (Gallais & Boudet 1979:14)

Access to land in a cultivators' society is defined by membership of the community that is composed of lineages, which are historically related to each other. In these relations a hierarchy may be defined based on primogeniture and the authority of the first settlers (Bouju 1984, Guillaud 1993). In the case of societies with traditional religious beliefs these were the *chefs de terre*, leaders of the founding lineages of the village. From these authorities people had to solicit permission to clear or redistribute land. The authority of these *chefs de terre* co-existed alongside political authorities, who might even be of different ethnic or historic origin (e.g. Izard 1985). In so far as land tenure systems were influenced by Islam and colonialism, deviations from this picture were possible. In Islamic societies the political chief or *amiiru* held ultimate decision-making authority over land and related matters. Except for religious leadership all administrative tasks were concentrated in his hands. Land was a commodity just like any other and it has become a marketable asset in many places (Kintz & Traoré 1993:13).[2]

Of course indigenous, Islamic, and colonial principles with respect to rights over land were often combined in some way and led to conflicts of interest between individuals and (clan) authorities and chiefs. In a quarterly report of the *cercle* administration in 1948 one can read:

> *... les cultivateurs cherchent à échapper à la propriété collective et à établir de façon indiscutable leurs droits sur les terres qu'ils ont reçu en héritage. Les affaires de revendications de champs ont été nombreuses. De leur côté les chefs ont tendance à abuser des droits que les coutûmes leur reconnaissent sur les terres (..) Douentza souffre particulièrement de cet état de fait, car les chefs ont toujours été très puissants et n'ont jamais en auprès d'eux des assimilées de notables pour les conseiller.*[3]

There seemed to be a tension between the requirements of some communal control in order not to create chaos in the exploitation of natural resources, and the needs of individuals for flexible management of their own resources. The French most probably supported the chiefs, whom

they regarded as their main tool to 'prevent anarchistic tendencies in the region'[4] (see also chapter 2). On the other hand they felt they should promote the blessing of individual ownership and private property.[5] In general the colonial authorities intervened as little as possible in land tenure at local level. At Independence governmental authority over forest and grazing areas was reinforced, and even customary tenure was made dependent on the national interest (Marie 1989). The landlessness of a large category of people in the centres of political power before and during colonial times was completely ignored. Only the elite was guaranteed access to crop land. The Riimaybe were merely dependent on their masters. Only at Independence when the power of the chiefs over land was curtailed in favour of the new Malian administration, did new bush land became available for the dispossessed. As we will see below, tenure systems in the drylands of Central Mali, and more specifically in the periphery of the chiefdoms of Dalla and Booni, are much more diverse and much more locally specific than depicted in the literature.

Rights over water and pasture

Rights over pastures and forest in this part of Mali were less clearly defined. In practice almost everybody was able to make use of them. This led observers to the conclusion that no tenure regime existed over these categories of land. Colonial officers did not fail to notice, however, that the suppression of raiding and warfare promulgated chaos in the movements of pastoral groups in the Gurma.[6] Apparently there had been some ordering principle for the use of pastures in these dryland areas, before the colonial conquest. Most certainly this ordering principle consisted of the dynamic interplay between military power, the requirements for pasture, and occasional warfare and plunder. The inhabitants of the drylands defended not only their livestock and kin in the wars they fought, but also the territory they needed for their livestock and for establishing fields for their slaves and dependents. So historically there are territorial claims; however these were based not on indiscriminate rules and laws valid within a specific space defined by neat boundaries, but on military power and political autonomy. The basis for any claim on territory evaporated with the subjugation of the chiefdoms and the defeat of this politico-military hierarchy. This is why territorial claims do not exist at present in a legal sense in the domain of state law. The only title which was recognized by the state and observers of tenurial systems was claims to water resources. The relationship between access to water resources and access to range is defined as:

> *L'espace ne fait pas l'objet de droits fonciers d'aucune sorte. La terre est à tous. Les parcours pastoraux délimitent de fait d'approximatifs territoires tribaux, mais ils s'enchevêtrent, se superposant en certains lieux et aucun groupe ne revendique de droits exclusifs sur ces pâturages sahéliens. (...) Les seul droits traditionels portent sur les puits qui 'appartiennent' à la collectivité ou aux individus qui les ont foré. C'est par ce biais que quelques 'droits d'usage' peuvent être revendiqués sur les terres qui les entourent.* (Gallais & Boudet 1979:14)

Later on Kintz and Traoré specify that '*c'est l'accès à l'eau qui détermine l'accès aux pâturages environnantes*' (Kintz & Traoré 1993:12). However, what this access to water resources and pastures is all about, for how long they last, and in which period of the year in

the diverse conditions in the drylands of Central Mali, is not specified. Complexity in this respect is only recognized in the Inner Delta of the Niger (see e.g. Gallais 1967, 1984, Gallais & Boudet 1979, Moorehead 1991, Kintz & Traoré 1993). Only there does tenure over pastures and water seems to be codified in the form of the rules of the Diina.[7]

The government also seems to discriminate against non-sedentary populations, such as pastoralists and gatherers, with respect to claims to territory. For sedentary villages jurisprudence indicates that rights over the territory around the village were recognized. It is, however, not clear if these rights concerned the right to give out land only, or included the authority to give out rights over pasture. *'Lors d'installation d'une famille en un point quelconque de la brousse, le chef de famille est, de droit, propriétaire de tout le terrain autour du lieu où il s'établit dans les limites du paccage journalier d'un boeuf."*[8] This judgement certainly would not apply to pastoral communities, and their rights to village territories, since for this they first have to sedentarize and to form an official village.[9] Serma is not an official village, so its inhabitants cannot lay claims on the territory around the village.

These viewpoints form the background for the way the government conceptualizes rights of access to land and pastures, and transforms these conceptions into interventions and policies with respect to the use and management of natural resources. This will be shown by analysis of the changes in land tenure and control over pastures in the course of the 20th century in Serma.

Local dynamics of land tenure

Intensification of land use

In this section changes in land tenure and the management of natural resources will be reconstructed. As will appear, land tenure and natural resource management are not and were not unchanging systems of customary rules and practices, as was thought by colonial administrators and scientists studying 'indigenous custom', but instead a very diverse and dynamic body of rules, influenced by the political games and manipulations of various actors present on the scene in the course of this century. This process of change has to be seen against the background of the changes which were described in chapter 2, both at the level of the state and at the level of the chiefdoms. At the same time the changes in Serma were characterized by their own dynamics, which were quite different from those in Dalla as discussed in chapter 2. Dalla belonged to the core area of the pre-colonial chiefdom where land tenure and use of pastures were regulated during the Diina. Serma on the other hand was located on the periphery of the pre-colonial chiefdoms, and had the characteristics of a pastoral area until the middle of the 20th century, when people gradually started to settle permanently in the Daande-Seeno.

The fact that Serma never was an official village before and after the colonial conquest, and was dependent on the chief of Booni, means that there is no founding lineage as among cultivating neighbours (Bouju 1984, Guillaud 1993). The Torodbe who founded Serma were and are a prominent lineage in the village, but they certainly do not perform the tasks normally assigned to the '*chef de terre*' in Dogon, Hummbeebe, and Sonrai villages. Within the Fulbe

political hierarchy, the chief was the ultimate authority over the allocation of land, which is quite logical, because he held ultimate responsibility for the coordination and timing of herd movements. Serma was a temporary cultivation hamlet, which was also visited by Jallube herdsmen, and where people practised a bush-fallow cultivation system, with some fertilized fields on the best accessible plots near the pond.

Due to the political changes after the colonial conquest the need for an intensification of land use increased in the course of time. The liberation of slaves forced the Jallube to take up cultivation, and to water their own livestock, so they faced labour shortages. Most Jallube disposed of too few cattle to live on livestock and the bartering of milk for millet alone.[10] The suppression of warfare and plunder, combined with the introduction of veterinary care, led to the growth of population and livestock numbers, so that the number of people and cattle making use of the area around Serma increased.[11] The last important factor that promoted the intensification of land use was the abundant rainfall in the 1950s and 1960s. As a result higher levels of soil fertility could be sustained, without risking the burning of the crop due to over-fertilization.

So, there was a shortage of labour and a potential for intensification of cereal farming. What was needed were two additional elements: a new form of organization for the management of natural resources; and the improvement of the water situation in Serma for human and animal consumption during the dry season, when the manure would have to be produced. Water was the key factor limiting intensification of land use in Serma. The discovery of underground water reservoirs, and the sinking of a well near Serma on the Seeno-Manngo in the 1950s, triggered a number of fundamental changes in the organization of natural resource management in a technical sense, but also in the domain of land tenure. A number of years later most fields were under permanent cultivation, with the Jallube also cultivating heavily manured fields where they stabled their animals.

According to the Imam, people started to spend the dry season in Serma around 1935. In the years before the inhabitants of Serma had discovered the underground water reservoirs in the bed of the pond (see map 3.1). These were probably dug by the *mawbe ndongo* in the remote past. The mounds had caved in, for they were built of wood that rotted over time.[12] That is why the water reservoirs remained hidden for so long; they were discovered by accident. The mounds were reconstructed with stones to prevent caving in, and the water reservoirs were deepened. To prevent collapse and to prevent the cattle falling into them the openings of the water reservoirs were protected with stones and large branches. Later on people started digging their own water reservoirs in the bed of the pond, but also in adjacent areas. Though the water table in Serma is very deep, the pond and the area with the wells is probably part of a small underground basin in which water collects due to an impermeable layer.

At the end of the 1940s flintstones were found by young herdsmen on the Seeno-Manngo, about 4 kilometres from Debere. This indicated that a well had been dug there in the past. The presence of flintstone also suggested that there would be water in the subsoil, because it meant that there was most probably an impermeable layer of stone, on which water might accumulate. The people of Serma decided to try and reach the water. They dug the well, but did not reach the water-table. The site was abandoned for seven years. Then another attempt was made to reach the groundwater, this time successfully. A cemented well was constructed in 1956 and

a second permanent water source was added to the existing stock. This well was given the name Yaraama (see map 3.1). The development of these water resources prompted a wave of immigration and remigration of Jallube from the east. These migrants were Seedoobe, who remigrated after having left the area at the turn of the century following a conflict with the chief of Booni (see chapter 4), and rich pastoralists of other lineages. They sunk a well at *Bunndu Jaabi* (the well at the Jujube tree) 20 kilometres east of Serma.[13] They penetrated into the territory of Serma. At Yaraama they participated in sinking the well, which is not on their former territory. They dug water reservoirs at Debere and bought others from the original owners. They bought land at Debere and, most important, they reactivated claims to land.[14] They were soon among the most prominent and powerful inhabitants of Serma, because they possessed many cattle, and were relatively independent of the chief of Booni (see also below).

The development of all these water resources enabled more people and more cattle to remain in Serma and in the neighbourhood during the dry season. Gradually the Jallube of Serma started to spent the dry season on their fields around Debere. They corralled their livestock on their fields at night for the sake of the manure. When the rainy season started and the animals left for the Seeno-Manngo to be herded there, a thick layer of manure that ensured a good harvest was left behind. So, the land around the pond and the water reservoirs was gradually taken into permanent cultivation. The fields became concentrated more and more in a circular pattern around this location, instead of the strips in the north-south direction.

This concentration of fields was forced upon the people, Jallube and Riimaybe alike, who were cultivating outlying fields. This development created an enormous potential for territorial disputes and conflicts about damage to fields by cattle, between Jallube and Riimaybe but also among the Jallube. Conflicts over damage to fields by livestock were resolved in accordance with a number of tacitly accepted rules and procedures. The territorial disputes, which will be discussed below, had a much more fundamental character and concerned the whole authority structure over natural resources. They were the result of tensions arising out of the new situation and fought along old political lines. On the other hand they had a formative influence on the organization of land use in the years to come. The resulting ways of organizing natural resource management still form the basis of spatial organization in Serma. In this process of change things were lost and things were gained. The bush fields were among those which got lost.

The disappearance of bush fields

Riimaybe, Jallube and some Bellaabe had been cultivating bush fields everywhere on the Ferro and the Seeno-Manngo for a considerable period. The Riimaybe cleared the majority of these fields after their liberation and as such these lands were an important mark of their newly acquired independence. Understandably they were not prepared to leave these fields under the pressure of the herds of the Jallube. The Jallube, however, outnumbered the Riimaybe by far and were politically dominant at the time. They claimed that these fields were worked by their ancestors, and that they wanted to reconvert them to pasture. This claim was repudiated by the Riimaybe, but they were powerless against the obduracy of the Jallube. When damage to the

crop occurred the Riimaybe were not compensated. Herds were driven into their fields. Complaints to the chief of Booni, who was nominally in charge of these affairs, led to nothing, for the Jallube bribed him with cattle. In the end the Riimaybe had to give up their fields in the bush.

A major conflict arose in the 1950s over the fields located at the border between Ferro and Seeno-Manngo. East of Debere passage was blocked for several kilometres by the pond during the rainy season. Between Coofya and Debere almost all the space was occupied by fields, so that herds could not pass from Wuro Kaaral, by far the largest settlement of the Jallube, to the pastures of the Seeno-Manngo and from Coofya on the Seeno-Manngo to the pastures of the Ferro. The Jallube drove their cattle over the fields of Bellaabe and the Riimaybe in this sector. The Riimaybe carried their complaints up to the *Commandant* in Douentza, who gave in to both parties, and a route for the cattle was fixed about a kilometre west of Debere. Some fields had to be removed. Other fields, though near the *burtol*, were allowed to remain in existence.

As a result a number of Riimaybe and Bellaabe had to give up living in Serma. They lost their bush-fields. Only those Riimaybe who were able to acquire land on loan or in ownership near Debere were able to stay in Serma. The others were obliged to leave. In this way the Jallube stopped agricultural encroachment of cultivators on their range and were even able to push them back. The Jallube occupied the bush and started to work deserted campsites *biile* (sg. *wiinde*). They took these sites into production for precisely the same reason that the Riimaybe cleared bush-fields, i.e. to produce cereals. Only they did so in an entirely different manner. The Riimaybe practised a bush-fallow system, in which the soil was worked for a couple of years and then abandoned. The Jallube invested in the land by bringing in the manure of their livestock. The bush fields of the Riimaybe were large and were dispersed over a vast area. Productivity of these fields was low and fell quickly after one year of exploitation, because of the poor sandy soils. Their dispersal made exploitation of the area as pasture impossible. Moreover, the presence of large herds in between these bush fields in the rainy season settlements, which were to be turned into *biile*, made the protection of the bush fields a very problematic task. The cultivation of *biile* allowed the concentration of crops into highly productive small fields. Moreover, the Jallube co-ordinated the migratory movements of their settlements on the *wiinde*, so that never more than a few per cent of the total land area was cultivated at a few spots. In this way settlement and the grazing of herds became possible at the same time. As was shown in chapter 4, both newcomers and families who had been living in Serma for a long period began to cultivate these sites.

If we look at the distance between the *biile* and Debere we see something remarkable. Except for Wuro Kaaral, which is never relocated, all the camps are at a distance of more than 2 kilometres from Debere. What keeps the rainy season camps at this distance is an invisible barrier delineating the extent of the fields of Debere, plus some additional space to prevent the herds from wandering off and entering the fields. This invisible barrier does not coincide with the frontier of cultivation, but lies some 500 metres beyond. It is up to there (see map 3.1) that the rights of the heirs of the people who founded Serma extend. The sites of the camps of the Jallube do not seem to be randomly or evenly distributed over the available space; rather they are clustered. Coofya, Koyo and Fappittoo are close to each other, just as Urfina and Wuro Boggo, and then again an extensive empty space until one reaches Nguma in the eastern sector.

Yaraama has to be left out of this distribution because the reason for its location is the location of the well. But again this distribution of the camps is the result of a number of invisible barriers. Everywhere in the bush there are abandoned bush fields of the Riimaybe, and sometimes Jallube: in the western sector just northwest of Yaraama and so on. There is a complex of bush fields that starts near Coofya, continues to Fappittoo, extends further west and east of Koyo, including the valley between the dunes west of Koyo and the Seeno Orowil[15] towards Wuro Boggo east of Koyo. South of Wuro Boggo near the small pool were also bush fields, just as near a waterhole in the neighbourhood of Debere. Between Debere and Fetesambo were numerous bush fields, which may explain the absence of settlements in the eastern half of the sector. Finally north of Debere at two kilometres from the hamlet there were fields on the Ferro. The rainy season settlements of the Jallube are carefully placed between these deserted bush fields. Paradoxically the intra-position of the camps makes the cultivation of these fields impossible, while the Jallube dare not violate the rights of the first occupants of these fields, even though they are Riimaybe and nominally lower in status than the Jallube. So the rights in the bush fields cannot be violated, but neither can the fields be made productive by the holders of these rights, so that they are used as range nowadays, which suits the purposes of the Jallube well.

The *wiinde* and the rainy season camp as organizational unit

The most literal translation of *wiinde* is 'deserted campsite'. Alternatively Gallais (1984:85) describes the *wiinde* as a 'mound', a place where the animals may rest at night. So the most essential feature of the *wiinde* seems to be that it has been used to corral livestock. It is different from a rainy season camp, for it is not humanized space. It is the fact that it was inhabited once that gives a special meaning to a site called *wiinde*. As we have shown the sites were carefully chosen: cattle are not kept at night just anywhere. Apparently there is something appropriative involved in the establishment of a rest place for livestock and the building of a hut. This something that is appropriated cannot be the land, for this is seized by putting the hoe to the soil as in the case of the bush fields, while rights on the *wiinde* are already established before a hoe has touched the soil. The appropriative act involves the manure that the animals deposit on the site. Just as the animals are appropriated by the herding family through their labour within the *wuro*, and the milk is assigned to the *fayannde*, so the dung constitutes the basis of a spatial unit and serves to appropriate the space that is occupied by the herding family.

The *wiinde* is not a fixed point in space. Every three to four years it is relocated to a new site. During the rainy season the livestock was corralled at night on these habitation sites. After a couple of years the manure left by these animals served to produce a big harvest on a relatively small plot.[16] When soil fertility was exhausted one moved on to the next habitation site. Wuro Boggo, for example has three locations, two on top of a dune and one in a depression nearby, from which and to which the camp is moved every three to four years. Koyo has two sites, both on top of a dune, and the camp was moved between these sites until recently. People from Coofya and Fappittoo interchangeably lived in Fappittoo and Coofya. At

the site of Wuro Kaaral cultivation of the camp site was not possible, because it is located on the Ferro and the enormous amounts of manure and the high susceptibility to drought of the soil on this site on the Ferro precludes any cultivation of fertilized soils. The soils of the fields on the *biile* are sandy with a fraction of clay and silt of less than 10%. When they are well fertilized and the rains are abundant these soils are ideal from an agricultural point of view. They do not silt up as the soils on the Ferro do. They demand much less labour than clayey soils of higher natural fertility. And the water retention capacity is better than the clayey soils of the Ferro. Lastly the fields of the inhabitants of Nguma are mostly located near the pond, where they could rely on the droppings of animals to fertilize their soils.

The *wiinde* is, however, much more than a deserted camp site. When in use it is the place of the rainy season settlement, a place of intense social interaction and to which the Fulbe, on their terms at least, feel attached. Given the fact that a number of families, from one or several lineages, occupy the same site in the rainy season, it can be inferred that within this unit coordinative links must be established, at least between the men. In order to be able to make efficient use of the manure deposited on the present *wiinde* and the former sites, the movement from camp site to camp site must be simultaneous. Given the extremely flexible organization and the lack of leadership it is easy to see why frequent changes in composition of the camp are bound to occur, when conflicts have to be avoided.[17]

In principle the head of the *wuro*, who is the first to settle on a non-occupied site, becomes its owner. All the others who follow him and want to join him have to seek his permission. Each new occupant is assigned his own sector. If we take a look at figure 4.3a where the distribution of huts in Wuro Boggo is depicted, we can draw lines delineating the territories of the various *gure*. The family of Hamma Aljumaa occupies the southeastern part of the imaginary circle. Clockwise follows Bubaare Aamadu, then the sons of his deceased brother Usmaane, the Bana'en, next the *wuro* of Abdramaane Hamma in the north with at its eastern wing the *gargasaabe* and at the western wing our own hut. The sector of Hamma Aljumaa is relatively empty. There is still space reserved for his brothers and their sons, who settled in Duwari. Likewise the sector of the Bana'en is relatively full. They occupy with 5 brothers (8 huts, 36 people) the sector reserved for their father. In principle the space reserved for them and Bubaare Aamadu should not exceed the room reserved for Hamma Aljumaa. The figure indicates, however, that some territorial encroachment is taking place. The same is happening with the territory of Abdramaane Hamma. He tries to extend his sector by placing his dependents (the *gargasaabe* and us) as far as possible along the (invisible) borders.

Rights in the land of a *wiinde* are not for eternity, although everyone would have liked us to believe that. In practice they last as long as the involvement of the *wuro* in the rainy season settlement lasts, plus the time needed for the dung to decompose. After that period the rights and the image of the *wuro* in the settlement faded away, as it were. An example of this is the history of Yero Alu. At present Yero lives only 500 metres away from Wuro Boggo in Urfina. He is one of the founders of Wuro Boggo, together with Aljumaa, the father of Hamma Aljumaa. He left the hamlet long ago, when disease broke out, and his place was occupied by others. He had lived for some time in Nguma, Wuro Kaaral, when he founded a new *wiinde* after 1985, close to Wuro Boggo, but not on a site that was occupied by Wuro Boggo. He has no more say in the management of the *biile* of Wuro Boggo. He was not involved in the

decision-making concerning one of the *biile* in 1991 that was prompted by Bubaare Aamadu (see chapter 7). Another person whose rights are fading away at present is Aamadu Aljumaa. When the Bana'en wanted to have more land on this cultivation site than their share allowed, they asked the permission of Aamadu Aljumaa to occupy his sector, and got his consent without any compensation. When the *wiinde* is left uncultivated the manure decomposes and soil fertility declines. As a consequence the interest of someone who has left also declines with time, for what he added to the soil withers away. When after a number of years his interest has diminished significantly, someone else may ask to settle on his sector, and will subsequently acquire rights in the soil as his share in the manure rises.

When the *wiinde* is taken into cultivation, as happened in 1991 with the *wiinde* of Wuro Boggo, the rights of every participant have to be assessed anew. The reason for this is that the rainy season camp is arranged on a circular plan, and fields to grow millet on a rectangular plan. Within the circle rectangular plots have to be laid out. Hamidu and Alu Usmaane asked permission of Aamadu Aljumaa, Hamma Aljumaa's brother, who is in Duwari. Bana refrained from occupying and cultivating his part of the *wiinde*. Knowing this, one can distinguish 4 sectors again, of almost the same size: those of Bubaare Aamadu and Abdramaane Hamma, which they cultivate themselves; the sector of the Bana'en which is worked by Bura and Sambo Usmaane; and the sector of Hamma Aljumaa and his brother which is worked by him and by the brothers Hamidu and Alu Usmaane who cultivate together. However, the arrangement that we saw in the present rainy season camp (figure 4.3a) is completely different from how the fields were laid out on the former camp site (*wiinde*). This is probably due to the fact that when this former site was occupied Abdramaane Hamma was not yet present and was assigned a location east of the others, so that he has attached Bubaare and the Bana'en, who are also from the Seedoobe lineage. When they moved to the present camp site they changed the arrangement.

Conflicts over *biile* like this are rare. There are relatively few people involved. As long as there is no source of water permanent settlement during the dry season is not possible. If dissent occurs, leaving the rainy season settlement is relatively easy and happened regularly in the past decades. There are few formal ties binding the people together in this unit, except for brothers, and fathers and sons, who are expected to cooperate in other domains as well. The departure of Aamadu Aljumaa to Duwari does not indicate that he does not feel at home any more in Wuro Boggo, only that he is not able to manage in Serma and has sought refuge with a Kummbeejo patron to survive. When, for example, an older man left Wuro Kaaral to settle in Koyo with his maternal uncle and cross-cousins, everybody thought this quite logical, despite the fact that his paternal cousin, was living only a few huts away in Wuro Kaaral. The wanderings of Yero through Serma are also not mentioned as an indication of his difficult nature, nor of the many conflicts he had with other people he lived with. Reasons for joining and leaving a rainy season camp or a *wuro* may be an entirely private affair, varying from one's will, to a more attractive existence elsewhere, or a rival male, who has winked at your wife, or that the women do not get along. What is relevant from the perspective of land tenure is the almost automatic diminution of one's rights in the soil fertility that one's animals once dropped there after one's departure. It is not the soil that is appropriated but the products of the animals, and this explains also the transient nature of rights on the *wiinde*.

The well at Yaraama

The way newly acquired agricultural land around water points is articulated with society is entirely different. The way the inhabitants of Serma divided the land around the well of Yaraama in the 1950s may also throw light on the way that they, or at least those who had political influence, were organized at that time, and how they thought about themselves. Firstly, it should be noted that not everyone has land at Yaraama. Only those who participated in the sinking of the well were allowed to take a share in the land. It is not known how these participants were selected. Residence in Serma was not a necessary condition, since several people who obtained land at Yaraama did not reside in Serma at that time, and there are still people living in Fetesambo who have land at the well. Most of the Seedoobe who have land at Yaraama were at the time residing in Fetesambo and Lennga. Probably they exploited the pastures in this area, gained access to the well, and decided to settle in its neighbourhood. Among those who participated in sinking the well a number of people did not exercise their rights to the land; these were the Weheebe and the Riimaybe. So, there are, apart from the lineages involved, two main blocks that participated in the division of the land: on the one hand the people who had been living in Serma for a long time, such as the Moodibaabe who were mainly living in Coofya, and the inhabitants of Wuro Kaaral, both those from a Seedoobe background, and those of other lineages, collectively called Junngo Nyiiwa; and on the other hand a group of newcomers of Seedoobe and Taamanke origin.

When the well was sunk these 'authochtonous' and 'allochtonous' people were rearranged in lineage order, and four lineages or groups of lineages were composed: the Seedoobe; the Torodbe; the rest, Junngo Nyiiwa; and the Weheebe and Riimaybe. Each group occupied a sector of 90°. In fact the Weheebe and Riimaybe did not belong to each other, but the Jallube had no bonds with their own Riimaybe any more, and no bonds with other Riimaybe as yet. The Weheebe were much more active in maintaining relations with the Riimaybe, so they were regarded as one group by the others. The Riimaybe never used their fields at the well, because the Weheebe took all the fields nearest to the well, where the passing cattle leave their droppings. The Riimaybe felt cheated. They do not manage cattle themselves, so how would they be able to manure the outlying fields, which were allotted to them. Moreover, their sector was near a *burtol*, a cattle route, which made the site even more unattractive.

The land within each sector was divided along lines of seniority. The oldest of the lineage took the field nearest to the well, so that he would profit most from the droppings of the animals watered at the well. Then his juniors followed, then the elders of the next generation and so on. In fact the lineage organization is attached to the well with its apex at the well and its base in the bush. This structure is still very recognizable because it was created in the 1950s, and fewer than 40 years have elapsed since then. This way of dividing may be regarded as typical of a pastoral segmentary lineage system, which is typical for many African pastoral societies. The mode of succession on the land at Yaraama is not generational, but is conducted in a form that may be termed Islamic. The sons each inherit from their father an equal portion of the land. In this way the land becomes increasingly fragmented over time. The original lineage organization tends also to be blurred by the fact that many fields of elders are worked by their sons. Hamma Usmaane, who is far too old to work the land himself, or to organize

the work, has his fields managed by his son Abdramaane Hamma, who in turn delegates the work to his son Aamadu. Another field of old Hamma is worked by Bubaare, and not by his own (grand)son.

However, this mode of succession to the land is not a fixed system either. Since 1956 not only kinsmen have been cultivating their share of the land in Yaraama. Land has been lent to others and even sold. Because of this the lineage organization around the well is no longer intact. The Weheebe sold their rights in the land to several others, among them the father of the present Imam, Buya Bukari, who belonged to the Torodbe. Now the brother of the Imam works this lot. Haidu Muusi sold his share in the field of his father to his paternal uncle Yero, who lives in Urfina today, so that in this sector the lineage structure remained intact. Others sold their land at Serma when they migrated. These arrangements are a perfect illustration of how the ideological importance of the lineage (*al'aada*) is combined with a pragmatic use of modern and Islamic (*juulde*) modes of succession to land in order to cope with the increasing fragmentation of society.

The well at Yaraama is neither an open access water resource, nor a private property resource. In principle only the people who helped sink the well, by their labour or in another way, and possess a field around the well, have unlimited access to the well. If one sells the land one loses the right of unlimited access to the well. With the purchase of land one buys access to the water at the same time. However, in accordance with pastoral custom water cannot be refused to a passing herdsman with his flock, so anyone trekking with his herd may use the water in the well, provided that there is sufficient capacity, that he asks permission, and that he waits for his turn, after the people who 'own' the well have finished drawing water for their animals. This right can be exercised for a week or so. If the passing herdsman wants to stay longer and exploit the pastures around Yaraama, he will have to ask permission of the owners of the well, or make a contract with one of the owners of the land around the well to manure his field in return for water. The conditions for the contract are the same as for the land and water reservoirs in Debere. Our impression is that most landowners in Yaraama seek to manure the land by themselves. Only in case of great need will they seek to engage someone else. The only case we know of is Hamma Aljumaa, who contracted with Buraima Hammadu from Fetesambo. Hamma invested a couple of loads of millet in this contract. While he was himself in Duwari endeavouring to earn a living there, his field in Yaraama was manured at the same time.

Land at Debere

The greatest concentration of agricultural land can be found around Debere, the Riimaybe hamlet. Most land worked here is owned by the Jallube. Even here the Riimaybe form a minority. As a result of all the changes in land management we described above everyone, Jallube and Riimaybe alike, rushed to get land and water reservoirs at Debere, where there was no risk of damage to the crops by livestock. The Riimaybe had to find compensation for their lost bush-fields, as did some Jallube whose fields extended too far into the pasture area. This led to the emergence of a lively land market. The land nearest to the pond, Debere, and the

water reservoirs was regarded as the most precious, because of the manure left behind by animals, which pass the fields on their way to the pond and the water reservoirs, and because of the village waste of Debere. Status is an additional factor which makes land near Debere more valuable. Those who have land near the hamlet are closer to the founders of the village, and are said to have more power. Despite this rearrangement the rights of the first occupants can still be recognized. West of the road from Wuro Boggo to Debere one can find the fields of the Hawgiibe. At present these are used by Aamadu Bura Totoodu. His field is of normal size, but in the course of his lifetime he has given most of it on loan to others. Part of it is borrowed by a *gargasaajo* of the Tuareg, who lives in Wuro Boggo. Another part is given in loan to a son-in-law, a *moodibo* from Jelgooji in Burkina Faso, who has no rights to land in the village. A third sector of his field is borrowed by a Diimaajo woman, the first wife of Demboy, Altine Aamadu. In addition Aamadu sold almost half of his original field some 35 years ago to Hamma Aljumaa and his brothers. Further he supervises a field next to his own field for his paternal uncle, who no longer lives in Serma. This field is used by a Pullo from Fetesambo.

The case of Aamadu Bura Totoodu is somewhat exceptional in the sense that we can retrace the size of the holding of his forefathers. This is due to the fact that he is the only member of his lineage, the Hawgiibe, who remained living in Serma, and indeed took over the care of most of the land belonging to his lineage. Given the size of the holding in the past it may be concluded that his lineage owned a whole sector of the land south of Debere. With some caveats this lineage origin of crop land around Serma can also be reconstructed for other sectors. East of the road from Wuro Boggo to Debere we find a similar ancestral origin of the land. The land on which Bubaare and the Bana'en have settled is partly bought, but partly it forms a large field which is oriented in the east-west direction. They were late arrivers in Serma, but they claimed that this sector once belonged to the Seedoobe. As there was nobody of the Seedoobe or any other lineage working on this land, they took it into production and declared themselves the new owners of the land. Further north most of the fields belonged to the Torodbe, and near the pond one can find land that once belonged to the Weheebe. There and north of Debere must have been the land of Maamudu Nduuldi, the founder of Booni. As far as we can reconstruct, the persons who own the land north of Debere are his direct descendants. Some of it is worked by the Weheebe of Debere. Other fields are still formally owned by the *koma galuuje*, the Riimaybe who voluntarily declared themselves the dependents of Maamudu Nduuldi, but worked by the Riimaybe who settled permanently in Serma. When the freed Riimaybe started clearing the bush fields, which are now abandoned, they did so outside the circle of the land occupied by this core of inhabitants of Serma.

The distribution of agricultural land is rather unproblematic at present. In contrast to the past there is no shortage of high quality land. Rather there is excess land, and a potential for allowing more people in Serma, because many people leave, and because of the fact that the deserted campsites are fallowed for most of the time. This is also reflected in the prices for land, which are rather low, when compared for example to the bush 2 kilometres from Douentza town, where numerous ecological refugees (impoverished Bellaabe, Tuareg and Fulbe from the Gurma) have settled. Despite this underuse of productive land, and the low stocking density of the pastures around Serma, there are no people from outside, Riimaybe cultivators

or Jallube herdsmen, who have moved in from other places by buying land or water reservoirs around Debere and land at Yaraama. There can only be one explanation for this phenomenon, and that is that the land market is only apparently a free competitive market, and that behind this wheeling and dealing access to land is controlled.

The restriction of inheritance to male kin makes it difficult for an outsider to obtain land in Serma or control over other assets, unless he is prepared to settle in the bush, where no-one can stop him, and to wait until he is accepted as an inhabitant of Serma. In practice there are other ways to get land in Serma. As was shown in chapter 9, fields may be borrowed, and may be obtained through marriage if the woman does not have brothers to inherit the land. It is much more difficult to get land as an outsider unrelated to people in Serma, or when not residing in Serma, or not having something special, symbolic capital, such as being a *moodibo*. The fact that there is a land market for agricultural land and the fact that Fulbe of various lineages and Riimaybe have bought land, does not mean that anyone can enter the village and buy himself an estate. Social relations are indeed very important in the domain of control over land, but in a different manner than was described in the preceding chapter with respect to access to cattle.

In principle an outsider is not allowed to buy land in Serma. If an inhabitant of Serma wants to sell his land,[18] he has to offer it to his kinsmen first. If they do not want to have it, or if they do not have the money, he may offer it to other people. Who is to buy the parcel of land is, however, still subject to the control of the *suudu baaba*, i.e. the community of men in Serma. This is certainly not a democratic forum, for there are influential individuals and groups within the *suudu baaba* Serma. For example, if Riimaybe want to settle in Serma, they should get along well with the Jallube. If not, they are obliged to leave. In the 1950s only the Riimaybe who were tolerated by the Jallube were able to acquire land. Some returned to where they came from. Others remained dependent on land borrowed from people who had left for good.[19] In Serma this community control may go so far as to force someone to sell his land. When the younger brother of Aama Babel wanted to sell the land he inherited from his father, as he planned to go away, Aama opposed it. He wanted to add this field to his own field and, as the oldest brother, he stood on his rights. However, the *suudu baaba* forced him to consent. They wanted Bukari Alasuna, the respected *moodibo*, who lives in Wuro Kaaral, to buy the land. Bukari does not originate from Serma, but from Gawdeeru. The men of Serma wanted to give him a permanent basis in Serma to keep him in the village. In the same way, no Diimaajo and no outsider has ventured to buy, lease or borrow any field at Yaraama in the 35 years since its establishment. Control by the *suudu baaba* prohibited this.

The process of decision making itself is relatively unclear. There is no organized forum for discussing problems, and most of the negotiations take place in small group discussions on various occasions in different locations. When consensus over a decision emerges, it is then made clear to the people what is the desired course of action. This is what can be deduced from the accounts of how transactions over land were concluded. When Bana told us about how he acquired a specific piece of land together with his younger brother Hamidu, he said: 'We were summoned to see Yero Yunuru and he said that we buy this strip of land and pay him two sheep and a goat'.[20] The transaction was finally concluded in Duwari. As he presented it, there was no public bidding and negotiation about the details of the transaction. Everything was

pre-arranged, the buyers, the price, and the timing of the deal. It is very difficult for powerless outsiders to gain access to this circuit. For powerful outsiders it is very easy to press their demands, because there is no open opposition possible. They need only to win some influential spokesmen for their purpose, and they will handle the political details in small groups in the daily discussions under the shelter in Debere.

The inhabitants of Serma want to stay in control of their own village territory. The fact that all kinds of deals are concluded by informal, almost secret, negotiations and that the male villagers try to influence the outcome of the negotiations as much as they can, indicates that territoriality is a major concern. An outsider who gains access to agricultural land and water in Serma becomes also a competitor for grazing and other resources. As a result there are relatively few outsiders, who are considered as such, who own and borrow land.[21] Only people who have a new or indispensable contribution to village life, such as *moodibaabe*, the Tuareg wood workers, and the tanner, are admitted to the village and given land. Paupers are tolerated and pitied, but are socially dead (see chapter 13).

According to the old men territorial concerns are the most important reasons for the high degree of consensus in land tenure matters in the *suudu baaba* Serma. Only by means of consensus can the *suudu baaba* Serma exert control over commercial transactions and inheritance matters. It is helped in this respect by the fact that there are no year-round open-access water resources in the immediate neighbourhood of the settlement, so that outsiders are not able to stay in the neighbourhood of Serma all year round unchecked. In order to keep it that way interference from outside has to be avoided as much as possible. The government as powerful outsider may attempt to break open this situation, when there are, for example, conflicts with large herd owners about access to the pastures of Serma (see also below). This consideration plays an important role in the attempts of the *suudu baaba* Serma to keep conflicts contained within the village.

The same applies to conflicts over damage to crops by wandering herds. In present circumstances conflicts over crop damage no longer have a political dimension or a disruptive effect on the community of Serma. When damage to crops occurs, no compensation is paid if the damage is moderate, not among the Jallube nor between Jallube and Riimaybe. If the damage is very great, something has to be arranged. This is not done on the basis of the fines imposed by a village tribunal. Rather people negotiate by means of intermediaries. Everybody is also expected to conform to this convention. In 'official' customary law compensation has to be paid, and there are even tariffs amounting to FCFA 1,000 per head of cattle. However, anyone claiming compensation on this ground has to face negative sanctions by the rest of the community. A Diimaajo once claimed compensation for damage to his crop more than 20 years ago. Since then he has been boycotted by the Jallube of Serma; they have refused to conclude a manure delivery contract with him and therefore he has to rely on passing Bellaabe. Socially he has become isolated to such an extent that he regards the Dogon of Nebe to the north as closer friends than the people in Debere and the pastoral camps.

When outsiders cause damage to crops, in the first instance they are told to leave, without being asked for compensation. Most herdsmen gladly accept this suggestion. For the inhabitants of Serma this strategy has the advantage of keeping the grazing territory free from troublesome strangers. Sometimes, however, these herdsmen stay in the area and cause recurrent problems

of this kind. In the second instance fines are levied. This may lead to unexpected and unwanted chains of events. In 1991 Bura Bilaali claimed compensation from a herdsman whose herd damaged his fields. Eventually this person was one of the herdsmen who were beaten up by the Jallube after a conflict over sick animals (see below). He complained to the *gendarmerie*, and had Hamma, the son of Bura Bilaali, arrested. This example indicates the risk of involving outsiders and especially government agencies in local level conflicts. Government agents come not only to solve the problem, but also to fill their pockets with fines for putative transgressions of the law, and payment for unwanted and unnecessary services, or just by intimidating people. In contrast to the past, today the inhabitants of Serma have no means to bribe these officials.[22]

Local dynamics of territoriality

Territorial disputes

To understand this suspicious attitude of the people of Serma towards the outside world, in relation to their territorial claims, we have to resort to recent history, and review the disruptive effects of territorial disputes and subsequent government interventions, or government interventions and the ensuing territorial disputes. It is difficult to get to know what territory means in Serma. The herdsmen have no idea where to locate the boundary of the grazing territory of Serma. We suppose the strength of territorial claims is relative to the distance from Serma, and the distance to the next settlements, Fetesambo in the east and Petegudu in the west. When everything proceeds without problems the notion of territory is hardly discernible. Only when calamity occurs, for example drought, does the concept of territoriality become relevant. A larger than normal area is claimed in this situation, because of the needs of the animals. Another source of disturbance which may occur is the imposition of new resources that enable outsiders to encroach on the village territory. On various occasions, starting with the colonial government in 1957, and later by the livestock service of independent Mali, after the droughts of 1969-73,[23] boreholes were drilled on the Seeno-Manngo, wells were sunk on the border between Ferro and Seeno-Manngo, and ponds were deepened, to open the pastures of the Seeno-Manngo in the dry season. The people of Serma were involved in various conflicts over these new water resources. In this subsection the conflicts over two of these boreholes, which took place around 1957, will be discussed to illustrate this change of attitude. One conflict concerned the borehole at a site called *edal*, after a big tree of the species *Sclerocarya birrea*. This site will hereafter be called Bunndu Henndu (the well of the wind), because the borehole was equipped with a windmill to pump up the water. The second site with which Serma was involved was Wiinde Kokulu, a deserted campsite somewhere between Fetesambo and Lennga.

Soon after the windmill was put into use at Bunndu Henndu, Jallube from the clan Seedoobe, living in Fetesambo, drove their herds to the borehole, for the site was ideal for the grazing of livestock. When the chief of Booni and the *chef d'arrondissement*, the government administrator, visited the site one day, they gave permission to make fields around the well. The people of Serma, who were not involved in the decision, rebelled, because they felt it was

their territory. Emotions ran high, and the situation became explosive. The chief of Booni, the elder brother of the current chief[24], felt compelled to revoke the decision. He sent his brother to tell the occupants of the land around Bunndu Henndu to leave their fields. Bubaare Aamadu told the following story about this episode:

> 'Do not dismount from your horse, whatever they do or tell you!' the chief told his brother.[25] Buraima left, and spent the night in Serma. The next morning he advanced to Bundu Henndu. Normally he would stay with me (Bubaare), for I was his *njaatigi* (host). I told him to come off his horse and have lunch with me. He refused and said: 'I will not dismount, for I am on commission for my brother. Gather all the people so that I can pass on his message.' I asked him again to climb down from his horse. Again he refused. I assembled all the people and Buraima delivered the message of the chief. We told him we would not do that and asked him once more to descend for lunch. He refused, even when I offered him seven two-year-old calves.[26] He went back to Booni and briefed his brother, the chief of Booni.[27]

The chief summoned the people at the borehole to come to Booni, and to appear before the *chef d'arrondissement*. After having heard all the parties, he decided that the Seedoobe did not have to give up their fields and that the inhabitants of Serma had no right to the land. After Independence, in 1964, the windmill broke down due to lack of maintenance.[28] The occupants of the fields had to leave, because there was no water and now no opportunity to manure the fields after the rainy season. Only in 1985 was the borehole used again, but then in a totally different context (see chapter 14). Ironically, some of these Seedoobe settled in Serma some years later, after conflicts over damage to fields in Fetesambo.

At Wiinde Kokulu a similar conflict occurred, which was more violent, and more delicate to discuss. Only a few people were prepared to discuss it, and then only strictly in private, for the risk that the conflict would flare up again was still present they said. The source of dispute was a *wiinde*, somewhere between Fetesambo and Lennga and Bunndu Jaabi. In Lennga and Bunndu Jaabi the settlements of the Seedoobe were located. Fetesambo was dominated by the Tamankoobe, although some families of Seedoobe lived there, among them Bubaare Aamadu and the Bana'en who live now in Wuro Boggo.

The Tamankoobe and Seedoobe had been cultivating this *wiinde* collectively for some time. There were pools in the neighbourhood, so that there was no need to maintain an access way to the borehole during the rainy season, to guide the livestock to the borehole without them doing damage to the fields. At one time the Tamankoobe from Fetesambo started to sow their fields on this *wiinde* without consulting the Seedoobe. The Seedoobe had planned to graze their animals around the *wiinde*, so they were not pleased and told the Tamankoobe to leave. They warned them that their cattle might damage the newly sown fields. The Tamankoobe refused to leave, for they had not sown other fields and if they had had to leave they would not have any millet that year. The Seedoobe argued that they could not prevent damage to the fields because their animals were used to the site and would automatically return to it. And so, on purpose or by accident, it happened that the crops of the Tamankoobe were eaten by animals of the Seedoobe.

Two prominent members of the parties, Ayra Maane and Bura Lobiri, came into grave conflict and it came to blows, and mortal insults.[29] They went to Booni to be heard by the chief, and he fined Bura Lobiri three calves of two years, because of calling Ayra Maane a bastard who did not know his father, and not because of the blows. This did not solve the

conflict and in the end the *chef d'arrondissement* was called to intervene. He came to Serma, but did not dare, or did not wish, to visit the *wiinde* itself. All the Jallube from Yirma, Lennga, Serma and Fetesambo came to hear his judgement. He decided that the Tamankoobe should leave the *wiinde*. Apparently the chief of Booni agreed with this decision. The season was already well advanced and the Tamankoobe appealed to Ba Lobbo, the powerful Sonrai chief of Hommbori. He asserted that the Tamankoobe should harvest their fields as they wished. So they did, and their wives and daughters pounded the millet while singing that they were pounding the harvest of power. This of course aroused the anger of the Seedoobe.[30]

The next episode took place at Bunndu Henndu, where everybody gathered after the wet season to graze the cattle on the pastures of the Seeno-Manngo. At the borehole Ayra Maane hit Kaure, a prominent Tamankoobe, with his stick, out of anger at the provocative songs of the Tamankoobe women. It happened that the chief of Booni[31] was present at Bunndu Henndu. He summoned Ayra Maane to appear before him and ordered the enraged Tamankoobe to leave him in peace. Ayra Maane once again provoked their anger by appearing only the next morning before the chief. They decided to entrap him. The next morning they hid in the bush and they let his nephew, a cross-cousin, do the treason. The nephew came out of the bush to greet him. When they shook hands he pulled Ayra Maane from his horse, and everyone came out of the bush and beat him nearly to death. After some more skirmishes the *gendarmerie* came from Douentza and arrested a number of people. These men spent one year in prison.

This conflict developed into a real feud. A couple of years later a son of Ayra Maane, Suka Lobbo, broke the leg of the father of the cross-cousin who betrayed his father. This happened under the tamarind trees at the water reservoirs in Debere. A general fight broke out, in which several men were wounded. The Tamankoobe immediately came to help their fellow lineage members. They closed off Serma and chased the Seedoobe men from their own base. Unfortunately many of the Seedoobe were away on transhumance, so that they were not in a position to defend themselves. The women and children remained in Serma and were taken into custody by the Tamankoobe. Serma was besieged. The situation became dangerous, because if the Seedoobe who were on transhumance became alarmed, fighting would continue on a much larger scale and with a higher likelihood of casualties. A venerated *moodibo* saved the situation by commanding everyone in the name of Allah to remain calm and not to fight. Later the *gendarmerie* arrived and arrested many men. The Wiinde Kokulu was never cultivated again and was ironically called Mande Hoddi ('when will someone be settled') from that time on.

The conflicts about the Wiinde Kokulu and Bunndu Henndu were clearly territorial disputes. They make it clear that, despite the fact that there are no fixed boundaries of village domains, there was a sense of territoriality (cf. Ingold 1986). The inhabitants of Serma regarded the invasion and occupation of the area around Bunndu Henndu as a violation of their rights. The conflict Lennga versus Fetesambo was a conflict of two lineages that compete for space and power. Power in a pastoral society is closely associated with control over space. By cultivating at Wiinde Kokulu the Tamankoobe of Fetesambo show their claim on this area and their independence of the Seedoobe. The Seedoobe contested this right and demanded decision-making authority over the *wiinde*. This is made plain by their refusal to withdraw their herds from the area around of the *wiinde*.

Superficially there were no losers in the conflicts over the territory associated with the

boreholes. The occupants of Bunndu Henndu won nothing with their victory, because the windmill broke down a few years after. The conflict over the Wiinde Kokulu also seems to end in a draw, because no-one was able to use the *wiinde* after the conflict. The very fact that these conflicts developed indicates that the power of the chief was limited and that the political hierarchy organizational model, in which the word of the chief was law, had lost its capacity for problem solving. This is most clearly expressed in the role of the chief in the conflicts. The chief of Booni was humiliated several times. The administration was needed to solve the problem, for the Jallube of his own region and of Monndoro were too unruly to command. The chief was there only to levy the taxes, to receive the administrators, and to collect the livestock with which the Jallube honoured him. In the conflict over Bunndu Henndu his defeat was total. He wanted the Seedoobe to leave or share the land around the borehole with his subjects in Serma, but they remained where they were with the help of the administration. In the violent conflict between Fetesambo and Lennga, he played a role only as the tax collector.

In the conflicts two models for the mobilization of people are used. In the controversy over Bunndu Henndu territorial organization is the principal means of mobilizing people. The inhabitants of Serma unite to keep outsiders away from their pastures. They cannot, because they have no say over the water. The conflict over Wiinde Kokulu is differently structured. In this case the borehole is positioned at a place which two villages consider as belonging to their domain. Over the years they had developed a way of using these resources in a peaceful manner. Then the value of these resources change, because of the imposition of a borehole. It so happens that the two parties in the conflict, the settlements of Lennga and Fetesambo, are dominated by a specific lineage. As the conflict develops the lineage becomes gradually the means for the mobilization of people. Thus, that one of the main characters, Ayra Maane, was betrayed by his cross-cousin, i.e by a son of a 'brother' of his mother,[32] showed that one's basic loyalty is to the patri-clan of one's father in case of political strife.

Both these conflicts were the result of the unclear situation with respect to access to these government-owned water resources. In the first instance it seems that the pastoralists from the east won the political game over these water resources by playing the chief against the administration. The authority of the chief of Booni does not extend over them, and the administration has to take over. The *chef d'arrondissement* assumes ultimate decision-making authority over land. It may be said that the state acquired this control through drilling the boreholes. With the boreholes they could decide who was allowed to make use of the range and the land around the boreholes. This clearly interfered with existing territorial claims on the pastures areas, such as those of Serma in the case of Bunndu Henndu, and Lennga and Fetesambo in the case of Wiinde Kokulu. The colonial government created insecurity with respect to control over resources in this way, and at the same time created, consciously or unconsciously, the conditions in which further interventions, i.e. the allocation of user rights on the land dependent on the borehole, were necessary. While the inhabitants of Serma initially welcomed these new water resources, later on the *suudu baaba* Serma, in order to prevent encroachment on their territory, consistently opposed the development of any year-round open-access water resource, such as a government well or a borehole, with the argument that they already had their own water.

The control over range

Control over pastures is much less strict than over agricultural land or over water. In principle access to range is open for every one, though it is dependent on access to water as was shown in the preceding section. This is quite logical, for there are no investments made in pasture. The costs would outweigh the benefits. The productivity of pastures is too low, and the organizational difficulties too large to invest in the vast areas that are used. Moreover, the capricious nature of the ecology places a premium on mobility. The insecurity of the returns on investment is too high. Still there is some regulation of grazing pressure on the pastures around Serma, and there are grazing territories, as was exemplified by the conflicts over the government boreholes in the 1950s, though clear boundaries do not exist.

In the rainy season there is hardly any control on grazing. The multitude of water resources in the form of small ponds, and the free access to them, precludes this. After the windmills on the boreholes broke down in the early 1960s, calm returned until the droughts began in 1968. The herds of the people of Serma occupied the range and probably used it almost to the full. The only limitation on the movements of herds were the fields, from which the herds had to be kept at some distance, in order to prevent damage. In addition the herds were away at the salt licks north of Booni for the annual salt cure for an extensive period during the growing season. This trek to the salt licks has become less important after the drought, and only the large herds undertake it. The smaller herds either stay at home or are joined into a larger herd. Livestock from other herd owners in the Hayre used the pastures of Booni to some extent, when they were on their way to the salt cure, or when pastures around their settlements were insufficient. This was welcomed by the inhabitants of Serma, as long as these herds did not bring any diseases, because they would have the same rights of access on the pastures around other settlements when their own range was of low quality. Livestock from outside the Hayre was, according to informants, relatively rarely seen, and had been so ever since the 19th century (see chapter 2). The herdsmen of Serma met these herds only around the salt licks at Durgama.

After the drought this situation changed completely. After the first drought, which lasted until 1973, the people of Serma were able to reconstitute their herds. In 1975 a special programme, called the *Opération de Développement de l'Élevage dans la région de Mopti* (ODEM), was started by the livestock service, and financed by the World Bank, to help alleviate the problems in the pastoral sector. Government wells were sunk in Lennga and Petegudu. An attempt to drill a borehole at the site of the water reservoirs in Serma failed. The inhabitants of Serma had opposed this, for they did not want foreign herds on their pastures. The geology helped them: the bit melted in an impenetrable layer, and no water could be found. Another intervention in the neighbourhood of Serma was the organization of a grazing reserve around a borehole on the Seeno-Manngo. This grazing reserve, 12,000 ha, was located on the territory of Serma and Fetesambo. Access to these pastures was prohibited in the rainy season, and for most of the dry season. Use of this scheme was for the inhabitants of the villages around the scheme only, so that the pastures were not lost for grazing. The inhabitants of Serma, however, were no longer in control over this part of their territory.[33]

However the most critical season with regard to control over pastures is the rainy season.

With the drought of 1984-85 the pressure of livestock on the pastures of Serma and adjacent villages has decreased considerably, probably by as much as 75 % in the Hayre, and rather less in other areas in Central Mali. Not all of this livestock died; an unknown portion of these lost cattle have found their way to new owners among agriculturalists, urban traders, and civil servants. These new owners bought them cheap, and managed to keep part of their new acquisitions alive.[34]

When the drought was over and pastures recovered the new owners sought ways to manage their new assets. They employed young herdsmen, and penetrated into new areas. Remote areas such as the Hayre and the Seeno-Manngo were soon discovered, where pasture was good and livestock density very low. During the growing season they did not need to negotiate access to pastures, because access was free and the only additional resource they needed, water, was freely available. As a result numerous herds now roam over the Seeno-Manngo in the rainy season. To give some examples: when we were celebrating *tabaski* in Wuro Boggo on the 23rd of June in 1991, more than 30 herds passed the camp on that day alone. Each of these herds was accompanied by at least two herdsmen, so we may estimate their size at 200-250 head of cattle each. The people of Wuro Boggo were baffled: never in their life had they seen anything like this. Abdramaane Hamma, our host, got so angry that he ordered the herdsmen to take another route, for they were damaging the huts. When one of the herdsmen asked for water he refused to give it, which is one of the greatest offenses one can think of in this area of water shortage.

During the rainy season a number of these herds remained in the area around Serma, and caused a great deal of tension in the village. The herdsmen exploited the pastures of Serma with their herds, and in this way diminished the already smaller resource base for the dry season. They also neglected the boundaries of the grazing reserve (cf. Shanmugaratnam et al. 1993:22). There were numerous cases of damage to fields. The herdsmen, who spent their days in Debere, dominated the scene completely. They were equipped with cassette players, with which they distracted the youths of Serma from their cultivation tasks. They were the main customers of the Riimaybe women, buying their food in Debere in the form of cous-cous, which is prepared from millet, and this added to the scarcity and the high prices of food in the village. Contagious diseases in these herds led to a number of incidents at the end of the rainy season. Some of the herdsmen were beaten up by the youths of Serma when they refused to leave the area, and they complained to the *gendarmerie* in Booni. As a result some people were arrested and detained in Booni for some time. The herdsmen were also courting young women in Serma, which created another source of unrest and jealousy.

Understandably control over grazing is much more strict in the dry season. Access to grazing is still free. In the past the herdsmen would conduct their animals to the Seeno-Manngo, to feed them on the fresh regrowth of perennial grasses after burning. In this way the animals were able to graze for two days on end without water, as long as the temperature was not too high. After the droughts the perennial grasses have disappeared, and no one burns the pastures any more, except by accident. The annual grasses when burnt do not regrow, and the range is lost until the next rainy season.

In the past as in the present access to water was limited, at least in Serma. One can remain in the area only when one has access to water. Most of the herds disappear to the Inner Delta,

where better grazing may be obtained. Given the location of the wells and water reservoirs in Serma, and the well in Bundu Jaabi, and the journey a herd of cattle is able to make in a day's time, it is easy to see that the Seeno-Manngo and the Ferro can only partially be exploited during the dry season. On the south of the Seeno-Manngo the nearest well which provides water at the height of the dry season is found in Duwari, almost 40 kilometres from Serma. To the north Booni and Beebi are the nearest stations to turn to. The well in Booni has a very small capacity. The capacity of the government wells in Lennga and Petegudu was limited due to a fall in water-table. This made these wells unattractive for outside herdsmen. By the end of the fieldwork period attempts were made to deepen these wells, and to bring them under the control of the user population. So water is the most crucial resource for the herds and their owners in the dry season.

The deepened pond

The weak spot in the control over territory and consequently the grazing resources in this situation is open water in the form of pools and ponds that appear in the rainy season. At first glance there are hardly any rules governing access to open water in pools. Everyone is free to use the ponds that appear in the rainy season as long as they last. No rights of access are defined. Soon after the rainy season, often as early as September, they have disappeared. They do not enable outsiders to remain in the area for more than a couple of months. From these ponds normally outsiders cannot be excluded, although they are mostly located in the neighbourhood of settlements. The inhabitants of these communities have, however, rights of priority of access. In practice these rights are hardly put in effect, because for most of the time during the growing season there is more than sufficient opportunity to water the herds, almost everywhere in the bush. By the end of the rains, when the water situation becomes more tight, there needs to be some coordination, to prevent all herds entering the pool at the same time. One after the other the herds are watered at the pool. The actual work of leading the herd back and forth from the pool is done by the young herdsmen, while their elders indeed supervise their work from beneath the remaining tall trees, sitting and conversing, and only intervening when something goes wrong.

In 1987 part of the main pond in Serma was deepened by ODEM, so that the availability of open water was extended from October to January, reducing the work load of watering the cattle in this period. An incident that occurred in October 1991 showed that rights of access to open water are not free in all circumstances, and that this government intervention created ambiguity in the definition of rights of access. In the neighbouring cattle camp, Petegudu, there was an outbreak of bovine pleuropneumonia, probably brought by a herd from the Inner Delta of the Niger which had been passing the growing season on the Seeno-Manngo and Ferro. Because of the outbreak the herds of Petegudu had to be isolated from the herds of Serma and Fetesambo in the east. Normally all these herds were watered at the Serma pond, because the ponds at Petegudu and Fetesambo were already dry at this time of the year.[35] In agreement with the veterinary service it was decided that the herds of Petegudu should be assigned a pond further away on the Ferro, so that the water at Serma would not be contaminated.



This did not work at all. A combination of resentment among the herdsmen of Petegudu at their bad luck and at being denied access to an open access (governmental) water resource, with feelings of *haasidaare* (jealousy), and the absence of a structure to resolve conflicts in this kind of situations, led to a very tense situation, which could well have led to violent conflict and have aroused village-like territorial feelings among the inhabitants of Serma.

A couple of days after the animals of Petegudu were banished to the pond on the Ferro,[36] alarm spread through Debere, where the men were sitting and chatting. A herd from Petegudu was seen approaching accompanied by a herdsman, obviously to drive the animals into the pond and to provoke conflict in this way. All the men, young and old, rushed to the pond, a couple of hundred metres north of Debere, only to find that the animals were already in the pond. The young herdsmen drove the animals out of the water. The accompanying herdsman took an aggressive posture, which was not difficult to see, for he was dressed for battle. He carried a heavy stick and wore a short blouse instead of the normal long *buubu*, which would not hinder his movements while fighting. The elders held back the *sukaabe*, who wanted to attack, and told the herdsman to go away. They promised not to beat him up, but instead to scare the wits out of his animals if he ever returned. The latter measure would be much more severe, because the whole herd would then disperse, and he would probably lose half of it, because of theft and thirst, before he found them all. This warning was more effective than a round of stick fighting. He gave in and disappeared with his animals. Thereafter guards were posted at the pond.

A week or so later, another incident happened. Despite the guards, who were probably sleeping or absent, the herdsmen of Petegudu somehow managed to drive a sick bull into the pond. When it was discovered the animal was removed from the pool. It was so sick that it

could no longer stand on its feet, and it had to be dragged to the edge of the pool. It was put on a sledge and taken to Debere. The *sukaabe* (young men) wanted to slaughter it out of revenge. The *mawbe* (old men) and common sense once again prevented this, for it would surely have brought a counter attack, more fighting and finally the intervention of the *gendarmerie* from Booni. In that case everyone would have had to pay dearly, because these officials would not have left Serma and Petegudu in peace before they and other authorities had pocketed large sums of money. The bull was taken back to Petegudu on the sledge, and the incident petered out with that. Fortunately no animals in Serma fell sick.

This example shows that ponds are not just open access resources. In principle everyone has the right to water his cattle in the pond. When, however, a calamity occurs, the people residing in the neighbourhood have preferential access to it. Those from outside were excluded. Even if the illness had been among the cattle of Serma only, the animals of Petegudu and Fetesambo would have been assigned another pond and not the reverse. An incident like this brings territorial groups into being almost at once, albeit on a temporary basis, but with a high degree of internal cohesion and motivation. All the young men, even the Riimaybe, were prepared to fight against the herdsmen of Petegudu, while they were of course friends and comrades in daily life. Equally remarkable was the fact that the *mawbe* were able to hold back the *sukaabe* from taking revenge, despite the fact that they cannot always command their sons without difficulties. Probably nobody felt sufficiently protected by the livestock service, and sure enough about the status of the pond to take a more firm posture, and to resort to violence to resolve the conflict. This contrasts very markedly with the way the same old men fought conflicts as young men over the boreholes on the Seeno-Manngo in the 1950s.

Discussion

So, in the course of the twentieth century, within a period of 20 years, an extensive bush-fallowing cropping system without permanent settlement in the area was replaced by a fairly intensive cultivation system of permanent and semi-permanent fields. Instead of expanding the cultivated area around the village, cultivation was restricted to the confines of permanent water points and the sites of rainy season settlements, under the pressure of growing numbers of livestock. Probably cultivated area decreased in this period, rather than increased as in other regions (cf. Gallais 1975, Marchal 1983). The meaning and value of land, pasture, and water points changed in a short span of time, due to the sinking of a well, the drilling of a borehole, and abundant rainfall. A new political structure developed in which the Jallube, and especially the Seedoobe, enjoyed considerable power over the Seeno-Manngo far away from the centre of the chiefdom in Booni.

A completely new cycle of transhumance developed. The herdsmen often only left the village during the growing season for the annual trip to the salt licks at Durgama. This journey took only a few weeks. Sometimes the herds were sent to the Seeno-Manngo when rainfall at the beginning of the rainy season was better than in other parts of the region. The rest of the year the preferred way of managing the herd and the fields was to settle with the animals on the family fields in Serma. People settled on the field near Debere in the post-harvest season,

when the water from the reservoirs was exploited. When the reservoirs were nearly empty, the Jallube moved their animals to Yaraama for the rest of the dry season, to apply manure to the fields they owned there and to water their animals at this well. When the fields were sufficiently manured they spent part of the year with their herd in Duwari or in Booni to barter milk for millet, so that the millet they kept in their granary at home was saved for the growing season. Some Jallube and Riimaybe even managed to save so much millet that they were able to market it and to buy extra cattle.

The ecological and political circumstances of the time were especially favourable for this development. The rains in the 1950s and early 1960s were very abundant in comparison with the present. The millet grew very well on these fertilized fields. Pasture land was managed only in an indirect way by the herdsmen, despite the fact that grazing areas were subject to territorial claims. On the Seeno-Manngo areas with perennial grasses were burnt to graze the animals on the fresh regrowth. This was, however, done only on pasture areas dominated by these species. Areas overgrown with annuals or trees that were accessible for the herds in the dry season were protected. On the Ferro fire was not used in management, even in patches where perennials occurred, because it could not be controlled in the dense bush.

It has also been shown above that there is not a systematic body of rules and procedures governing access to village resources. The legal framework used at present by the community is an amalgam of customary, Islamic and modern elements unusual for this part of Mali. It would not even be appropriate to term this framework plural, because the plurality of it is so dazzling that the blend is something completely new. Its dynamics cannot be deduced from the dynamics of its legal sources. They are embedded in the situation of Serma itself. Rules and procedures are not only time-bound, in the sense that they are an historical phenomenon, they are also space-bound. Different rules apply to various types of land, which are under differing management regimes, under fluctuating climatological circumstances. As we have seen in the section on bush fields there is a tension between farming and herding activities. Depending on the location of the fields and their number of livestock the Jallube have different interests in farming and herding, and have more or less to fear from wandering herds. In order to combine cultivation and livestock keeping, coordination of activities and a careful spatial allocation of crop land is needed (bush-fields versus the *wiinde*). When the climatological circumstances permitted, rights in the bush-fields were suppressed, but as has been shown, nothing precludes their reactivation at some time, e.g. when the Jallube have lost all their livestock and drought continues to vex the country.

Before the increase in livestock numbers and the development of water resources there was much less need for coordination. Because of the technological innovations in the form of permanent sources of water some tracts of land became more attractive and more valuable for cereal cultivation. Other tracts of land lost their suitability for the cultivation of millet as they were located in the areas where herds of livestock wander. The grazing lands around Serma acquired extra value as pastures because, thanks to the development of water resources, possibilities were created to exploit them more fully. Efforts to remove fields and Riimaybe from these areas paid off in this period. As a result the local balance of power changed too.

The courses these conflicts took explain a lot about the power structures over land and pasture in this peripheral area in the colonial period, and just before and after Independence.

The organization of natural resource management which resulted somewhere around the early 1960s, i.e. how land, water and pasture are divided over space, and the organization of use, and to whom resources are allocated, gives at the same time insight into the power structure. Rules and ideas about access to resources contain a discourse of power. If we look at the losers in the conflicts about agricultural land, the Riimaybe and Bellaabe, they are at the lower end of the social hierarchy. Nevertheless not all Riimaybe and Bellaabe were obliged to leave, only those that occupied the cattle route that was claimed. The reason is that these two lower status groups perform and probably performed crucial tasks in the village economy of Serma. In fact they could not be spared and they were allowed to stay, although not on their own conditions. They were defeated by the Jallube because of their numbers of livestock and people, and because of their status. In the conflict over Yaraama they had to defer to the status of the Weheebe. As former slaves they could not demand the right of first choice, nor the right to get access to the land in another sector around the well.

Conflict over territory and water has potentially much graver consequences in the present as well as in the past. Many more people, even whole lineages, are involved, and all kind of political loyalties are tested in these situations. Involvement of the administration has become unavoidable. In the course of 40 years the administration, and its representatives such as the ODEM and other services,[37] have obtained a firm grip on the situation. The people of Serma are no longer able to control who is to use their pastures in the rainy season and a considerable period thereafter. In the dry season they are officially co-managers along with ODEM of the grazing reserve, but if ODEM had had its way, they would have been provided with a permanent uncontrollable source of water, which would have made a definitive end to village autonomy with respect to natural resource management.

As a result of state intervention in tenure and control over grazing the balance of power has changed completely. For most of the year a considerable section of the pastures cannot be used any more, for it has been declared a grazing reserve. Even when calamities occur, such as drought or excessive rain, when they need the grazing land they are not allowed to use it. As a result of this and the encroachment of herdsmen from the Inner Delta in the rainy season, the pressure of livestock remains high, even though the number of cattle owned and managed by the inhabitants is far below their subsistence requirements. This precludes the extension of agricultural fields, or the reactivation of rights on bush fields, for the risk of damage to the crops is too high. The re-introduction of a bush-fallowing millet-farming strategy would be one of the temporary options open for the inhabitants of Serma to overcome the effects of drought. This fall-back option would enable them to cultivate fields which are neither over-manured nor under-manured (see chapters 7 and 8).

Moreover the clearing of this land, even though it may have been cultivated in the past, is officially prohibited. Only with permission of the administration, the agricultural service, the forest service and the ODEM is the clearing of bush land possible. The chances that such a permit will be obtained are rather low, because these days the ODEM objects to any agricultural encroachment in pastoral areas. As officials of ODEM say, this is to protect the pastoralists, but they fail to see that they deny pastoralists who have lost their means of existence the opportunity to make use of age-old fall-back strategies. Moreover, for most inhabitants the acquisition of a clearing permit is too costly, not only in monetary terms, but

also in terms of time and effort spent on these bureaucratic procedures. They would rather buy the land of people who migrate from Serma or need money to overcome difficult situations.

So there is warrant for concluding that government intervention and the takeover of control over territory has robbed a constantly evolving complex of rules and procedures of its dynamics. It has been shown that this plural legal complex evolved in close conjunction with changing local political and ecological conditions, and mirrored the processes of change in Serma. With the immobilization of this legal complex, and the establishment of state power over natural resources, land use in Serma is also to a large extent robbed of its dynamics. The herdsmen and cultivators are unable to change their land use strategies, because the organization of land use, which fitted the ecological conditions of the 1950s and 1960s can no longer be changed in view of the newly insecure ecological conditions. The flexibility, which was the fundamental characteristic of land use in the past, is lost, and this is one of the main reasons for the crisis in agricultural production. Moreover, the Jallube and Riimaybe have to face increasing competition for pasture and territory from herds from outside. This competition is not limited to natural resources, but also extends into the political domain. This has led to a new form of political insecurity, in which the people of Serma form the weakest party, because they lack the cattle and the physical and legal capacity any longer to control their territory.

The modern bureaucracy replaced the indigenous chief as the ultimate authority over resources, and now sets the agenda for change. In chapter 14 a charismatic opportunistic indigenous chief, a modern World Bank sponsored development bureaucracy, armed with scientific concepts about the rational management of natural resources, and a whimsical administration, enter the scene. It will be shown how this unholy alliance in its efforts to reduce its own insecurities, and to propagate its own interests, tries to get control over the people of Serma, and further diminishes the room to manoeuvre of the Jallube as well as the Riimaybe of Serma.

Notes to chapter 10

1. This is, by the way, consistent with the findings in chapter 4 that the lineage, camp, and community of Serma were not very important levels of social organization in daily life.
2. No doubt this was reinforced by jurisprudence in the colonial period. These principles are stated almost verbatim in the minutes of the French court in Bandiagara, which laid them down in a text in response to conflicts over land. This text ran as follows:

   En date du 2 janvier une contestation au sujet du droit de propiété d'un terrain de culture ayant dépendu d'un village aujourd'hui en ruïnes. Les explications fournis par le tribunal à ce sujet sont les suivantes: «Lors d'installation d'une famille en un point quelconque de la brousse, le chef de famille est, de droit, propriétaire de tout le terrain autour du lieu où il s'établit dans les limites du paccage journalier d'un bœuf. Lorsque les gens viennent se joindre à lui, il leur donne en propriété, définitive et héréditaire les terres dont le produit doit suffire à assurer leur existence. Cependant il conserve toujours le droit de reprendre tel partie du sol pour lui, concédée qu'il lui convient pour permettre à de nouveaux immigrants d'y construire leur case, dans le cas où le village se serait tellement développé, que l'emplacement réservé à cet usage fut devenir insuffisant. Sans cette réserve la propiété du sol est absolue, la location et la vente en sont régulières, et le détenteur n'en peut être privé que s'il le laisse en friche pendant dix ans consécutives. Nul ne peut donc lui contester cette propiété, même

dans le cas de déstruction de village dont la terre dépendent, s'il est de notoriété publique qu'il la tient de ces ancêtres établis dans le dit village.
in: Archives Nationales, Bamako (ANB): *Fonds Anciens*: 2M-56, *Justice indigène: Rapport sur le fonctionnement des tribunaux: Cercle de Bandiagara: 1905-1920. 1906: Rapport sur la justice*

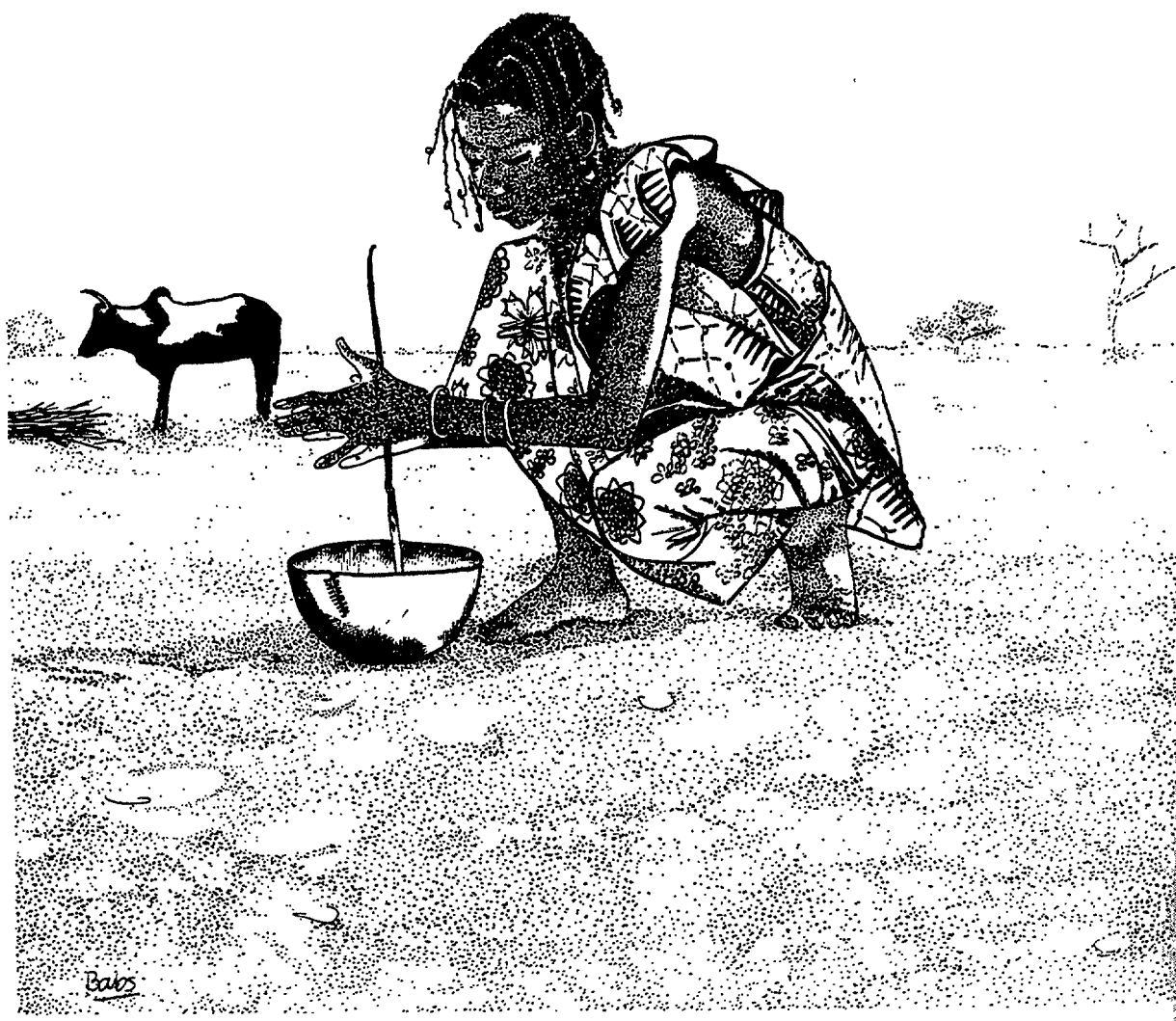
3. ANB, *Fonds Récents*, 1E-15: *Rapports politiques et rapports de tournées: Cercle de Douentza: 1941-1954, Revue des événements deuxième trimestre 1948.*
4. ANB, *Fonds Récents* 1E-132, *Transhumance et droits de nomadisations, 1921-1931; Le gouverneur de colonies, Lieutenant-Gouverneur du Soudan français à M. le Commandant du cercle, 5 avril 1927.*
5. ANB: *Fonds Anciens*: 3R-39, *Eaux et Forêts - 1916-1918:* letter of: *L'Administrateur en chef de 1-ère classe à Ms les Commandants des Cercles et le Commandant de la région de Tombouctou*, dated April 16, 1916.
6. ANB: *Fonds Récents*: 1E-132, *Transhumance et droits de nomadisation: 1921-1931*: letter of April 5, 1927, by: *Le Gouverneur de Colonies., Lieutenant-Gouverneur du Soudan français à M. le Commandant de Cercle.*
7. This codification of rights of access to land, range and fishing grounds has undergone many practical unofficial changes and manipulations in the course of history (see e.g. Gallais 1984, Moorehead 1991), and it is questionable if it is justified to use the rules defined by Seeku Aamadu as the basis for the administration of law and the allocation of land and rights of access. The Diina of today is different from the Diina in the 19th century.
8. See note 2 for a more elaborate complete version of this judgement.
9. At present this issue is reappearing on the agenda with current policies to organize management of bush land at the village level under the heading '*Aménagement de Terroir villageois*'. The issue of the rights of pastoral and nomadising population groups is hardly given any attention by donors and responsible government agencies alike (see also Marty 1993). The irony is of course that the notion of village, and the decisions over what constitutes an official village, is a colonial invention, and is nowadays defined by the state, which claims sovereignty over its territory and subjects.
10. This is confirmed by the number of animals that were taxed in the chiefdom of Booni during the colonial period.
11. It is very hard to say anything definite about the number of people and livestock in Serma, because it never has been an official village. As a consequence there are no official census figures for the village. We can only generalize the trends for the whole region to Serma, though we know that some areas were depopulated in the 20th century.
12. See chapter 3 for an explanation of the way these reservoirs are constructed.
13. In contrast to the well at Yaraama, this well does not provide water all year round, which makes it less valuable.
14. They re-occupied land that they claimed was worked by their ancestors, who accompanied Maamudu Nduuldi to Serma. The Seedoobe also have ancestral claims on land in Booni and other villages.
15. The baobabs (*Adansonia digitata*) to which this name refers have all disappeared
16. A comparable strategy is found among the Fulbe in northern Yatenga (Marchal 1983) and in southern Burkina Faso (Delgado 1979).
17. Though it is also said that a frequent source of discontent is the fact that women from different *gure* do not get along, and that this may lead to splitting of the *wuro* and changes in the composition of the rainy season settlement (see also chapter 11).
18. It is always his land, because women do not own land, and even if they work it they are not allowed to sell it.
19. As we saw in chapter 2 this controlled land market was in effect in Dalla during the colonial period The chief prevented the sale of land to Riimaybe and bought it all for himself.
20. This piece of land of more than 2,5 ha was located next to the field of Hamma Yunuru, his elder brother. Just like the brother of Aama Babel, Yero Yunuru has not been heard of for years.
21. Those outsiders who gain access to a piece of land are made into insiders before they get the land (see chapter 9).
22. To explain what has changed in the relation between civil servants and the local people, Bura Bilaali told us that in the past they would welcome a civil servant with lots of food and milk, and that efforts were made to get him into a benevolent mood, so that he would not impose too heavy fines. Now, he explained, we receive him rather with hunger food, such as *giigiile* and roasted desert melon, to indicate that we are really poor and cannot pay the fines.
23. The *Opération de Développement de l'Élevage dans la région de Mopti* (ODEM), which will be discussed in chapter 14.

24. His name was Aamadu Hammadu Dikko, and he was a great-grandson of Maamudu Nduuldi, who founded the chiefdom.
25. To indicate how scared the chief was both for his safety, and of a major row between the Seedoobe and his family.
26. This is to indicate how scared he was, for the Weheebe are known as very greedy.
27. Interview with Bubaare Aamadu Jiallo, 26 October 1989.
28. Gallais (1984) dates the breakdown of the windmills to 1960. Bubaare Aamadu Jallo dates the deterioration of the equipment to 27 rainy seasons (*duubi*: sg. *ndungu*) before the interview, which is the rainy season of 1964.
29. Ayra Maane, when asked by Bura Lobiri why his animals damaged his field, told him that he had ordered him to go, now the animals will eat everything, the millet, the soil, even your mother. Upon which Bura Lobiri replied that Ayra Maane was a bastard, for he did not have a father - which is one of the gravest insults among the Fulbe.
30. Ba Lobbo was indeed a powerful chief with influence outside his own domain during the colonial period (see Marie & Marie 1974).
31. see note 24.
32. We do not know if this cross-cousin was a classificatory or a real cross-cousin.
33. See further chapter 14.
34. Shanmugaratnam et al. (1993·23) report that probably the majority of the herds in Central Mali (i.e. the Delta plus adjacent drylands) are in the hands of absentee owners now. These herds are in general based in the border area of the Inner Delta and the Inner Delta itself. We know of only one herd of considerable size which is based in Serma.
35. There is a government well in the neighbourhood of Petegudu.
36. Which was located much farther away, putting extra strain on the animals, which were already sick.
37. We left out, for example, the forest service, which has a major (negative) impact on the attitude of the inhabitants of Serma vis-à-vis trees and tree management, and has made an end to any basis for tree management and regulation of access to trees at the level of the village.



Part IV

The Present: Dealing with Social Insecurity


Babs

11

Women between Kin and Affines

Women and marriage

According to Jallube standards, Dikoore Bukari is a beautiful woman. In 1977, when she was fifteen years old, she married Sambo Usmaane in Wuro Boggo, and they are still together. An extraordinary situation for a Jallo couple, as the divorce rate is very high among the Jallube. Until recently there have been no urgent reasons for Dikoore to divorce. Life has always been relatively prosperous for her. Sambo's *wuro* always had a large herd, a considerable part of which is owned by Dikoore and her children. All her six children received animals from their father, herself and their *kaw* (Dikoore's brother) at several occasions like name giving (*lamru*) and circumcision (*taadordi*). Dikoore has always lived in the vicinity of her mother, which gave Dikoore the opportunity to keep in contact with her and offer help in times of need. Dikoore still visits her mother regularly. Dikoore's father, however, went to Gase in Ivory Coast years ago. His family has not heard anything from him ever since. Her brother lives in the neighbourhood of Duwari. He has only a few cattle left after the droughts. Despite the loss of cattle that also struck Sambo and Dikoore, every second day Dikoore has some milk to sell in Debere. She always has a stock of butter. Furthermore Dikoore is very skilled at making calabash covers which she sells quite easily in Booni or Duwari.

In 1991 Dikoore's situation changed radically. Sambo married a second wife, Matta. Dikoore was not happy with this change, but she could do nothing but accept it. For her the second wife was not an important threat. She and her children owned a substantial part of the herd and Sambo could not give any of the milk of these animals to Matta. Furthermore, Matta took some animals with her from her father's *wuro* in Fetesambo. Nevertheless, the reason why she did not try to prevent Sambo from marrying this second woman, or to run away, must have been the fact that her family could never have taken care of her. Should she decide to leave Sambo her family has the duty to take care of her. However, her mother married a man who owns only a few animals, and her brother has no animals left after the droughts. These considerations may have played a role in her decision to stay with Sambo.

Jeneba Hamma is the second wife of a younger brother of Sambo, Hamidu Usmaane. The brothers and sisters of Jeneba also live in Serma, and they visit each other regularly. Jeneba has left her only animal in the herd of her brother who lives in Wuro Kaaral. Jeneba has been ill for a long time. After she gave birth to her second child she has been feverish every now and then and her breasts are inflamed. Her eldest son is 12 years old now, but he looks like 7. Jeneba ascribes his retarded growth to his physical condition which has never been good since he was a toddler. Moreover, he has had blood in his urine for a few years now. Jeneba discussed the issue of her own and her son's illnesses with her husband, but he refused to help his son, and for her own health she was responsible herself, he said. The problem was that Jeneba had only one head of cattle and spending this would mean an end to her 'wealth'. Eventually she decided to sell the animal in order to cure both her son and herself. She had the opportunity to go with us to the hospital in Douentza to consult a doctor. With her sister, but without her son, we left Serma together. Hamidu told her to leave her son in Serma, because he was now under his care being almost an adult, and he preferred to ask the advice of a *moodibo*, which he never did in fact.

In patrilineal societies the position of women in a marriage union is often related to their economic and reproductive functions. A marriage is mostly seen as a transfer of a woman from one kin group to another. Among the Maasai agro-pastoralists in Kenya, for instance, a woman is totally submitted to the reproduction of the social group (patrilineage) into which she marries. Thus her success in reproduction, i.e. the number of children she gives birth to, defines her social position (Talle 1988). For Wodaabe women in Niger Dupire (1960) sketched the same picture. In her analysis marriage is a transaction between two agnatic kin groups transferring the rights over a woman, and later her children, from one group to the other. This is the same interpretation as Riesman gives for the Jelgoobe in Burkina Faso (Riesman 1977:81). Hence, a woman enters a new group which is a hostile world for her, and she starts a 'new' life. In agricultural societies more importance is attached to the potential economic contribution of a woman to the group of her husband, because the transfer of rights over the labour of the woman forms an integral part of the transaction.[1]

Among the Jallube the economic role of women within the *wuro* is confined to milk, i.e. cattle. This may be an important input in the *wuro* economy, but as we have seen this importance is declining. If there is a shortage of labour, other (male) kin may be asked to help the family. The reproductive function of a woman is important, and in case of divorce children will stay with their father in most cases. This does not mean, however, that a woman loses all her rights in the children. Considering the cases of Dikoore and Jeneba we may wonder if the rights over women are transferred at all among the Jallube. They show that women may shift back and forth from kin to affines. Even when she has been married for a number of years, she may still look for support to her parents, brothers and sisters. As long as a woman has animals of her own, she has a large degree of independence in the marital union. This relative autonomy of a woman has not only an economic basis. It is also testified to by the solidarity relations which exist in Fulbe society. A woman balances between her own family and her marriage. Just as Baroin concluded for women in Tubu, Tuareg and Maure societies, '*[les femmes] tirent leur relative autonomie du fait que dans ces trois sociétés, les liens de la parenté consanguine priment les liens d'alliance*'(Baroin 1984b: 122, cf. Tauzin 1984, Claudot 1984, Baroin 1984a, Randall & Winter 1985).

Not all women in Fulbe society of the Hayre enjoy this degree of autonomy. The social position of married women differs according to social category. For Riimaybe and Weheebe the picture is a little different. The Riimaybe women play a more important role in the economy of the *suudu*, and for them the transition to the *suudu baaba* of the husband is more absolute.[2] Among Weheebe the transition of women from one kin group to the other is also more strict, but for a totally different reason. Due to Islamic norms, to which they adhere more strongly than any other social category in the Hayre, a husband has to take full responsibility for the subsistence of his wife, and has to seclude her within the confines of the compound.

In this chapter the focus will be on the social position of married women among the Jallube, and the social security arrangements they use as they balance between kin and affines, in a situation of growing insecurity. Social security arrangements are embedded in the social organization of society. As we have seen in chapters 4, 5 and 9, the organization

of the Jallube is at very flexible at various levels. This may explain the differences in women's position in the marital union between Jallube on the one hand and for example Wodaabe, Jelgoobe and Maasai on the other hand, and also between Jallube women, and Riimaybe and Weheebe women. This flexibility may bring it about that a woman finds social security within the marital union as well as within her own family. Production and distribution are concentrated in the marital unit, in the relations with her affines (organization of labour; distribution of productive resources). Care relations, e.g. in case of illness, and mental support are to be found in a woman's own kin. As many women analyzed it themselves, the relations with their kin contained more emotion and were more 'useful' than the relations they had with their husband and affines. At the same time they admitted that the *fayannde/wuro* provided them under normal circumstances with food and a way to survive, and it gave them an old age pension through their children. If a woman is not married her social position in society is not defined. Access to these various social security relations partly defines the bargaining power of a woman in the *wuro* in which she is wife, in her larger family group, and in society as a whole, for they provide her with fall-back options (cf. Agarwal 1991). This unsettled character of the position of a married woman may explain the persistent tension between the group of affines (*esiraabe*) and the kin of the woman, which is expressed in a relationship dominated by feelings of *yaage*.

The flexibility of social organization, and the way social security relations are arranged, have changed due to the droughts and the loss of cattle. The family of Dikoore, for example, is no longer able to provide her with a fall-back option. Women who have lost all their cattle during the drought have no resources to depend on. Jeneba, for instance, will be totally dependent on her brothers when she has sold her last cow. If these are poor, social support for Jeneba will simply cease to exist. When the herd of the *wuro*, which provides milk for the *fayannde*, itself is decimated this means that the production and redistribution of the *fayannde* is at stake, and thus the survival of the woman and her children. The *gure* (plural of *wuro*) of Dikoore and Jeneba were both relatively rich, and these women possessed some cattle so that at the time of the above accounts their subsistence was not immediately threatened. Though these changes were undeniably influenced by processes of monetarization (Waters-Bayer 1988, see chapter 8), Islamization and sedentarization (Dupire 1970, Walker 1980, see chapter 9), the droughts made them very visible.

The ephemeral position of married women, and the changes prompted in social security arrangements by the present insecure situation, will be demonstrated in the next four sections by a discussion of types of marriage, the exchange of marriage gifts, the ways in which marriage partners are selected, and the rate of divorce. The effects of changes in these domains on the social security of married women and the economic and social base are the subject of the fifth section. In the last section these changes will be positioned in a larger context, that of society, by means of a discussion of the changes in marriage festivities, because these may be taken as symbolic of the changes in the position of women (cf. Monimart 1989: 39-49). The main focus in this chapter is on the Jallube, but where the differences are very prominent the Riimaybe and Weheebe are also discussed.

Marriage contracts

Betrothal and successive marriages

The Jallube distinguish two main forms of marriage. The first is called *cabbugal*, and consists of two stages. The first stage consists of the betrothal of two children at a young age.[3] The second stage is marriage itself which takes place when the girl has reached the marriageable age, i.e. when she starts menstruating. This marriage is arranged between the families of the two partners.[4] The second form of marriage is called *dewgal*. This is much more a contract between two individuals. These marriages differ not only with respect to type of contract, but also with respect to the moment at which the marriage is concluded, the stages distinguished in the marriage and the accompanying gifts, and eventually the wedding ceremony itself. For both forms of marriage the marriageable age, i.e. when the couple may start to live together, is 14 years for a girl and 18 for a boy.[5] It was said that the marriageable age is increasing, especially for girls. This may be due to the fact that they reach maturity, i.e. start menstruating, later than before. This is probably a consequence of the chronic malnutrition and the lack of milk in the diet.

The *cabbugal* is arranged by the parents of the marrying couple. When a child is still very young the parents may decide to marry her or him to a boy or a girl of their choice. According to Islamic rules, as described by two *moodibaabe*, Bukari Alasunna from Serma and Aamadu Muusa from Bunndu Jaabi, the negotiations for a *cabbugal* are done by the fathers, in the presence of a *moodibo*. This does not mean, however, that women have no say. On the contrary, women influence their husbands and they decide amongst themselves which marriage suits their children best and how conditions should be set. The following example shows an element of the women's roles. One day Dikoore Bukari and a group of women were sitting in our hut. They were visiting Mirjam because she was ill and stayed in bed for the whole day. The women discussed the negotiations that had been opened between Sambo, the husband of Dikoore, and Sana from Fetesambo, about a *cabbugal* marriage between a daughter of Dikoore and a son of Sana. The women knew exactly what was being discussed, and Dikoore made a plan what to tell Sambo for the next negotiations. Dikoore clearly considered the marriage good enough for her daughter. However, she did not agree with the amount of money Sana wanted to pay and she argued that it should be more.

A *dewgal* marriage is not pre-arranged when the marrying couple are still young. This marriage may be arranged by the marrying couple themselves, but in practice the respective families have considerable influence. One form of this marriage, the bride-capture (Dupire 1970:61), is not known among the Jallube. The Jallube abhor this custom, practised by the Fittoobe (Barri), a neighbouring lineage, because it does not conform to Jallube custom, and besides it is against Islamic rules.

Other marriage contracts that occasionally occur are the *janturu* and the marriage between old people as prescribed by Islam. *Janturu* is a marriage with the sister of one's deceased wife, or with the brother of one's deceased husband (cf. Dupire 1970:54-61). This is not frequently practised among the Jallube. We only recorded one such marriage, namely

between Bubaare Aamadu from Wuro Boggo and the sister of his late wife. And as people assured us this marriage was not obligatory. The marriages between old people mainly had a symbolic function. According to Islamic rules a woman is not allowed to be without a husband, and therefore old widows must be married. These marriages were mostly arranged by their children. The marriage partners often did not live together, because they lived with their children, who pre-inherited their cattle. Besides women could not expect any help from their old husbands or their family. This was, for instance, the case in the marriage between Abdramaane Hamma's father and a woman of Gawdeeru. The woman was very poor and her children could hardly care for her. Hamma Usmaane was not eager to help her, because he did not feel responsible for her at all. What did they share together?, he asked once. This marriage was arranged for them only to fulfil the rule. Many old people in Serma did not remarry after the death of their husband or wife.

Polygyny

Al'aada (Fulbe custom) and *juulde* (Islam) do not forbid polygyny. The number of polygynous marriages and the preference for this type of union differs according to social category. The Weheebe and Riimaybe practice polygyny much more than the Jallube. For the Riimaybe this may be linked to the women's economic role in the household. Riimaybe women add a substantial labour force to the family. They work on the land of their husbands and on their own land, and they have their trade, which in some cases is lucrative. Women in an agricultural economy are not competitors for land, which in most cases is not scarce, rather they can help each other with household tasks and so they profit from the polygynous structure of the household. For Weheebe women, however, this reasoning does not hold. Weheebe women, just like Jallube women, are not allowed to work on the fields, nor do they have a task in animal husbandry. Their only economic activity is making mats, a home-industry, but this is of no real importance for the household economy, but only for personal expenses (cf. Dupire 1970:81-82). Nevertheless, Weheebe men prefer to have two or more wives, when their wealth allows it. Polygyny is for them an expression of wealth, a symbol of status, and of religious zeal. A pastoral group tends to have fewer polygynous marriage contracts, as a consequence of its economy. In a pastoral society where women do not engage in work on the land, nor in trade, but only in the management of milk, being married to more than one woman is not a real advantage from an economic point of view. In a pastoral economy with a strong pastoral ideology two or more women in one household are always competitors over a limited resource, namely the milking rights in the cows in the herd. It is clear that most herds in Serma do not yield sufficient milk to profitably engage more than one woman in the milk economy.

Despite these economic considerations, a polygynous marriage is no longer an exception among the Jallube. In Wuro Kaaral, Wuro Boggo, Koyo and Urfina live 27 adult men in total, of whom 10 are older than 50 years. Of these 27 men 8 have two wives. There are various reasons for the existence of this arrangement, and, as some informants stated, for its increasing incidence. Factors like wealth and status, which are important among the

Weheebe, play a role among the Jallube too, but are not of much importance. Dupire (1970:80-81) links the relative importance of monogamy or polygyny to stages in sedentarization, and the nature and content of contact with other ethnic groups. She cites the example of the Wodaabe who take Moors and Tuareg as the standard for their preference for monogamous unions. The differences between the social categories of Fulbe society make this proposition for the Jallube unlikely. Another factor Dupire mentions is that a stricter adherence to the Islamic ideology may lead to a higher incidence of polygyny. This may be the case for Jallube. They probably copy the Weheebe in this respect.

Riesman found among the Jelgoobe (Fulbe) in Burkina Faso a high proportion of polygynous households. In his analysis of this phenomenon he relates it to the authority of men over women, which is according to Riesman inherent in Jelgoobe culture. According to his informants, a monogamous household is a household where the woman dominates, and the threat of a second, third or fourth wife is always there for a woman (Riesman 1977:92). In our view this power of men over women should not be overestimated among the Jallube in the Hayre (see chapter 4). Riesman's analysis seems to fit much more the situation of the Weheebe women, where male dominance is indeed a more salient feature of gender relations. The change towards more polygynous unions may, however, indicate a shift in power relations between women and men.

In the actual situation in which the Jallube live, a monogamous union may be a luxury. The crisis has led them into a situation in which women and men are to a certain degree forced into polygynous unions. After the droughts of 1985 many men left the region and left their wives behind, which led to an imbalance in the number of men and women in society, women being more numerous.[6] Some of these women are now without a husband, which is against *al'aada* and *juulde*. Their parents, uncles, and brothers look for men to marry these women, but this is not easy nowadays. The shortage of men and pressure of relatives leads many women to accept a polygynous union eventually. This was for example the case for Matta, the co-wife of Dikoore Bukari in Wuro Boggo. Her husband died and she had been a widow for a few years. In reverse a woman who in the past would have left her husband when he married a second wife, could not stop her husband now. How would she be able to find another husband? Although a woman without children is not 'doomed' in Fulbe society, the barrenness of a wife may be a reason to look for a second wife. Another very important reason for Jallube men and women to enter a polygynous union is 'love', which was not part of the arranged match. In a number of cases the first union would have been dissolved under normal circumstances, because the first wife would not have accepted a second wife in the *wuro*.

Among the Jallube not every man is a suitable marriage partner, because there are several prohibitions on marriage partners. A second wife cannot be a cross- or parallel-cousin of the first wife. In case of a marriage with a widow the relationship between the new husband and the deceased is important; they must not be closely related. However, the fact that these marriages are prohibited does not mean that they are not contracted. An example of such a prohibited marriage is the marriage between Abdramaane Hamma and Rukiata, who married shortly after the husband of Rukiata died, in 1987. The reason for this marriage was definitely love, they could not resist, despite the fact that Rukiata and

Yaaya Aamadu, the first wife of Abdramaane Hamma, are cross-cousins. It was gossiped that Rukiata used all kinds of magic to bind Abdramaane. These kinds of marriage are the subject of gossip and disapproval in Serma. In this case it decreased the status of Abdramaane Hamma, the counsellor of the Seedoobe.

In Serma wealth is not crucial for the polygynous union. There are simply hardly any wealthy people. In the richer camps, like Coofya, Koyo and Wuro Boggo, polygynous unions occur, but there also only a few families can afford this in economic terms (number of animals). A few examples from Wuro Boggo. Bubaare Aamadu is moderately rich, but his 30 cattle are not enough to supply his wives and dependents with a sufficient quantity of milk. The reason Bubaare married a second wife was that his first wife only gave him daughters, whereas he cannot really afford to support two wives (see chapters 7 and 8). The son of Abdramaane Hamma, Aamadu Maane, is head of a family consisting of two wives and three sons, yet he did not separate from his father's *wuro*. The simple reason is that the herd owned by his dependents and himself is not sufficiently large. The competition for the milk that one would expect in such a situation is not noticeable yet, because Aamadu's mother divided the milk among her daughters-in-law until the end of our stay. The reason for Aamadu to marry his second wife was clear, they fell desperately in love with each other. Sambo Usmaane married Matta as second wife, which was only possible because she brought a few cows with her and because Dikoore Bukari, his first wife, also had some animals of her own, so that both women were able to have their independent *fayannde* within his *wuro*. For Hamidu Usmaane, the husband of Jeneba, having two wives was no problem, his herd was large enough. Still his wives were always complaining about the amount of milk he gave them, which was indeed not enough to feed their children. Maybe this was the reason why his herd prospered. In the end Sambo Bukari from Koyo was the only one who could easily afford to have two wives, with his more than 200 head of cattle. His women's huts were the most beautiful in Serma.

The relationship between co-wives is hardly ever good in Jallube *gure*. Jallube women do not like to have a co-wife (*nawliraado*). They have several reasons for this attitude. In a polygynous unit they must share the milk production of the animals and the millet their husband brings into the household. The women are also competitors in other fields, for instance, for the expenditure of the husband for their beauty, the number of children, and the labour invested in the care of kids, lambs and calves. All polygynous unions we observed eventually ended up without any cooperation between the women. Co-wives thus nearly always have their separate *fayannde* within a *wuro* which are connected only through a shared husband. The aversion women have for the polygynous unit leads in many cases to *haasidaare* (jealousy) between the co-wives, which may lead to accusations of sorcery. Women go to the *moodibaabe* to influence their husbands not to marry a second woman, or to chase away an existent co-wife. In some cases women were suspected of killing or bewitching their co-wives. Women may also go to the *moodibaabe* to ask for means to attract a certain man, so that he is not able to refuse her. Mariamma Aamadu, herself married to a husband who married many other women, assured us that all these stories were nonsense and that it was thanks to her strength and perseverance that all her co-wives eventually left (cf. Riesman 1977:217).

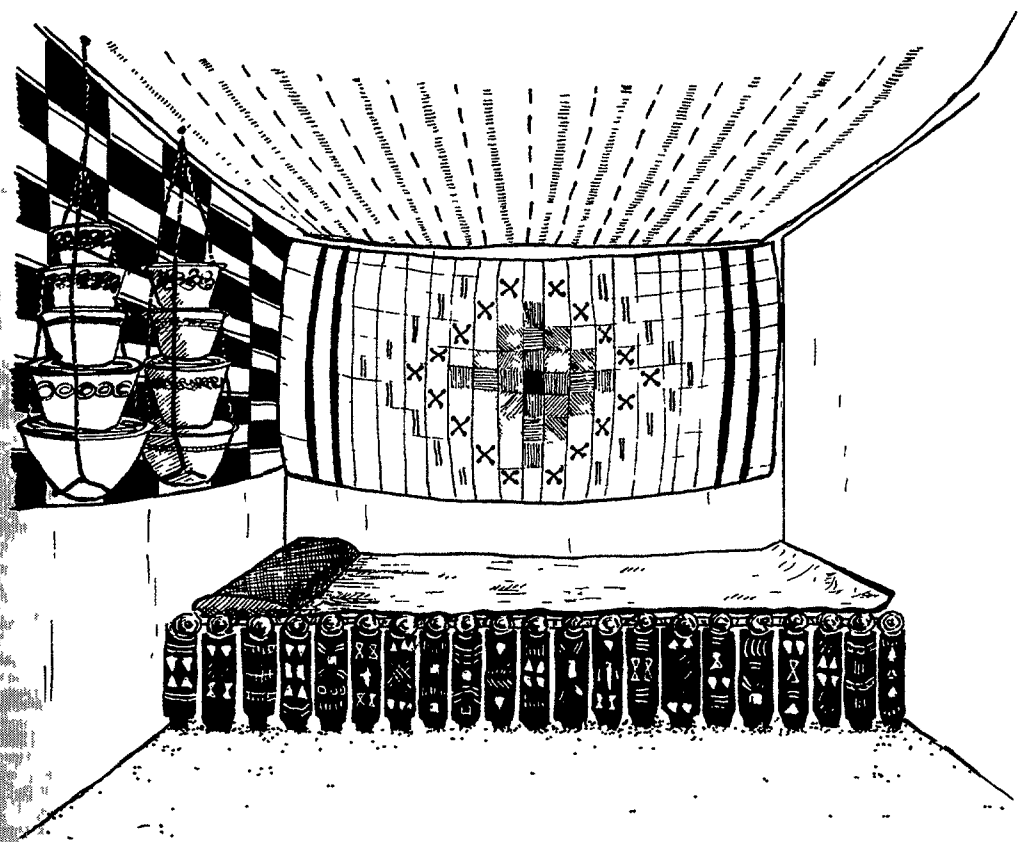
The marriage gifts ('dowry')

Over the last decades the exchange of gifts between the two parties involved in a marriage contract have not changed in form, but their content and volume have changed considerably. This may be a consequence of the impoverishment of the Jallube, but it must also be connected to the changes in preference for specific categories of marriage partners, as we will see below. That poverty is not the only reason is shown by the fact that among Riimaybe the exchange of gifts did not change in the same way, though they too are impoverished. They keep as strongly to the marriage gifts as in the past, although the marriage prestations are sometimes delivered with a considerable delay. These changes in marriage gifts, and their influence on a woman's position in a *cabbugal* marriage as well as in a *dewgal* marriage, will be explained below.

When parents have decided to betroth their children to each other (*cabbugal*) they start exchanging gifts on a regular basis. The rules for the amount of these exchanges are not strict and depend on the wealth of both parties. However, the kind of gifts and the moments of the gifts are prescribed. The exchange is mainly directed from the family of the groom to the family of the bride. The family of the future husband must give clothes, shoes, and small gifts to the family of the future wife at Islamic festivities. The two children realize already at a young age that they are betrothed to each other, and they will behave accordingly, as characterized by feelings of *yaage*. They will laugh and become shy when confronted with the fact of their betrothal. In a *cabbugal* marriage the family of the boy has to pay the *safannde* (money to be paid) at least some months before the time of the marriage. This money is used to buy household equipment for the girl in a *cabbugal* marriage. In a *dewgal* marriage the money is for the bride. The amount of money to be paid depends on agreement between the parents and on what the family of the boy can afford to pay. Informants told us that the *safannde* is less at a *cabbugal* marriage than at a *dewgal* marriage. The reason for this difference is the long relationship that precedes the *cabbugal*, and the fact that a *cabbugal* is between families, while a *dewgal* is often between 'strangers' who have their specific wishes.[7] However, in reality the amount of money depends on many factors, so that the *safannde* is highly variable. It seems that the variability of the *safannde* is higher in *dewgal* marriages than in *cabbugal* unions. The size of the *safannde* also depends on the kin relation between the families or between the spouses, on the beauty of the woman, on her age, and whether the union is a remarriage, or a first marriage. The amount of money paid in a *dewgal* depends on the reason why the marriage is contracted. A marriage out of poverty has no high *safannde*. The number of marriages of a woman will also influence the price. Beauty of a woman pushes the *safannde* up. In the past the *safannde* would be paid in animals (cf. Dupire 1970:26). Nowadays it is paid in cash. In the marriages we recorded the *dewgal* marriages were not always the most expensive. The smallest amount of money paid for a *cabbugal* marriage was FCFA 2,500 and the highest FCFA 20,000. For a *dewgal* the smallest was FCFA 500, and the highest FCFA 25,000.[8] In a *dewgal* marriage the husband also gives some clothes and a pair of shoes (the *kabbirgal*) in addition to the money of the *safannde*. This replaces the earlier gifts in a *cabbugal*, and therefore they are not part of the exchange at the time of marriage

in a *cabbugal* marriage. The *moodibo*[9] is the witness and advisor at the discussions about the *safannde*.[10]

Following Islamic rules the bride is entitled to half the sum of the *safannde*. The Jallube only partly keep to this rule. In a *dewgal* marriage the woman receives all the money, a part of which she divides among her family (*suudu yaaya*). In a *cabbugal* marriage the bride receives the money only in an indirect way. When her father obtains the money, he must give part of this to his wife. He keeps the other part for himself, which is meant to organize the festivities and to pay the *moodibo* who will officially contract the marriage. The mother of the bride uses the money to buy part of the dowry (*hurto*) for the girl. The *hurto* is a gift of the mothers (*suudu yaaya*) to the girls and it consists of her household equipment, of which the most important is the bed. The main elements of a bed, which a mother has to buy for her daughter, are 20 *aluuji* (wooden front plates), 20 bedposts, and several mats. The frame of the bed is constructed of branches of trees which are cut in the neighbourhood of the settlement. The 20 *aluuji* cost at least FCFA 10,000, the bedposts cost also FCFA 10,000, and the mats cost FCFA 5,000 each. The *hurto* is the property of a woman, and her family; her husband and his family have no say over it. The wooden part of the bed is made by a *gargasaajo*, or a Diimaajo. The mats are made by specialized Jallube women, or Weheebe women. Other things that are part of the dowry are silver jewelry and golden earrings, blankets, calabashes, and wooden bowls.[11] The amount



depends on the wealth of the family and on the seniority of the daughter. Especially the first daughter must marry rich, to show the prestige of the mother and her *suudu yaaya*. A mother is helped by her sisters and other members of her family to gather the *hurto*. A woman starts to increase the quantity of gold and silver she owns when her daughters are still young. Compared with stories about the past the *hurto* has become less extravagant, as is illustrated by the bronze anklets that were given to the bride in the past. In the past these alone cost at least one large bull that is worth 100,000 FCFA at present. These anklets were given together with the other things of the *hurto*. In that time there was no gold and silver included in the *hurto*.[12]

Nowadays Jallube mothers have difficulties in collecting the required amount of money for a normal *hurto*. A girl hardly ever receives a complete *hurto* in time, but in the course of the first years of her marriage her mother will gradually give her the necessary equipment. The youngest daughter often enters marriage without any gold and silver. A complicating factor for the collection of the girl's *hurto* is the manipulation of the money of the *safannde* by the fathers. They demand at least half of the money as their share nowadays, because they claim that they have to spend so much on the marriage of their daughters. In one case the father took all the money, because he said he needed the money to buy millet for his family who were starving. The fathers' claim is dubious. They but rarely slaughter animals for the ceremony, and buy only one set of clothes and shoes for the girl; in addition they must provide millet for the wedding meal. Their cash outlays are nothing compared to the money the mothers have to spend, and as the above mentioned case shows, they do not always use the money for the marriage.

Another part of the *hurto* are the daughter's pre-inherited animals. If the father is rich he will give his daughter some more animals when she marries. Her mother can take some animals from her own stock if there are any left. Furthermore the girl may take with her the animals that were given at her birth and on other occasions. From the Jallube women we interviewed it was only some older women who told us about any animals they took with them (up to nine head of cattle). The younger women who brought animals into their marriage most often lost them all during the droughts. The majority of women nowadays do not take any animal into their marriage.

Another round of gifts takes place a few years after marriage. A married woman always returns to the house of her mother to give birth to her first child. A few months to a year after the birth of this child she goes back to the *wuro* of her husband with many gifts. These gifts consist of millet cous-cous, rice (50 kilos at least), cooked millet balls for the millet porridge, butter and buttermilk. Gathering this food is difficult for the young women and their mothers nowadays. It may even cause a considerable delay in a young mother's return to the *wuro* of her husband.

Another important 'gift' is the *futte*.[13] The *futte* consists of the animal(s) given by the husband to his wife on the occasion of the marriage.[14] The *futte* is not part of the *safannde*. In fact it is a transfer of property rights over cattle from the husband to his wife. It is not regarded as part of the *hurto*. The *futte* is indicated by the husband at the moment of the (Islamic) marriage ceremony, in the presence of the *moodibo*. It is in the first instance not shown to the woman. She only gets to know her *futte* by giving it to her

children in pre-inheritance, and by the fact that she has milk rights in the animals. However, women marrying close kin have often known the herd of their husband since their childhood, and they easily recognize the animals belonging to their *futte*. The number of animals given as *futte* depends on the wealth of the husband, or his family.

The *futte* as put into practice nowadays among the Jallube is at variance with the Islamic orthodoxy. Islamic rules give the woman exclusive rights to the animals of her *futte*. Thus a woman has to know the animals, and she can take the animals with her in case of divorce when this is on the initiative of the husband. In other Fulbe groups this is indeed the case. For example among the Jelgoobe the *futte* goes to the woman, and her father takes care of the animals until the marriage proves to be stable (Riesman 1977:81). In Serma the women are not able to lay a claim on the animals of the *futte*. Women also disagree about the claims they have on the *futte*. Hadjara Aamadu from Wuro Kaaral (70 years old) was very clear about her rights. She stated that women became the owners of the *futte*, but as the women leave these animals in the herd of their husband who takes care of the animals they become in fact 'property' of the husband. However, if a man 'eats' (*nyaami*) the animals of the woman, then the woman has the right to withdraw the remaining animals and to give them to her *suudu baaba* to herd. This may also concern the animals a woman has already given in pre-inheritance to her children, or that are part of her own inheritance. Hadjara based these ideas on her own life-experience. When she was married she once asked a *moodibo* to mediate between her and her husband when he 'misused' her animals. Young women were not so outspoken about their rights to the *futte*. A few young women told us that they did not know the number of animals their *futte* consisted of, others admitted they really do not care. Both arguments seem contradictory with the function the *futte* has for the women, i.e. they have exclusive rights on the milk of these animals, and if their husband dies they will inherit these animals. Thus the *futte* may be regarded as a life insurance (cf. Dupire 1970:27). However, in case of divorce among the Jallube a woman never claims the *futte*, as she considers them the property of her husband rather than hers.[15]

Because of the loss of cattle there has been a notable decrease in the number of animals constituting the *futte* in Serma. This may explain the different views old and young women have on their rights over the *futte*. Women who married after 1985 only received one cow as *futte* or no animals at all (11 marriages were recorded), so it is not worth the trouble to claim this single animal. From the 68 marriages recorded before 1985 only in five cases was a *futte* of one cow given, the other *futte* varied from two head of cattle (four cases) to nine (two cases). In claiming the *futte* the women also lack the support of the *moodibaabe*. The *moodibo* always chooses the side of the men in conflicts about the *futte*. *Moodibaabe* confirmed this, and explained this deviation from Islamic rules as a result of the tension between *al'aada* and *juulde*. Women complained about it and said that they would not even think of going to a *moodibo* in these cases. For instance Kumboore Buraima who wanted to divorce Bana because he sold her son's animals to marry a second wife (see below), argued that it would make no difference if she went to a *moodibo*, because a *moodibo* would always choose the man's side. Another indication of the weak protection of women's rights in her animals in the herd of her husband were the numerous complaints of women that their animals were among the first to be sold when the family needed grain. They could not

refuse their husbands permission to do so, because they could not see their children starve, so they said. That the women's animals were sold first, and even died first in the droughts or due to illnesses, was confirmed by some men. This practice may have been the same in the past, but then it was not so problematic because the number of animals owned by women was much higher. The limited control of women over their *futte* has become worse with the drought. Men simply cannot acquire grain in any other way than by selling animals, and women cannot refuse permission when the food of their own children is at stake.

If we consider the marriage prestations from the perspective of the new *fayannde*, which is created by the marriage, it is striking that all these gifts may be regarded as investments by both the boy's and the girl's family in the maintenance of the children who will be born from the marriage union. The boy's family invests more, because the children primarily belong to his family. The gifts constitute the household equipment for a *fayannde* and the economic base in the form of milk rights on the animals of the *futte*. The gift exchange may therefore be regarded as an indirect dowry system (Goody & Tambiah 1973). Equally remarkable is the fact that among the Jallube both families hardly invest any prestige in the marriage gifts. This is also expressed by the absence of any ceremony related to the giving of the gift. It is an affair mainly between the parents of the couple to get them started in life. The lineage, the *suudu baaba*, and *suudu yaaya* do not play a decisive role in the whole affair. Only the *suudu yaaya* of the girl is mobilized to build the hut for the bride. This contrasts with the marriages of Weheebe and Riimaybe in town.

The low value of the gifts and the absence of ceremony are characteristic of a nomadic lifestyle as Dupire explains: '... *ce mode de relations (...) ne lie pas les individus et les groupes d'une manière continue et inextinguible comme le ferait un systeme de dettes et de créances que pratiquent autres sociétés. Il est adapté à une vie nomade ou l'insécurité économique, l'instabilité résidentielle menacent chacun. Recouvrer des dettes en de pareilles conditions d'existence serait une entreprise sterile, vouée à l'échec...*' (Dupire 1970:32). Although the Jallube are not as nomadic as the Wodaabe, this description suits them well, even better now that the maintenance of the principle of reciprocity has become extremely difficult as a consequence of impoverishment.

Another aspect of the gifts that needs our attention is the absence, or practical absence, of the exchange of meat, the ritual slaughtering of animals. This is most probably caused by the droughts and impoverishment. It may also be an effect of the Islamization of the Jallube. In a comparison between Islamized and non-Islamized Fulbe Dupire (1970:26) found a modification of the exchange of marriage gifts in the first marriage. From her data she concluded that Islamization and a decrease in the exchange of animals went hand in hand. This was the case, for example, among semi-nomadic Fulbe in Adamawa (Dupire 1970:29). In the marriage gifts the importance of the brideprice augmented and the gifts got a more reciprocal character. These trends were not visible among the Jallube of Serma. As the slaughtering of animals has also become a problem for the Weheebe, who are very fond of meat, and are more fervent muslims, and have a more prestigious wedding party than the Jallube, it seems likely that the absence both of ritual slaughter during the ceremony and of the exchange of cattle as gifts is an effect of the general impoverishment rather than of

Islamization. Moreover, people assured us that in the recent past they slaughtered animals ritually.

Comaroff (1980:33) suggests that the marriage prestation, as part of the transfer of material objects, '... represents a point of articulation between the organizational principles which underlay and constitute a socio-cultural system and the surface forms and processes which together comprise the lived-in universe'. And if it is true that 'marriage payments [may] act as a grammar in defining male and female roles (...)' (Parkin & Nyamwaya 1987:9) then the way marriage gifts are organized in Jallube society points at specific characteristics and trends in Fulbe society. The fact that all gifts are (indirect) dowry meant to set up a new *fayannde* implies that the *fayannde* is the basis of social organization of the Jallube. The erosion of the marriage prestations as presented above thus may be a symbol of the deterioration of the *fayannde* as an independent unit, which must have consequences for the position of women in the *fayannde* and in the *wuro*. The rights in the *futte* exemplify her social position. As we have seen, men try to gain influence over the *futte*, in which they are supported by the *moodibaabe*. The ultimate consequence is that women no longer receive a *futte*. This may indicate a tendency towards more control of the *wuro* over the *fayannde*, i.e. of men over women. The role of the *fayannde* is eroding as the representative of the woman's kin group (*suudu baaba* or *suudu yaaya*) in the domain of the *suudu baaba* of her husband, and as the symbolization of a married woman's unsettled position between kin and affines.

Choice of marriage partners

Two cases

The way the social organization of women is arranged and the economy of the *wuro* is structured in Jallube society imply that the relationship with the marriage partner is essential for the content and stability of a marriage union. Some concrete cases of marriages will give insight into choices of marriage partners among the Jallube: the family of Abdramaane Hamma, a relatively rich family, and the family of Hamma Aljumaa, a relative poor family. Both families live in Wuro Boggo. Abdramaane Hamma is a Ceedoowo of a sub-lineage that is politically dominant in Serma (see chapter 4). The marriages he arranged for two of his daughters can be situated in a tradition of marriages between two large families of the Seedoobe: the family of Hamma Usmaane Buraima Aluure, and the family of Aamadu Hamidu Buraima Aluure (see figure 4.3b). Two sisters of Abdramaane Hamma were married to men of the group of Aamadu Hamidu Buraima Aluure. Ay Hamma married Bubaare Aamadu (they live in Wuro Boggo), and Fatumata Hamma married Allaaye Aamadu (both died). A sister of Bubaare also married a Ceedoowo, but of another sub-lineage. One daughter of Abdramaane married a son of another brother of Bubaare, Bura of the Bana'en brothers (residence in Wuro Boggo). His youngest daughter was married in 1991 to a son of Bana, who is a nephew of Abdramaane (see below). Moreover, these marriages were all between neighbours in the same camp. Abdramaane's eldest daughter

married a nephew of Bukari in Koyo. These choices may be influenced by residence, but also by the wealth of the families in this network. Abdramaane himself married a Hawgiijo woman. A marriage between Hawgiibe and Seedoobe at the time (1960) may be explained as politically strategic. His eldest son Aamadu married a daughter of Yero, the most prominent man in Urfina. The next son to marry is Alu, who will marry a daughter of one of the half-brothers of his mother, who lives in the neighbourhood of Duwari.

Similar considerations weighed with Hamma Aljumaa, his wife, and children, though from the opposite position. They are much poorer than the family of Abdramaane Hamma and Hamma Aljumaa is not a member of a politically dominant lineage. One of Hamma Aljumaa's daughters, Jeneba, married a *moodibo* who is rich and wealthy, and on top of that a Ceedoowo. This marriage has several advantages for Hamma Aljumaa. The blessings of the *moodibo* will also reach the family of Hamma Aljumaa. His daughter has a relatively wealthy life with this *moodibo*. She will study the Koran a little which will give her status. This marriage integrates Hamma Aljumaa into the Seedoobe lineage with which he identifies himself already. The family in Wuro Boggo will also profit from the material wealth of the *moodibo*, who is their son-in-law. The *moodibo* himself has chosen Jeneba as his second wife because she is a beautiful woman. Jeneba has a light skin and a long nose; she is an ideal woman. That she is barren is not a problem for the *moodibo* as he already has children by his three other wives. Jeneba could simply not refuse this marriage, and she says that she is happy this way. Another daughter, Pennda, married a Kummbeejo merchant in Duwari. We have seen that Pennda's husband, although not totally accepted by the family, helped them during the dry season when they camped near Duwari. Hamma's youngest daughter was married in 1991 to her *denndi* (cross-cousin), a son of a sister of Hamma Aljumaa in Beebi. Hamma Aljumaa did not want his daughter to marry yet, because he considered her too young, but he could not refuse the demand of his sister who had helped him in the years of scarcity, and now wanted to have a helping hand in the household. In fact he gave his daughter away as a recompense for his sister's help, but at the same time this was considered a good match between close kin. The two eldest sons are not married. They left Serma after 1985 and are considered 'lost' (*be njiilan*). The disabled Buraima, Hamma's third son, who had polio when a child, has not found a wife after his first divorce. The fourth son married an adopted child of a family in Fappittoo in 1990. This marriage strengthens the ties between families within Serma, but does not add to the wealth of the family.

From these two examples we may discern several reasons behind the choice of marriage partners in 'first' marriages of the families concerned. These are kinship, neighbourhood, wealth, political reasons, strengthening the bonds between dominant lineages, or integration of one lineage in the other, social security, religious and political status. In the following we will investigate the choice of partners among the Jallube in Serma by the criteria of endogamy, kinship, residence, wealth and politics. And we will investigate what the consequences of changes in these choices are for the woman's position and social security.

Endogamy

According to the rules associated with *ndimu* (what it takes to be noble) the Jallube are endogamous. Nobles marry nobles. However, among the Jallube endogamy is defined more strictly than that. They do not marry Riimaybe women as the Weheebe do, nor Weheebe themselves, although they are considered nobles as well. The Jallube practice clan and residential endogamy. Jallube only marry Jallube and in preference only from a certain region, for instance restricted to the Jallube living in the area of Booni, Hayre-Monndoro, which also implies that in general marriages are also limited to certain lineages. This strong endogamy is a 'tool' for the Jallube to claim a 'purer' *ndimu* status than the Weheebe (see chapters 4 and 6).

A rule would not be a rule if there were no exceptions. The two Barri men of Wuro Kaaral who are married to Dika and Aminata Bulo (see figure 4.2a) were accepted by the Jallube. The people of Serma consider the husband of Dika (who died 20 years ago) as a good person, and what was more, he integrated well into society. He took over the *al'aada* from the Jallube. The husband of Aminata is a *moodibo* and thus part of the Islamic community (*alsilaame'en*) to which the Jallube also reckon themselves. Some non-endogamic marriages, recently concluded, were disapproved of, and were the object of gossip. These were marriages of Jallube women with Hummbeebe men, with men of other Fulbe lineages, and with Riimaybe men. These unions partly grew out of poverty, though we may not exclude the attractiveness of the outside world. One example is the marriage of Pennda, a daughter of Hamma Aljumaa (see above). She was married to a Jallo and they had two children. In 1985 all their cattle perished and Pennda's husband left the area. They have heard nothing of him ever since. Pennda divorced him (which is possible after the intervention of the fathers of both marriage partners), and she looked for another husband. She decided to marry her present husband, a Kummbeejo merchant, who was very rich and already married to two other women. Nowadays she lives with him as his third wife in Duwari. Her father and mother never consented to this marriage, but they could do nothing about it because it was her second marriage, and in this instance a woman is free to choose the man she likes. Another example is the grand-daughter of Fatumata Aamadu from Wuro Kaaral. She married a Barri from the Inner Delta of the Niger. He camped near Serma during the rainy season of 1989 while herding the cattle of a trader in Booni. They fell in love with each other. It was said that the love of this girl was probably influenced by the number of animals this herdsman slaughtered for her and the wealth he possessed. Fatumata was not proud of this marriage.

People who migrated with their family to the south after the drought of 1985 are considered as lost by the Jallube in Serma. Their children will marry men and women from other Fulbe lineages and will not return to Serma, but instead integrate into other lineages. These people are simply no longer counted in the genealogies, or it is said that their situation is unknown. South of the Hayre on the Bandiagara Plateau we met some Fulbe who migrated recently. Barri and Jallube lived in one cattle camp and undertook the transhumance together (see de Bruijn & van Dijk 1988). This process of integration into other lineages is also described for migration to towns (cf. Frantz 1975). Best (1982) found

the same process among Fulbe in Senegal. He concluded that this migration and integration into other lineages is the result of impoverishment.

Kinship

The Jallube emphasize their preference for marriages between close kin, and at the same time they speak of an erosion of this 'rule' during the last decades. Any kind of cousin was preferred: i.e. *bibbe yaaya* (matrilateral parallel cousins), *bibbe wappaybe* (patrilateral parallel cousins), and *denndiraabe* (cross-cousins) without differentiation between matrilateral or patrilateral cross-cousins.[16] The reasons behind these preferences are explained differently by men and women. Bubaare Aamadu, from Wuro Boggo, told us that for him it was important to keep a daughter within one's own *suudu baaba* (patrilineage). If she marries a patrilateral parallel cousin, the cattle which she takes with her remain in the *suudu baaba*. A son may marry outside his *suudu baaba*, as he is likely to stay with his father, and his cattle remain within the *suudu baaba*. Bubaare speculates on a customary rule that (as was shown in chapter 4) is not always followed: men often leave their *suudu baaba* to settle with their maternal uncle. Hamma Bama, from Wuro Kaaral, also preferred a marriage with a patrilateral parallel cousin, as this keeps the cattle within the family. Furthermore, such a marriage is sanctioned by Islam.[17] Fatumata Aamadu, from Wuro Kaaral, favoured a marriage between matrilateral parallel cousins, which is a relationship of pity and care (*yurmeende*). Nevertheless, everyone agreed on the three preferred categories of marriage partners, with *bibbe yaaya* or *bibbe wappaybe* as first preference.

In fact Bubaare and Hamma stress the point that cattle should be kept within the *suudu baaba*. Fatumata emphasizes the social security of women. A woman may expect most social security from the members of her *suudu yaaya*. However, any partner who is related through another close kinship tie will feel this obligation more than non-kin, i.e. *reworbe*. According to all these informants the proportion of marriages with strangers, *reworbe*, is increasing. This would imply that both arguments for the preference -keeping cattle together and guaranteeing social security for women- have become less important, or that rules in relations to those aspects have changed.

Control by the family over choice of marriage partners is greatest in a *cabbugal* marriage. We may expect that in this type of marriage the preferences will be most outspoken. In a *dewgal*, which is more a decision of individuals than a *cabbugal*, there may be another preference. The data on marriage practices we gathered in Serma may give some insight into preferences for certain categories of kin, and the presumed tendency towards more *reworbe* marriages, while showing differences between men and women with respect to these issues. We interviewed 32 Jallube women and 18 Jallube men. The women all entered a *cabbugal* marriage and contracted a *dewgal* marriage 54 times. The men also entered a *cabbugal* marriage and a *dewgal* marriage 43 times.[18] In these interviews we were not interested in the real kinship relations, but in how the respondents defined these relations themselves. The 'real' relations are often difficult to discern, because people are frequently related to each other through various kinship ties (see chapter 4).

Table 10.1: *Kin and non-kin relations between spouses, by type of marriage and sex*

	WOMEN					MEN				
	non-kin		kin		n	non-kin		kin		n
cabbugal	25%	(8)	75%	(24)	32	28%	(5)	72%	(13)	18
dewgal	39%	(21)	61%	(33)	54	56%	(24)	44%	(19)	43
both	34%	(29)	66%	(57)	86	48%	(29)	53%	(32)	61

Table 10.2: *Cabbugal-relations between spouses, by generation and sex*

	WOMEN						MEN					
	b.w.*	b.y.*	dennd*	other kin	non-kin	n	b.w.*	b.y.*	dennd*	other kind	non-kin	n
I	75%	-	13%	-	13%	8	-	-	25%	75%	-	4
II	9%	9%	27%	18%	36%	11	17%	-	17%	17%	50%	6
III	46%	8%	8%	15%	23%	13	-	-	25%	50%	25%	8
mean	41%	6%	16%	13%	25%	32	6%	-	22%	44%	28%	18

Table 10.3: *Dewgal - relations between spouses, by generation and sex*

	WOMEN						MEN					
	b.w.*	b.y.*	dennd.*	other kin	non-kin	n	b.w.*	b.y.*	dennd.*	other kind	non-kin	n
I	9% (2)	4% (1)	18% (4)	31% (7)	40% (9)	23	9% (1)	-	9% (1)	27% (3)	55% (6)	11
II	7% (1)	-	36% (5)	14% (2)	43% (6)	14	-	6% (1)	17% (3)	11% (2)	67% (12)	18
III	6% (1)	12% (2)	24% (4)	24% (4)	36% (6)	17	7% (1)	7% (1)	21% (3)	21% (3)	43% (6)	14
	7%	6%	24%	24%	39%	54	5%	5%	16%	19%	56%	43

* b.w. = *bibbe wappaybe* (patrilateral parallel cousins), b.y. = *bibbe yaaya* (matrilateral parallel cousins), dennd = *denndiraabe* (cross-cousins)

I = $x > 60$; II = $40 < x \leq 60$; III = $20 \leq x \leq 40$

As table 10.1 shows, in a *cabbugal* marriage there is in practice a clear preference for marriage with kin. Men and women do not disagree in this respect. However, from table 10.2 it follows that men and women do classify their kin related partners quite differently in a *cabbugal* marriage. Women define their partners more often as *bibbe wappaybe* (41% against 6%). Men said more frequently that they married women from the category 'other kin'. The total percentage of *cabbugal* marriages with closely related kin, however, indeed shows that families do try to find specific categories of kin as first marriage partners. Jallube frequently marry their 'sisters', 'brothers' and cross-cousins. Marriage with a child of one's mother's sister, or between 'father' or 'mother' and 'child' (marriage with one's *kaw, bappaanyo, yaaya, goggo*) does appear, but cases are very rare and were mainly defined as such by men. For the *dewgal* unions the choice of marriage partners from the preferred categories is not clear, the percentages vary by sex and the difference between non-kin and kin marriage is not so large, with a higher preference of women for defining their partners as kin (see table 10.1). Also in *dewgal* unions men and women define kin differently as table 10.3 shows. However, this difference is not so extreme as in the *cabbugal* marriages.[19]

The preference for kin is clear. However the preference for favoured categories is not very explicit. All kinds of kin relations between partners were recorded. The higher preference for kin in *cabbugal* marriage confirms the idea that the kin groups have more control over the choice of marriage partner in this instance. The fact that we do not recognize the pattern specified by our informants may be a result of the unavailability of the preferred marriage partners. There is not always a person of the right category available at the moment of the marriage. The high percentage of *reworbe* marriages may be due to the simple fact that there are more *reworbe* than closely related people of one person. Unfortunately we do not know what pattern would emerge in a small population which intermarries so frequently when there was no preference for specific kin categories. In fact any marriage seems to be permitted as long as it is within the Jallube clan. All kind of kin relations are possible.

Differences between men and women in the definition of kin relations with marriage partners probably follows from their expectations of the marriage. For a man the children are most important, they continue his *wuro* and *suudu baaba*. The cattle the future spouse brings in are relevant for the husband. His wife will eventually become part of his *wuro* and thus it is less important for him where she comes from, although he may prefer close kin. For a woman the type of kin relation is more important, because of the 'care' she and her children expect from the husband and his family. Thus she may select from the different links with her husband the one that suits best from the perspective of social security. She may also define a kin relation over more generations where a man would be inclined to define the relation as non-kin. Further the difference between men and women may be a result of the fact that women are in general keener on *al'aada* than men.

Table 10.2 and 10.3 also show differences between age groups. As the data show, the number of *reworbe* (non-kin) marriages does not increase, neither in the *cabbugal* marriages, nor in the unions classified as *dewgal*. The people of age group II seem to marry more with *reworbe* than people from age groups I and III. So in contrast to what

respondents suggested, the data do not indicate an increase in the number of *reworbe* marriages over the last decades, but a decline. The respondent's impression does however reflect their perception of reality. Do they no longer consider the keeping of cattle together, or *yurmeende*, as relevant? Or do the interpretations of respondents reflect their preoccupation with the decline of social cohesion and moral codes? However, the differences between the three age groups, notably the decrease in *reworbe* marriages in group III, may also suggest another reason why people prefer to marry close-kin. This reason is the general impoverishment of society. In a marriage between close kin expenses on gifts and festivities can be kept low. But at the same time the guarantee of social security for the daughters who are married away is higher. The argument of cattle no longer is important; most cattle have been lost. The period when the *reworbe* marriages were contracted in generation II was the most prosperous of this century.

Given the data, is there sufficient evidence that the Jallube indeed marry with certain categories of kin? Or is it inevitable to marry kin in a strictly endogamous group? It seems that the most important conclusion is that men and women have quite different opinions about marriage and the value of kinship relations. Men seem to value especially the economic aspect and children, whereas women attach a high value to social security relations. The decrease in practice instead of the presumed increase in marriages with strangers (*reworbe*) is more telling about the feelings of (social) insecurity people have than about marriage practice. It is probably not kinship alone which directs the preference for marriage partners, not in the past and certainly not in the present. There must be an additional factor.

Neighbourhood

Many Jallube mothers expressed their wish that their daughters marry nearby, so that they can visit each other regularly. If the daughter lives in the neighbourhood of her parents she also has easy access to help from her own kin group, and the mother may rely more easily on her daughters. Some old women explained that long distance between a woman and her kin is an important reason for divorce. In our sample we also gathered information on residence. From the 86 marriages of women in the sample the changes of residence of women after their marriages, *dewgal* as well as *cabbugal*, were recorded also. It appeared that young and old women from Serma married from within a radius of 15 kilometres from Serma, regardless of whether a kin or non-kin relationship existed between the spouses. The few exceptions concerned a Jallo woman of 42 years who married a Beweejo in Booni, and therefore lived a few years in Booni. Another exception is Dikoore Bukari. She came from Yirma and settled with her husband's family in Wuro Boggo. Serma, however, appeared to be the residence of Dikoore's *suudu yaaya* (her mother's family). At present her mother lives in Fappittoo.

During our stay we witnessed marriages only between inhabitants of Serma, most often even between girls and boys of the same cattle camp.[20] Only one marriage was contracted between partners who lived far from each other, between a son of Abdramaane Hamma in

Wuro Boggo and a girl from Duwari, who was a daughter of a half-brother of his mother. Her father migrated to Duwari as a consequence of the droughts in 1986.

From a survey conducted among Jallo women who live in Booni nowadays, it appeared that the Jallube north of Booni also marry within a certain radius north of Booni. Further most people we met near Duwari contracted marriages with people who were also settled in Duwari. These 'new' marriage clusters and the tendency we found in Serma indicate that Jallube attach much importance to the residence factor in their choice of marriage partners, though preferences are framed in a kinship discourse. The areas within which most marriage ties are realized overlap with the migration of the people between different rainy season camps (see chapter 4).

It is not clear whether the preference for marriage partners from a small region is higher nowadays than in the past, or whether it has always been the rule for the Jallube. For the Weheebe in Dalla it is clear that marriage partners are selected from an increasingly smaller region. At present most marriages are contracted between people from the same chiefdom and even from the same village, whereas in the past most marriage bonds were formed between Weheebe from different chiefdoms. In the past unions with partners from other ethnic groups, such as the Sonrai, were arranged frequently. These were political marriages with the purpose of establishing political relations between chiefdoms and important families. In the present political situation such marriages no longer have a function. This is only one reason why these marriages are no longer contracted. The second reason is the impoverishment of the Weheebe especially in Dalla. They can no longer afford to organize large festivities and to pay the high brideprices that accompanied these 'political' marriages.[21]

Preference for marriage partners and change

How do these patterns of selection of marriage partners fit in with the changes in Fulbe society and the difficult current situation? From the analysis of the data it becomes clear that many factors influence the choice of a specific marriage partner: kinship, residence, wealth, the social security of the woman, and love. However, some factors seem to be more important than others. In the first place the Jallube of Serma are highly endogamous. They select marriage partners only from the Jallube clan. In the rare instances where this rule was broken there were exceptional circumstances such as extreme poverty. If such a marriage is contracted this has considerable influence on the relation with the affines, the *esiraabe*. Normally this relationship is dominated by feelings of *yaage*, mutual help and respect. Given the fact that Jallube women are highly esteemed for their beauty by other ethnic groups, their non-Fulbe husbands are inclined to invest considerably in the relationship with their affines, which implies that they support the families of their wives.

Secondly, endogamy seems to be confined to a limited geographical area, not only for the Jallube of Serma, but also for other Jallube in other areas, and, increasingly so for the Weheebe. This implies that all kinds of political and support relations formed by marriages and the ensuing kinship ties do not extend beyond the confines of this territory. Another

implication is that political considerations in the choice of spouses are absent. There is no evidence for the exchange of women between lineages on the regional level, nor on the local level. This may indicate that the political organization of the Jallube is shifting from the *suudu baaba* in its lineage signification to the *suudu baaba* as a geographical, village or area based unit. This tendency was also apparent in the spatial/territorial organization, and signifies an increasing tendency towards sedentarity (see chapter 10). This is also an indication of the limited contacts of the Jallube with the outside world.

Within the confines of the geographical area much emphasis is put on kinship as the major selection criterion for a marriage partner, especially in *cabbugal* marriage. This is congruent with findings of Dupire who argued that, just as in Serma, kinship, residence and considerations with regard to wealth, especially the inheritance of cattle, play a major role in the selection of spouses (Dupire 1970:486). As a result most *cabbugal* marriages are contracted between close kin, of the same socio-economic strata. Within the confines of the territory rich people marry rich people. In Serma, people in Urfina, Koyo and Wuro Boggo preferably select partners for themselves and for their children from each others' camps. Marriages between the poorer strata are also confined to specific camps, in this case Nguma and Wuro Kaaral. This is also the reasoning followed by male respondents in Serma. Even if we look at *dewgal* marriages this trend is discernible.[22] Another advantage of marrying close kin and neighbours is that no extensive ceremony is needed, which fits well with the present situation of scarcity.

However, these considerations concern only the perspective of the male part of the population. From the point of view of women other considerations also play an important role, i.e. the position of the woman in the marital union and the provision of social care for the woman, her own kin and the children. In present circumstances marrying close kin or neighbours is likely to result in a more secure position for the woman. She may expect more care from her husband's family, because she is related to them, and she has a fall-back option nearby in the form of her own family, resulting in a higher degree of independence of her *fayannde*. Conversely her mother may expect more care from her daughter when she is living in the neighbourhood. This female perspective on social security will be worked out in the next two sections.

Divorce

Despite the social security aspects of marriage, the Islamic rule that a woman must be married, and the preferences for marriage partners, divorce is a structural aspect of marriage in Jallube society. Almost all *cabbugal* marriages end in divorce, and *dewgal* marriages are not very stable either. From our sample of 32 Jallube women, ranging between the ages of 20 to 72, only six still lived with their first partner. The others had divorced between one and seven times. The 18 Jallube men from our sample had all married between two and eight times. Of the 18 *cabbugal* marriages only three are continuing within a polygynous union. Other subgroups of Fulbe society in the Hayre have lower divorce rates.[23] Among the Jallube marriage instability was high in the past and it is

still very high. The difference between today and the past must be sought in the reasons for divorce, rather than in the frequency of divorce.

High instability of marriage is not exceptional among Sahelian pastoral populations. Among Wodaabe one divorce per three marriages is normal (Dupire 1970:75). Among the Tuareg the rate of divorce varies a lot depending on the social organization of the group. Worley (1988) found among the Tuareg of Niger, of the group of nobles, that about one third of the men and women had separated at least once. One tenth of these people remarried for the second time (ibid:274). Among the northern neighbours of the Jallube, the Tuareg of the Gurma, all women married at least twice (Randall & Winter 1985).

Randall & Winter (1985) explain the high rate of divorce by the tension that exists between the relationship of the woman with her own family and her relationship with the husband. Among the noble Tuareg, who participated in their survey, the latter relationship is much weaker than the first. Thus in this respect divorce is not very problematic, since a woman can always fall back on her own family. Moreover, the basis of the economy of the household is the herd in which animals of husband and wife are pooled, but the woman's share is not very large. The contribution of a noble woman to the labour of the household is minimal in the Tuareg economy. This low economic 'value' of these women renders divorce less of a rupture in the organization of the household economy. Except for the low economic 'value' of women this explanation suits the Jallube very well. Among the Jallube the social security of a woman also balances between the family of birth and the marital unit. However, if there is milk a woman has an important role in the economy of the *wuro*, and she does other kinds of work.

The analysis of marriage stability among various groups of Fulbe in West Africa made by Dupire (1970:76) reveals four other reasons that may lead to divorce: a too small quantity of milk, i.e. few cattle;[24] absence of children; a bad relationship between the couple, and between co-wives; and the large distance between the married woman and her own family. All these reasons mirror the care of the husband for his wife, and reflect his capacity to fulfil his obligations towards her. Jallube women said that if their husbands neglected them, i.e. gave no clothes and only a little milk, they would leave him. The argument of Dupire that more children stabilize a marriage is not confirmed by our data. Many Jallube women had children in all their marriages that ended up in divorce. Children seem no impediment to divorce. They may be an important reason to 'repair' a marriage, but in many cases this is not successful.

The nature of gift exchange during marriage among the Jallube is probably another explanation for the high rate of divorce. The gift exchanges are very low and non-reciprocal and there is no need to pay them back in case of divorce. The contrast with the Weheebe makes this point very clear. In their marriages more money is involved which must be paid back in case of divorce (as Islamic rules prescribe). In some cases the failure of the family of the woman to repay the money prevented her from remarrying for several years. At the same time this leads to a more 'stable' marriage, for there are considerable costs involved in divorce.

In case of divorce the Jallube keep to Islamic rules regarding remarriage. According to these rules, as explained by the *moodibaabe* in the Hayre, a man is allowed to marry the

same woman three times consecutively for a Jallo, and twice for a Diimaajo. This difference stems from the time when the Riimaybe were slaves, to which their actual status is still related.[25] This rule is easy to circumvent, because a short marriage with another person in between makes it possible to remarry the same woman or man again.[26] This may happen in cases where husband and wife have frequent fights, and therefore separate frequently. When there are children their respective families, but also they themselves, will try to repair the marriage, as in the case of Aamadu Maane, the son of Abdramaane Hamma, and Ay Yero. They married five times. Their first marriage was a *cabbugal* marriage. They divorced because of misunderstandings between them. Their child was the reason for them to remarry again. In the meantime Aamadu Maane fell in love with another woman, Aisatu from Koyo, whom he wanted desperately to marry. Because Ay did not agree he divorced her again, but not for long because Ay was expecting her second child, and besides they liked each other one way or another. Aamadu had not yet married Aisatu. This third marriage of Ay and Aamadu again ended up in divorce. Ay's mother was tired of the affair and tried to convince Ay to marry another man, who was her cross-cousin. Ay did this. She divorced this man, because he lived too far from the camp of Ay's family, while Aamadu lived next door. Besides Ay had two children with Aamadu, and the relationship with the family of Aamadu was quite good, and also Ay missed Aamadu whom she really loved, so that she accepted Aamadu's second wife and they married again. Again it ended in divorce. This time it was because Ay could not stand the fact that Aisatu did not do any work in the household because she was very ill. The real reason may have been that Aamadu preferred Aisatu to Ay, and showed it openly. Aisatu returned to her mother's house to give birth to a child, and Aamadu and Ay remarried for the fifth time. Aamadu spent much money on all these marriages, because each time he had to pay the *safannde* for Ay. Ay also lost more than she gained. Her *futte* diminished from five animals at her first marriage to one animal at her last marriage, and this animal died of a cattle disease that killed many animals in 1991.[27] With her first marriage Ay had taken the animals from her *hurto* into the household of Aamadu, with her last marriages she left these animals in the herd of her parents. In the course of these five marriages Ay's position changed considerably, from that of first wife to that of second wife.

However, with the droughts the 'easy divorce' situation has changed. It is clear from the above descriptions that a woman can no longer rely in all circumstances on her own family as a fall-back option, because it simply does not have the means to support her. This may lead to situations in which a woman has no other choice than stay with her husband.[28] Kumboore Buraima, for example, wanted to leave her husband, Bana from Wuro Boggo, after he misappropriated her sons' animals. He married a second wife (in fact a third, but he divorced the second), for which he plundered his sons' animals in which Kumboore had milk rights. He gave his second wife an animal as *futte* and he sold one to pay the *safannde*, although both animals belonged to his sons. A man is allowed to sell cattle of his children when his family is starving and grain is needed, but in this case Bana used the money to marry another woman, which was not acceptable. In anger his son took a sheep from the herd to sell in the market in order to buy himself new clothes, without consulting his father. Kumboore protested by leaving her husband. She went to her brothers. After a

few weeks she returned to Serma with the argument that she had to look after her children. Of course this was true, but she could have taken her two daughters with her and her sons were old enough to take care of themselves. Besides they could eat with the second wife or with their uncles. It appeared that Kumboore was pushed by her brothers to return, most likely because they did not want to, or simply could not, take care of her. Under normal circumstances her oldest son, who was almost married at that time, could have decided after the conflict to leave his father with his own herd and start a new *wuro* where his mother could live. This was no option because of the size of the herd. Nevertheless this may happen in the future if Bana continues behaving in this way.

Another case that illustrates the diminishing freedom of women and thus their changing position is that of Sama. She is the first wife of Hamidu and co-wife of Jeneba, whom we presented at the beginning of this chapter. Sama's daughter had been very ill for a long time. Sama's own family was very poor and she had no animals left of her own. Thus to take care of her daughter she depended on Hamidu who refused to help her. During the rainy season of 1991 the situation was very bad in their *wuro*. Hamidu gave millet to his wife only once in two days, i.e. one day to Jeneba and the second day to Sama, and so on. Jeneba and Sama did not share a *fayannde* and the millet was so little that they kept it for their own children. Milk was also very scarce that year, so that they were really starving. Eventually this situation was too much for Sama. She knew that her husband had enough animals (he is the richest of the five Bana'en brothers in Wuro Boggo) to buy sufficient grain for his family, and to milk his animals a little more. He simply refused to do this for the sake of his herd. Sama asked him to buy her new clothes (which is the test of a husband's care of his wife). When he refused to do this she decided to leave him. She went to her maternal uncle, Hamma Aljumaa, but he urged her to return to the *wuro* of Hamidu. Then she left with her youngest children to go to her mother and brothers who lived near Duwari. They also sent her back because they could not take care of her. Sama could not do otherwise than live with her husband, whom she could not force to take better care of her and her children because she was not backed up by her own family. Later that year she went with us to Douentza, where a few of her brothers lived. They went there after the droughts, and herded animals for the Hummbeebe of Diamweli. She stayed with them for a few days only, realizing that they too did not have the means to take care of her.

So the change in the relationship between a woman and her own family, caused by impoverishment, may lead to a decrease in the number of divorces. A woman loses part of her bargaining power vis-à-vis her husband. This tendency is countervailed by the diminishing rights in cattle that women gain with marriage, i.e. the *futte* has become less important and her children inherit fewer animals, which makes the marriage a less attractive union for her. [29]

The data, however, do not confirm a decrease in the number of divorces. In the past as well as at present divorces were very frequent. This suggests that the reasons for separation have changed, but not the divorce rate itself, which is congruent with the reasons women themselves provide for their divorces. At present the migration of men also dissolves many marriages. Another reason for divorce is the inability of the husbands to sustain their wives in a proper manner. Disapproval of the marriage by fathers and mothers or by the marriage

partners themselves (e.g. in case of polygyny, mismanagement of the *futte*) do still play a role but they have become less important recently.

The dwindling base of the *fayannde*

All the changes we described above tend to decrease the power of the *fayannde*, i.e. of Jallube women in the *wuro* they live in. Married women also now take second place for their own families. These two tendencies indicate a change in the organization of social security for women. The organization of the marriage institution gives a woman a relatively autonomous position in the *fayannde* and does not mean that care for women is taken out of the hands of the women's own family. The (indirect) dowry system means that all 'gifts' at marriage are used to set up a new *fayannde* that is her own domain. The *fayannde* is symbolized by the bed, the hut and the household equipment. These are all the property of the woman. Further, a woman can have a considerable share in the herd of the *wuro*. The high rate of divorce in the past indicated the relative autonomy of a woman in the economy and her relatively good position in the organization of social security relations. Women depended on their husbands to get access to milk in the framework of the *wuro*, but they could always escape to their own families. The importance of the *suudu yaaya* underlines this autonomy. A woman thus is not 'transferred' at marriage, but marriage simply meant that she entered a new phase in her life in which she was quite independent and had much room for manoeuvring. For Riimaybe and Weheebe the situation of women after marriage was quite different, which is related to the economic importance of women and to Islamic rules. With them the gift exchange at marriage has much more the character of a brideprice, and divorce rates are much lower.

Due to impoverishment the situation has changed. The decrease of the herds resulted in a lower quantity and quality of milk for the woman and therefore an erosion of her central position in the *wuro*. Another result is that men keep as many animals as possible for themselves, leading to a decrease of the *futte* and to manipulation of women's rights over animals. Consequently, women can no longer give their sons and daughters animals at the name-giving ceremony, nor can they give their daughters a considerable *hurto*, which is also an effect of the decrease in *safannde* and the monopolization of this money by the men. The decrease in milk yield may be an effect of the monetarization of the economy. Men sell a large number of animals to obtain grain. The migration of men leads to another problem for many women, that of finding a husband. This results in a higher number of polygynous unions even when the herd of the *wuro* cannot provide the means for the subsistence of more than one *fayannde*. The shortage of men may eventually lead to a situation in which the 'gifts' exchanged during marriage become effectively a brideprice system, where rich men 'buy' the surplus of women, a tendency that has appeared in other pastoral societies after the droughts (Horowitz & Jowkar 1992). The 'gift' of a woman to another family is also caused by the poverty of the family of the bride. They 'give' their daughter in return for the help a family receives from their future family-in-law, or for the benefit of Islam (gift to a *moodibo*, see chapters 5 and 12). All these tendencies result in an erosion of the

social security of women, as is shown by almost all stories of individual women. The following example shows the loss of social security very explicitly.

Adama Allaaye was 24 years old in 1991. Her father and mother had died a few years earlier. She has two brothers and one sister. All the animals they inherited from their parents perished in 1985. Adama's sister left for Duwari with her husband. They herd animals for the Hummbeebe. One of her brothers, Sambo, left for Burkina Faso to search for gold. He was lucky and found enough gold to return to Serma with five animals. He married and set up home in Wuro Boggo with his *kaw* and *bappaanyo* (Abdramaane Hamma and Bubaare Aamadu). He lives with his wife in the *wuro* of Abdramaane Hamma (see fig. 4.3). The wife of the other brother, Hamma, died in labour with her fourth child. After this drama combined with the loss of cattle, Hamma also left for Burkina Faso, leaving his children with the family of his wife. He was not lucky and it is said that he went mad and will not return to Serma.

Adama divorced her first husband a few years ago, her reason being that he left her behind uncared for. She has not found another husband yet, and she lives alone with her small daughter. According to Adama there are several reasons why she cannot find another husband. The first is that she has no wealth, no animals, and no gold. Another reason is that she has no support from her parents to find another husband. After her divorce she went to live with her brother Sambo in Wuro Boggo. At first her stay was considered temporary, but later they built her a small hut because it was clear that she would stay more permanently. At this time the family of the late wife of Hamma sent the children to Sambo, as he had to take the place of the father and they could not take care of all those children. Thus Sambo had to take care of these four children, his sister and her child, and his own wife with her new-born child. This was simply impossible with his five animals. His uncle, Abdramaane Hamma, had a relatively large herd, about 30 head of cattle and a considerable herd of goats and sheep. His *wuro* is quite large and many relatives and neighbours appeal for his help. Nevertheless, his wife, Yaaya Aamadu, gave the children of Hamma some goats' milk every day, and the left-overs of the meals. She asked Adama to work for her, so that she could eat 'legally' with her *fayannde*. Despite this help Sambo was at a loss. He feared for the future. He could not find a husband for his sister, so he had no other choice than to take care of her. Adama shared in the milk from his cows, which was very little. Later on Adama earned some money by making calabash covers. With this money she bought a goat. However, in 1991 she sold the animal in the cold season because she and her daughter were 'freezing' and she had to buy some cloth to protect her child against the cold. So Adama could live but it was on the margins of survival, always ill with infections on her hands, mouth and eyes, just like her small daughter.

Ghost meals

The declining autonomy and economic basis of the *fayannde*, and related decrease in social security of women, is reflected in the way marriage ceremonies are held.[30] In the first year

of our stay only one wedding (*kurtungal*) was held in Fetesambo, and none in Serma. People told us they had no means to pay for all the millet and the animal that had to be butchered. Only in the last months of our stay, after the relatively good harvest of the rainy season in 1991, were some marriages celebrated. However, we had the impression that people were not really interested in such a festivity. If the marriage was contracted in accordance with Islamic rules the rest of the celebrations could as well be kept simple, indeed austere, so they reasoned.

Since our arrival in Serma there had been speculations about the marriage of the youngest daughter of our host, Mariamma Maane. She would marry the oldest son of Bana, her neighbour, and at the same time her 'son'.[31] The marriage was arranged years ago (a *cabbugal* marriage). Because Abdramaane Hamma and Bana were both among to the richer inhabitants of Serma, we expected a big festivity with much meat and food, with many people attending from other villages, and even from Booni where Abdramaane Hamma had his contacts. We imagined that we would finally see a marriage such as the Jallube used to celebrate, in contrast to the ceremonies we had attended before. This fancy was fed by the stories we heard about the marriage of the eldest brother of Mariamma ten years ago, at the beginning of the 1980s. This wedding is still remembered as very lavish. The festivities took a week and people from over the whole Hayre were present. It is remembered as one of the last big weddings in Serma.

The first preparations for Mariamma's marriage were very problematic. Mariamma's mother, Yaaya Aamadu, had enormous problems in collecting the *hurto* for her daughter. She had no bed nor gold of her own, because she had already divided these goods between her two other daughters, who married years before. A new bed, including the beautiful mats and the carved front plates, would cost her at least FCFA 40,000. It proved impossible to save this amount of money. All her animals were (pre)inherited by her children, and Mariamma's animals, which could have been used for this purpose, were all dead, or sold after 1985. Furthermore, although it was never said to us directly, it seemed that part of the *safannde*, which belongs to the mother of the girl, was confiscated by Abdramaane Hamma. The little money Yaaya Aamadu had, which she earned by selling butter, and a goat and some money of the *safannde*, was sent to Duwari, where Jallube women make beautiful mats, and to woodcarvers who specialized in making the front plates for the bed. Yaaya Aamadu only obtained part of the bed and this was not ready at the time of the wedding. Mariamma also entered her marriage with only a little gold and silver jewelry. We once went with Yaaya Aamadu to Booni, where a smith was working on the golden earrings for Mariamma. He asked too much money, Yaaya Aamadu admitted, and she could only afford small earrings. Mariamma's father had to buy her new clothes. However, he only bought a *saaya* (dress) for her, and it was too small. What he did with the money of the *safannde* never became clear. Most probably he bought millet for his family, or tea for himself.

Considering these problems of Mariamma's parents we began to wonder how they and the boy's parents would organize the marriage festivities themselves. Until the day of the marriage there was no sign that people had been informed of the festivities. The day before the celebration, when the Islamic ceremony took place, some women gathered in the *wuro* of Bana to pound the millet for the wedding meal. The next day big pots were filled with

water and millet flour, and dough was prepared. That night the festivities started. Mariamma was prepared as a bride in the hut of her mother. She was chatting with her friends, her eyes blackened with charcoal, and she wore her new *saaya*. The friends of Aamadu Bana came to take her to the hut of her 'husband'. The groom himself was not present. He was herding the family herd at night. Mariamma did not protest and climbed on the back of the camel which brought her to the hut of Aamadu's mother, situated on their fields near Debere, *dow tiile*.[32] The visitors were already there. It was not very animated. Only people from Serma and Fetesambo visited the festivity. There were no guests from outside. Most older men were lying in a corner. The girls and young married women were dancing. Later in the evening the young men who had no herding obligations joined in and sang their songs. Everyone was offered some food consisting of millet dough and sauce of baobab leaves, the daily food. There was no meat, not even a goat was slaughtered. The mother of Aamadu was nervous, as she was responsible for the correct division of the food. With the help of a couple of young men the food was divided among the various groups from Serma and Fetesambo, i.e. men and women, divided into *waalde*, the different *gure* of Wuro Boggo, and all the social categories present in Serma. This division seemed somewhat surrealistic to us, because not all these groups were present at the marriage and besides, nobody ate anything. The prepared food was far too much. Furthermore, it did not seem a festive meal, because there were no delicacies of any kind. We were the only visitors who were served some butter. The kola nuts, and cigarettes, which were normally offered to the singers, were absent. Without meat, cigarettes and kola nuts the festivity was not complete. And indeed people went home very early.

The next day the preparation of millet dough started all over again. All the food which was prepared for last night and left over was dried on the shelter outside the hut. In this way it was preserved so that it could be eaten later. It seemed a provision for a few months. That night there was hardly any singing. The next day the food (almost all) that was left over was preserved in the same way. The third day another 'ghost' meal was prepared. The fourth day Mariamma returned to the *wuro* of her parents, as if nothing had happened. They could not do without her labour yet, because one daughter-in-law was ill and the other pregnant and could not work (see also chapter 13).

It was remarkable that these festivities and the preparation were completely organized by women, except for the 'official' Islamic part which was arranged with the Imam by the fathers, in the presence of some witnesses. The women prepare the bride, try to collect her household equipment, prepare and divide the food (though often assisted by young men) and they are the main dancers at the festivity. This reflects the women's important role in social and symbolic life and their share in the establishment of a new *fayannde*. It seems, however, that only women attach any importance to this celebration, and by extension the establishment of a new *fayannde*. Men have retreated from this part of the marriage ritual. Often they are not present at all. They no longer slaughter animals, and they even use the money of the *safannde* to provide their families with food. Women on the other hand cling almost desperately to this part of the ritual, because it symbolizes the value attached to the *fayannde*. The presence of many guests is a symbol of the care and regard for this new unit in society. This is why the women give much attention to the preparation and division of the

meals, which, in the absence of guests, appear to be ghost meals, but still symbolize the establishment of the *fayannde*. And so they pretend that the *fayannde* is still important. This wedding was exemplary. All marriages we attended were organized in the same manner, or even worse. The only visitors from outside we met at a marriage festivity were some civil servants from Booni, who attended the festivity because the groom's family herded their animals.

For Mariamma and her mother there were some advantages attached to this marriage from a social security point of view. The bride's mother would not be robbed of the labour power of her daughter, and the bride remained in the neighbourhood of her mother, so that she would be able to rely on her support. There were no strategic reasons for this marriage. All the bride's animals died during the drought. The marriage only served to strengthen the ties within the camp and a sub-unit of the lineage. This may have been a strategic argument to promote the position of this sub-group, but this was never mentioned.

So, it is most likely that both parties, and especially the women, found this marriage a good match. It suited them well that the marriage was between close kin and neighbours. The fathers of both bride and bride-groom were unwilling to invest any money or prestige in the new *fayannde*. The women did not have the means to do so. Thus the poverty of the celebrations symbolized the problems the Jallube encounter in establishing new *fayannde*, i.e. in ensuring the reproduction of society.

Notes to chapter 11

1. See for a discussion on African marriage and different theoretical approaches Burnham (1987).
2. There is much variation among the Riimaybe, e.g. depending on where they live: whether near Jallube or near Weheebe.
3. *Cabbugal* is derived from the root *sab*, from which also the verb *sabbude* comes. *Sabbude* means 'to agree upon, to propose a marriage'; the middle voice form of this verb means 'to wait for'. These meanings can be found also in the word *cabbugal*.
4. This marriage is also designated by the term *kobgal/koowgal* (Riesman 1977, Dupire 1962, 1970). This word was also known in the Hayre, but it was never used. Riesman (1977: 81) says that the word *koowgal* is derived from the stem *koow-* which means coitus, which is for Muslims a 'dirty word'. This may be the reason why the Fulbe of the Hayre do not often use this word for the first marriage. Though the second stage of the *cabbugal* is officially also labelled *dewgal*, this marriage is commonly referred to as *cabbugal* only.
5. According to Monteil (1980: 191) the official nuptial age is 18 in Mali (Code du Mariage, 1962).
6. We did not gather extensive data on demography, birth and mortality rates, nor did we gather systematic data on migration. However, our observations indicate trends which are recognizable in another Fulbe population, the Bande in Senegal (Pison 1986). Pison (1986) attributed the imbalance between the sexes in Bande to the migration of men, to a higher mortality rate among men than women, and to population growth under specific condition. For the Jallube in Serma migration of men was very high in the last decades and may have led to an imbalance between the sexes. E.g. from Wuro Kaaral, of 27 family heads (who have almost all died) with 33 sons, 14 sons have left the area. Seven without wives or children (they divorced or were unmarried) and seven with wives and children. Also in the genealogies we recorded that more than 40% of the people migrated. The number of deserted *gure* in the camps was considerable and people indicated that in the past their camps were much larger (see chapter 4). Concerning the mortality rates of men and women we can only say the following. In Serma there were far more old women (above 65) than men, further the men who migrate often die in their new environment. This also happens when the migration was planned to be seasonal.

For the population growth Pison (1986:100) constructs a model for the growth of a Third World population, such as he found among the Bande Fulbe in Senegal. In this model the younger generations are much larger than the older ones, leading to a shortage of women if the difference in age between women and men at marriage is substantial. For the Jallube this reasoning does not hold, because the difference in age between marriage partners is not defined and mostly not more than five to six years. With the enormous migration, and high child mortality, the model of population growth among the Jallube is not likely to be according to a 'general' Third World population. Another point Pison makes is that the remarriage of divorced women and widowed women also leads to more polygynous unions. Among the Jallube this remarriage is seen as an obligation, as also according to Islamic rules. The second wife is often divorced (no wonder when we consider the high divorce rates that we discuss below).

7. Dupire (1970:61) found that a *dewgal* marriage is generally less expensive than a *cabbugal*. The sum of all the gifts in a *cabbugal*, including a few head of cattle, is higher than the one gift exchange in a *dewgal*. The Jallube, however, do not give much on the occasions of gift in a *cabbugal*. We have never heard of gifts of cattle. The gifts consisted of kola nuts (about 25 FCFA), some clothes (about 1,500 FCFA), and soap (about 250 FCFA).
8. Cf. brideprices of other social categories in Fulbe society of the Hayre: Weheebe: FCFA 30,000 - FCFA 100,000; Riimaybe (in Serma and Booni): FCFA 1,000 - FCFA 30,000. Monimart (1989:42) found that such low 'brideprices' as we recorded are also found in other parts of West Africa, where they are called 'le prix de cola'.
9. *Moodibaabe* of Serma (Bukari Alasunna and Aamadu Muusa) confirmed to us that according to Islamic law the minimum brideprice is a quarter of a dinar, which is the same as 1 gram of gold.
10. A strange development in the *safannde* is difficult to explain. After 1970/75 the *safannde* rose enormously. An explanation for this may be the abandonment of the payment of the *safannde* in animals. In the marriages of Jallube we attended the *safannde* never exceeded FCFA 15,000. *Dewgal* marriages were arranged for FCFA 1,250 or even for only FCFA 500. These low *safannde* are common in case of remarriage with the same husband. Probably the *safannde* as recorded after 1970 were exaggerated just because of the representation to the anthropologist.
11. Riimaybe and Weheebe have the same beds, although many Weheebe give their daughters also modern beds with spiral springs.
12. Compared with Weheebe and Riimaybe the *hurto* of the Jallube is very small. Riimaybe include many expensive blankets and two beds in it; Weheebe also include many blankets, and a lot of gold and silver in the *hurto*. Nowadays the collection of the *hurto* poses Riimaybe and Weheebe mothers with severe problems.
13. Jelgoobe call this *futteeji* (Riesman 1977:81). Riesman (1977) suggests that this word comes from the verbal root *fud-*, which means 'to begin'.
14. For the Riimaybe the *futte* often consists of packets of millet or some money, in some cases also cattle or goats. The Weheebe used to give a female slave (*kordo*) as *futte* and some animals.
15. The Wodaabe also do not consider the *futte* the property of women (Dupire 1960:89).
16. Best (1982) only mentions patrilateral parallel cousin marriage and cross-cousin marriage as preferred marriages for Fulbe in Senegal; Riesman (1977:214) says that the Jelgoobe have patrilateral parallel cousin marriage as the preferred marriage; Pison (1986) also considers the three mentioned partner choices as preferential among the Bande Fulbe in Senegal. He differentiate between matrilateral and patrilateral cross cousins. The Jallube did not make this difference. Dupire (1970:479) found that among the five groups of Fulbe she examined in West Africa these preferences for marriage partners are often followed in practice. Marriage with cross-cousins and patrilateral parallel cousins occurred in all groups, but marriage with a matrilateral parallel cousin was not preferred and was rarely found. Among the Wodaabe (nomadic Fulbe) no union of this type was found, in the other groups only a few.
17. The reasoning of Hamma Bama and Bubaare is the same as is recorded in other ethnographic work on pastoral peoples. In many of these societies there is an outspoken preference for marriages with children of father's brothers. This marriage is also a preferred marriage in Islamic law, fitting well with the inheritance practices when the goal is to keep the wealth together.
18. Some of these men and women were couples, which is another reason to present both sets separately. These are not independent samples. The data were gathered with the help of a questionnaire. Questions were about

marriage partners, divorce, duration of marriage unions, children, marriage prestations, residence before and after the marriage, lineage membership, and reasons for divorce, and there was room for any other remarks women made. The sample was taken in Serma, and some women were interviewed from all cattle camps. We also interviewed some women in Booni.

19. To compare: of seven marriages of Weheebe women and three of Weheebe men no *bibbe yaaya* marriages were recorded, three *bibbe wappaybe* marriages were recorded, and one marriage with a *denndiraajo*. Of 35 Riimaybe marriages there was only one *bibbe yaaya* marriage, and two marriages with *kawiraabe*, 11 with *bibbe wappaybe* and six with *denndiraabe*. Pison (1986) calculated that 15% of all marriages with cousins among the Bande Fulbe in Senegal concerned matrilateral parallel cousins.

20. Two marriages between girls and boys of Nguma; a marriage between a girl from Fetesambo and a boy from Wuro Kaaral; a marriage between a man from Jigi and a woman from Coofya; a woman from Coofya and a man from Debere; the marriages of the children of Abdramaane Hamma were within Serma; a man from Wuro Boggo with a woman from Debere; a woman from Wuro Kaaral and a man from Wuro Boggo; a woman from Fetesambo and a man from Wuro Boggo; a boy from Fetesambo and a girl from Wuro Boggo, a marriage within Wuro Kaaral.

21. Muusa Dikko, personal communication. In Serma marriages between Seedoobe are the most frequent, which is not unsurprising given that the Seedoobe are an important lineage in Serma and Fetesambo, and we lived with Seedoobe so that we were more integrated in that section of society.

22. This trend is also apparent among groups of pastoralists in East Africa. See for the Maasai, Talle (1988); for the Boran, Hogg (1985); Baxter & Hogg (1990). Talle (1988) links the increasing inequality among the Maasai to the pattern of marriage, rich marrying rich and poor marrying poor.

23. Both Weheebe and Riimaybe marriages are more stable: of 35 Riimaybe women only three divorced more than twice, and 22 never divorced; of seven Weheebe women four married once and only three married twice, of three Weheebe men no one divorced, but they were all married to more than one wife.

24. Stenning (1959) relates marriage instability to the herd which is the base of a *wuro*: if it is too small, the result may be too little milk for the woman's subsistence. Stenning also relates divorce to the pre-inheritance of the herd. If all the animals are pre-inherited, the men and woman have no reason to stay together. These divorces mostly occur at older ages.

25. Another rule the Jallube adhere to concerns the mourning period of a woman after the death of her husband. She cannot marry within three months, and she has to wear black clothes for a year. This last prescription was not always followed by young women. A child born from a widow within five years after the death of her husband is ascribed to this late husband who is then the father, if the woman has not remarried.

Cf. Jansen (1987:77) who attributes the same rule of marriage to Islamic practice in general; however, Danner (1988:132) warns that the rules for marriage can differ considerably by school of jurisprudence in the Sunni world. The Jallube *moodibaabe* most probably follow the rules of the Malikite school.

We were told that this was the animal of the *futte* of Ay, but Ay never confirmed this. Probably she did not know which animal belonged to her *futte* and she had to accept that it was this animal. Besides the loss was not so dramatic because the animal had a calf that was in good health.

Vaughan (1987) also found this tendency in Malawi during years of famine. Women became more dependent on their husbands instead of their own families, as a reaction to scarcity in the society.

Toulmart (1989:40) found in a survey conducted among Sahelian women that women in fact perceived an increase in divorce due to the droughts (57% of her respondents).

We may therefore say that the changes in marriage rules and in the social relations that are formed by marriage are reflected in the ritual. Rituals are a place where society is performed, including the expression of social security relations (Vuarin 1993:303). These rituals communicate these changes to society.

Mariamma is genealogically senior to Aamadu Bana, and they are related through their fathers, Abdramaane Hamma being a *bappaanyo* (paternal uncle) of Bana.

After the harvest Bana and his two wives moved their *wuro* from Wuro Boggo to their fields *dow tiile*. Mariamma's family also camped *dow tiile* at the time, but their fields were much closer to Debere.



12

Nobility and Survival: Coping with Poverty and Identity

Poverty and society

In the community of Serma the distribution of productive resources among the people is not equitable, and this has become more accentuated in the situation of scarcity of the last decades. The rules with respect to the redistribution of resources were often manipulated in favour of the powerful. This has resulted in growing inequality in the community, but also between members of the same family, and between men and women. This has led to the growth of a group of poor: of people who are gradually pushed out of the economy and society. On purely economic grounds we may distinguish two kinds of poor people. Almost all inhabitants of Serma may be said to belong to the group of conjunctural poor, in the terminology of Iliffe (1987). Poverty may be only a temporary phenomenon for them. When they have a few head of cattle, and are still healthy, their fortunes may change when the ecological or economic conditions ameliorate. Besides to this group there exists a category of structural poor, the destitute. They lack the means of production for subsistence and are often not able to work, because they are old, infirm, or not allowed to work for ideological reasons. The purpose of this chapter is to show how this group of structural poor is trying to survive, what strategies they follow, which options they have and the perceptions of Fulbe society on this kind of poverty, on how society should cope with the poor in terms of help, on social security arrangements, and on what norms should be imposed on the poor.

According to Iliffe, poverty is not a new phenomenon in Africa. In the savanna societies of West Africa there was always a large group of structural poor. There were two ways for the destitute to cope with their situation; They might rely on their family, or on their own efforts. Most poor people seemed to depend on their own efforts. National or regional institutions for the poor were lacking, except for Islamic charity. Another reason why most poor had to rely on their own efforts was the attitude of society to the poor, the ideas that existed about poverty. In many savanna societies in West Africa the poor were regarded as a disdained species, because wealth was in general highly valued (Iliffe 1987:46).

Fulbe society provides the poor with a contradictory message regarding their position. On the one hand there is the cultural ideal of the pastoral way of life, embedded in the ideas of the Fulbe about dignity, *ndimu* and *yaage*, and related ideas about exchange relations and gifts, that do not fit the situation of the poor. These ideas negate or deny in fact the

possibility of poverty. On the other hand their experience gives them no choice but to change these ideas, which implies giving up their identity, to die, or to migrate. This may lead to a fundamental confrontation with their identity. The people who migrate often lose contact with the Hayre. They enter a new world, new social relations and a new identity. Others end up in the margins of big cities like Abidjan and Bamako (cf. Monimart 1989:35-39).

As will appear there is a wide variety of poor people. Jallube women, who still live a 'pastoral' life but in reality have lost their autonomy, may be regarded as poor (see chapter 11). Women without husbands, divorced or widowed, are often worse off. The ultimate consequence of being poor and unmarried is often migration to town, or to small rural centres. This process is described for women from other pastoral groups in the Gurma, Mauretania and Senegal (Smale 1980, Ag Rhaly et al. 1987, Findley 1987). Another group of poor are impoverished families with no cattle, living with a handicapped husband or wife. Old people are often deprived of any help nowadays. Especially for the poor Jallube who stay in Serma the situation of poverty also leads to a reassessment of their own cultural understandings, about identity, about poverty, about relations with the Dogon and Hummbeebe, and relations in their own community. In some cases ideas related to *juulde* (Islamic rules and values) seem to offer a way out. This 'escape' of the Jallube with the help of *juulde* shows the other side of these, for them in general restrictive, ideas, rules and norms. They also enable people who belong to the structural poor to survive. The symbolic and social capital derived from *al'aada* and *juulde*, knowledge of Islam, a social network, esteem, are transformed into a means to survive. For each individual this will be different. It depends on the 'mental map' of a person based on age, status, personal history and experience (Brown 1991). In their struggle for survival they will alter the interpretation of these normative complexes. As we shall see some individuals appear to shift their orientation from *al'aada* to *juulde*.

The description of how the poor survive the crisis opens a window on reality (Vaughan 1987), on the importance of social relations, on the relation between praxis and ideology, reality and discourse. Changes in the cultural understandings of work, poverty, exchange relations and identity are inevitable. This chapter starts with a description of how the Fulbe themselves perceive the poor, and poverty, and how they think about exchange relations and the gift. In the next sections the various ways of the poor to cope with their situation, in Serma but also in small rural towns in the neighbourhood, are discussed. The 'use' of *alaada* and *juulde*, as well as the constraints imposed by these normative complexes on the poor, and the shift from one complex to another, are clearly demonstrated.

Jallube society and the poor

Definitions of poverty

It is difficult to determine who exactly is regarded as a poor person in Jallube society, but it is clear that the attitude of the Jallube towards poverty is ambiguous. On the one hand

poverty negates the idea of *ndimu* (nobleness), on the other hand inequality, and its ultimate consequence poverty, is a necessary phenomenon in a society which is marked by the distinction *ndimu* versus non-*ndimu*. The Fulbe definition of poverty is based on values related to *juulde* and *al'aada*. In the wealth-ranking exercise that we did three assets were mentioned as defining wealth (see chapter 3). These were *jawdi* (cattle), *yimbe* (people) and *anndal* (knowledge, more specific Islamic knowledge, but also wisdom). All three assets may provide material well-being. On *jawdi* a person may subsist, from *yimbe* one may receive help, and *anndal* enables an individual to earn an income. People who have none of these assets are called *miskiine* by the Jallube. These are the structural poor in Illiffe's terminology. Another category of poor are the *talka*, people who have no *jawdi*, nor *anndal*, but who are still able to work (*talka walaa mojjere fuu; gollude ley dabaaji e gawri o waawi*; a *talka* has no goods whatsoever, he can only work with the animals, and on the land). In their definition of wealth *gawri* (millet), land, and labour power are absent. People (*yimbe*) are only associated with support and gifts, not with work. The Riimaybe, on the contrary, define wealth in terms of land, millet, and labour power. While discussing poverty people also referred to *barke* (*baraka*). Someone will keep his wealth when he has *barke*, i.e. being good to others and keeping to socially accepted forms of conduct. As was discussed in chapter 5, *barke* is also a divine force. The combination of Allah's gift and good social behaviour (by Jallube standards and not exclusively Islamic standards) helps a *talka* or *miskiine* to survive in a social sense, which may result in a material improvement of his or her situation, because people 'reward' him or her with gifts to show their appreciation.

In *al'aada* (Fulbe custom) poverty is defined as something shameful, a condition which results in feelings of *yaage*. It decreases one's noble status, one's power (*semmbe*), because it implies the loss of Jallube assets, i.e. cattle, milk, power. Women for instance associated poverty with the lack of milk. Want of milk destroyed the Jallube (*rafi kosam bonni Pullo*),[1] so they said. Poverty is also associated with engagement in types of labour which negate nobility, because this labour was done by *maccube* in the past. A Jallo will avoid this as much as possible. If not, he or she brings shame upon the category of nobles. This is one of the reasons for people to leave the community. They cannot bear the judgement of others and the feelings of *yaage* which result from poverty. Being poor is being driven away from Jallube values and assets. Widespread poverty endangers the existence of Jallube society as such.

It follows that, more than in other societies, a person who is poor is not in an enviable position. To earn a living he or she has to turn to practices that do not suit a noble. For example the division of labour between Jallube and Riimaybe is well defined and linked to the status of *ndimu*. Feelings of *yaage* limit the possibilities of labour for poor Jallube men and women. This is illustrated by their ideas about gathering, which is considered shameful. Bubaare Aamadu, whom we already cited on this topic in chapter 6, analyzed this as a mistaken feeling. It is so strong that it indeed constrains people from gathering, which is in the end contrary to their survival. This led him to the conclusion that ideas about *yaage* and *ndimu* are part of the problems the Jallube encounter nowadays.

Thus despite the fact that a Jallo may be able to gain a living through activities that conflict with his or her status, he or she will not easily do this and leave behind the cultural values, rules and norms. Poverty is bad and degrading, but losing one's identity may be worse and may lead to psychological problems for the person involved. Men go mad and wander the country. Women talk about loss of custom. Some women and men who are forced to break the rules are called, as a kind of joke, *maccube* or *haabe*. Islamic norms and values, which are much more tolerant with respect to poverty, have not altered this basic idea about social status in Jallube/Fulbe society. Of course poor people have in many cases no other choice than to cross the cultural boundaries, but they never do so from free will. Each individual reaches this point at a different level of misery and poverty, depending on his or her character, on the social networks he or she participates in, on gender, and the access he or she has to social security relations and institutions as defined in society.

This is why after all the Jallube have to accept poverty as a fact of life. There always were and always will be poor people, and one can become easily one of the poor. This is related to the will of Allah, and thus linked to his gift of *barke*: 'One day Allah makes you rich and another day he makes you poor'. It is almost impossible for human beings to manipulate this. Even good behaviour according to *barke* does not necessarily change one's economic situation. Powerful *moodibaabe* may intercede for a person to receive more wealth, but they do not do this for nothing. There are no such *moodibaabe* living in Serma. Thus being rich is also positively sanctioned in *juulde*; it is Allah's will. In the Islamic conception the poor are those who are not able to take care of themselves, the *miskiine*, together with those who occupy themselves with religion, pupils of Koranic schools, and *moodibaabe*. They should be supported by other members of society, as implied in *zakat* and *sadaqa*. But the *talka* should take care of themselves.

Social security mechanisms

Inequality is an integral part of Fulbe society. The oral traditions justify the social hierarchy, and thus the differences between social categories. In Jallube society *ndimu* allows differences in wealth, which may among other things even be the basis of the concept of *ndimu* (see chapter 6). However, as in any society, too much inequality has its costs, it leads to jealousy and conflict, *haasidaare* as it is called in Fulbe society. An important way to lessen the disruptive effects of *haasidaare* is avoidance, as embodied in the whole *yaage* complex (chapters 6 and 9). Social security mechanisms, which redistribute wealth from the wealthy to the poor, are another means to lessen the disruptive effects of inequality. Inequality may even be regarded as a prerequisite for the existence of social security mechanisms, gift or exchange relations (Platteau 1991). The various inequalities in Fulbe society have led to different mechanisms of gift exchange that soften the inequality but do not erase it. We will examine those based on the social hierarchy in Fulbe society, and those within the community of Serma, between Jallube and Riimaybe, and among the Jallube. As will be clear these levelling mechanisms have changed enormously under the pressure of the scarcity of the last decades. A consequence of the erosion of these social

security relations may be that people no longer feel secure, and thus lose their 'existential' security, which had already suffered because of the dwindling resource base.

A political hierarchy may function as a safety net for poor people, as Iliffe (1987) and Bernus (1990) showed for the Tuareg. The poor herdsmen or warriors were integrated into the lower strata of society, so that they did not become outcasts. It is not clear whether the political hierarchy as it existed in the Hayre in the 19th century also had this function so explicitly. The strategic shift of an impoverished herdsman to cultivation also occurs in the Hayre. This does not imply a change in status: a Jallo noble cannot become a Jawaando and never a Diimaajo, because he is born a noble: at least this is the way people present it nowadays. However, it cannot be ruled out that in the past impoverished herdsmen integrated into Riimaybe communities, a process which can be observed today. Some Jallube families live among Riimaybe and depend on the same techniques for survival. Such processes of integration into agricultural groups also took place in southern Mali, where several groups of Fulbe have Bamanized (Azarya 1993). In the Dogon area south of the Hayre some Fulbe families (Jallube and Barri) have Dogonized (de Bruijn & van Dijk 1988). These examples show that pastoral Fulbe are forced to integrate into other societies in order to survive. However, these processes cannot be regarded as institutionalized mechanisms to integrate the poor in the Fulbe society of the Hayre.

If there were no institutionalized means for the integration of the poor, there may have been informal ways of doing so, or mutual help relations may have developed between Riimaybe, Jallube and Weheebe, based on their shared political history. These relations were based on inequality, but were transformed in the course of history (see chapter 2). The content of the relations between Riimaybe and Weheebe has changed drastically with the liberation of the Riimaybe. The old bonds did not disappear, on the contrary they are still the basis for several relations of mutual help. Furthermore they play an important role in the definition of each other, and therefore also in the expectations that Riimaybe and Weheebe have of each other. In some cases the old relations persist. An example is the relation of the chief of Dalla with the Riimaybe villages. After the harvest he always makes long trips in the mountains to collect food in what he still considers as his Riimaybe villages. The 'gifts' of 'his' Riimaybe allowed him to survive fairly well in 1990 and 1991. His land is worked by 'his' Riimaybe, and his cattle are herded by 'his' Jallube. The chief of Booni also has not given up the old custom. When his son married he made a tour in the Daande-Seeno and collected five bulls. The Jallube youth (young men and women) were all summoned to come and sing at the wedding, which they did despite the fact that most of them had left Serma on transhumance to near Duwari, Tula and Wayre. The Riimaybe and Jallube cannot refuse these demands of 'their' Weheebe. However, the reciprocal character of these relations has been lost. The Weheebe no longer have the means (and the will) to provide the Jallube with cattle. On the contrary it is the reverse nowadays (see chapter 14). Neither are they able to give land to the Riimaybe (see chapter 2). Sometimes they contribute to Riimaybe weddings, and Islamic festivities, which symbolizes the old relationships between them. In times of hardship, however, this does not alleviate deep poverty. Only some individuals with whom the Weheebe have a good relationship, or who are necessary in the political game, receive assistance from the chief in administrative

affairs, or even in material support. They may, for example, herd the chief's cattle and keep the milk. Thus gifts between social categories of Fulbe society no longer need be, or never have been, reciprocal. This inequality is confirmed by the fact that there is a certain element of force in the relations between social categories, i.e. a Jallo cannot refuse a Beweejo, and a Diimaajo cannot refuse his former master.

The present relationship between Jallube and Riimaybe is also defined in terms of the past. Jallube often call the Riimaybe their *maccube* (slaves), although originally the Riimaybe with whom they form a community at present belonged to other nobles, as is the case in Serma (see chapter 4). In reality they have grown equal in economic terms. Between them more equitable relationships have developed; the Riimaybe extending more help to the Jallube than the reverse, while remaining subordinate in status.

On the level of the smaller community, the hamlet or cattle camp, there may be gift relations between rich and poor members of a camp, and between kin. In kin relations without *yaage*, for example between brothers and sisters, the exchange of gifts is relatively easy and regular. However, as we saw in the preceding chapters, these support relations have eroded, due to impoverishment on both sides. In other kin relations mutual support is obligatory. These relations are marked by *yaage*, for example between a son and his father, between affines. In these relations the refusal to give, or the incapacity to provide support, result in feelings of *yaage* in the persons concerned. These help relations between kin clearly belong to *al'aada* (Fulbe custom) and are to a certain extent an intrinsic part of this value complex. Between neighbours in the same cattle camp also help relations exist. Rich inhabitants may support the poor with some food. A relatively wealthy woman will always reserve something for the deprived or needy members of the camp (poor old people, children, pregnant women) when dividing her milk (cf. Kettel 1992:7). These small gifts do not belong to an institutionalized complex of exchange relations, as was shown in chapters 9 and 11, but they are simple and frequent gifts on a day-to-day basis, mostly consisting of milk, or some food, or small loans, and depend on the relations between the persons or families involved.

This kind of gift relations between Riimaybe and Jallube are not only embedded in *al'aada*. Historically the nobles have the obligation to take care of the non-free, because they are among to their dependents. With the breaking of these bonds of dependency, help relations between Jallube and Riimaybe have taken rather the character of the Islamic institution of charity, and can be said to belong to *juulde* (Islamic values). According to this everyone who can must give to the poor members of society, kin and non-kin. This is institutionalized in *zakat* and *sadaqa* (see chapter 5). *Juulde* may also give an indication as to whom one is to give. Especially the Riimaybe mention help to others as part of their Islamic duty. For the Jallube this Islamic gift replaces the former 'traditional' exchange relations as we shall see later on.

These help relations have come under pressure as a consequence of scarcity. Most people have not sufficient to give, so that they cannot share with others. The first reactions of people when we asked if they helped their poor relatives or village members were negative. It is a widely shared idea, so it seemed, that if a person has become very poor, in the sense of *talka*, he or she must look after him or herself. There is no obligation for the people

around to help. As we have seen in chapter 9 giving cattle to fellow nobles who have lost their animals is also not considered normal. It seems that nobles do not prevent fellow nobles from degrading themselves in poverty. Instead they prefer someone who has lost his cattle to leave or at least to look after him or herself. There is no social obligation to help the poor of this kind.[2] The reaction to the behaviour of Waddijam Saalu, a Diimaajo woman who runs a small village shop in Debere is typical in this respect. She helps many poor people by giving them work or by simply giving them food. For this poverty relief she was thought of as a fool, or even blamed by other members of society.

The gifts we discussed above will not erase inequality, but they may give some relief. However, in case of real scarcity, and growing inequality, these relatively small gifts can no longer dampen the effects of poverty, nor serve as an institution which contributes significantly to the alleviation of poverty. Another institution of giving that is even more symbolic than those discussed above is *eelude*, the continuous asking for small gifts. *Eelude* is an integral part of Jallube culture and can almost be described as habitual. Normally a request for a small gift cannot be refused. It is also part of *eelude* that people take things without asking where they consider the other wealthy enough not to miss them. The other will never dare to ask for them back, because that would diminish his or her noble status, and lead to feelings of *yaage*. For example, we always gave Yaaya Aamadu, our host, some ingredients for the sauce. Once she left these on the shelter before her hut, and they disappeared. As she discovered later, Yaaya Bana had taken them and given them to her own daughter. Yaaya Aamadu just shrugged her shoulders, accepting such things as a fact of life, and we ate sauce without spices for a week. Another consequence of *eelude* and the associated feelings of *yaage* is that it is impossible for a Jallo to sell anything to another Jallo. We were asked to bring rice for *tabaski*. So we brought a sack of rice and left it with Yaaya Aamadu so that people could buy it from her in small quantities. Yaaya Aamadu indeed sold all the rice, but received hardly any payment. She explained that if the rice had been her own property she would have received no payment at all, and it was only because it was our rice that she could force people to pay a little. She never recovered the debts. This custom also posed problems for merchants in the village. In the dry season of 1985 a trader in kola-nuts sold all his nuts without receiving any money. He never did get his money, which meant a severe loss for him. Also during our stay he was the object of *eelude*, and although he tried to refuse many people he did not manage to ward off all demands.

Nowadays there is less to share and people in Serma have become very creative in avoiding giving. Most of the time we observed that when someone asked for a small gift, the person asked simply ignored the request, pretending to have nothing. Later on, when the person who had asked had left, the tea, sugar, or kola-nuts, were dug out of a calabash that was covered, and wrapped in plastic. We hardly ever saw cases in which people gave freely to others in the context of *eelude*. All luxury goods were hidden and people preferred to pretend to have nothing. This concealment of goods may be compared to what has been observed in other societies subject to scarcity. Vaughan (1987:137) and Spittler (1992) found as a reaction to famine in Malawi and Niger that people gave up the custom of eating together but instead ate secretly and in the dark, which is also to hide food from others.[3] It

is noteworthy that the Fulbe of Serma always ate inside their huts, or in the dark, and then only when no strangers were present. They explained it as their custom, and that they did so because of feelings of *yaage*. In this context, however, this behaviour appears in another light.

For the Jallube there was no explicit idea that giving was an obligation, but their behaviour suggested that they felt ill at ease when refusing others their demands, because it led to shame and diminished one's dignity: a noble has to give. Furthermore there are sanctions on the refusal to give. Someone who never gives, or refuses openly to give, will become the object of bad talk (*hururuy*). This may bring evil to a person. Conversely people who ask too much may also become the object of gossip. Gifts may also be a source of *haasidaare*, especially when not evenly distributed. This element of Jallube culture often annoyed us. We were sometimes the subject of intense *eelude*, because we were considered very rich, which made it extremely difficult to handle the problem of the gift.[4] Most people were destitute, in our eyes, and 'needed' gifts. But we never worked out how to give without making the recipients the object of *haasidaare* (jealousy). We once gave some clothes to Fatumata Aamadu, from Wuro Kaaral and our 'grandmother'. She found the clothes very beautiful and showed them to the villagers. As we heard later on, people talked about Fatumata as if she manipulated us and was no good at all. This 'gossip' or bad talk was dangerous to Fatumata's social position.[5]

That distribution is a problem for the Jallube, and has become more so in the last decades, is also shown by the form distribution has taken in rituals. In the rituals we have discussed so far it is clear that the amount to be distributed has decreased, or is very small. In the case of *tabaski* we described the problems that may arise between neighbours or kin when the distribution of meat is not carried out correctly (see chapter 5). At a marriage the prepared food that is consumed by the guests, or at least is assumed to be eaten by them, is divided meticulously, as if the people responsible were afraid to forget even one person. Indeed this may lead to feelings of *haasidaare* in others and to gossip, which causes *yaage* for the person who is the object of the gossip. When we organized a festivity in November 1991, the problem of sharing and distribution presented itself in a very complicated manner. We were the people of everyone, kin of everyone, part of all camps and of the whole Fulbe society. It was important to forget no one. The division of the food we prepared, rice with meat sauce, and kola nuts and cigarettes, took hours. All the groups of people that could be thought of were given their share: all *waalde*, all *gure* of Wuro Boggo, all cattle camps, men and women separately, all Riimaybe families, all Weheebe families, our grandmother (Fatumata from Wuro Kaaral), Fetesambo, even some Bellaabe who camped in the bush were not forgotten. Despite this precise sharing ill-will was our reward, for some people inevitably got more than others, and so we were said to prefer these people above others.[6]

Inequality is ideologically accepted in both *al'aada* (Fulbe custom) and *juulde* (Islam). Both ideological frameworks also provide society with the means to integrate and cope with inequality. At the same time inequality and property are also an obsession with the Fulbe. In Serma the increasing inequality after the drought did not lead to more exchange or to gifts between the rich and the poor. On the contrary the rich hide their wealth and no means for tapping it are provided, though the rules for the 'gift' as described above would suggest

the contrary. Probably the wealthy are too few to support all the poor, and they no longer care if they are the object of *haasidaare* and bad talk. Many poor have no *yimbe* and no *anndal* to force the wealthy to support them. Hence there are numerous people who cannot rely on any social network. These people have to cope with poverty in one way or another, and they will encounter problems: a conflict between survival and the rules and norms of society. In fact the rich also encounter this problem. They either have to become poor themselves by giving as is their duty according to *al'aada* and *juulde*, or remain rich and lose their social contacts, and become the object of gossip, envy, and in the worst case sorcery. In all cases it leads to a change in identity, for the poor as well as the rich. They all risk losing their self-respect in some way, which adds a new insecurity to their lives. This ontological insecurity plays an important role in the choice of certain coping strategies by the poor, be it conscious or not. Of course this differs between persons, but the basic ideas about identity based on norms and values in society, *ndimu*, *yaage*, and *juulde*, are also the norms of the poor. Breaking with these norms leads to conflicts with people, or to conflict with the self. How poor people solve or fail to solve these conflicts, what decisions they take and how, is the subject of the following sections.

Poverty and *al'aada*

Old women

Old people are among the most vulnerable in Serma.[7] They rely completely on the willingness and ability of others to sustain them. Old Jallube women complained most about the differences from the past. They interpreted the changes in their own community as a loss of *yaage* (see chapter 6) and a loss of milk and cattle, essential assets for Jallube. In their reminiscences the past is a very glorious time. Of course it was better, but our data reveal that it was never as rich as some old women tried to make us believe. This also became clear from arguments among themselves, as they discussed the changes in their lives. Fatumata Aamadu from Wuro Kaaral was very empathic about her wealth in the past. Two other old ladies from Wuro Kaaral objected. They said that they had never many cows, and that life in the past was also very hard. They all agreed that life was worse now, but the degree of decline differed in their experience. One major cause of their experience of poverty, of becoming useless as old women, is their feeling that there is no respect any more for old people. The young no longer want to learn from them, as their wisdom has become useless for the young, who have to cope with a situation totally different from that of their parents and grand-parents. Consequently, the old are no longer asked for advice. In the image of the old women all young people leave. They feel very vulnerable without their sons and daughters around, depending perhaps on one impoverished child. We were often asked to look for 'lost' children when travelling to other parts of Mali, and we even once made a tape, to be broadcast on the radio, with a cry for help of an old woman (the mother of Aama Babel in Wuro Kaaral) to her son who had been gone for nine years. (In the event the tape was never broadcast). The three women from Wuro Kaaral analyzed the causes for

their situation as follows: '*Nden mawbe ana woodi semmbe, joonin min poyri e rafi'* (Then the old people had a lot of force, but nowadays we have grown thin and starving), and, '*joonin be mbaawaa gollude, nden nyaamdu tan, sukaabe kokkude tan, timi*' (now the old cannot work, in the past there was plenty of food, the young people always give it freely, that is it!).[8]

Changes in material culture are also responsible for the deterioration of the situation of old people. Making rope, spinning cotton, preparing milk, gathering grasses in the bush, building huts, and weaving several types of mats, have always been tasks of old women. Nowadays it is not necessary to spin cotton or to make rope, because they can be bought for relatively low prices at the market.[9] Besides plastic cord is much stronger, and lasts much longer than rope made of bark. Today the bark rope is used only for the construction of huts. For ropes for fetching water, or for tethering the calves, plastic is preferred. Milk is no longer available in such quantities that old women can earn a living from it. Only the weaving of calabash covers is left for them.

Between Jallube and Riimaybe women the difference in wealth and in the attitude towards poverty is remarkable. While Jallube women in most cases depend totally on others, despite their efforts to be independent, Riimaybe women are in most cases independent, and do not rely on anybody. In Debere most old Riimaybe women could live on their own. In some cases they were forced to because they had no family. Of course this was not the life they preferred, but still they were able to cope with it. Yaaya Birgi is an example. She is about 80 years old now and she worked for a long time as a 'domestic' slave for a Jallo, whose children live in Fetesambo. She lost all her 14 children, which made her a very sad and withdrawn person. The skills she developed in the course of her hard life helped her to survive the present situation in a decent way. She cultivated a piece of land given to her by the sons of her former master, who also helped her to do the bulk of the weeding. Jallube women used her house to market milk for which she was rewarded with some milk. She gathered bush products, she ground millet for many people of Debere with the grinding stones and stone mortars of the *mawbe ndongo*. She lived her own life. A Jallo woman in her situation would certainly have starved. The following examples of old Jallube women make the difference clear.

Fatumata Aamadu from Wuro Kaaral was left alone after the death of her third husband in 1989, without any cattle and with only a few goats. In 1990 she sold these goats to feed herself and the children of a poor member of the family. Of her two daughters, one migrated in 1990 with her family to the south, where they herd the cattle of a Dogon cultivator. Her other daughter lives in Nguma, where she and her husband have only a few cows. Fatumata does not want to live with her daughters, because she is afraid of being a nuisance to them. Another reason is the *yaage* she feels for her sons-in-law. In Wuro Kaaral the son of her late brother, Aama Babel, and a son of her late sister, Bukari Alasunna, supported her a little.

One day we went to the hut of Fatumata to talk about the past, as we had agreed the day before. We found her lying on her bed with a really bad stomach-ache. When we asked her what was wrong she told us that she was in pain because she did not get enough food (milk and hot millet dough). After that day we often brought her a little milk, which seemed to

help her to live a better life. It was clear that the people who were responsible for Fatumata could hardly survive themselves, nevertheless the little they could spare they brought to her. However, to Fatumata it seemed that nobody cared for her. The dry season of 1990-1991 was very difficult and Fatumata did not know where to live in the dry months. No one had enough to support her. We transported her several times between Serma and Booni. In Booni she had hoped to find a living with her daughter, but as she got very little to eat she preferred to return to Serma. In Serma, however, only very poor people and Riimaybe were living at that time. She relied for a while on these people and then decided to go to Booni again; but after a few weeks she asked us to bring her back to Serma. Eventually the rains started.

The second rainy season of our stay Fatumata had the company of her grand-child, a boy of 16. He gathered wild fonio for his grandmother. Fatumata herself could not gather, as she lacked the strength, at least she said so. At the same time she assured us that she would gather fonio herself if she had been strong enough and hungry as she was then. Later that year she went out to gather wild rice, which was the food for *layya* that year, in the pond next to Debere. That rainy season she tried to cultivate her late husband's field. Her grandchild did some cultivating work, but he was not very enthusiastic. Fatumata herself could not combat the birds, locusts, worms, and the strong winds, so she did not get any harvest, just like the year before. Besides she had no experience in cultivation work, being a Jallo woman.

A number of old impoverished Jallube women live among the Riimaybe in Debere. Most of them stay only temporarily in the dry season, but others have become permanent residents there. One of these latter is Yaaya Cuume, an old lady of 72 who has no children who are able to look after her. One of her sons is very sick with tuberculosis and cannot work; another son is unable to find employment. With her third son she has had a serious quarrel, and she is unwilling to ask him for anything. Her daughters are all married, but are too poor to be able to support their mother properly. Even when the old hut in which Yaaya Cuume lived collapsed, leaving her without shelter, her daughters failed to come to help, and several months went by before the hut was rebuilt.

Yaaya Cuume often showed us what little her daughters gave her to eat: just a little buttermilk and the left-overs of the millet stew. She could not have survived on this. In fact, she had become a 'member' of the Riimaybe village and received help from them: 'It's one's duty to support the poor villagers', they would say. Two of the richer villagers were very active in this way, Waddijam Saalu and Bura Bilaali. From them Yaaya Cuume occasionally received a good meal.

Sometimes women form a separate unit. Aminata (65) lost her husband, who was a *moodibo*, in 1990. In the course of time her family gradually lost their wealth, but survived on the profession of her husband. Her son left for Abidjan and has not been heard of for four years now. One of her three daughters died in childbirth. Her second daughter replaced her sister. Her third daughter and grand-daughter have come to live with her, after her daughter's husband stayed away for years on migration. They have no livestock, and no man to work the land. They survive on mat weaving and the making of rope, and gifts, mainly from Aminata's brother-in-law, the Imam, in whose courtyard they live.

Although in the cases of Fatumata, Yaaya Cuume and Aminata there are potentially enough kin to care for them, this does not seem to help them much. This is in contrast with Riimaybe women who in general have fewer kin to care for them, but who survive much better. The children and other kin of the Jallube women are generally too poor to sustain their old mothers. When the mother still lived with her children (sons), life was not very prosperous either. Milk is also scarce in relatively rich families and the mother consequently receives little or nothing, unless she owns cattle herself. The difference between Riimaybe and Jallube women results also from their past experience as respectively non-nobles and nobles. The Riimaybe women simply have many more survival skills than Jallube women who have never learned to cultivate, gather, and undertake trade, because of their nobility. Most old Jallube men seem to do a little better, which may be a consequence of the fact that restrictions on their behaviour, i.e. labour, are less than for Jallube women. If their children have left they work themselves, cultivating and herding a few animals, as in the case of Hamma Aljumaa. If their children are in Serma they live with them and are cared for. However, the number of old men is low compared to that of old women.

Young Riimaybe and Jallube women

The differences in 'mode of survival' is even more prominent with young Jallube and Riimaybe women. As was discussed in chapter 11, most Jallube women have lost their main source of income and status, milk. Other activities of Jallube women like gathering grasses, building huts, or making calabash covers yield only an unstable and marginal income. The women discussed in chapter 11 still had some social network on which they could rely, though they became totally dependent on their husbands or relatives. Their situation, however, enabled them to maintain their dignity. In most cases food was not sufficient to feed their families, but they preferred to starve rather than to turn to Riimaybe work. Riimaybe women survive the difficult times because of the variety of productive activities they undertake. They have their small trade, they work on the land, gather bush products, and sometimes migrate to look for work on their own, with their children if necessary, when times are too hard.[10] All these options are undeniably closed for noble Jallube women.

What then are the options for Jallube women if they are poor, have no cattle, and no husband to rely upon? Marriage may be a strategy to escape misery as is exemplified by the case of Lobbere who entered a polygamous union with Bana of Wuro Boggo.[11] Lobbere had been living with her parents in Wuro Kaaral, after her marriage in Beebi was dissolved. Her marriage with Bana offered the only escape from her situation at home. Her parents were very poor. They owned one cow only, and her father left each year for Konna to herd the cattle of a Dogon. For them the marriage of their daughter would relieve them of the burden of a third person to take care of. Bana could provide the family with something extra, and it would prevent their daughter from leaving the camp, in order to find a less respectable life in town. The fact that Lobbere and her co-wife Kumboore were family, and therefore the marriage was prohibited, was ignored. When Lobbere entered the *wuro* of

Bana she immediately furnished her new hut with a bed and beautiful mats, bought with the money of the *safannde*. Furthermore she wore all the jewelry she had. With this exhibition she showed her reconquered status as a Jallo woman: A status comparable to that of the rich wives of Sambo in Wuro Boggo and of the women in Koyo. Lobbere was also freed of any work that would detract from her dignity as Jallo woman. She found an additional income by searching for grasses in the bush, and by selling grain behind the back of her husband to the two anthropologists. Furthermore she had fattened a goat for *tabaski* which she sold to the same persons. It happened to be the same animal that her husband wanted to sell them.

Women who are left without husband and relatives with whom they can live, and without any other form of care, do not have much choice. They either leave Serma, or enter into liaisons with men who support them, though these are seen as dubious by the rest of the community. This was the case with Taco and her daughters, from Nguma. The daughters of Taco helped their mother to survive. The two youngest had friends who herd cattle from the Inner Delta. From the money they got from these men some sugar and tea was bought, which they sold in the camp. Though people talked maliciously about this situation, the girls and their mother survived better than others. They admitted to us that they would not hesitate much to leave Jallube culture and marry a herdsmen from the Inner Delta with enough money. The oldest daughter of Taco was married to a Barri in Douentza. Taco often visited her. But as we soon discovered this man was very poor and could hardly sustain his wife and two children. Another daughter of Taco lives on the Bandiagara plateau. Taco visited her each year for a few months. A relative of Taco cultivated a small piece of land for her and her daughters in 1991, but the harvest was so small that it could not sustain them for more than one month. They could not turn to cultivate more land as Jallube women.

Another example of a deprived woman in a situation of deprivations is Ay Bukari, who lives in Nguma with her husband Lobbel, their son, daughter, and a sister of Lobbel and her children. This sister joined the family after the death of her husband a few years ago. In 1985 Ay and Lobbel lost all their cattle. Although also before the drought they were not very rich, they had lived fairly well with this small herd. Each year they went to Booni during the dry season, where Ay bartered milk for millet and Lobbel herded the cattle. After six years of the drought they now have no herd apart from some goats. They have sent their only son to the Koranic school of an uncle 60 kilometres to the south. Lobbel has lost his left leg after a snake-bite. In spite of this handicap he works hard on his land, together with his dumb nephew. This nephew is the son of the sister of Lobbel. Since 1985 they never harvested enough to feed this large family. This is partly the result of lack of labour. However, even in this situation a Jallo woman does not join her husband in the field, neither does she gather bush products to supplement the diet. Only their son could have gathered in the bush, although he would not have done it so skilfully as the Riimaybe.

After the harvest which they store in their granary in Debere, they go to Booni, just as they always did, but now without animals. The few goats are left with a family member in Nguma. In Booni Ay works for Riimaybe and Weheebe women. She pounds millet, fetches water, goes into the bush to gather fuel wood, etc. She only works for women she knows, her 'friends'. During the dry season of 1991, the pounding of three bowls of millet yielded



FCFA 25, fetching water FCFA 25 per bucket.[12] The price of fuel wood varied. With this work Ay also tried to gather the *hurto* for her daughter, who planned to marry in 1992, but this was very difficult. A Diimaajo woman in Booni told us that she could not refuse her Jallube friends some work each day, although it was rather expensive for her. During the dry season pastoral women looking for work with 'friends' were a regular phenomenon in Booni. However, in town there is an oversupply of impoverished pastoralists looking for work.

The case of Ay and Lobbel shows that the work which is not considered *ndimu* for men and women is only turned to when people have no other choice. However, they will not work for others in their own community, which would be too shameful. Working for people outside the community may be an option in this case, and therefore one must rely on acquaintances to get work. Many people who are related to the Jallube of Serma live in Booni. Ay and Lobbel 'use' the relations they built up with the people of Booni when they were on transhumance in the past. Thus Booni has the advantages of being outside, and yet of being inside the community of Serma in the sense that people have some obligations towards them.

As is clear, the people from Serma rely on Riimaybe in Booni; but also inside Serma the role of Riimaybe is essential for the survival of Jallube women, though not as employers. New help relations have developed among a number of Riimaybe and Jallube women, which are a continuation of relations of interdependency in the past. Jallube women do not work for Riimaybe women, but rather enter into a relationship which helps the Riimaybe women to organize their petty trade and the Jallube women to overcome temporary shortages, without loss of status. These transactions are facilitated by the fact that they still regard

each other with the ideas and status symbols which were defined in the political hierarchy. Their relationship is not coloured by *yaage*, and this results in a relatively easy communication. For the Riimaybe the difficult situation of many Jallube women is no secret. Three Riimaybe women's houses are centres where Jallube women sell their milk. The two rainy seasons that we were in Serma there was hardly any milk to be bought, which nearly led to fights between the buyers (mainly Riimaybe). Some Riimaybe women are indispensable for the Jallube women. They lend the women spices for the sauce, some rice, or millet if they are starving. Waddijam Saalu for example has a very central role in a network of help and credit relations. In the past she had a relationship with the Jallube based on mutual trust. Jallube men deposited with her money that they earned from selling of animals at the market. She invested this money in her trade, because the men asked for the money back in small amounts only. At the same time she lent Jallube women spices and food. In this way she accomplishes what Jallube women and men cannot negotiate on their own because of feelings of *yaage*, i.e. that they help one another. Because *yaage* is lacking in the relationship between Riimaybe and Jallube, the Jallube do not need to hide their wealth or poverty from them. It happens that impoverished Jallube women are helped by their Riimaybe friends, which means that bush products, and other products of the labour of the Riimaybe women are eventually shared with the Jallube women. In fact this is another form of the old relationship of slave and master that once existed between Riimaybe and Jallube.

The relationship of mutual help between the Riimaybe and Jallube does not go so far that the Jallube depend totally on the Riimaybe. Despite the fact that Jallube women buy on credit, this will never result in permanent work or gift relations. This would be a display of one's poverty which is disapproved of among the Jallube. If necessary they will leave for Booni as in the case of Ay Bukari. These people may eventually leave for good and join the ecological refugees in Booni and elsewhere.

Ecological refugees in Booni and Duwari

The Fulbe in the Hayre who decided to leave their camps or villages and settle in rural towns may be labelled ecological refugees. They can no longer make a living with their own resources and are forced to search for work or material support in town. Not all these people have the opportunity or the courage to migrate to a big town, because they have no relatives or only a few living there. Settling in small rural towns in the home area is an intermediate solution for these people.[13] Often kinsmen or friends live in these big villages and, if there is a market, and if a reasonable number of people have some means to pay for labour, work is relatively easy to find. Social networks seem especially crucial in this situation. These networks are based on a shared history which is at the roots of the relations between the social categories of Fulbe society, but also on a shared economy, in the case of the transhumance of the Jallube to these towns. In the Hayre two such rural towns are Booni and Duwari.[14]

Booni is the old seat of Weheebe chiefs, founded by Maamudu Nduuldi. The descendants of Maamudu Nduuldi still live in this town. Booni has become an administrative centre under the Malian government. The Jallube of Serma have close relations with Booni. These relations are not only historically defined, but also related to the 'modern' services in town. Most inhabitants of Serma pay taxes in Booni and they regularly visit the market. *Njaatigi* relations have developed over generations between the inhabitants of Booni and the Jallube of Serma and other camps in the area of Booni. Booni may be considered the capital of the Jallube in the eastern Hayre. At present it has become a refuge for many deprived Jallube.

During the dry season of 1991 (in the months March and April) one of our assistants interviewed most of the Jallube families that had settled permanently in Booni.[15] These families lived literally on the margins of the town. Only one family came from Serma (Nguma), the others came from other camps (Beebi, Simmbi, Gimmballa). Of the sixteen families that were visited 10 were female-headed households. The husbands of these women had died in the 1970s or shortly after 1984. Two husbands left and never returned, and sent no money to their families. The same happened to most adult sons. They left as soon as possible and nobody ever heard of them again. One family settled in Booni as early as the 1970s. They lost their cattle due to the droughts of 1973, and the successive bad years. The other families all came to Booni after 1985, some only two or three years ago. They had all lost their animals and had no labour in their families to cultivate sufficient land to provide a subsistence. If they came to town with a few head of cattle these animals died in the course of the years. Most people had relations with Booni in the past, for they often came there on transhumance during the dry season. The *njaatigi* relations that developed in this way, however, do not support all these families. Two Jawaambe families (two brothers) offered the majority of these Fulbe families some land to build their huts on. Their animals were also herded by a number of adolescent herdsmen from these destitute families. The women did all kinds of work for the wives of these two Jawaambe. In the past these two Jawaambe brothers were intermediaries at the market place in Booni. In this function they used to sell animals for the Fulbe who were now camping at their place. The reason why they helped these people is that in the past they had earned a lot through and from the Fulbe, and therefore helping these destitute 'friends' was an obligation. Other families camped on the fields or in the compounds of Riimaybe. The men herded the animals of these Riimaybe and the women did some work in the household. The Fulbe were not paid, but they enjoyed the use of the milk of the animals. Besides the work these people did for their new *njaatigi* they had to work for other people in order to eat at least one meal each day. The families with adult men (sons or husband) were relatively well off, because they often herded animals for others, and this yielded them some milk, a guarantee for income. Among the female headed households only two had a son who stayed in Booni. One of these boys herded some goats for a resident of Booni. The women, if they had the strength to do any physical work, worked very hard. They sold the milk if their husband or son herded animals; they did all kinds of household work, like pounding millet, and drawing water from the deep well in Booni; they built huts; they searched for firewood; they made mats; some women also cultivated on the land of their *njaatigi*. With these activities most women earned enough to

eat at least once in two days. One woman very explicitly expressed her wish to leave as soon as possible, no matter where, anywhere is better than Booni.

Duwari is a village of Hummbeebe, cultivators who invest their capital in cattle. Near Duwari are a few wells that attract Jallube and other Fulbe with their herds in the dry season. A few families from Serma have been coming to Duwari on transhumance for generations, and the relations with their *njaatigi* have a very long history.[16] Although the number of deprived families that settled in Duwari after 1985 is much smaller than in Booni, in Duwari more families from Serma can be found. A group of Fulbe who mainly originate from the cattle camp Nguma settled in the courtyard of Attoy. Attoy is a Kummbeejo who lived for 10 years in Serma, where he and his wife cultivated fields. When they returned to Duwari they became the *njaatigi* and friends for many Jallube families from Serma. For them it is almost impossible to refuse Jallube leave to settle on their land, or some other form of help. And so it happened that these destitute Jallube became stranded in Duwari in 1984/85.[17]

These families (about five, but their number fluctuates) built their huts, for which Attoy gave the construction materials, on Attoy's land at the edge of the village. Life in this 'refugee camp' is not easy, and the first time we visited Duwari and tried to interview these 'stranded' people we were really shocked. Mirjam found that interviewing these people was too difficult, and eventually she just sat with them, and gave them some money and food. The next visit to Duwari was even worse and we did not want to return there for a while, nor did our assistants. We still feel the sadness that such poverty caused us. The huts in which these people lived were no more than shelters from the sun. They had no furniture at all. Their clothes were rags. Most depressing, however, was their apathetic attitude towards life. Most of these people did not live but simply endured existence. This impression altered some time later, because some of these people appeared to work as hard as they could to get something to eat, which they did every two or three days. This work consisted, even more than in Booni, of continually asking for labour, some food, and so on. The Jallube living in Duwari had become real beggars.

The only 'complete' family living on the land of Attoy are Hammadu Maamudu and his wife Fatumata from Nguma. They have three sons and two daughters. They all look as if they have not eaten enough for years. Their youngest son of one year was born without eyes. In 1985 they came with all their animals on transhumance to Duwari. All these animals died except five. These escaped to Serma. Hammadu went there to collect them. Back in Duwari these animals also died. The family stayed in Duwari in the compound of their *njaatigi* Attoy. Returning to Nguma made no sense because all the brothers of Hammadu had migrated to the south and the family of Fatumata had also lost their animals. They would have died if they had returned to Serma, as Hammadu assured us. Fatumata said that Hammadu does not want to ask his kinsmen who live in Urfina for help, because this would be a shame (*omo yaagoo*). Their oldest son, 19 years old in 1985, left for San and still lives there. Sometimes he sends some money to his parents: this year FCFA 5,000 and five *pagnes* (pieces of cloth). Hammadu returned each year to Nguma to work his fields, but as the harvests were next to nothing, he decided to leave this work. In 1990 he cultivated a field in Duwari, given by Attoy, which yielded only five loads of millet. These

five packets were almost finished at the time of the interview, December 1990. Before 1985 Hammadu never cultivated, because this was the work of his brothers. In fact Hammadu considers himself too weak for cultivation, as for all the work. He has no strength to herd animals of the Hummbeebe or to do any other work, and he is convinced that he cannot work. He spends energy only on the study of the Koran with a *moodibo* who also settled on the land of Attoy. This *moodibo* comes from Yirma. The only work Hammadu did during our visits to his family was making rope from the plastic food sacks which are used to transport millet and other grains (food aid). He told us that this was for his *moodibo*, for which he did not ask money; 'of course not, he is a *moodibo*'.[18]

Still Fatumata managed to prepare one (poor) meal a day. They were very lucky with their daughter of fourteen who is extremely skilled in hairdressing, so that many Hummbeebe women asked her to tress their hair. She is paid two to three bowls of millet for tressing the hair of an adult woman, which takes a day. This was the family's only income. The Hummbeebe did not give them food or other things. For this family it was very difficult to continue as Jallube. Their oldest daughter who had married a Jallo who also camped in Duwari would soon give birth. To celebrate the name-giving ceremony of the child, which is absolutely essential, they needed at least a goat, which they did not have. Fatumata hoped to save one load of millet, so that she would have something for the celebration. It was clear that Fatumata doubted if she would be able to rescue this packet of millet from her hungry family. The daughter of fourteen in fact has reached the marriageable age, when she also wants to be clothed and to behave as a real Jallo girl behaves. Fortunately her brother sent the clothes. However, her mother was considering selling them in order to obtain food. It was also time for her to have her mouth tattooed.[19] A Diimaajo woman from Serma, who is specialized in tattooing, came with us to Duwari, and the girl desperately wanted to have her mouth tattooed. Her family objected. They did not have the money, FCFA 500. The daughter ignored these objections and had her mouth tattooed, and promised the Diimaajo woman to pay her as soon as possible. As a consequence of the tattooing she was not able to work for days, which meant another blow to the store of millet her mother was trying to save.

Normally family, or co-residents in the camp, would have helped in this situation, but in Duwari such help was not given. This was even more painful when another younger daughter of Fatumata died of starvation. According to Fatumata she did not want to live any more and starved herself to death. The day the child died her husband was away and she did not know what to do. She sent the older daughter to Attoy, who came, washed the child and buried her, in accordance with the prescriptions of Islam. A woman is not allowed to perform the burial ritual.

Hawa Buraima and her two daughters also lived in the corner of Attoy's compound. In 1984 the animals (goats) that had not died, were stolen. Their cattle had already died in the 1970s. Hawa's husband died a long time ago. He was a brother of Bubaare Aamadu and of the father of the Bana'en from Wuro Boggo. Before 1984 Hawa and her daughters came to Duwari during the rainy season in order to earn some money. After 1984 Hawa and her two daughters settled permanently in Duwari, and they constructed a hut near the house of Attoy. Hawa replied to the question why they did not stay in Serma, that she did not know,

only Allah knows! (*Alla nii andii*). Jeneba, her youngest daughter, is married to a Pullo who herds the cattle of a Kummbeejo. She stayed most of the time with her mother, because her husband was not able to take care of her. Hawa earned something by repairing calabashes.[20] The repair of four calabashes, which took at least a day's work, paid her FCFA 50. In December 1990 one bowl of millet cost FCFA 50. Later in the dry season the price of one bowl of millet went up to FCFA 100. Hawa did not find enough calabashes to repair all the time. Sometimes they ate nothing for three days on end. Hawa has no sons and no brothers, so where could she go? Later in the dry season we met her eldest daughter Ay in Booni, where she was looking for work. She said that in Duwari no work could be found, because most Hummbeebe had left on seasonal migration to Burkina Faso and the people who stayed behind did not need her labour. However in Booni she was not lucky either. Her eyes were swollen from conjunctivitis and most days she had to keep to her bed, not only because she felt ill and weak, but also because the people of Booni did not need her work. There was too much competition from other people, also ecological refugees, and Ay had hardly any acquaintances in Booni. Later we met her mother Hawa in Serma. She stayed there for a few days. She had asked all her relatives (including her brother-in-law and her nephews) for some help, but they hardly gave her anything. She did not even stay with her relatives. The only people who really helped her were the Riimaybe in Debere. Both Bura Bilaali and Waddijam Saalu gave her some millet. Again we gave her some money, knowing that it would not be sufficient for her to make it through the dry season.

The *njaatigi* relation these families have with Attoy, which is also a relation of friendship and neighbourhood, provides these destitute people with shelter and some moral support, and, if we may believe Attoy's wife, also with food at times. Many old women worked at the house of Attoy. Young women came to their house to pound millet. The household equipment of Attoy's wife was common property. Attoy always bought milk from passing Jallube. It is clear that for these families neither kin nor neighbours offer any social security. Though they dearly try to keep up their identity as Jallo, they are already expelled from their own society, which is to a certain extent their own choice, though most probably they are right when they say that staying in Serma would mean their death. It is not certain whether the same fate will await them in Duwari eventually.

So far it has been shown how ideologies, rules, norms, and mutual help relations embedded in *al'aada*, have become marginal in Jallube and Fulbe society and do not provide social security for a large number of people. In some cases 'new' social security relations are created that are based on *al'aada* but take a different form than in the past, e.g. the help of Riimaybe and *njaatigi*. An important recurrent theme is the loss of dignity, both the fear people have for it, and the real loss of it. People desperately try to conceal this or to cope with it. Feelings of *yaage*, because of the loss of *ndimu*, prevent people from undertaking specific activities in many cases. Especially in their own environment these values and norms, which are not so much imposed on them by others as by themselves, may be a handicap rather than an asset. *Ndimu* , *yaage*, *jawdi*, *yimbe*, *semmbe*, in short *al'aada* as a whole is a discourse about power and wealth, a cultural ideal of pastoralism more than anything else, and gives few guide lines for survival in this kind of unremitting crisis. This

is why many people try to find dignity and respect in another framework than the *al'aada* of the Fulbe culture. They turn increasingly to Islam. Islam in fact provides them with a reason to live and an understanding of the situation, as the cases of Ay Bukari, Aminata and Hammadu exemplify. It also seems that Islamic institutions and networks become more important under these changing circumstances. What role the Islamic institutions and networks played in the past is difficult to assess. In the present situation, however, these institutions and networks have become essential for the survival of a number of people within the Jallube community. Some of the people we have come to know in the Hayre found an escape by Islamic means as will be shown below.

Poverty and *juulde*

Islamic charity (*zakat* and *sadaqa*) in Serma

In chapters 2 and 5 the institution of *zakat* and its historical development were discussed. In its historical form *zakat* has never functioned as relief for the poor at the level of the state, from the Diina to the République du Mali. How it functioned on the local level in the past cannot be reconstructed. The information we gathered reveals that everybody has his or her own interpretation of this gift, especially on how to divide it and on whom to give it to. Some people gave it directly to the people they thought to be poor and needy, others gave it to the Imam and hoped that he would divide it among the poor. Many people gave to the *moodibaabe*. These gifts were also interpreted as *zakat* while in many cases they were simply payments for the services rendered by the *moodibaabe* during the rainy season. For example, at the beginning of the rainy season of 1990 in Serma the villagers agreed to give the *moodibaabe* one load of millet each for their services, if the season should be good. Tacitly this load was classed as *zakat*. In Serma there are no people who pay *zakat* on animals, because no one owns a sufficient number of animals.[21]

Exact information on the actual payment of *zakat* on village level in the past is lacking. The harvest of 1990 was so small that apart from the *moodibaabe* no one got *zakat*. This *zakat* was not redistributed by the *moodibaabe* as they considered it a payment for their services. In 1991 the harvest was relatively good and *zakat* was paid by several people. It became clear that in practice everyone who paid *zakat* distributed it by him or herself. It was given to needy relatives, to the Imam (as payment for his services) and sometimes to the destitute of society. Almost no payment of real *zakat* was made directly to the Imam so that he had nothing to redistribute. *Zakat-al-fitr* was rarely given directly after Ramadan. In 1990 and 1991 the month of Ramadan was in the dry season, when nobody had enough to eat and many herdsmen were far away, so most people only fulfilled their *zakat* duty long after the harvest. To get an idea about the functioning of *zakat* and *sadaqa* we will discuss the cases of a few receivers and givers of *zakat* and *sadaqa*. The receivers were mostly old women.

After the harvest of 1991 Aminata from Debere received some *zakat*. She got a little millet from different people in the village, among them Buya, who is her brother-in-law and



Imam of Serma, some Riimaybe, and her son-in-law. In total she got four loads in Serma. She went to Beebi, 30 km north of Serma, where her paternal kin live. There they had a good harvest as she was told. Her family in Beebi gave her another eight loads of millet. In 1990 Fatumata Aamadu from Wuro Kaaral received no *zakat*, but in 1991 the children of her brother and sister gave her some millet. She got some millet from another neighbour and from a rich nephew who lives in another camp of the village. In total she received ten loads of millet, which was sufficient for her to survive on.

Aama Babel from Wuro Kaaral harvested eighty loads of millet in 1991. From these eighty loads he took eight (=10%) to divide as *zakat*. He divided it himself: one load to a *moodibo* who made charms for him; one load to a *moodibo* who was needy and very ill; one load for his aunt (Fatumata Aamadu from Wuro Kaaral); one load for another aunt who has no sons; one load for the oldest man and lineage leader of Serma; one load for a *moodibo* who stayed for a few months with his students in Serma; one load for an old woman in Debere; one load for a destitute woman from his own cattle-camp. Four of these eight people live in the same cattle camp as Aama Babel. The others, except the visiting *moodibo*, are close kin. Besides these eight loads, he set two loads apart to divide in small portions among other people (i.e. *sadaqa*).

Lobbel and Ay Bukari from Nguma took sixteen bowls (almost 11 kilo) of millet from their granary and divided it among three people after Ramadan as *sadaqa*. One part for the *moodibo* who had made some charms for them, one part for an old woman in their cattle camp, and one part for an old woman who is their aunt. The giving of *sadaqa* is illustrated by the case of Yaaya Cuume. Bura Bilaali literally explained his gifts to Yaaya Cuume as his duty as a Muslim. Waddijam Saalu too said that the inspiration of Islam brought her to

divide food among the poor and needy. This was a very important drive for them to help these people in addition to the old relationship they had with them.

These examples show us that for some people *zakat* has become crucial as a means of survival, but only in times of relative abundance. Their children are absent or have not enough means to support them all the time. *Zakat* thus allows older people (and also disabled people and poor families) to stay longer in the village, and it gives them some independence from their relatives. On the other hand the examples also give us insight into the willingness and ability of people to pay the *zakat*, which they consider as their Islamic duty. However, if possible, they divide *zakat* themselves and they prefer to give *zakat* to their own people, related through kinship or co-residence, or to the *moodibaabe*. In this way they fulfil at the same time their obligations according to Fulbe custom.[22]

Sadaqa, given by the Riimaybe, has become part of existing mutual help relations, based on the transformation of a historical relationship as we discussed above in the context of relations between Jallube and Riimaybe women. For the Riimaybe this giving, and also paying of *zakat*, is an expression of their Islamic piety. As Islam was a privilege of the elites in the past, this can also be seen as an expression of their new status as independent people. It was difficult to talk to the relatively rich members of society about the amount and distribution of their *zakat*, as it was difficult to discuss anything related to wealth with them. We observed them also giving to their needy aunts, and to the *moodibo* who had written charms for them. According to a *moodibo*, who came from another village, not all people pay *zakat*, but as it is not the custom to talk about the amount of *zakat* given, this does not harm their reputation.

The two examples of givers of *zakat*, Aama Babel and Ay and Lobbel, also show how much value some people personally attach to *zakat*. The case of Ay and Lobbel was discussed above and it is clear that the millet given as *zakat* was a large donation, considering their situation. As we have seen in chapter 8, Aama Babel's means were extremely limited. The fifty loads which remained after he had fulfilled his other (postponed) obligations were not sufficient for his family. Nobody would have objected if he had saved these eight loads for his own family.

Islamic gift institutions are indeed functioning to alleviate poverty on the community level.[23] However, it is doubtful if this is indeed an improvement of the poor people's situation, given the way *zakat* is redistributed, i.e. among kin and neighbours. It seems to replace other 'traditional' social security mechanisms. It is not extra. Further the paying and receiving of *zakat* and *sadaqa* seems to be a 'new' arena in which social and political differences between people are manipulated.

Religious knowledge as an asset

Moodibaabe and some old women profit materially from their knowledge of the Koran. The symbolic capital of a *moodibo* is of course knowledge of the Koran, and other books. If a *moodibo* has proven to be very wise, he is highly respected by society and will be consulted

frequently. For a *moodibo* religion is highly instrumental in its economic consequences. He is paid for the consultations, but he will also receive gifts, like milk, grains and some money from people who want to show him respect. A *moodibo* can survive as such on his knowledge (cf. Saul 1984).

This became clear after the drought in 1985. The *moodibaabe* were as much victims of the droughts as all other members of society. Some *moodibaabe* who had many cattle and did not really practise their skills as learned men now took up their work as *moodibo* in order to survive the crisis. Alu Hamma Lennga, the Imam living in Douentza, had lived there since 1985 because he lost all his cattle. One cow was left, herded by his uncle's son in Serma. As a descendant of a *moodibo*, who was regarded as a saint after his death, he has prestige in Douentza, and was asked to become Imam of a new mosque. Life in town provided him with a good living. Other *moodibaabe* have fled the region after they lost all their cattle, and wander around in the Inner Delta of the Niger or in areas south of Serma and in Burkina-Faso. They have students and seem to survive fairly well compared to other wandering Fulbe without education in the Koran and other Islamic books. We also met people who studied only the use of medicinal herbs and plants, which they started after they lost their cattle. They dare not operate in their own village and region, but travel long distances and never seem to come back with any money in their pocket, like Aamadu Yaaje (see chapter 5). The *moodibaabe* we know in Serma are comparatively well-off after the drought. In one way or another they are respected, and many people consult them for different things. In the dry season they leave for the towns where the Jallube camp, and gain a relatively easy living with the services they render to these Jallube and to the villagers (often Hummbeebe).

We did not collect budgets from *moodibaabe*, but the following examples will make clear that *moodibaabe* are indeed better off. A *moodibo* often gets help from other villagers with the work on his land. The *moodibaabe* wives have better clothes than women who are married to a non-*moodibo* with the same wealth (lack of wealth in cattle, small ruminants). One *moodibo*, who was very ill, got a free taxi ride to the hospital in Burkina Faso, because he was a *moodibo*: normally this would have cost him FCFA 5,000. Another *moodibo*, Bukari Alasunna (see chapter 5), gained from two months of work in Booni enough money to marry a second wife, to clothe his family, and to buy sufficient millet for the rest of the year. Another *moodibo*, Aamadu Muusa from Bunndu Yaabi, has earned enough cattle from his work to marry four wives, to adopt some of his nephews, and to eat so much that he is now said to weigh more than three Fulbe men together.[24]

The way Buya, the Imam of Serma (see chapter 5), organized his life gives us more insight into how the *moodibaabe* survive after the droughts. Buya and his wife have no cattle any more, all perished in the drought of 1983-1985, and they live as sedentary people in a mud-brick house in Debere, next to the mosque. Buya has large tracts of land, but he cannot work it all as he has no adult sons to help him. As he is Imam, however, a group of young men of the village work his fields each year. For his work as Imam, who leads people on the path of Allah, he is given part of the *zakat*. If he has been successful with healing people or making charms, he receives goats or millet in return. Although Buya is poor in terms of cattle and labour, he has access to the labour of the villagers because he is

Imam, and he has access to cash and food because of his knowledge. In the dry season Buya often goes to Duwari, where he has a good reputation as a healer and as a maker of charms. He lives there in the house of Attoy. With the Hummbeebe he can earn more than with the Fulbe. As Buya has an important say in political decisions, he has the opportunity to get his share of food aid or of other development efforts for the village of Serma. In the dry season of 1990-1991 he was able to build up some capital, although he did not harvest anything. He got three bulls of one year old as payment for the healing of some people. He sold these bulls for FCFA 30,000. With this money he had two mud-brick houses built, he bought millet, and he bought clothes for his wife and children. After finishing the millet he survived on the sale of a goat (the goat of his wife) and on the revenues from his work as *moodibo*, mainly the performance of rituals. Despite these earnings Buya complained about the diminishing returns he gets for his work. For instance, due to competition of 'modern' justice he is only rarely asked to administer justice. If necessary, people go to the village chief of Booni. Other conflicts are brought directly to the secular Malian court. Making charms and healing people are his most important activities nowadays. But because people have less money, cattle, and cereals, the rewards are meagre and are often only handed over after the harvest. Still, he has a good income as an important *moodibo* and as Imam of Serma.

Religious knowledge is important as a source of income not only for the *moodibaabe*. Other people who have knowledge of the Koran may make use of it, for instance old women. This also helped Fatumata Aamadu from Wuro Kaaral. She studied the Koran as a young woman and gained some knowledge of plants. She held the women's rain ritual in 1990. Women would ask her advice when their children were ill. For all these services she was not paid directly, but she received small gifts if there was something to give. We never witnessed this, but it may have helped her to survive.

Another example are widows of *moodibaabe*. After the death of their husband they can make an asset of being a *moodibo*'s widow, as Jeneba Maamudu, from the cattle camp Nguma, has been doing since the death of her husband who was a great *moodibo*. During the rainy season she stays in Serma. Jeneba has no sons nor daughters living with her in the cattle camp, so she lives off the gifts and her own work like repairing calabashes, and making rope from bark. At the beginning of the dry season she usually goes to Booni. In 1991 she went accompanied by her daughter-in-law, whose husband had left to look for work. In Booni they lived in the house of the sister of a famous *moodibo* who was a friend of her husband. Booni is always very populous in the dry season, and Jeneba is one among many old women who come to this small rural town in search of food. Jeneba is one of the better-off among these people, because she has an important asset, i. e. knowledge of the Koran. Each day, when she has enough energy, she visits her relatives, acquaintances, and also strangers' houses where she gives blessings, recites some Koranic texts, and sometimes does a little curing. This will bring these people prosperity. The people she visits belong largely to her kin and friendship network and will always give something for her services. Some people give her FCFA 10-25, others give her some food. In one week in Booni she earned from her services: five times a little millet, once kola nuts, three times a little rice,

three times some spices, FCFA 120 and a piece of meat. This was enough to eat breakfast and dinner for at least three days. The other days she ate only one meal.

These examples show us that Islamic knowledge may provide people with an additional income. For a *moodibo* who lived before the crisis as a herdsman or a cultivator with a specialization as a learned man, which gave him something extra, the income generated from this Islamic practice has become his only income after the droughts. For the old women the exploitation of their knowledge means living in accordance with the ideology of Fulbe society and therefore without shame. These women explore existing social relations in a 'new' way. The *moodibaabe* and the old women are paid for their religious services. We can also interpret these activities as a form of redistribution, because the poor in a way oblige the better-off to give them something for their religious services.

Thus Islamic knowledge brings profit to the people who possess it, but it also gives advantages to the ordinary people. The religious knowledge and the religious services are very much needed in times of crisis. The *moodibaabe*, especially, help people to secure their survival by helping them attack plagues and illnesses, in short to control their physical environment. Further the spiritual work of the *moodibaabe* and the old women helps people to formulate an answer to the existential questions that everyone has more urgently now in times of crisis. It is part of the mental aspect of social security. In explaining the crisis and difficult situation, people use expressions like: 'It is Allah's will', or 'Allah will bring good rains', or 'Allah has sent away the small birds'. And it is to Allah that the *moodibaabe* and the old women refer.

The importance of religious knowledge as an answer to the crisis can even lead to a situation in which some men look only for knowledge of the Koran and therefore submit themselves entirely to a *moodibo*, forgetting the material means they need to provide their families to survive physically. They hope to protect their families in this way against all evil. In the most extreme cases the women and children have to work for the family in order not to die, as was the case for Hammadu Maamudu in Duwari.

Social networks based on religious relations

Related to the problem of the mental aspect of social security, but also based on more practical considerations, is the tendency that people try to get more grip on social networks based on Islam, and on Islamic knowledge. The three strategies discussed here: making an appeal on the social networks of *moodibaabe*; giving one's daughter in marriage to a *moodibo*; and sending one's children to a Koranic school, are not new for the Jallube. However, it seems that more people make use of these strategies and that the reasons for doing so have changed. In a few cases the material benefits, i.e. obtaining food, seem to be as important as the spiritual benefits.

Networks of *moodibaabe* are formed as the scholars study, and they cross ethnic and national boundaries. The family of a *moodibo* may also profit from his network. As all these people are Muslim and they form a Muslim network they are bound by their Islamic

duties, which implies help to the poor (see *zakat*). Thus in theory it is always possible to make an appeal to the charity of members of the Islamic community, who are also one's acquaintances, in times of crisis.

This was the case for Aminata, from Debere, whom we introduced above. In 1990 she got no gifts from anyone. No field had been worked for her, although that would have been of little help since harvests were very meagre that year. The rope and mats that she and her daughter made were not sold, because no one had the means to buy them. They were really desperate. They decided to go to Wayre, a village of Hummbeebe cultivators 60 kilometres from their village. They knew some of their relatives and acquaintances had gone to Wayre with their cattle to spend the dry season. They hoped these people would support them a little. We wondered if these Fulbe could give them enough to survive. As it turned out, indeed they could not. Moreover that may not have been Aminata's plan at all. A Kummbeejo friend of her late husband, a great and rich *moodibo*, lived in Wayre and he was willing to help Aminata and her daughter through the difficult dry season, as they were wife and daughter of his late well respected friend and *moodibo*.

Moodibaabe who are famous have in general a very crowded homestead during the dry season. They are not allowed to refuse people who knock on their door to ask for help. The *moodibo* will ask the richer members of the Islamic community in the village where he lives to give him food and so forth in order to feed all these people who stay at his home. Not all *moodibaabe* appreciate these requests for help. The Imam of Dalla, for example, was always complaining about all the people he had to feed. People from Serma also went there in the dry season, in order to receive the blessings of the 'holy' *moodibo* (the father of the Imam). Moreover they would eat in the compound of the *moodibo* each day, creating a massive workload for his wives and a burden on his limited means.

Practices which profit from the networks of *moodibaabe* indeed signified for some people the difference between survival or starvation. A related practice is embedded in marriage strategies of the Jallube. Parents can decide to give one of their daughters to a famous *moodibo*, who may marry her when she has reached the marriageable age. This was earlier described in chapter 5 when discussing the way people expressed their respect for *moodibaabe*. The other side of this practice is that it gives the family of the married girl 'spiritual' and material benefits. If the family is lucky this *moodibo* will help them as son-in-law in times of shortage, and through her relation with the *moodibo* the girl brings the family nearer to Allah, which means more security. This was also the case for Dikko, whom we discussed in chapter 5. She was not happy in her situation as a young woman married to an old *moodibo*. Her *moodibo* husband in Douentza is rather prosperous as Imam of the new mosque of Douentza. He often sends some money to his family-in-law and he helps them when they are ill and have to go to the hospital in Douentza. So next to 'spiritual' benefits from the marriage of their daughter there are also material benefits.

Just as it is good to have a daughter married to a *moodibo*, so it is good to send one's son to the Koranic school. This brings the family 'spiritual' well-being, and it saves them another mouth to fill. However for the boys it is a hard time. While studying with the *moodibo* the students have to collect their food each morning and each evening. When they are in town or in a village they will ask for food morning and evening at the entrance of

every compound. When wandering *moodibaabe* with their students visit cattle camps, they send their students among the families in the camps. That surviving as a Koranic student is not easy nowadays in the Hayre is evidenced by this practice in Serma. The children must scratch up their food each day, wandering around in towns or villages where their *moodibo* has decided to stay for a few weeks. Some of these *moodibaabe* with their students made a stop in Serma, hoping to get some milk each day. At the start of the dry season, each morning at six o'clock we were awakened in our cattle camp by the whining of Koranic students '*Gido Allah Gariibu*'. They were lucky that we did not eat too much so we could always give them some left-overs from our dinner of the night before. Other families would give them a little milk, a few millet heads or the left-overs of their meals, which was never much. It is their Islamic duty to give, but they would not give as much as they did in better times. The idea inhabitants of Serma (Riimaybe and Jallube) have of these 'begging' students is highlighted by a proverb: '*ko hilli wuro e tikere gariibu*' (the village is not concerned with the whining of a Koranic student). As we followed these children over a few months, we saw them grow thinner and some of them fell severely ill.

Sending children to a *moodibo* is thus a risky affair. Often these children suffer, they are used as 'slaves/labourers' while not getting enough to eat. Often children die during their stay with the *moodibo*, far from their own village, infected with new diseases, undernourished and with no relatives to give money for medicines. Even if relatives are around it is difficult for them to intervene, because the child is 'given' to the *moodibo*. Moreover, it is not at all certain that the profession of *moodibo* will have great potential in the future. As a *moodibo* in Douentza analyzed matters, it is an eroding profession because more and more people enter it to earn a living. The actual situation of a Koranic student is in sharp contrast with an important reason why they are send to the *moodibo* by their family: to bring prosperity to the family (cf. Saul 1984:82-84).

Does this creation of 'new' religious networks via marriage and sending one's children to school, and the reinterpretation of the use of existing networks as social security relations, indeed bring the benefits to the people that they hope to get? Are these indeed social security relations? In every case these relations contribute to feelings of security and well-being. In the sense of material social security the benefits are distributed unevenly. The Koranic students suffer for the salvation of their parents. The daughters that are married out to *moodibaabe* do not marry a boy of their choice and can never divorce. However, as long as the *moodibaabe* are among the wealthier and more respected members of society these networks will have a support function for poor families.

Culture, an asset and a constraint for survival

The survival of the poor in Fulbe society of the Hayre is not of immediate concern for society as a whole. Although there are some prescriptions on the level of society that define social security mechanisms, the general attitude is that the poor must look after themselves. It appears that old or deprived people who lack the necessary social relations to survive, i.e.

(classificatory) sons or daughters with enough wealth to support them, must rely on other social security relations, or must invent or create these relations themselves. Another option they have is to sell themselves as labour force, but again for this it is necessary to have a social network which rewards the poor person's labour. Moreover the possibilities of relying on work are limited by the ideologies, rules and norms prevailing in society. Especially young and old Jallube women are restricted in their behaviour in this way. The women who do still live in Serma permanently and who try to survive in a proper Jallube way are starving. However, the position of women in small rural towns seems even worse. That this is also due to ideas related to *ndimu* is clear from the comparison with Riimaybe women who have more options for work and who survive much better. However, Jallube women are not only prevented by other members of society from gathering, cultivating, and so on, but also lack the knowledge and skill to enter this work, which they have never learned. Moreover, they are hampered by their own feelings of *yaage*, even when they would be prepared to accept the loss of *ndimu*. The knowledge and skills of the Riimaybe are much broader, which widens their ability to survive in times of crisis (cf. Brown 1991). The women who come to towns to do household work for others try to escape the control of society and their own feelings of *yaage*. They have no other choice than to enter this hard and in their eyes non-noble work, because they are very poor and the alternative would be eating the last reserves, and then being forced to leave Serma and join the group of ecological refugees.

The ecological refugees live literally on the margins of society. The problems they encounter are enormous and their future is very insecure. African hospitality provides some solace, but there is a limit when material means are finished. Hummbeebe will never refuse a person who wants to settle in their village, but to support this person is another question. If everyone is poor it is difficult to find work, and impossible to raise one's living standard. Instead the ecological refugees in the Hayre enter into a spiral of impoverishment, which will eventually lead them to decide to migrate further, or it will lead to illness and death. The people who found work in Booni have adapted in fact a servile status as they have become totally dependent on their *njaatigi*. The mutual respect, and mutual help that characterizes the *njaatigi* relationship has disappeared in these relations, as a result of the widening gap between rich and poor. These problems are experienced by many groups of self-settling refugees in Africa (see Holy 1980, Chambers 1979, 1982).

Some of the poor, old women and poor families, have found a means to survive in Islam. Islam not only provides social security mechanisms at the level of society, it has also become a means to survive because people use the symbolic capital of Islam as an instrument to gain a living. Islam has a long history in the Hayre, as have its institutions such as *zakat*, Koranic schools, and networks of *moodibaabe*. However, the harsh circumstances in which the Jallube must live have opened new dimensions and given new meaning and importance to these institutions and to social relations based on Islam: new networks based on Islam are explored, *zakat* has become much more an institution directed to alleviating poverty and replaces other more or less obligatory help relations based on kinship. Islamic knowledge and the related esteem open new possibilities for survival. Furthermore these 'new' survival mechanisms are positively sanctioned by other members

of society, because they are part of the ideology/religion of society. Moreover, Islam increasingly provides all people with a general orientation on life and an explanatory framework for the crisis. Everyone, rich and poor, 'uses' religious duties and explanations to justify their life and to assure a future. Fulbe ideology tends to lose influence, because the cultural ideal of pastoralism conceptualized as *ndimu*, *jawdi*, *yimbe*, *semmbe*, and *yaage*, is no longer valid. The cattle died, *ndimu* is only an idea, people went away, and they have to transgress their own norms.

As the cases discussed in this chapter show, the specific way of survival is highly individualized, and is narrowly related to the symbolic and social capital a person disposes of. This means that many kinds of survival strategies are not open to everyone. As the distribution of *zakat* shows, even society-wide social security mechanisms are not neutral in the choice of their destination, as they gradually lose their depersonalized character and replace help relations defined by kinship and residence. *Juulde* gradually takes over from *al'aada* as the core ideology of society.

A marginal group which has not received attention yet are the ill. Illness may be a consequence of impoverishment, but may also strike the wealthy. Explanations of illness, and the ways in which society and the ill themselves try to cope with illness and mobilize care will be the subject of the next chapter.

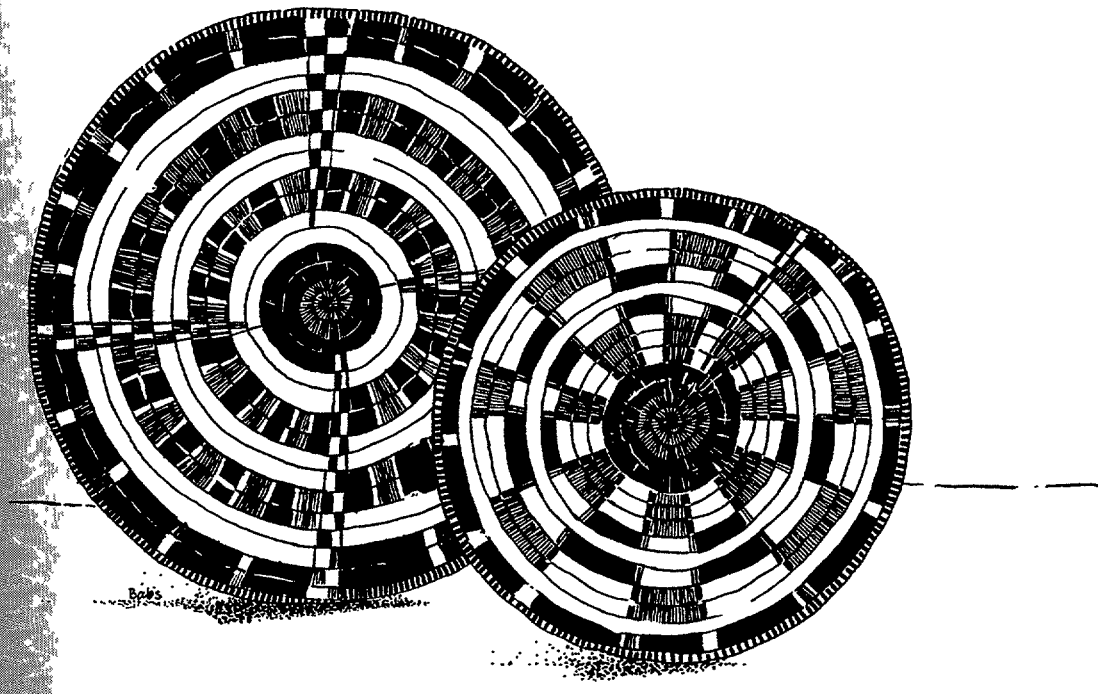
Notes to chapter 12

1. By 'Pullo' they refer not only to the herdsman/woman as a physical entity, but also to the cultural ideal and the identity of a Pullo.
2. This attitude is not specific for the Fulbe in Mali. Among other groups of pastoralists similar processes take place (cf. Baxter & Hogg 1990). Among the Isiolo Boran this attitude may prevail, 'prolonged drought [brings about that] many pastoralists can no longer make ends meet and, unless helped by wealthier pastoralists, are forced out of the pastoral sector, and/or become absorbed by neighbouring tribes' (Hogg 1985:42). Cutler (1986) explains this behaviour also in terms of a conscious survival strategy: 'In some cases abandonment may have been a survival strategy, especially where a men with two or more wives would abandon one family and take the other to the road in search of relief' (ibid:..). Holy (1980) found a tendency among the Berti in Sudan that forced many of them into labour for the richer members of society, leading to a structural differentiation into rich and poor.
3. Cutler (1986) found in a situation of famine that credit and gift networks collapse.
4. Probably many fieldworkers have the same experience. In our case, this problem was aggravated by the extreme poverty of the people of Serma. Helping everyone would also exhaust our means. On the other hand, as outsiders, we had no grounds for giving to one person and refusing another. In the course of time we more or less adopted the secretive Fulbe manner of distributing gifts, in order not to arouse feelings of jealousy against the recipient, or ill-will against ourselves. Unfortunately people sometimes made it known publicly what we gave them, so that others felt deprived and expressed their feelings of jealousy (*haasidaare*) and hostility to us. Nevertheless we believe that the general opinion about our gifts to the poor was positive, not least because they relieved other people of some of their duties. Later on we became part of society and developed our own 'kin' networks, which made it easier to refuse people outside these networks.
5. In other groups of Fulbe this 'culture of asking' also exists. For instance among the Jelgoobe in Burkina Faso, where Riesman did research. He did not find any sanction related to the gift. According to him the absence of obligation makes the gift so valuable for the Jelgoobe (Riesman 1977:180-182). Dognin (1975) examined the gift among the Fulbe in Cameroon. Though his conclusion may be too strong for the Fulbe in the Hayre it

comes nearer to the situation of the Jallube than does Riesman's analysis: '*En sollicitant un don ou en le refusant, on court le risque extrême de devenir un sorcier ou un dévoré*'(Dognin 1975:317).

6. We foresaw this problem, and therefore charged a committee of young people with this task, keeping ourselves at a distance. Nevertheless we were held responsible.
7. In Serma there live many more old women than old men, 11 old Jallube women and 3 old Jallube men over 65. The old are the people who no longer milk or herd themselves, but who have given this into the hands of their sons and daughters. Men seem to die younger than women, or they leave. In Debere there lived three old Riimaybe women.
8. For the Jallube old people contain value, i.e. they have knowledge, or they have *barke*. Nevertheless the situation sketched here comes close to the analysis Stenning made of the position of old people in Wodaabe (nomadic pastoralist) society. 'An old man is regarded as of little use. He may help in making rope but he has no voice in planning the movements of cattle of the household. Old people in this situation spend their last days on the periphery of the homestead, on the male and female sides respectively. This is where men and women are buried. They sleep over their own graves for they are already socially dead' (Stenning 1962:99). Such an attitude towards old people was discussed once by two Jallube men who were clearly shocked by the idea of leaving the old to die in a way not even proper for an animal. On the other hand they also recognized that today the people in Serma no longer took care of the old in a proper way.
9. In the past cotton was cultivated in the Hayre itself, in depressions on deep soils with a high water retention capacity, so that the cotton matures on residual soil moisture. At the foot of the Bandiagara escarpment the Dogon still grow some cotton.
10. For the Riimaybe women it was also very difficult to buy the dowry for their daughters, especially so since the dowries among the Riimaybe are much larger than among the Jallube. But eventually these women gather enough money to buy all the necessary equipment. Thus Waddijam Saalu, whose daughter married five years ago, just after the drought of 1985 when Waddijam had no means, nor did her *suudu yaaya*, to buy the necessary equipment. But during the five years that followed Waddijam earned enough from her work on her late husband's fields and from her trading in Serma to provide her daughter with a rich dowry. Members of her *suudu yaaya* also contributed. In the dry season of 1992 Waddijam's daughter furnished her house with two beds, pottery, mats, etc.
11. In chapter 11 this marriage was discussed in relation to the position of Bana's first wife, Kumboore Buraima.
12. FCFA 100 = FF 2 (before the devaluation in January 1994). In the dry season of 1991 a bowl of millet cost in Booni FCFA 100-125. One bowl is two thirds of a kilo. A hard working woman needs at least (if she has no other food) 1,5 bowl millet a day, a family of about 5 people needs 5 bowls of millet. Pounding three bowls of millet costs a young woman one and a half to two hours work.
13. The term ecological refugee might not be appropriate given the definition of the term 'refugee' in the literature. A refugee is someone who enters a new land, while a displaced person stays in his home area. However, the situation of these people is such that they cannot return to their villages, and the world that they enter is new for them; moreover it is only an intermediate stage as most people will leave Booni within a few years, or die there. Their displacement is definitive. Some of these people can also be labelled self-settled (rural) refugees; people who integrate into another community, where they try to find a new livelihood (see Chambers 1979, 1982, Kibreab 1985, Tieleman 1990). In the past small towns offered the poor of the savanna opportunities for independent survival (Iliffe 1987:38).
14. For a description of the migration to small rural towns as part of the pastoral way of life, but also out of poverty, in East Africa, see Dahl (1979) and Baker (1990).
15. The interviews were done by Aisata Maliki Tambura, our assistant and resident of Booni. She is a Diimaajo woman. The interviews were conducted with a list of topics that we made together. Aisata gave the women some money or millet when she conducted the interviews. She viewed the time she asked of the women as a waste for them, because it hampered them from going out to search for work. Aisata herself was shocked by the situation in which these people had to live. Of course she was aware of this situation, before she interviewed them, but interviewing meant a very concrete and hard confrontation with the situation of the people who lived in the margin of her town. In Aisata's house were always some women doing work for her and her mother. Mirjam visited some of her informants together with Aisata, and they did a couple of the interviews together.

16. They probably date from the 19th century, when the Hummbeebe villages placed themselves under the protection of Maamudu Nduuldi.
17. Attoy, by the way, is a wealthy person. His son works in Saudi Arabia and sends money on a regular basis. Attoy himself undertook the pilgrimage to Mecca.
18. The Jallube explained this behaviour of Hammadu by the fact that he turned slightly mad (*dérangé* as our assistant translated *omo yiilan*: he is wandering around, which may also refer to his mental condition). However, in the course of our fieldwork so many people, especially men, were described as '*omo yiilan*' that we wondered whether this was not a normal condition, or a normal strategy of Fulbe men to survive, just by roaming the countryside.
19. The Fulbe consider a tattooed mouth as beautiful for a woman. It is a painful 'operation', done with a bunch of needles or thorns of Acacia trees and powdered charcoal. The lips and the area around the lips as well as the gums are tattooed.
20. Hausa people say: 'Calabash mending is the last way to make a living' (Iliffe 1987:39).
21. This is also due to the ownership structure of the herds (see chapter 9).
22. F. von Benda-Beckmann (1988) found similar results for an Ambonese village.
23. In Mali *zakat* is absent at the level of the state's social security policy (cf. Braun 1991). However in other countries of West Africa *zakat* is gaining importance as a social security institution on the national level. For instance in Senegal Islamic organizations promote *zakat* as a social security institution beside other governmental social security arrangements, in order to alleviate the poverty of the needy, especially those who, not being workers, are ineligible to benefit from the state's arrangements (Vuarin 1990).
24. The income of a *moodibo* in the dry season in Burkina Faso may range from FCFA 30,000 to FCFA 95,800 (Saul 1984:79).



13

The Politics of Care: Coping with Illness

Illness as insecurity

Though many of the poor suffered from malnutrition, death through starvation rarely occurs in the Hayre. Even during the most difficult years from 1971 to 1973, and 1983 to 1985, the death toll was limited, due to the massive inflow of food aid into the area. Only after the drought of 1985 did many older men die. So 'famines that kill' (de Waal 1989), which regularly struck the Sahel in the past, were replaced by chronic malnutrition and starvation. According to Iliffe (1987:160) this shift took place by the middle of the colonial period. Malnutrition, poor harvests, poverty, malnutrition can be a vicious circle (Shipton 1990) and inevitably lead to physical weakness. We may expect the marginal groups of society to suffer bad health. Their marginal position in regional and national politics also results in limited access to 'modern' health care (hospitals) and education (hygiene, good nutrition). Thus the problem of health is of collective social and political concern. It is political-economic in origin (Scheper-Hughes 1992:146).[1] Illness may thus be regarded as a consequence of the political and ecological insecurities in the Hayre.

Many people attribute their physical suffering to the difficult ecological and economic situation. In Serma many people defined themselves as ill, and so far as we could see they were indeed suffering. It was therefore inevitable that illness became part of our research and of our experience of Fulbe society in the Hayre. Theoretically the massive incidence of disease can be regarded as an expression of scarcity and poverty, and its study may reveal how people cope with the insecurities of daily life. Practically, it dominated the fieldwork in the last months of our stay in the Hayre. In Serma itself people told us more and more about their illnesses or about the illnesses or deaths of their friends, family or neighbours. It was present every day and everywhere. Sometimes interviewing was impossible, because the person we wanted to visit was ill. We were often asked for aspirin and medicine, which we gave only if we were sure it would help. Undernourished and dehydrated children were regularly shown to us and we were asked if we could help. So we explained about the oral rehydration drink, safe water and better food, which was almost useless since there was no sugar to make the oral rehydration drink, nor safe water, nor sufficient food. Our car was used as a means to transport sick people to the hospital in Douentza, or the dispensary in Booni. When in town we bought medicine for many people. And in some cases we became the intermediaries between the people of Serma and the 'modern' hospital and its doctors in Douentza. We became part of the strategies of people for coping with the phenomenon of

disease in their lives. Our own position in society was partly defined by illness. In the last month of our stay Mirjam ended her medical history in Serma with conjunctivitis (inflammation of the eye), which is very common among the Fulbe in the dry season, after she had suffered from *henndu*, backache and headache. This conjunctivitis, as she was told, made it clear that she had become an integral part of the community, as she had undergone the same illnesses and had become skinny.[2] This chapter results from these experiences as well.

Though the health situation in the Hayre was never optimal (see chapters 2 and 3), illness was seen by many of the people of Serma as an increasing problem. This observation may be the result of physical realities, affected by malnutrition, bad hygiene, and the ensuing physical weakness and lack of immunity against sickness. However, in crisis situations illness may also be a result of depression and the mental inability to cope with the situation. It was said in Serma that people who left went mad, *omo yiilan* (he just walks around), *hakkile dillii* (his wits have gone). A crisis may lead to a loss of norms and values, which may lead to physical illness, as Tinta (1993:217) showed for the Dogon. This is exemplified by the illnesses of some old women. Mariamma, the mother of Aama Babel in Wuro Kaaral, thought her life would change for the better, i.e. she would no longer be so very ill, if her youngest son returned. Fatumata Aamadu from Wuro Kaaral experienced stomach ache because she had no one who cared for her (chapter 12). For them illness is a consequence of lack of care, of social breakdown.

Thus social disorder in itself may contribute to an increase in illness. In the perception of the Jallube illness is often caused by forces from outside, e.g. ghosts and witches. They induce illness among people and in this way contribute to disorder. So the cause of disharmony is the outside world. However this is only a partial explanation. Especially around illness all kinds of social tensions manifest themselves for example *haasidaare* (envy, jealousy) and *dabare* witchcraft may cause illness. The ultimate outcome of illness is death. But as we shall see people who die are placed outside society, so that their death does not threaten the social order. They are people without relatives to take care of them, or people too old to function in society. The very ill are in fact already socially dead, except for some old people who are thought to have some special force. Death is ascribed to Allah, and Allah, like the dead, is external to society. If death and illness were also to be caused by forces from within society or near society, then the social order would be severely threatened, given the high mortality rate.

The explanation as well as the search for the cure of illness are closely associated with the normative complexes, *al'aada* and *juulde*. Health specialists then in fact restore the social and normative order, which is also the function of *moodibaabe* in other domains of life. For a person who is sick his or her social position, and networks, and the means he or she is able to mobilize, define the possibilities for the restoration of health. The people from these networks provide material means to consult a specialist, or they offer access to a certain healer by their own network (cf. Tinta 1993). In the search for relief of their ailments, patients and healers use an amalgam of remedies based on various kinds of knowledge, therapies, and social relations, from their own culture as well as from outside

(cf. Kleinman 1980, Good 1987). There is no fixed repertoire to be followed. Also the specialists' knowledge is a mixture of ideas of very diverse origin (Bakker 1993).

In a crisis situation social relations and support, knowledge about others, and about the other world, may change in content. Social relations are under continuous pressure as well. Knowledge is by its nature not freely accessible for everybody, and increasingly gets the character of capital. Social support relations may change for individuals. Care and support are searched for in alternative networks. Wealth and power play an important role in these transformations. Thus, if the difficult situation persists, we may expect changes in the way people cope with illness, not only because there are more unhealthy people, but also because the society in which these people live changes, and consequently the social position of the sick. As scarcity continues and the economic situation declines, and the number of poor increases, the sick become more vulnerable. Insecurity grows as to who will take care of them, and how recovery will be promoted.

The signification people give to illness and death and their ways to cope (or not to cope) with it, with the help of beliefs, symbolic means and political and social relations in society, i.e. the politics of care, reveal much about the culture of the people and about the social organization. As we will see the struggle for health or being ill is at the same time a struggle for the definition of one's social position and one's identity in the culture. It is a search for security for oneself, or for a kinsman, within the framework provided by society, but as will become clear this security is not always found. It is only a reduction of insecurity.

In this chapter these processes are unravelled through some personal accounts of illness and death. In relation to these cases we will try to evaluate the cultural complexes people employ to cope with this specific insecurity, illness and eventually death. It will become clear that just like the poor, the sick are confronted with less social security, with a decrease in the availability of care, which also leads to a failure in some cases of the 'medical' treatment available in their society. This may in itself lead to doubts about one's own culture, leading to a search for other means outside culture and to changes in people's identity. We will first consider the reality of daily life by the history of sickness of a woman, Aisatu.

Aisatu, a case of illness

That Aisatu has not yet seen a doctor is not good for her. She has grown terribly skinny and her head is swollen. Her child does not grow, but he seems healthy. Seeku, a skilled *moodibo* from Kaajorde who is in Serma for a while, advised her to make a *talkuru* (amulet) of *makki* (red wood), *doodi* (faeces) of a bird, *wulleeru* (a certain grass). She should mix these ingredients, and seal the mixture in a leather envelope which she must hang around her neck. This should help her recover. But Aisatu and her family have consulted many *moodibaabe*, and they eventually want her to see a doctor. Seeku got a sheep from the father of Aisatu for this advice. (diary of Mirjam 1-11-91)[3]

I got to know Aisatu personally half a year after our arrival in Serma. At that time she returned to the house of her husband Aamadu Maane, the eldest son of our host. Some evenings when Han was brewing tea, and only Aamadu Maane or some women joined us, Aisatu would also come and chat a little. She would always sit a little apart, as the rules of *yaage* prescribe, for Aisatu followed these rules very precisely. She had all the features of a Jallo woman: a long nose, and long face, long strong hair which could be beautifully tressed. She had a lovely slim figure, and she knew very well how to behave according to Jallube norms of conduct. She also made her daily prayers.

She had left Wuro Boggo about a year before to give birth to her first child in her mother's home. Her son died after three months: he was 'too beautiful and everybody said so', for the Fulbe believe that what is beautiful cannot last, for it arouses the wrath of others. It took her quite a while to return to her husband's house. After the birth of her first child a woman is allowed to return to her husband's family only after she has collected a required amount of food and household utensils. These items were hard to obtain. A further prerequisite was that her mother should build a hut for her in her husband's *wuro*, to establish her own *fayannde*. This also took a lot of time, because her mother opposed her marriage to Aamadu.

Her marriage to Aamadu Maane was not without its particular history. It was surrounded by gossip. We came to know that her mother Daado did not like the marriage. One of the reasons was that the mother of Aamadu Maane, Yaaya Aamadu, is a relative (cross-cousin) of the former co-wife of Daado. So she did not want to accept Yaaya Aamadu's children as her *esiraabe*. Another reason for her to dislike this marriage was that Aisatu is the second woman Aamadu married, having first married Ay. Ay and Aamadu divorced several times (see chapter 11). The last time Aamadu married Ay, he and Aisatu were already married, so that Aisatu became his first wife. It was also clear that Aamadu and Aisatu really liked each other, Aamadu surely preferred Aisatu to Ay, although he respected the latter. An important reason for this was that Ay gave birth to two living sons. The mother of Ay also disliked the polygynous union in which her daughter seemed to be in the background. Aisatu and Ay did their best to meet each other as little as possible. They hardly spoke to each other and we never saw them do any work together.

Aisatu's father, mother and siblings live in Koyo. Her father is the first son of Bukari, the camp elder. He lives in Koyo with his brothers, his maternal uncle, and a cousin of his father, and they still have a herd of medium size. In Serma they are known as a moderately rich family; by no means poor. Koyo was the richest camp of Serma.

On our return from the Netherlands in June 1991 from our vacation, we did not find Aisatu, Ay and Aamadu in Wuro Boggo. They were trekking with the cattle herd on the Seeno-Manngo. A few milking cows were left in Serma for the rest of the family. Aamadu arrived in Serma late one afternoon. He came to Serma in order to discuss the problem of the lost cattle of Hamma Dalla, who joined them on their trek (Hamma Dalla herded the cattle of a Jawaando of Dalla under supervision of Abdramaane Hamma and his son). We met each other for the first time in three months, it was good to see him again. He did not want us to stay behind. And true or not, he fell ill with stomach pains, or so he said. The only

possibility for him to return to his camp somewhere in the Seeno was by our car. He wanted to return because he could not leave his wives alone there and, more importantly, he could not leave his cattle because the other herdsman, Hamma Dalla, was busy tracking his own cattle which had wandered off, and both his wives were pregnant. There was no person left to take over his tasks. We asked him what he would have done if we had not been there. He did not answer, but we had the impression that he would have slept in Serma, ill or not, as the journey back would take a few hours walking. With our car, it would only take half an hour, and so we left together for his camp on the Seeno-Manngo. It took more than an hour, because of the rugged terrain, and we arrived when it was almost dark. There we met Ay and Aisatu. They had not built their own huts but lived in old dilapidated huts, which served as shelter from the sun, though wind and rain came through as if one were outside. During the day, they told us, they sat apart in their separate huts, because no one was around. They prepared their own milk and Ay once went to a market 12 kilometres away to barter milk for millet. She could not bear living on milk alone for such a long period. Aisatu said she was quite happy. She had no work to do and a lot of milk to drink, and she was 'together' with Aamadu. To us it was clear she was not in good health. She looked pale and was very thin. She said she had a chronic headache, and the sun was a real burden for her. Her mother had tried to keep her in Serma, but she wanted to go. The trip to their first camp site on the Seeno had been very hard. She was pregnant and had the feeling there was no strength in her body; Ay too was pregnant but she was in a better condition at that time. Before they had left Aisatu was already ill, and she was unable to work in the household of her *esiraabe*, which caused much gossip, which we already heard on the first day of our arrival in Serma. The fact that Aisatu could not work was also a reason for her mother to try to persuade her to leave Aamadu, because she was in a large family in which there was a lot of work. Yaaya Aamadu, the mother of Aamadu Maane, was not pleased with her daughter-in-law for this reason. At first we thought Aisatu's sickness was caused by her pregnancy, but we discovered gradually that her case was in fact rather complex. When we left the next day Aisatu insisted that we come back in a few weeks, to pick up Aamadu, Ay and herself and bring them back to Serma by car, which we did.

At the age of marriage (14-16 years) Aisatu was a beautiful girl.[4] She had a beautiful face and body. She married a boy, her sweetheart, who died a few months after the marriage. An illness consumed his body very fast and he died within 10 days. Nothing could be done about it. He had gone to different *moodibaabe*, but without any effect. Aisatu loved him very much and was devastated by his death. One night, shortly after his death, Aisatu woke up with an urgent need to relieve herself which required her to go into the bush (*ladde*). She was afraid of the night and did not want to go but she had to. While she sat there she was overwhelmed by an unknown power. She fell down and lost consciousness. Her anxious mother came after her and found her, seemingly lifeless. After a while Aisatu woke up and her mother took her back to the hut.

This incident was told to me by Aisatu's mother. She was convinced (and many other people too) that Aisatu was taken by a spirit (*jinnaaru*) which had given her *henndu*, and

she had become *jom-henndu* (possessor of *henndu*).[5] Since then Aisatu had not regained her strength. This story was confirmed by Aisatu herself. Being a *jom-henndu* manifests itself in different ways, more or less severe. Some people get very ill because of it while others have a latent form of *henndu*. Such people have some traits in common. They cannot enter a hut in which a new born baby is present. Should they do so, the result will be a terrible headache. They also fear to enter a room in which, or near which, a person has recently died. All places where one can expect *jinnaaji* to be present are to be avoided by a *jom-henndu*.

Aisatu mourned for four and a half months.[6] When this period was over Aamadu Maane asked her to marry him, which she accepted. In the summer of 1990 Aisatu gave birth to her first child. He died after three months. When we saw her in June 1991 she was pregnant with her second child.

In the beginning of the hot season that year (March or April 1991) Aisatu and Aamadu and Ay sojourned with the cattle on the pastures of the grazing scheme around the borehole of Bunndu Naange. Aisatu fell severely ill. Her illness was acute and it was feared that she would die. Someone was sent to Wayre to warn her family, because when a woman is very ill her own family will look after her. Fortunately Aisatu recovered a little, and her husband, Aamadu, took her to Bukari Alasunna, who is an expert in the curing of *henndu* in Serma. Everybody was convinced she had *henndu*, so when her family came to see how she was doing they brought her again to Bukari Alasunna. He was given a goat by Aamadu Maane for his services, which is quite unusual but reflects the love of Aamadu for Aisatu. We do not know whether the family of Aisatu gave him anything. Aisatu regained (some of) her strength. She returned with Aamadu Maane to the Seeno, to Petel Jokolle, where we met her in June 1991.

After we had taken Aisatu and four other women from the Seeno-Manngo to Serma, she did not stay long in Wuro Boggo. She felt too ill to do any work, and went to Koyo to live with her own family, where she did not have to work. She also went there because she wanted to give birth in her mother's house. Had she not been ill she would probably not have left Wuro Boggo. At the end of September she gave birth to a son, named Bukari. She kept on bleeding for weeks. She lost a lot of blood and her condition worsened again. Of course we went to Koyo to see the child, who was in a way our nephew. I was shocked on seeing Aisatu and her condition. She did nothing, and she looked even weaker than before. Her child was very small and Aisatu told me she did not have enough milk for him, and she was worried about his health. The child suffered from high fevers every other night. Aisatu herself was also feverish every evening.

By the end of October 1991, I discussed Aisatu's situation with Aamadu Maane. He wanted us to help him get Aisatu to a doctor in Douentza, because he saw no results from the visits to the various *moodibaabe*. He, as husband of Aisatu, had no real say in what to do about her condition, since she had gone to her parents. Consequently her family would decide. He had no influence at all on the decision of her family, and he asked us to try to persuade Aisatu's family. Aamadu thought that Aisatu would indeed agree to go to a doctor in Douentza. She was ill and had been for almost a year, or perhaps much longer. We were

also very worried about Aisatu, we knew her now fairly well and she had become something like a sister to us. We were pushing Aamadu to take her away from her family and go to Douentza with her, but this seemed impossible.[7] Aamadu was not sure whether the doctor would succeed in healing Aisatu, but he thought it worth the attempt. He himself once underwent surgery in Douentza when he had appendicitis. Although he still looks back at this episode in his life as a big mystery, he was very grateful and he was convinced of the enormous and miraculous healing power of the doctor.

Before the decision was taken to bring her to town, other possible explanations of her illness had to be ruled out. One of these was that Aisatu's condition was the result of *dabare* (witchcraft). The mother of Ay Yero, Aisatu's co-wife, was suspected of this, as she opposed the marriage of Aamadu and Aisatu. She was thought to have engaged *moodibaabe* to apply black magic in order to kill Aisatu. She had also been accused of having done such things in order to drive away her own co-wives in the past. Aamadu characterized her as: *Jeneba ana hiiri* (Jeneba is a jealous person). This possibility was ruled out by Aamadu Muusa, an uncle of Aamadu and a 'famous' *moodibo*. He assured them that there was no witchcraft (*dabare*) involved.

After Aisatu's family had consulted several more *moodibaabe* there were only two possibilities left that could help Aisatu. One was to consult a Haabe healer somewhere in Burkina Faso. This would mean a very long ride on the back of a dromedary and they were not sure if Aisatu would survive that trip. They asked us to go there, but we refused. We honestly did not really believe this would be the solution, and besides, our research permit did not cover Burkina Faso. In this way we forced Aisatu's family to choose what they considered the second best possibility. Aisatu would come with us to Douentza, and we would take care of her. In Douentza she would be able to stay with an uncle of Aamadu Maane, Alu Hamma Lennga, the Imam of the mosque of the *nouveau quartier*, and with us if we were in town. Alu's first wife is a 'sister' of Abdramaane Hamma, and his second wife is also a girl from Serma. I promised that I would take Aisatu to the hospital, and guide her everywhere, and only because of this they let us go. Douentza, and especially the hospital, is a frightening world for the family of Aisatu (and for many other Jallube). It is also a hostile world of which no-one can expect any good. It seemed very important for them that Aisatu herself was convinced that it could help her, and that she trusted us.

So eventually we went to Douentza with Aisatu, accompanied by her little son Bukari and her mother. Her mother brought buttermilk, a sack of millet and a bundle of clothes with her. This was their luggage for their stay in 'town'. It was clear they did not expect to stay there for a long time. We stopped at the house of Alu Hamma Lennga, who knew already that we would be bringing Aisatu one day, so he and his two wives were not very surprised when we arrived. Aisatu and her mother were warmly welcomed, and we left them with Alu and went to our own house. In the afternoon Aisatu and her mother, Daado, visited us. Of course they were curious to see our home in Douentza, which they would soon enough consider theirs, a satellite of Serma in Douentza. It was clear they were not at ease in Alu's house. Daado had a lot of fear in being there, she did not eat and hardly drank. She said she was blocked by feelings of *yaage*. She considered Alu and his two wives as her

reworbe.[8] The first wife of Alu, Taco, was also her *esi* because she is closely related to Abdramaane Hamma, the father of her son-in-law. Taco later explained to us that this was really absurd. She was angry as she had never experienced this before in Douentza. In Douentza the relationship with people from Booni became transformed into *enndam*. They all became one family in a strange world. Never before had Taco a visitor who reacted as Daado did, and yet, for Aisatu it could not be a problem at all as Taco was an aunt (*goggo*) of Aamadu Maane, so she could be at ease. Indeed for Aisatu it was no problem to stay at Alu's house, and we convinced them that it would really be better for them to stay there, because we would have to continue our work and leave Douentza for several days as soon as we knew more about Aisatu's health. If Daado insisted, she could of course eat at our house while we were there. Aisatu decided to go back to the house of Alu. Not only the house of Alu was the problem, but also the town itself. Daado and Aisatu were for the first time in their lives longer than one day in town, and they did not like it. Some customs were abhorrent to them. For instance, they refused to use the latrine. Daado and Aisatu went into the bush though it meant several kilometres walk to relieve themselves.

The next day I picked up Aisatu and Daado at Alu's house, in the morning, and we went to the doctor. Daado said she did not sleep at all, because she was overcome by *yaage*. At the hospital Daado got very nervous, which I did not understand, and I began to get irritated by her intolerable behaviour. When it was our turn, I went alone with Aisatu into the consultation room. Aisatu behaved with restraint as a Jallube woman should. Courageously she answered all the questions of the doctor, except the name of her child. She nodded to me that I should say his name. She could not because a Jallube mother never utters the first name of her first born. The diagnosis of the doctor was straightforward. She had chronic malaria and this had caused severe anaemia, affecting the condition of her heart. He feared she would not recover completely. To aid recovery, she was to rest in bed for at least a month with no work. Good food, an extended cure of nivaquine, and iron would help her to recover. Halfway through the consultation Daado entered the room. She could no longer bear to sit outside and not to know what the doctor was doing to Aisatu. Her intervention amazed me. When she saw Aisatu was still unharmed, she started to talk to the doctor about herself, she was also very ill and had the same symptoms as Aisatu. I asked doctor Jallo to examine her too. Indeed it appeared she also suffered from chronic malaria, but less severely than Aisatu, and she needed the same cure. When we left the hospital, we went to the *pharmacy* where we bought medicines for FCFA 3,000. Daado found this an excessive amount of money. I explained to her that they had spent much more on the services of *moodibaabe*, whose cure had not worked so far, so that it was worth the try.

The next day we went back to the hospital, for the doctor wanted to monitor Aisatu's condition. This time he decided she had to stay in the hospital. He did not believe she would get sufficient rest in Alu's house, especially because Aisatu had to bear her mother's nervous reactions there. In fact I think the doctor feared for Aisatu's life. Her heart was very weak and it even seemed a wonder that she was still alive. 'People who are living in the bush must have something supernatural to stay alive', our neighbour in Douentza

assured us when we discussed the case of Aisatu with him: 'it is really amazing how, and on what they survive!'

Aisatu and her mother faced a difficult dilemma: if Aisatu had to stay in the hospital where would her mother stay? She decided to sleep in the hospital with Aisatu, and we would take care of their food. Aisatu stayed in the hospital for one week. She was very disappointed, because she thought that the doctor would visit her every day, but he was travelling a lot that week, and she only saw assistants who were rude and unfriendly to her. Daado could not sleep in the hospital, because it was a house where people were born and died. It gave her, as a *jom-henndu*, pains everywhere; especially the nights were unbearable for her. Aisatu too was a *jom-henndu*, but she reasoned that if she wanted to get better she had to stay in the hospital and accept western medicine. I think now she could do this only because she considered us her last hope. If she did not recover now she would surely die. Later on I realized how terrible those days and nights in the hospital must have been for Aisatu, and how much fear she must have felt, not only because of the *jinnaaji* who live around the hospital, but also because of the strangeness of this world, which felt very inhospitable to her.

The medicines and the food (meat especially) which we brought her did their work. Aisatu got more colour in her face, and she seemed to have more energy. The fevers waned and after a week Aisatu was told she could leave the hospital if she promised to keep resting. We decided she would stay with us a few days and then go back to Alu Hamma Lennga. Her mother, however, increasingly became a burden for Aisatu (and for us). Aisatu discussed this problem with us and we decided it would be better for her mother to return to Serma. Staying in town near the hospital drove her crazy and we risked that Aisatu would not be able to get her rest. So we played a trick on Daado. We told her to return with Han to Serma to pick up some clothes and other necessities for Aisatu and to explain the situation to her family. Having arrived in Serma, Han and Bura, our assistant, would discuss the problem with her family and refuse to take her back to Douentza.

Whilst Aisatu and her mother were in our house, waiting for Han who was preparing to leave for Serma, Daado began to vomit and to shiver all over her body. The *henndu* had taken her in the hospital. She asked me to grind some *makki* for her and mix it in water. Alu Hamma Lennga, who arrived in the meantime, spoke a Koranic text over the water, Daado drank a little and washed herself with it. It calmed her down. Then she told me about a Dogon healer in the hospital. He had been trying to persuade her that Aisatu was possessed by a *sukunya* (witch) and *henndu*, and that he was able to prepare the right medicine for her. He lived near Douentza in a village in the mountains. Daado asked me to fetch that medicine for Aisatu, because that only would help her. I was perplexed, how could she... I told her that the cure of the doctor, and that of a Dogon healer, could not be combined, and in the end she accepted my argument.

They left, and Aisatu stayed with me. Soon after she also started vomiting and trembling. I wondered if the *henndu* had taken her too. It was terrible to see, because she gave me the impression that she was giving up now her mother had left. My neighbour (a Moorish woman) came to help me, and she too was convinced Aisatu had been attacked by *sukunya*, so again we ground some *makki*. I called Alu Hamma Lennga, the Imam, who came

immediately and spoke some Koranic verses. Everything Aisatu drank, she vomited. Eventually, she calmed down, and in the evening we ate some sweet potatoes together, and talked about her experience in the hospital, and the possible attack of *sukunya*. Aisatu told me that she does not know what the *henndu-jinnaaru* looks like, and that she dared not ask the *moodibaabe* about it. Her whole *suudu yaaya* has *henndu*. A person can get *henndu* via a *sukunya*, sometimes you can see a person is attacked by *sukunya*, because a *sukunya* sometimes spits blood which is said to be very bitter. Any person who is spat on will then be covered with blood.

The next day Han came back. He had a hard time convincing Aisatu's mother not to return with him to Douentza, and she only agreed when a cousin of Aisatu agreed to accompany him, so that Aisatu and she could go to another *yaatigi* in Douentza. Aisatu's father and his brothers agreed with Han, but they could not overrule Aisatu's mother in this case. Daado did not want Aisatu to return to the house of Alu Hamma Lennga. The other members of the family of Aisatu, and her husband Aamadu Maane, trusted us completely, and they had given Aisatu totally into our hands, expecting us to do the best we could. The cousin of Aisatu who came along with Han, Jeneba, a daughter of Taco from Nguma,[9] and Aisatu went together to the house of the sister of Jeneba, who was married to a Pullo of the Barri clan, an old man. He was very poor and the house was very small. It was clear that Aisatu would not have the space she had in the house of Alu. After two days Aisatu and Jeneba were back at our house. I met them on the street early in the morning, on my way to meet them to go to the hospital again. Aisatu was taken by *henndu* again, as was Jeneba, and they could not stay in that house, because a child had died soon after birth nearby. They could not stand it. If they stayed there Aisatu's body would swell, which also happened when she gave birth to her own child. Of course this *henndu* was very real at that moment for Aisatu and Jeneba, but it was clear that Aisatu did not want to stay in her cousin's house. That night they slept in our house.

After this discussion we went to the hospital again. Doctor Jallo decided that Aisatu had to stay in Douentza for at least another month. The medicines seemed to help her. However, going back to the cattle camp, where she would have to work very hard, and where the food was not as good as she could get in Douentza, would hamper or even reverse her recovery. Aisatu was not convinced that she would be better off in Douentza and she wanted to go back to her parents and family in Serma to discuss the problem with them. The only possibility to stay for a longer period in Douentza would be to return alone without any family and be lodged at the house of Alu Hamma Lennga, near our house. For this she needed permission. With our help she might get her family's consent and be cured soon enough. In the meantime doctor Jallo became tired of all these discussions at his hospital, while there were so many people waiting. I tried to convince him that he had the authority and prestige to persuade Aisatu that she had to stay in Douentza under his supervision, and that she had to stop thinking about returning to Serma. The goodwill he enjoyed with Aisatu, and with her family and maybe even the whole village, would evaporate if Aisatu fell ill again. I argued that now he had the chance of gaining the trust of a woman from the unreachable bush, and making an example, so that other pastoralists from the bush would be able to find their way to the hospital in the future. But the doctor

was tired after four years work in this small-town hospital, and he did not make the effort. Aisatu and I found a compromise. She would go with us to Serma, where we would monitor the situation and the possibilities for her to stay there. If this was not possible, we would discuss the problem with her family. This also allowed Aisatu to join our fare well party, which we had planned for November, because the young men would leave Serma to look for work elsewhere soon after.

In Serma everybody who saw Aisatu agreed that her stay in Douentza had done her much good. She had indeed regained some colour and some weight, and had more milk for Bukari who had become a well-fed baby. I went to Koyo several times to see how she was doing there, and urged her mother Daado to prepare at least a chicken for Aisatu. After our party was over we discussed with Aisatu what she had decided to do. She decided it was better to return to Douentza. Here, in Serma, she could not refuse to do work, her mother did not prepare a single chicken for her, and she was taken by high fevers again. Returning to Douentza would not be easy for her, but she knew she had to. Her father promised to sell a couple of sheep or goats and give her some money to subsist on in Douentza. It was clear that her family agreed with her return to Douentza. And so she did.

Aisatu stayed in Douentza for another month. When we were in town we prepared meals for her, and gave her money to buy meat. She was in good hands in Alu's house. At the end of December Doctor Jallo told her she was allowed to go back to Serma, if she promised to keep to her rest periods. After three months, she would have to return to Douentza for a final check. We continued our work and left the Hayre at the end of February. We do not know if Aisatu ever saw the doctor again. I am sure, however, that she will have many more children, who may or may not survive, and will weaken her, and that in the household of Abdramaane Hamma she will have to work very hard in order to keep her position vis-à-vis her co-wife, Ay Yero.

Of course there was a backlash to all the effort we put into caring for Aisatu. During these months gossip sprang up about the relationship between Aisatu and me in Serma. It was said that I preferred Aisatu to others, and therefore devoted so much energy to her, even while I took care to invest more than usual in the relationship with Ay Yero, Aisatu's co-wife, to prevent the marriage unions from exploding as a result of our actions. Unfortunately the child which was born to Ay died soon after birth. Inevitably, however, the energy I put into Aisatu was not put into Serma. It is true that the relationship between Aisatu and me became very close indeed, and we were related to each other more and more emotionally. Aisatu herself explained these rumours as *haasidaare*.

To better explain the background of Aisatu's case we have to situate it in the context of the difficult situation of the people of Serma, and their cultural understandings of illness. Aisatu's illness was clearly aggravated by the lack of good food. Because of her weakness her life as daughter-in-law became a real burden for her. She could not do hard physical work. Although in Douentza there became apparent a clear physical cause for her illness, a mental cause could not be excluded *a priori*. She had a very difficult history behind her. She was widowed after a couple of months and her first child died. Aisatu did not like to talk about it. The *henndu* that was ascribed to her gave a justification for her mental state.

Her *suudu yaaya* was vulnerable for *henndu*, so that it was accepted that she was as she was.

Her case also shows us the complexity of social relations, especially care relations. The care for Aisatu is the responsibility of her *suudu baaba*. Her *suudu yaaya* offered emotional support (*yurmeende*). With the diagnosis *henndu* for her illness more emphasis was put on Aisatu's relation with her *suudu yaaya*, as *henndu* was an hereditary sickness in her *suudu yaaya*. Her *suudu yaaya*, in the person of her mother and her cousin, were also trying to control the whole process from diagnosis to cure, which may be interpreted as the other side of *yurmeende*. This is probably the reason why her *suudu baaba* was so reluctant to invest in medical care. Aisatu's husband and his family are not responsible for Aisatu in case of illness. Nevertheless in this case her husband Aamadu Maane took responsibility through his brother and sister anthropologists, who controlled the access road to another domain of knowledge, modern medicine. All the tensions and gossip which arose in this process, between the *suudu yaaya* and the *suudu baaba* of Aisatu, Aisatu's family and her affines, Aisatu's family and the family of her co-wife, the *suudu yaaya* and the anthropologists, reflect the struggle over the meaning of her illness and the correct treatment. Due to the shifting balance in the course of time, Aisatu received very diverse treatments, she was treated for *henndu* and *sukunya*, the diagnosis of the *suudu yaaya*, a *moodibo* was consulted to investigate the possibility of *dabare*, the diagnosis of some of her affines, and finally for malaria, the diagnosis belonging to the anthropologists' domain.

All these meanings attached to Aisatu's illness were at the same time reflections and discourses on the relation between an individual and society. In Islamic discourse her illness was related to the supernatural world. In the local discourse she had fallen victim to tensions in social relations, which induced others to make witchcraft against her. In our world view, the cause of her illness is related to the physical world, the lack of food and the physical incapacity of her bio-chemical apparatus to withstand bacteria and parasites. The Jallube locate the causes of illness outside the body, and therefore the doctor's explanation was hard to grasp for Aisatu and her mother. In the imagination of the Jallube everyone can get ill, illness is literally everywhere. It surrounds people. It can attack anyone, although personal characteristics related to the social groups of which a person is member, family tradition, age, wealth, social status, knowledge have a certain influence. The treatment and causes of illnesses as defined in the case of Aisatu are not exclusive to the Jallube only. Hummbeebe and Sonrai are not only involved in it, but their ideas about illness overlap with those of the Jallube.

These meanings can be directly related to social relations, to ideas about the world (religion, custom), to Aisatu's position in society (i.e. in her *suudu yaaya* or *suudu baaba*, her relations with her *esiraabe* and co-wife), and to the community's position in the wider society. All these networks are to some extent affected by the insecure situation. In the next section the various images and etiologies which people have of illness will be explored. In the section thereafter we will discuss the relation between the meaning attached to illness and the social networks that people use to seek remedy.

Illness in the context of *al'aada* and *juulde*

Explaining illness: *al'aada*, *juulde*, and modern medicine

Most of the explanations that the Jallube have for illnesses relate to forces from outside. It is caused by non-humans like birds (*pooli*), ghosts and spirits (*jinnaaji*), and by witches (*sukunya*). Spirits are part of the Islamic universe and the way they operate is well understood by educated *moodibaabe*. The relation between spirits and illness was explained to me by Bukari Alasunna, the *moodibo* in Wuro Kaaral. In the world of the spirits, which is normally invisible, there are good and bad spirits. The *seedaani* are the spirits that bring bad things. If they are spotted by human beings they will cause illness. These illnesses are called *henndu* (wind) and *haandi* (madness). *Henndu* has two variants. One takes the body, the person has fever and gets thinner. The other form makes a person mad (*hakkile dillii*). *Haandi* has three forms, of which one is also called *dabia* or *kirikiri*. This form will certainly kill a person. It was translated by my assistant as tetanus. Another form is called *juusi*. This makes a person mad (*hakkile dillii*), but does not kill. The third form is called *irtotoodi*, which means roughly 'twisted'. Bukari Alasunna considered the *moodibaabe* to be the most appropriate persons to cure these ailments. He himself was an expert in *henndu*. In his view, a 'modern' doctor was not able to heal these mental sicknesses. The symptoms of *henndu* and *haandi* are rather vague, and several illnesses identified by scientific medicine can be grouped under them. Examples of these are brucellosis, which is endemic, the long term effects of bilharzia, chronic malaria. Mental illnesses may be caused by the difficult situation people live in.

Spirits are everywhere in the bush, for example in the bush next to Debere. People are advised not to go out in the evening and at night, because of the risk of running into a spirit which will almost certainly make one ill. Shortly after their birth children are protected with an amulet, made by a *moodibo*, against the influence of bad spirits. Illnesses caused by spirits are not gender specific. In principle everyone can be attacked by them. This is what the *moodibaabe* say. However, we met only women who were *jom-henndu*, and never men. Men also suffer from *henndu*, although the illness was only attributed to men who were dead. Children may also encounter spirits and become ill, and in fact many children, the majority of them girls, actually were. They were hardly ever treated for this illness. It was a fact they had to live with.

Another important cause of illness is *sukunya* (pl. *sukunyaabe*). In contrast to the spirits, the existence of *sukunya* is not explained in the Islamic universe. They are transformations of human beings, and can be compared with witches. Their behaviour is between that of a witch and a vampire. They fly around during the evening, and if they catch a person they suck his or her blood. Children especially are the victim of these creatures. During the night one can see the *sukunya*. Once I went to the hut of Yaaya Aamadu after dinner, where some women of the camp meet every evening. In the evening the camp is quiet, children are sleeping, young girls sometimes sing and dance together a few hundred metres outside the camp, the cattle low. Suddenly Yaaya Aamadu saw something. She indicated a white spot near a small tree outside the camp. 'There is a *sukunya*' she whispered. I also saw the

white spot. After this incident I would also recognize white spots as *sukunya*. In Duwari I was again confronted with *sukunya*. In the evening I went with Ay Bubaare from the field, where she camped with her father and mother, to Duwari, to sell fresh milk. Ay shivered with fright on our way to the village. In the village she was very vigilant and fearful. On our way back to the field she indicated *sukunyaabe* who were sitting everywhere in the bush.

Sukunyaabe are found especially among strangers, outsiders, like the Hummbeebe, among people with whom the Fulbe have an ambiguous relationship. On the one hand they need them, but on the other hand they are afraid of them. This label can also be attached to individuals in Fulbe society, who are regarded as outsiders, i.e. strange and creepy people are sometimes accused of being *sukunya*. An example was a man in Debere who played a central role in the age group of young men (*waalde sukaabe*) in the village. It was said he regularly reported on Serma to the chief of Booni, and played a dubious role vis-à-vis the administration. He married a woman from outside, but they were childless. He had also a strange appearance, big eyes, a tall figure, and a high voice. In short, he was not like the others, defined as an outsider, and yet he had power over the other villagers. In gossip he was often called a *sukunya*, who ate the children from the belly of his own wife. It was for this reason they were childless. The illnesses caused by *sukunya* cannot easily be classified under one heading.

A mortal danger for children are *pooli* (birds). When children are very young and are left alone when a specific bird (owl) is around and calls, the child is attacked. The *moodibaabe* explain this illness as the work of spirits that are identified as *pooli*. This spirit may move into the body of the child and cause illness. If the child is with someone this will not happen. One can see that a child has been taken by the call of *pooli* if the baby's fists are always clenched. These children have fever regularly, and they may be restless. The other clinical manifestations of *pooli* are very variable.

Almost all children suffered from *pooli* at some stages of their development. Most children get over it, but some fall severely ill. Buraima Hamma, a son of Hamma Aljumaa, was taken by *pooli* when he was a little child. This is now about 34 years ago. He was not the only baby that was taken by *pooli* then, but he is one of the few who survived the attack. He has suffered a lot. Because of this *pooli* his feet and legs did not develop well, and consequently he limps. He looks like a polio sufferer, and this most likely was the illness that was brought by this specific *pooli*. Surviving in this situation is very hard for him. He cannot work in the field, nor is he able to herd cattle in the bush. He occupies himself with the study of the Koran, but until now he is not recognized as a 'good' *moodibo*, and thus he earns practically no money with his craft. He married once, but the woman (a cross-cousin) divorced him because he was useless as a husband (i.e. not beautiful, not able to work and probably impotent), so she said. She remarried with a *moodibo* from Jelgooji in Burkina Faso.

Another cause of illness can be the use of *dabare*, as we also discussed in the case of Aisatu. The relation between Aisatu's mother and the mother of Ay Yero, Aisatu's co-wife, is full of tension and jealousy. This is the reason why the mother of Ay was suspected of using *dabare* against Aisatu. Only the *moodibaabe* are able to figure out if this is true or

not. *Dabare* are made by *moodibaabe* or *bonngobi*, specialized in black magic, when they are asked and paid for it, but never on their own initiative. Some old Jallube or Dogon women and men are also able to make *dabare*. It is used not only to make people ill, but also to drive people away, kill people, and do all other kinds of evil.

People speak about *dabare* only in private. It is often related to *haasidaare*. It is never openly described. People that are accused of the use of *dabare* (or at least the people we heard of) are mostly socially deviant. An example is Rukiata Maamudu. She is an independent woman. She works on the land herself and runs her own 'farm'. She has 'good' relationships with everybody, e.g. Hummbeebe, Dogon, *gargasaabe*, Weheebe and Riimaybe. When her husband died she was married by Abdramaane Hamma (our host) very quickly. This marriage was openly disapproved of. Rukiata and Yaaya Aamadu are *denndiraabe*, a relationship forbidden for co-wives. It was said that Rukiata had been using and still used *dabare* to keep Abdramaane Hamma attached to her. She was also said to have caused the illness and death of a daughter of Yaaya Aamadu, who fell ill after she played in Rukiata's hut. At least this suspicion was expressed by her co-wife. One day when we were sitting in Rukiata's hut on her field near Debere with Mariamma Maane, the daughter of her co-wife, Mariamma found small pieces of paper with written texts on them. She asked us if we wrote the texts, but as they were in Arabic, we simply could not have written them. Mariamma subsequently concluded that the paper was part of a *dabare* on which Rukiata was working. Like Rukiata, the mother of Ay Yero is also very independent. She gathered wild fruits in the bush, work that is not done by a Jallo woman. Several times, we were told in private, she used *dabare* to drive away all the co-wives her husband ever married. Many people therefore found it very plausible that she had used *dabare* to free her daughter (Ay) from the presence of her co-wife Aisatu.

Illness and death are sometimes attributed to animals, both cattle and bush animals. One may wonder, however, if these accounts are based on real conviction or are constructed to make a specific point. The following story was told by Fatumata Aamadu from Wuro Kaaral. Her third husband died after a strange adventure. Together with her third husband Fatumata went to Booni in the dry season. In their herd were some animals of the *gargasaabe*, among them a big black bull. The owner of this animal warned him not to hit this animal, and if they did they would see! However, her husband did not take this advice very seriously. He herded the animals during the night and hit the black bull three times. Immediately a lion appeared from the bush, who laughed as a human being. Her husband said to the lion, if you dare to kill me here, then I will kill you. The lion answered that his appearance meant that he was already dead. And he responded to all other questions of Fatumata's husband with the same words. Fatumata's husband was very frightened, and he was overwhelmed by cold. He could not move, because there was something in his legs. When he returned home, he refused to answer Fatumata's questions, saying to her, Do you want to kill me? He fell seriously ill, and remained ill for twelve months. To cure him, they went to Dogon, *moodibaabe*, and all other kinds of healers. In order to pay for this they sold many animals, but nothing worked. Just before he died he told Fatumata this story.

In the first place the story points again at the difficult relation with the outside world, in this case the *gargasaabe*, who are of non-Fulbe origin. Secondly, the village doctor told us

that Fatumata's husband died of leprosy, and she herself probably also suffered from this disease. This renders the story much more intelligible. If a person suffers from leprosy he or she will be forced to move to town, and become an outcast and beggar. Fatumata's story is a conscious or unconscious attempt of herself or her late husband to avoid this tragedy, and to disarm rumours about her physical condition, which she knew was not very good.

In fact everybody is ill in Serma, but they are not all ill from the causes mentioned above. There is also something like 'normal' illnesses, which are considered as part of daily life. People do not stay home for these illnesses but they mention them often, especially to an anthropologist who probably has some medicine with her. These illnesses are: *cammbol* (headache, chronic syphilis), *hoore nawoore* (also headache), *jonte* (fever and headache), *doggu reedu* (diarrhea), *nyaw reedu* (stomach ache), *mburutu* (guinea worm), *keefi* (fever together with yellow vomiting), *peewri* (rheumatism). Lack of good food is sometimes suggested as a cause for the bad physical condition of Fulbe in Serma. One of the frequently mentioned causes of the 'normal' illnesses is the lack of milk (*kosam*) (see also chapter 12). But also the beauty of a woman is attributed to the consumption of much milk. In general chronic ailments are ascribed to other causes than lack of food or malnutrition. A good example is provided by a conversation I had with Yaaya Aamadu, our host, about a child of the *gargasaabe* who camped near our *wuro* in Wuro Boggo. The child looked very ill and it was clearly malnourished, having a big belly and red hair. I suggested giving the child a little milk each day. This could not be the problem, according to Yaaya Aamadu, for 'the *gargasaabe* always ate much better than the Fulbe; milk and butter were regularly eaten even today although they were also impoverished. The reason for the child's bad health was the *sukunya* of the Hummbeebe that took the child last year'. Later on this was confirmed by the mother of the child. However, this particular *gargasaabe* family often had nothing to eat. Only if they had visitors, or when other *gargasaabe* joined them temporarily, they bought some milk from the Jallube women.

The cure of illness

Severe illnesses are mostly regarded as disturbances of the social order. They concern relations with spirits, with other ethnic groups (Hummbeebe), with people in the community (in the case of *haasidaare*).[10] To cure these illnesses the people of Serma have three options: the knowledge and skills of specialists within the community, the crafts of Dogon or Sonrai healers, and 'modern' health care. For minor ailments people rely on the knowledge of old people, their mothers, or other non-specialists. In the case of Aisatu, *moodibaabe* and the 'modern' doctor were consulted. Aisatu's mother also wanted to consult a Dogon healer. Food was not considered to be part of the cure. Aisatu's mother did not see why she should prepare a chicken for Aisatu. Here we will examine which options are within the domain of the people of Serma, and in which conditions.

Almost everyone in Serma, Jallube and Riimaybe, knew some folk medicine against the most common ailments. Old women and some older men (40-50 years old) were more knowledgeable than others, and they were consulted by the others. Especially for the

treatment of children young mothers consulted old women. Most of these household remedies were based on the use of trees and plants, which were often processed in some way or another. Most of these trees and plants were found in the immediate neighbourhood of the camp or hamlet. An important remedy against headaches is the kola nut. In this repertoire food also plays a minor role. Milk is ascribed healing powers and the broth of a chicken and red peppers was considered good for someone who has no strength. Peppers were also used for colds. The advice of the specialists in folk medicine was free. Some old women also treated more severe illnesses of children, like *pooli*, but they admitted themselves that they were not very successful in the treatment. The real specialists in herb and tree medicines are the *bonngobi* and some *moodibaabe*, but Sonrai or Dogon are also recognized as potent herbal healers.

Bonngobi and *moodibaabe* without exception acquired their knowledge of herbal medicine from Dogon and Sonrai, or from Fulbe who studied with them. *Moodibaabe* often combined knowledge of medicinal plants with the use of Koranic texts. The plants they used are not only those that grow in the Hayre, but some also originate from Maasina, or even Ivory Coast. The combination of the Koranic texts and herbal medicine seems to be very effective in healing people. Among the *moodibaabe* a further subdivision was made into specialists in the treatment of certain illnesses. The specialist in the treatment of young children was a very old and blind *moodibo*, who lived in Iisey. In Serma Bukari Alasunna is recognized as a specialist in the treatment of *henndu* and to a lesser extent of *sukunya* and *pooli*. The other *moodibaabe* in Serma do also treat these illnesses (and many others) but the worst cases were eventually treated by Bukari Alasunna. The knowledge about the world of the *jinnaaji* required to treat these sicknesses is 'secret', and the domain of the *moodibaabe*. People would not dare to ask a *moodibo* to explain what *jinnaaji*, *henndu* and *pooli* exactly are.

Modern medicine is represented in Serma by a village pharmacy and a village doctor and a midwife. They are the first and only result of a socio-economic component of the programme of the livestock service (ODEM). The pharmacy was run by a Beweejo, who was selected by the village to follow a 14-day training course in Booni to become a village doctor, because he was the only person who ever attended school and mastered some French. The village doctor complained that 'modern' health care was hardly accepted by the villagers, although he saw some progress. During our fieldwork people regularly bought medicines at his pharmacy, mainly aspirin and nivaquine. These 'modern' medicines were called *safaare*, to be differentiated from *lekki* the 'traditional' medicine. Aamadu recognized the power of certain plant medicine, which he also used. However, his two weeks training in which he learned about alphabetization and health care did not make him a doctor. Nevertheless he presented himself to the villagers as such. He gave people injections, he advised all kinds of sick people. And not always very skilfully. Some people who were injected by Aamadu suffered from secondary infections caused by dirty needles. The pharmacy is installed in a small room of his house. The roof was leaking, and mice, rats, and dirt had free access. The medicines, needles, and bandages were kept in a wooden cupboard, of which the village doctor kept the key. If someone wanted to buy something the same ceremony unrolled every time. He opened the cupboard with much gesticulation and

took out the medicine, almost always aspirin or nivaquine, and told the ailing person how to use it after he or she paid for it. Prices were twice as high as in Booni, where the medicines were bought, so that he had some income from his pharmacy.[11] Most villagers did not consider their village doctor very skilful in the field of medicine: 'he has the same knowledge as we have, *min fuu poti*'. The dispensary in Booni and hospital in Douentza were rarely consulted by the people of Serma. People also bought all kinds of non-registered drugs which were smuggled from Burkina Faso. Favourite among these were the *nyiiwaaji*, named after the picture of an elephant (*nyiiwa*) on the tablet. This drug was for example taken to alleviate the chronic headaches resulting from chronic syphilis (*cammbol*).

Diagnosis and treatment

The choices which are eventually made regarding diagnosis and treatment differ from person to person, depending on one's social network, knowledge and access to the practitioners. But also on the type of illness. Severe illnesses are best treated by the specialists of one's own society, or by Sonrai or Dogon. Modern medicine is not (yet) included in this process.

Aisatu's illness was diagnosed as *henndu* almost from the beginning. Later the viewpoint of some of the people surrounding her changed in the direction of *dabare* and *sukunya*. In all cases a *moodibo* was consulted, though belonging to different social networks. These various diagnoses were based on the same symptoms though interpreted in a different manner and in a different social context. In the local etiology the symptoms for illnesses like *pooli*, *henndu* and *sukunya* resemble each other very much. Only for *pooli* in children are the symptoms not open for discussion, i.e. the clenched fists. So, people in reality make their own diagnosis by selecting the healer. The way the *moodibaabe* (but also the doctor in town) make the diagnosis is relatively simple. During the consultation the symptoms of the illness as shown by the patient, and by his or her social network, i.e. illnesses that appear in the *suudu yaaya* of the patient, are taken into account. If there are suggestions of *haasidaare* the *moodibo* will figure out by a technique unknown to us whether this is true or not. Probably very important in this diagnosis is his own craft and the expectations of the sick person. In the case of Aisatu there was a shift from *henndu* to *sukunya*. The first was diagnosed by Bukari Alasunna, who is specialized in *henndu*, the second was diagnosed by a Dogon who clearly knew how to cure *sukunya*. In both cases the symptoms of Aisatu's illness did not change. Also the diagnosis of the doctor in town was a combination he made of the symptoms and his own craft. However, in each case the shift in interpretation was made before the new healer was consulted. In the case of Aisatu it is quite logical that initially a *moodibo* was selected. The fact that they wanted to consult a healer in Burkina Faso signifies that other causes than *henndu* were considered, when the cure of the *moodibo* proved not to work.[12]

Eventually Aisatu went to the doctor in town partly because she perceived us and our ideas as belonging to her world at that moment, and because of the fact that we ruled out the possibility of going to the healer in Burkina Faso.[13] However, there are important other

reasons for this choice, related to the knowledge available in her social networks about the outside world. Her husband Aamadu had been treated in hospital before, and he even underwent surgery. His brother was also treated in the hospital. Abdramaane Hamma, their father, took these decisions. To understand why he did so we must look at his person and the position he occupies in Fulbe society and Serma. He had sufficient means to pay for this care; at that time he was one of the richest people in Serma. Because of his position as counsellor of the Seedoobe chief he was well acquainted with the chief of Booni. The relationship with the 'modern' administration was less alien for him than for most other Jallube. He not only knew about the hospital and heard stories about the doctor (also a Jallo, although foreign), but the hospital was also part of his world. The chief of Booni and his family, and his relatives in Monndoro, often consulted modern doctors from the hospitals in Douentza and Djibo in Burkina Faso. Their experiences showed Abdramaane that these treatments sometimes worked. He transmitted this knowledge to his sons. He invested money in the health care of his sons because they were badly needed for the work on the land and for the herding of the family's cattle. If they died this would not only mean an emotional burden for the family but also an enormous loss of labour power.

In contrast to Abdramaane Hamma many people from Serma were ignorant of and feared the modern doctor and medicine. They heard about only the negative results of the treatment people received at the hospital, because in most cases people go to the hospital when the illness is already too much advanced. The case of Aisatu, and two other women with whom we went to the hospital after Aisatu's treatment proved successful, showed the people of Serma that the effect of the hospital can also be positive. As Bubaare Aamadu said: 'You opened the way to the hospital for us'.

Wealth is an important factor in the choice of a healer and the type of treatment. The hospital and doctor are thought to be very expensive, which is true for the rare cases in which a doctor was consulted. These consultations only took place when the person was almost dead, and all other treatments had not worked. When the patient in fact dies the expenses of modern medicine, after having spent much money on other healers, are indeed a waste of money in the minds of the surviving family members. An additional factor is that payment is only in cash and not in goods. Payment in goods is perceived as less expensive, while they may amount to much more if converted into money (cf. Diakité 1993).

The point that the choice of healers, diagnosis and treatment is largely dependent on wealth, knowledge, social position, and the network in which people participate, is extremely well shown by the choices that healers, in this case *moodibaabe*, make for themselves. Umaru Buubu, a *moodibo* from Wuro Kaaral, had been ill for a couple of years. He had a problem with his belly. During the dry season he earned a living as a *moodibo* in Booni. To cure himself, however, he went to the hospital in Djibo where he underwent surgery. The journey to the hospital was given him by a taxi-driver. Another *moodibo* from Dalla had ambiguity in his attitude to health care. His wife died of tuberculosis. She was treated only by himself and other *moodibaabe*. When he himself fell ill he went to Bamako and was treated in the best hospital in town. His treatment was paid for by the director of the *Banque du Mali*, who often consulted him. Another example is the imam of Dalla. He studied in Dakar, and travelled extensively in West Africa. As he gained

a lot of money with the writing of charms for sick children and others, he was in a position to go to the hospital when he was ill, because it worked better, he said. His own daughter, who had chronic diarrhea, was 'cured' by him with Koranic means. Even when his wife suffered from a swollen neck, he did not send her to the hospital, but made charms for her. Eventually her maternal uncle who is a civil servant brought her antibiotics. Each time I met the Imam he had another box of pills from the hospital. As he could not read French he asked me to translate for him what was written on the carton. As far as I could see he was in good health, his complaints concerned minor problems such as colds, and the medicines were of the same order.

The importance of '*yimbe am*'

Networks and mobilization of wealth

Aisatu's social position in Jallube society in Serma may be analyzed through her medical history. She is more a member of her own *suudu baaba* and *suudu yaaya* than of the family of her husband, her *esiraabe*. Decisions about her treatment can be taken only by her own family. Her husband can try to influence this decision only through other people, for example by pushing our intervention. The force of the *suudu yaaya* and *suudu baaba* are not the same. In the case of Aisatu her *suudu yaaya* certainly influenced her own perception of her illness. She was told by the women of her *suudu yaaya* that being *jom-henndu* is something normal for them, and that she had to accept it, as they all did. Emotionally Aisatu was in the hands of her *suudu yaaya*, and in particular of her mother.

The mobilization of means to pay for treatment is a social affair as well. Because Aisatu was an adult woman her mother did not have this responsibility. Her mother had already given most of her animals to her children and she had nothing left to pay for the cure of Aisatu. If Aisatu had enough animals of her own, these would have been sold to pay for her cure. But in the case of an adult woman, the *suudu baaba* is also concerned with her health and her father or his brothers should pay for her treatment if necessary. However, Aisatu's father is not very rich. He lost most of his cattle during the drought of 1983-85. He managed to rebuild a herd of goats. But the year before Aisatu fell ill this herd was decimated by a strange disease. Thus he was not in a position to pay very much for Aisatu's health. This became clear in the (hidden) discussion between Aisatu and her parents. Aisatu wanted her parents to pay us for all the help she received. Her father was reluctant to do this, because he had so few animals (and we could not do otherwise than agree with him). So Aisatu returned to Douentza with FCFA 1,500 only, which meant that we paid for her. Of course this was no problem at all for us, but it showed that the mobilization of means was a problem. This may also explain why the role of her husband was quite large in her treatment. Next to his concern for Aisatu, induced by the love for his wife and son, the lack of resources in Aisatu's family played a prominent role. Although one would expect the uncles of Aisatu, brothers of her father, to help him this did not happen. The case was discussed amongst them, but the richest brother, Sambo, did not support his brother

financially.[14] When Aisatu seemed to do better her father offered us a goat on the occasion of a visit by our supervisor - an event which was highly appreciated by the people.

The crucial role of wealth of oneself or of the family was also shown by another case. A herdsman from Petegudu was said to be very rich, for he owned a few camels and his family herd numbered at least 130 head of cattle. He had an accident with his camel, which bit his arm between its jaws and struck him several times to the ground, so that his skull was totally smashed. One of his brothers went to Booni and hired the car of the chief plus driver in order to take the wounded man to the hospital in Douentza, the only place where he could be saved. No expenditure was too much. The man underwent surgery and he stayed several days in the hospital. Despite all efforts he died.[15]

Changing care relations

The persons who take care of a sick person change in the course of his or her lifetime; from baby and toddler into child/adolescent, and from non-married to married, from childless woman or man to mother or father, to old woman or man. Not only do the people who care for a person change through these different stages of life, but also the number of people one has to take care of varies.

If Aisatu had been a small child, then the case would have been different. To understand the responsibilities for the treatment of children it is necessary to reflect on the 'value' of children. Children are very much loved, but the more so when they are a little bit older. Children below the age of five are considered as not very useful yet. As an old woman in Dalla explained: 'If a small child dies, then that is of course a pity, but mourning makes no sense, because the child will not return. And a small child has had no use value yet. The death of an old person is worth mourning about, because he/she has been useful'. A small child is a child that only plays and has not yet begun to learn anything. From the age of five they start to learn how to do the work in the household, on the land, or with the herd, and then they start to become real persons, she continued.[16] This idea about children is partly reflected in the people who care for them and the intensity of the care when they are ill.[17] For small children the main responsibility is in the hands of the mother. She pays with her own means when she wants her child to receive treatment. This is not the father's obligation. Of course there were exceptions to this rule. When Matta, the co-wife of Dikoore Bukari in Wuro Boggo, had a premature delivery, her husband, Sambo Usmaane, went to the *moodibo* to get his son an amulet. Unfortunately this did not help the poor child, who died a few days after the name-giving ceremony. Most women who had sick babies went on their own to the *moodibo* in order to cure them. However, many children die eventually of these illnesses, leaving desperate mothers. This was also the case with the first-born of Aisatu. She explained why he died: it was because he was too beautiful. This explanation we heard constantly about the small babies that died too soon. Either their noses were very long and beautiful, or their head was long, or their skin was exceptionally white. Children that are too beautiful to live will separate from this earthly life. I was often warned, when visiting a mother and newborn child, not to praise the beauty of the child,

because that would kill the child. Probably these children are too much the object of *haasidaare* in a society where all mothers have lost one or more children in the course of their lives.

For older children, older than five, the responsibilities change a little. The fathers start to take an interest in the well-being of their sons who are learning how to herd and how to work with the calves. The young boys can be found in the evening sitting with their grandfathers, who visibly care for their grand-children. When these children fall ill, the father will also invest his share. However, not all fathers take the responsibility for the health of their children. This was, for example, the case with the son and daughter of Hamidu Usmaane from Wuro Boggo, discussed in chapter 11. Hamidu would not let his child go with his mother to town in order to be treated, but at the same time he did not try to arrange any other treatment for his child. This was also the case with his daughter by his first wife. This girl had been ill since her birth, and her mother had no means to take care of her. Hamidu told her that he would consult a *moodibo*, which he never did. It was even worse because he gradually reduced the quantity of food for both of his wives and their children. Each woman received millet only once in two days and they had hardly any milk. The strange thing was that Hamidu was the richest of the five Usmaane brothers living in Wuro Boggo. Did he not care for his children, or had he given up on their health and decided that if they could not get better themselves it would be better they should die? Must we situate this case in the context of the crisis in which not all children can be fed and looked after, or is it just Jallube custom? In this context the following conversation with Bubaare Aamadu from Wuro Boggo can be located. He assured us after the death of Matta's child that it was not really something to regret, because they (the Jallube) already have many children. At the same time all men expressed their love for children, girls as well as boys. These kinds of reactions are probably only the result of the hard life people live. They have to face the inevitable, in order to cope mentally with child mortality.

As we have seen in chapter 12, old age is not a guarantee of receiving help nowadays. However, there are established ideas about help for old people in case of illness or other misery. An old woman may receive help from her brothers (her *suudu baaba*) if they are still alive. Her children have the explicit duty to take care of her, for they received all her animals in the course of her life. She will also be visited regularly by members of the village of her camp, and by people of her *suudu yaaya* who often undertake a long journey to see her. All these people will help her also with material means, if they can. That this is not only idiom is exemplified by two cases. When a very old woman was dying in Koyo, there were visitors all the time. People from Lennga, Gawdeeru, all members of her *suudu yaaya* or *suudu baaba*, came visiting her. The whole day people tried to persuade her to drink something, or to eat a little. This behaviour can be explained by the fact that such a woman has a symbolic function, because in this case she was the oldest member of the *suudu yaaya* of the wife of our host, Yaaya Aamadu. Another example was the father of Abdramaane Hamma, our host. Hamma is the eldest member of a powerful branch of the Seedoobe, of the generation that rules. As he fell ill, syphilis slowly ravaged his body, resulting in blindness, chronic headache and problems in moving, so that his son took over his tasks. Hamma stayed with his son. Everybody who went to Duwari would take some

nyiiwaaji for him (paid by himself). But what is more important, he had visitors all the time and his advice was constantly asked for. People were really concerned about his well-being. As the examples of chapter 12 show, however, this is the ideal situation that seems to work only for old people with special qualities.

Importance of social network

The geographical extension of a person's network also defines the freedom of movement to go for a particular specialist, who may be known to the ill person because of this same network (see above). Aisatu went to Douentza because she had people to stay with for whom she did not feel *yaage*, and because she knew us. *Yaage* was one of the reasons that held back Aisatu's mother from freely entering the hospital and from staying in town. Again most *moodibaabe* who are consulted for treatment are people who belong to one's social network, especially nowadays, because the obligation to pay the full rate for their services is much less than it would be with *moodibaabe* from outside. This also has a practical side: it is easier to visit someone who lives nearby. This aspect of 'reachability' leads to a separate 'medical' network in the dry and wet seasons. During the rainy season the Jallube use the network in Serma. During the dry season they will visit the *moodibo* who is nearby. For Aisatu and Aamadu this was indeed Bukari Alasunna in Serma, because they camped at that time 14 kilometres from Serma on the Seeno-Manngo. Sometimes the *moodibo* travels to his clients. In the dry season of 1990-1991 Buya, the Imam of Serma, spent some time in Duwari, and Bukari did the same in Booni.

Aisatu was lucky. She belonged to two families with large networks (and some means to pay for help). Such a network has developed over generations and is composed of all kinds of social relations, such as kinship and political relations; but it can also be viewed in more geographical terms, such as the existence of *njaatigi*s in far away towns, and the geographical extension and size of the *suudu baaba*. This network can only function, however, if there are means to make it work, i.e. if there is a certain amount of wealth. Participation in social networks defines one's social position in society, which is narrowly related to one's economic position as we saw in chapter 12. Poverty and social isolation go hand in hand. The poor do not dispose of networks, nor do they have the means to make them function. The story of Fati, a Tuareg woman in Serma, illustrates painfully how important such a network is.

When we met Fati she seemed well-fed and at home in Serma. She was a noble Tuareg, belonging by birth to the Islamic clergy. She lived among the Fulbe without family and without any wealth, and this made her a very peculiar person in Serma. Her past never became totally clear to us. We only know that she had had a son, who had died after living for a few years in Abidjan, the capital of Ivory Coast. She had mastered a little French which explains our quick involvement with her. We were looking for a female assistant for the research, and we though she might serve. However, things went differently.

As soon became clear to us, Fati was an isolated person in Serma. She was seen as a stranger by the other people, and Jallube women were a little afraid of her. When we first met her she was alone in Serma, her husband, Deedi, having left to look for work. Fati ate with a Diimaajo woman, whom she promised to pay on the return of her husband. When her husband returned Fati had to work much harder, which was probably why she decided not to work with me. Deedi told us about their arrival in Serma. He and his father owned a herd of 500 cattle and some dromedaries. They came from the north in the drought of 1972/73, looking for pastures in the region of Booni. In 1985 all their animals perished, including the dromedaries. Between Deedi and his father a deep conflict developed, and they went their own ways. Deedi and Fati settled in Serma without any resources beyond their own persons. The few animals that were left were taken by Deedi's father who was also a great *moodibo*. The situation of Deedi and Fati was very difficult. They still had the air of nobility around them, but their practical situation was the very contradiction of this. They were probably the poorest people in Serma. All the more so because they were not Fulbe, and had no family in the village. Who should take care of them?

As soon became clear, the work in the household was very hard for Fati, who was not used to such work. She gradually became a thin and worried woman. She could not have done this housework and at the same time have worked for me as a research assistant. Her husband had no regular income, and refused to cultivate a field of his own, or to work as an agricultural labourer. He helped a Jallo herdsman smuggling cattle from Burkina Faso to Mali. They also smuggled non-registered drugs, which they sold in Serma. This trade stopped when the Jallo herdsman was arrested. After this happened Deedi tried to earn some money by (illegal) hunting, and selling the game. But as there was hardly any game in the bush this did not bring much money into the family.

Since Fati refused to work as our assistant, our contact diminished. She was always working and she avoided my questions. I regretted this. Some people, Fulbe, told me that it was better so, because Fati was not accepted by the Fulbe, so I would never have worked very well with her.

The negative attitude of the people of Serma towards Fati appeared on another occasion. From the start of our stay in Serma we brought spices with us at the request of the women. As this activity took a lot of my time, we decided to give the responsibility to Fati, who could also earn a little money with it. Deedi allowed his wife to do this, he even helped her. They had no income at all and this would help them a little. Many Jallube women were angry with me because of this. They did not want to buy from Fati, who was not one of them. She was not honest, people were afraid of her, so they told us. It took me a lot of time to explain that it would be better that Fati took over the trade, as I did not want to continue it, and besides I would be leaving the village within the year. As far as I could check it Fati was very honest, she always paid me back, and I returned from town with new spices, which she sold again.

Fati fell ill with hepatitis and could no longer look after her small commerce, so she stopped it. The hepatitis became chronic. People said she had *henndu*, like so many other people. When she got a little better Deedi left Fati alone for a few months to look for work again. In this period Fati worked for Waddijam Saalu (a Diimaajo woman in trade) in order

to survive. Waddijam was worried about her situation and took pity on her. The housework she had to do was too heavy for her; but in this way she could eat, which was better for her health. When Deedi came back she got pregnant, about which she was very happy, despite the difficult situation; Deedi was still without work, and being a noble he refused to cultivate. His Jallo friend helped them, but Fati had to continue the hard work for Waddijam. Her physical condition worsened because of this work, her pregnancy and the fact that she had only partly recovered from the hepatitis. She had a premature delivery when she was out in the bush,[18] and the child died three days after birth.

Shortly after this had happened we found Fati in her hut. She had not been out since the birth of her child. She was very ill, and so desolated with what life had brought her that she could not believe what had happened. People in Serma did not talk about her, no one visited her, except for the wife of the Jallo friend of Deedi, and Waddijam. No one would do anything for her even Deedi's sister who happened to pass through the village did not stay to help her. Because we saw that the situation would be hopeless without medical intervention, we decided in discussion with Deedi and Fati (as far as she could) to bring her to the dispensary in Booni, together with Deedi and Waddijam.

Death and *juulde*

We heard of Fati's death the day after. I remember this as a severe shock as I had hardly ever felt in my life before. Waddijam and Deedi who stayed with Fati in the hospital returned that night on foot. They brought a plastic bag with the medicines and injection needles intended for Fati. As we paid for it they wanted to give it back to us. We told Waddijam to give it to the village doctor. Maybe another sick person could be helped with the antibiotics. Seeing all this, with the memory of the shivering body of Fati in our car, in which her short life and the miserable last years came together, I could not hold back my tears. Waddijam, who was with me at the time, accepted this, but other women began to tell me I must stop. Crying would not bring her back. Waddijam returned to her work. Deedi resumed living without Fati. In the village Deedi, Waddijam, and the Jallo woman whose neighbour Fati had been, were the only persons who shared the grief of Fati's death.

The night of Fati's death we participated in two marriage celebrations with pain in our hearts. The marriages served as a welcome diversion. However, I felt very guilty about our intervention. Why could we not just leave sick people to die if they were beyond help? The only solace was that we had discussed the problem with Deedi first. Modern medicine cannot erase the misery of life in Serma, especially not of someone who is not cared for.... Neither Deedi nor Waddijam blamed us for this. Had we not done everything we could? '*Saatu makko wari*', her time had simply come.

Childbirth is often a killing ordeal (Riesman 1992:30), but at the same time a joyful event as it brings a new member of society. Many young women die in childbirth, or shortly after, because of bleeding, or of anaemia and general weakness. During the two years we were in the Hayre, among the people we knew well four women died in childbirth. Of many others we heard the stories. Women are much afraid before giving

birth, which they must do alone. They receive no help other than that of their mother, and then only with the births of the first two children.

In June we met Umu in the camp of Aamadu Maane and Aisatu on the Seeno. She was pregnant with her third child, herself 19 years old and in good health, and we had a good time together. Umu's sister, Matta, is married to Sambo Usmaane in Wuro Boggo. Umu lived with her husband in Fetesambo, her father and mother live in Jigi. Her child was born in the middle of October. She was with her mother at that time, not because of the birth of her child, but because her husband Nuure wanted to marry a second wife. Umu refused to become part of a polygynous union. Although the separation from Nuure was very hard for her, because she really loved him, she could not do otherwise. Nuure asked us one day to take his 'new' wife from Coofya to his *wuro* by car, which we simply could not do because of Umu. From Matta we heard that Umu suffered much emotionally because of the divorce. It was so bad that she fell ill, after she gave birth to her third daughter.

This illness was not only caused by her emotional condition, but was also the result of continuous bleeding after the birth of her child. Her physical condition worsened rapidly. We lived in Wuro Boggo and did not visit Jigi regularly, so the only news we got about the illness of Umu was from her sister Matta, who always acted as if it was something normal that would pass without too many problems. Until one day, at the end of October, when she came to me with tears in her eyes, and told me that her sister was so ill that she feared for her life. We went immediately to Debere to call the village doctor, who was the only one in the village who knew something of modern health care. Buya Bukari, the Imam, also joined us, and we went there to see if we could transport Umu to the hospital in Douentza. We were too late. Umu was beyond help. She had drunk nothing for several days. In order to get her a little better so that we could transport her we gave her an oral rehydration drink. The village doctor examined her, but told us it was hopeless, which we had seen for ourselves. I went into the hut where she lay and we gave her some water to drink. It seemed to ease her suffering. Then she died.

Many people were sitting outside the hut, mostly men, while the women were inside the hut of Umu's sister. The moment she died women started to cry, I joining them. Umu's aunt, Taco from Nguma, and Buya washed the body with water in which they had dissolved a little *makki*. They made a bier of branches and the men brought Umu's body to the graveyard. Han and Bura, our assistant, joined them. Matta's husband, who was also there, dug the grave together with Bura. The burial ceremony was very simple. When the grave was ready, the men did the ablutions. The corpse was positioned in front of the grave. Buya, as the Imam, said some Koranic texts, and led the men in prayer. The women who stayed behind were all very emotional, but Taco urged them to stop crying. Why cry when the mother of Umu had more children to care for? That day and the days after, all the people from Serma and Fetesambo visited Jigi to share in the loss of Umu. A marriage to be held in Wuro Kaaral that night was postponed a day, because the bride refused to have her hair tressed now Umu had died.

Later on we met Nuure, Umu's husband, who was desperate and felt himself responsible. He told us that Umu had asked for us when her illness began, because she wanted to go to the hospital. She knew she was severely ill. Nuure also preferred this, but he could do

nothing. As a husband he could have influenced his affines a little, but since they were separated he had no say at all. He regretted the divorce, in fact he wanted Umu and not the other girl, but 'such is our character'. The parents of Umu, especially her mother, were convinced of the fact that Umu was taken by *pooli*, and that therefore going to the hopital was no remedy. They called the help of *moodibaabe*. When we arrived, they were still convinced that we could not help. *Pooli* was Umu's destiny, even if she had to die, *saatu makko wari*, her time had come. However, they were grateful for the help of the village doctor, Buya and us: had we not done what we could? Umu's child, twenty days old, was in the care of a woman from Jigi. She was to be raised on goats milk by Umu's mother. The death of Umu was one of the factors that made the parents of Aisatu decide to let Aisatu go with us to visit the hospital in town.

Young children under five years seem to die almost unnoticed by the community. There is no public mourning. I had the impression that only the mothers were affected by the death of a young child. These children are buried apart in a separate graveyard. Once I was with a woman from Wuro Kaaral and we both enjoyed her little son playing in the sand. He seemed very healthy. A few days later she expressed her irritation; why did I not ask after her little son about whom I had laughed the other day? He had died of fever the day before. All women have had this experience at least once. These children are mourned in private, for their mothers are not allowed to show their grief. All the mothers I came to know fairly well were ambiguous about their dead children. They had explanations for the early death, like the beauty of the child, but at the same time the grief over this wound in their lives and the emotional scars these dead children left were clearly visible. The only help their society offers them is that *sukunya*, *pooli*, *henndu*, in short the work of the *jinnaaji*, is an insecurity in their lives they have to live with. Just as other insecurities this one is largely outside the scope of human intervention at their level.

Mourning for the dead of more than five years of age is very short. The burial is quick, as soon as possible after the person dies, and there is no extended ceremony. When everyone has visited the house of the bereft to deliver their condolences, the funeral is over and people continue their lives. There is no collective ceremony a few days or months after the funeral to commemorate the person who departed. Mourning, from then on, becomes an individual affair. For Fati even these condolences were not offered: she had no family in Serma and almost no friends.

We were left with many questions after these deaths and those of many others. Why did they not call us more often to go to the hospital, instead of waiting until the person was nearly dead? When the diagnosis is *pooli*, *sukunya*, or *henndu*, the only way to heal is the intervention of a *moodibo*, or another 'local' specialist, who can restore the relations with the other creatures, i.e. restore the social order. This is even more true for illnesses caused by *dabare*. Other illnesses like the 'normal and frequent' ones, like accidents, are probably interpreted as having another cause and thus probably a doctor can help. It seems that this interpretation of the illness is as important for the choice of a certain treatment as the wealth of a person or his or her family. And all these factors have to do with the knowledge and spread of the sick person's social network.

Illness and the social order

It has been shown that illness is a social event. Illness is situated in its social context. A sick person depends primarily on his or her social relations (*yimbe am*) for the care and the explanations attached to his or her ailments. Explanations, causes and cures for illness belong to the domain of *al'aada* (Fulbe custom) as well as *juulde* (Islam), and in many cases it is a combination of both. At the same time this cultural framework helps people to explain illness in an existential way, because it is such an important source of insecurity to deal with in their lives. This insecurity is of course related to the ecological environment in which people live and to the economic scarcity, but it is also a social insecurity; are there people to care for the sick person, and will they take action? Both the ecological and the social environment are eroding for many people in Serma. For them a specific discourse about their own illness or the illness of a family member may be a way to cope with these insecurities. It may, for instance, soothe an increasing number of conflicts and tensions that exist between individuals in society, in these times of scarcity, in a society where *haasidaare* (jealousy) is such a central emotion (in cases of *dabare*). In this sense illness also refers to the 'other', invisible world (*pooli*, *henndu*, *haandi*). A world that is very insecure and can hardly be manipulated by human beings. Illnesses also refer to inter-ethnic relations (*sukunya*) that are under much stress because of the scarcity. In this complex of discourse and meaning as it develops around illness, the *moodibaabe*, who are the most prominent medical specialists in Fulbe society, play a very central role. Without them the Jallube would not be able to cure the very ill. They control the 'other' world, the spirits, as well as witchcraft and *dabare*, though they often deny the existence of the latter. By doing so they are crucial in the process of gaining control over the insecure environment, reflected in the explanations of illness. The *moodibaabe*, and the values they represent, become increasingly important in the world view of the Jallube and their self-definition.

Death, however, seems to be outside this complex of ideas surrounding illness. Probably this is a conscious or unconscious strategy of the Jallube in order to avoid too many problems, because if the illnesses that increase in number in these hard times all ended in death, this would put the Jallube in a difficult situation. It would imperil relations with other ethnic groups, with each other, and so forth. Indeed spirits are rarely related to death. Probably children are the only exception: their cause of death is often called *pooli*. Explanations for death are not related to the social order. One can fall ill as the result of the above mentioned causes, but when a person dies it is never related to the illness he or she had before that. Then it is said '*saatu makko wari*', his or her time has come. And this is a given in which human beings have no say. Death is unavoidable and an affair of Allah. Death is not made into something social or human. In a situation in which death is so much part of reality, discussion about it is not possible.

What does this essay on illness and death say about the identity of a Jallo? Illness is everywhere. The illness that really troubles people, the severe illnesses, however, must not be confused with our idea of illness, i.e. a disturbance of the biomedical system that we are, but its explanation is related to the social order. This social order, consisting of elements from *al'aada* and *juulde*, and containing social relations in the community

(*haasidaare*), between social categories, with other ethnic groups, and with the outside invisible world of the *jinnaaji*, is very much present for the Jallube. If there is no disorder a Jallo behaves according to *ndimu* and *yaage*, which means that he or she is in control of him or herself. This is the way a Jallo shows the ability to manage his or her life. Sick people have a disturbed relationship with one of these aspects of the social order. To re-establish these relations there are intermediaries, the specialists. A large social network and wealth are after all necessary elements if one is to be cured. So a Jallo is a social person, and thus exists if he or she has *yimbe*, and wealth (*anndal*, *jawdi*), and is able to maintain his or her status, *ndimu*. If a sick person is not able to regain his or her health this means also a definite loss of control over oneself. We have also seen that a person who has no people, and no wealth, and who has lost *ndimu*, and is ridden by feelings of *yaage*, is not likely to regain health. The ultimate consequence is loss of control over oneself, i.e. madness, or an untimely death.

The etiology and incidence of *henndu* shows that the social order is deeply gendered and that insecurity is perceived differently for men and women. The fact that women especially suffer from *henndu* shows that women consider themselves more vulnerable to a disturbance of the social order, i.e. lack of people and cattle, and loss of *ndimu*. *Henndu* is inherited in the female line. Women socialize the new generations to behave according to the codes of conduct of the social order, and the norms and values of society, embedded in *ndimu*, *yaage* and *juulde*. On the other hand the material means to maintain this social order and its values, people (*yimbe*), wealth (*jawdi*), knowledge (*anndal*) are inherited in the male line, and increasingly so. With *henndu* women claim attention for their contribution to society, and their suffering in the form of dying children and illness.

This view on illness yields a new insight into the position of poor people. They have no *jawdi*, and their social network is often limited (no *yimbe*). This means they cannot keep to all the prescriptions necessary to be or to remain a Pullo. The self-control needed to be a Pullo cannot be effectuated. Neither do these people have the means to re-establish the social order around them if disturbances occur. This means that they are no longer proper Jallube and had better leave society. This opinion is indeed widely held by the Jallube themselves. Of course there are means to keep one's status as Jallo, and as we have seen in chapter 12 *juulde* is very important in this struggle. However, many poor people do leave the society, which may also be interpreted as the loss of their identity.

Death is not linked to the social order, but to Allah. Allah is outside it all. Probably the relation of the Jallube with Allah is best described by saying that He plays the role of the judge in their minds. Ultimately Allah cannot be manipulated. He makes one rich or poor, and he decides about life and death. These kinds of values were probably related to cattle in the past, but now that the cattle have perished Allah has taken over.

Notes to chapter 13

1. For a discussion of the critical medical anthropology in which this view on health is elaborated, see Good (1994:25-65).

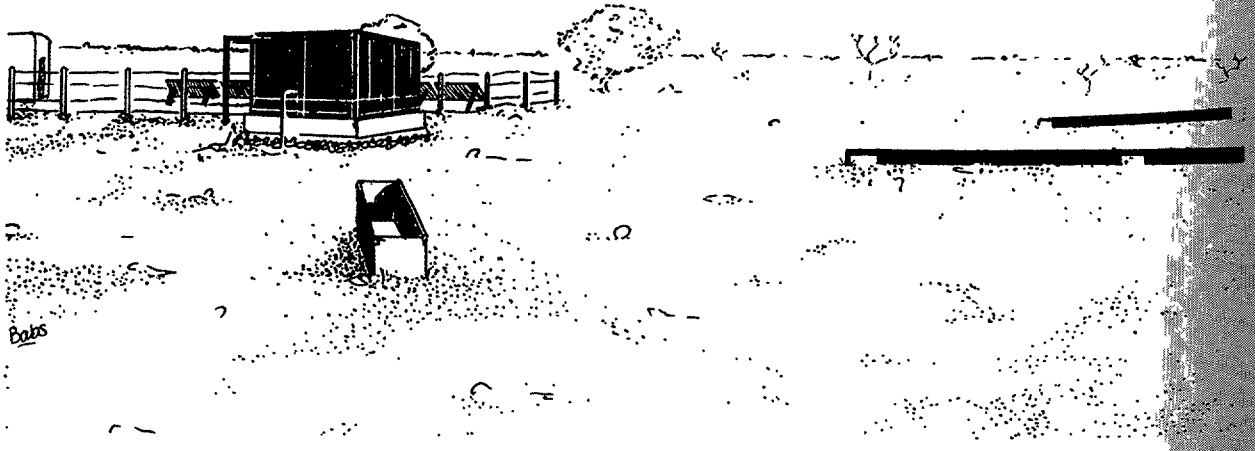
2. In the second period of our stay Mirjam fell ill regularly. These illnesses were diagnosed as including malaria, cystitis, inflammation of the eye, dysentery. The second period of the research was hard for me. I was weary of all the poverty around me and now anno 1995 and back home for three years, I would say I could hardly cope with the situation any more. The more so because the second year was much more coloured by the illnesses and deaths of people who had become so close to us, and in whose lives we got so much involved.
3. This chapter is told in the first person, because it is mainly based on experiences of Mirjam that were very personal. This does not mean that Han played no role in the events, but only that we have chosen for Mirjam's perspective here.
4. Just before the difficult years 1983-1985.
5. *Henndu* means wind and spirit in Fulfulde (Zubko 1980).
6. This is the time prescribed by Islamic rule for the mourning after the death of one's husband.
7. I saw Aamadu then as one of the persons responsible for Aisatu, which indeed he is, but only in the second instance, as we discovered. Of course I was misled here by the interpretation of the situation from the viewpoint of our own culture (see also chapter 11).
8. Although Daado did not indicate this herself, the *yaage* was also the result of the *yaage* relationship between Tamankoobe and Seedoobe. Daado was married to a Tamanke man and Koyo is a Tamanke camp, Taco and Alu were both Seedoobe. We discussed such a case before in chapter 6. This would indicate that Daado identified herself now with the *suudu baaba* of her children.
9. Taco is the sister of Daado, and Jeneba and Aisatu are therefore *bibbe yaaya*. We discussed the situation of Taco and her daughters in chapter 12.
10. See also Schmitz (1991) who characterizes illness as a disturbance of relations with Allah, spirits and society for the Jelgoobe in Burkina Faso (ibid:31). We do not include in these relations the relation with Allah, because this was never mentioned by the people. We come back to this point when discussing death, and its difference from illness.
11. He was allowed by ODEM to make some profit on the selling of medicines to keep him motivated.
12. Other researchers observed among the Tuareg in the Gurma the same pattern of treatment as among the Fulbe in Serma. They also have a broad spread of basic knowledge about illness and a variety of specialists. Anywhere people need some treatment against the most common illnesses, and having only one specialist would be very impracticable for a mobile lifestyle. This flexibility in the search for treatment in case of illness may be specific for (semi)nomadic people (Randall 1993b, Diakité 1993). Among the Fulbe in Serma the tendency to call on the *moodibo* for any illness may seem to contradict this idea. It is not, when we consider the fact that in almost any family there is a *moodibo*. This specialization is a 'common good' as well, although they are not all very competent.
13. The remark I made in my diary that Aisatu did not see a doctor represents my idea about what is good for her, what is the only way to treat her illness, or even to discover her illness. 'Our'(as westerners) trust in the hospital, doctors, and scientific medical knowledge, is very high. It is 'our' only hope when we are ill and in fact we always expect to be cured and we close 'our' eyes to the mistakes doctors make and the fact that they are not able to diagnose everything. It has become part of 'our' culture, 'our' expectations and knowledge and frame of reference, and therefore it works in many cases. But this may not be true for people from other cultures. Other cultures have their own ways to deal with illnesses, and the treatments related to these do also work as long as people believe in them. With our interference in the illness of Aisatu, and many others, we assumed that scientific medical knowledge would probably have a better cure for these illnesses than those provided by their own specialists. People who accepted our intervention, or asked for it, had realized that in their specific case the 'usual' treatment did not work. The mother of Aisatu was not convinced at all, and her attitude towards the hospital reflected this. Another (decisive) factor for the choice of people to come with us to the hospital in Douentza is that we had become part of Serma. Our house in Douentza was seen as a place of Serma. After two years we were no longer strangers but we had our family in Serma. Thus our ideas about illness were worth trying. Certainly for Aisatu this was very important. I am sure that she would never have come to Douentza without our assistance. On the contrary her mother was not really enthusiastic, and it is true that we did not know her as well as Aisatu.
14. We did not investigate this issue, because we did not want them to think that we were after the money we spent on Aisatu. We also forbade our assistants to make inquiries on the subject.

15. Apart from wealth it may have been that his family did not class this accident under one of the illnesses we discussed above, and thus saw it as something that should be treated in hospital.
16. Interview with Fatumata Abdullaaye, widow of the former chief of Dalla and Diimaajo, 1-8-90 & 31-7-90.
17. Tinta (1993:213) describes the same attitude towards young children for the Dogon. She relates this to the fact that a Dogon child younger than five years is not yet a 'person', and therefore receives less care in case of illness or disease. Among the Dogon a mother is responsible for the care of her children until they reach marriageable age. She has to ask the advice of certain persons who are near to her, but the father only intervenes if it is necessary to treat the child outside the community, which implies significant expenditures.
18. Fati went out of the village because she had so much pain in her belly. She may have recognized this as the start of the delivery of the child, for which she had to be alone. Where she lived in Debere this was hardly possible and so she fled into the bush.



Part V

The Present: Dealing with Political Insecurity


Bales

14

The State, Development and Natural Resource Management

The state and development

This chapter will return to the subject of chapter 2, the political position of pastoralists in relation to the outside world. The political situation of the people of Serma, and more specifically their relation with the state, will be shown by analyzing the way in which livestock development was carried out, having been sponsored financially by the government and the international community, and executed by the *Opération de Développement de l'Élevage dans la région de Mopti*, from now on abbreviated as ODEM[1]. In the preceding chapters we have seen that the Hayre, and especially villages and settlements in the bush like Serma, have become extremely backward and poverty-ridden places. Within these peripheral areas the Fulbe pastoralists occupy an even more marginal position, as was exemplified by the situation of Fulbe ecological refugees in Duwari and Booni. Even when people still dispose of livestock or herd animals for others, they are banished to the fringes of society, to prevent them from acquiring permanent rights in sedentary society.[2]

The reasons for choosing state- and donor-sponsored livestock development embodied by ODEM as an illustration of the marginal and insecure position of Fulbe pastoralists are various. In the first place the ODEM acted on behalf of the Malian state and the international community to ameliorate the situations we described in the preceding chapters, i.e improve the socio-economic conditions of the pastoral population (ODEM 1984). ODEM obviously failed in this respect. The state as administrative body seems a remote, abstract, but forceful and threatening entity, when one has been living for a long period in Serma. It manifests itself in the village through arrogant petty bureaucrats, who form the lowest administrative layer and represent the government for the people in the bush. When they come to Serma, they behave as if they 'own' the people and their possessions. They shape a very negative image of the state in the minds of the people of Serma, so that every action by any outsider, be it from the state, a development agency, or research institution, even if it is well-intended and well-directed, is regarded with intense suspicion. Though not all of these characteristics automatically apply to some ODEM staff, some elements of ODEM's programme have helped shape this image, and in any case did not help to improve local opinion about the state.[3]

The second reason for taking the interventions of ODEM as exemplary for the marginal position of the Fulbe in Serma is the fact that ODEM is by far the most important agent of change in these remote places in Central Mali. NGOs are allowed to work only in official villages, and many Fulbe pastoralists live in unofficial settlements and in the bush where development workers do not come. Indeed most NGOs do not work even in official Fulbe villages, because they either find it impossible to work with highly individualistic Fulbe pastoralists, or regard the Weheebe, with whom they are often in contact, as unreliable crooks. Other government sponsored development operations like the *Opération Mil Mopti* (OMM), and village forestry programmes, do not extend their activities into these distant areas, or they devote themselves exclusively to the Inner Delta of the Niger, such as *Opération Riz Mopti* (ORM), and *Opération Pêche*.

A third reason for taking ODEM is that this development organization is not only relevant at a technical level, but aims at nothing less than completely reforming the social infrastructure of the pastoral sector. As has been shown in chapter 10, ODEM's technical interventions have a major impact on the way claims on resources like water and pasture are stated and made effective. Although the organization is not given the authority to intervene in the tenure of natural resources, ODEM has undeniably a great influence on this aspect of Fulbe society. A fourth reason for taking ODEM is that its role in livestock development in Central Mali is a debated issue, and we think we may have a new contribution to this debate.

Before embarking upon a discussion of the activities of ODEM in the research area, it is useful first to delineate the issues we will address in the chapter. Our point of departure is that development is essentially a political process, in which often there is little regard for the wishes, ambitions and abilities of the target population. Development agencies have often come to play an indispensable role as intermediaries between government and population. Soft loans and gifts from donors and development bureaucracies have grown into important means for urban elites and indigenous aristocracies to get employment and indemnities, and provide opportunities to divert and mismanage public goods (Gallais 1984).[4] The development process has helped government agencies to proliferate the state apparatus, and this can be seen as an indication of increased control of the centre over the periphery (Quarles van Ufford 1988a:17).

The process of development presupposes a recognition of the sovereignty of the state over its subjects and the resources in its realm to which it has laid claim, and that governmental development agencies are relatively efficient and effective tools in the hands of (political) authorities (Quarles van Ufford 1988a:16). For this reason the problems these agencies are supposed to address such as drought, famine, poverty and ecological degradation have to be rephrased in a-political terms. That sometimes reality is distorted and even plain fiction is written in policy documents and project identifications is taken more or less for granted (Ferguson 1990). All kinds of relevant insights from disciplines like development sociology and social anthropology concerning the political aspects of poverty and underdevelopment are brushed aside. Scholars from these disciplines are condemned for providing inappropriate, and hopelessly inadequate, far too detailed studies.

At least this is how development workers reacted to our prolonged stay in Serma. However, according to Horowitz the failure of literally all livestock development projects may be attributed to the fact that 'fundamental errors about the nature of pastoral production systems are maintained by planners and these errors lead inevitably to flawed projects' (Horowitz 1986:255).

Development agencies are not just intermediate agencies. They have their own dynamics, in which power and politics play an important role. No bureaucracy undertakes action to execute official policy when doing so would undermine its own power and threaten its survival (Quarles van Ufford 1988b:77). Any organization will try to reduce the insecurity and uncertainty in its environment, and make it predictable, so that it may operate effectively and its continuity be ensured (Thompson 1967:159, Mintzberg 1979:21). An organization is also never an undivided whole. Various fractions within it and potential beneficiaries compete for power and try to direct the organization and its resources to their purpose. The capacity to reduce or control uncertainty and insecurity is narrowly related to the actual structure of power, and may have an impact on who controls and benefits from the organization and its resources (Pfeffer 1978:4). People who are able to control uncertainty acquire power because they help to preserve the organization and help to promote the efficient execution of the tasks assigned to it (Quarles van Ufford 1988b:79).

One of the ways to reduce uncertainty at the level of a development organization is to reduce the target population to an amorphous mass of poor and needy, and to attribute specific stereotypes to them. So far, we have demonstrated that within a group of poor Jallube and Riimaybe such as those in Serma, there exists a wide variety of strategies and modes of survival, as well as a multiplicity of norms, values and ideas about status. These various categories are differently involved in and affected by the development process, and will not have the same interest in the development agency. To this we have to add the role and the position of indigenous aristocracies, and religious leaders who often act as spokesmen on behalf of the population or as intermediaries between them and the state or the development organization (van Dijk & de Bruijn 1988). The role of this political hierarchy is rarely assessed in studies on pastoral development. It is simply assumed that they represent the interests of their following, which is rather naive.

Another important source of insecurity and uncertainty for a development agency is the authority over the resources it is supposed to manage. The problem of pastoral development was perceived as one of bad land use, and the way to cope with it was to increase control over the numbers and movement of livestock (Hogg 1988:183). Pastoralists may participate in this control, but this transfer of control may lead to changing power relations in the pastoral community. One of the prerequisites for intervening in natural resource management is the ability to exert control over the resources themselves, and to be able to legitimize this control in local terms. In pastoral development control over water and range land are the most important. Shanmugaratnam et al. (1993) regard the lack of authority over these resources by livestock development agencies as one of the main reasons why pastoral development projects fail. In most cases governments are not willing to cede control over their national domains to development agencies, even if they belong to the government

bureaucracy itself, or are working under a mandate of the government as a parastatal organization.

Control over its target population is another requirement for a development organization to function effectively. Often participation of the intended beneficiaries is presented as a means of improving the effectiveness of the development process (Cohen & Uphoff 1980, Oakley 1987). It may also be a means of encapsulating the target population in the project organization, so that it can be controlled more effectively (van Dijk & de Bruijn 1988). Pastoral associations, which are local organizations in which pastoralists undertake development activities on their own initiative supported by governmental development agencies, are currently seen as important participatory units to promote pastoral development (World Bank 1987:6, 42-47, Diop 1989:1). In these pastoral associations the issues of local political hierarchies and indigenous leadership re-appear, for local elites often head these pastoral associations (Shanmugaratnam et al. 1993, Vedeld 1994).

The organization of ODEM

Background

As was shown in chapter 2, in the colonial period the French administration was mainly interested in the potential for livestock production of this part of Mali, and the export of cattle to the coastal countries of West Africa. Government services were established in the colonial era, but their impact was limited to controlling the population. Except for the livestock service, which set up vaccination services to wipe out contagious livestock diseases, there was little investment in this semi-arid area. Though the land (pastures and forests) had become national property, the government had little interest in doing anything with the land. Apart from agricultural land, which was under customary tenure regimes, so that it could not easily be touched by tenurial reforms or development schemes, all other land, forest land and grazing areas, became part of the private domain of the state. The productivity of this land was so low that no governmental or developmental agency had any interest in improving it. The costs would outweigh the benefits by far.

The drought of 1968-1973 set off a rapid process of change in this situation. The Western world was seriously alarmed by the Sahelian drought. Malthusian scenarios were drawn up for this part of the world (Grainger 1982, Lamprey 1983, Catinot 1984). Deforestation, overgrazing by livestock, erosion and overexploitation were seen as the prime causes behind this disaster, leading to a dwindling resource base and more disasters in the near future. Desertification as a problem of world-wide magnitude was set high on the agenda of international fora. This resulted in the United Nations Conference on Desertification held in Nairobi, Kenya, in 1977. These problems have remained high on the agenda ever since. A number of regional offices and research institutions were set up, with the aim to concert and coordinate all kinds of actions to combat desertification. The donors were represented through the Club du Sahel in the OECD (Organization for Economic Cooperation and Development). The recipient countries united in the CILLS (*Comité Inter-*

état pour la Lutte contre la Sécheresse). The United Nations established a special Sudano-Sahelian Office (UNSO). All kinds of institutions were set up for all kinds of purposes, such as the Institut du Sahel in Bamako, to coordinate and execute research, Agrhymet in Niamey to perform basic meteorological and agro-ecological research, OCLAVAV (*Organisation Commune de Lutte Anti-Acridienne et de Lutte Anti-Aviarire*) in Bamako to coordinate the struggle against locusts and grasshoppers. WARDA (West African Rice Development Authority) undertook a research programme in the Sahel. The International Livestock Centre for Africa (ILCA) based a special programme for the Sahel in Bamako, and ICRISAT (International Centre for Research in the Semi-Arid Tropics) established a branch office in Niamey.

These institutions were supposed to help build up the scientific capacity of National Agricultural Research Systems (NARS) such as the *Institut d'Economie Rurale* in Bamako, Mali. The International Service for National Agricultural Research (ISNAR) based in the Hague was established in 1979 to provide NARS with organizational capacity, and to improve effectiveness and efficiency, and to develop liaison services with development agencies. In addition aid money poured into the Sahelian countries to execute pastoral development programmes, reforestation at village level, erosion control, cereal banks, intensification of agricultural production, the production of export crops etc. In total an estimated $7.45 billion was invested in the Sahel alone in development programmes between 1975 and 1980, of which 5% was destined for the livestock sector (Grainger 1982:47-48). ODEM is part of the executive branch of this development industry.

This massive inflow of know-how and money has changed the context of local level resource management in a dramatic way. For Sahelian governments it became worthwhile to invest in dry land areas, such as the Hayre and the Seeno-Manngo. These areas acquired more value for the government because of donor interest. It became attractive for governments to attempt to gain more effective control over natural resource management in these areas, for it would attract financial resources from donors to their bureaucracies. An illustration of this process is, for example, the stationing of six extra forest agents in the *cercle* Douentza in 1987, one in each *arrondissement*, which meant a sevenfold increase (from one to seven) of the capacity for control in the *cercle*. Of course law with respect to forests and uncultivated lands was instrumental in this process. According to international convention the state laws with respect to natural resources are valid. Consequently the state was regarded as the owner of the resources that were used by pastoralists, gatherers, and cultivators, and was thus considered the sole intermediary for external interventions in land use by international and governmental development agencies. So, projects to combat desertification problems in the Sahel inevitably enhance control of the government over natural resources, and consequently over their management by the population.

In the region of Mopti a number of these anti-desertification or rural development programmes, so-called ODR's (*Organization de Développement Rural*), were started. The most important were the *Opération Riz Mopti* (ORM), to develop rice cultivation, *Opération Pêche*, to promote fish production (fish was a major export product of Mali in the 1960s), and the *Opération Mil Mopti*, for the intensification of dry land farming. For these governmental agencies IDA-loans (International Development Assistance) were provided by

the IBRD (International Bank for Reconstruction and Development: World Bank). USAID (United States Agency for International Development), and the FED (*Fonds Européenne de Développement*) funded part of these programmes. USAID also provided funds for a social forestry project, within the framework of the Forest Service. These credits provided these organizations with the necessary means for investments and operational costs to start new activities. In some locations bilateral projects were attached to these para-statals. GTZ (*Gesellschaft für Technische Zusammenarbeit*), for example, started a dam building programme with the *Genie Rurale* and later on an extension project in co-operation with OMM in Bandiagara, to develop market gardening.

However, these development and rehabilitation projects hardly extended into the cercle Douentza and the research area. Most efforts were directed to the Inner Delta or densely populated areas such as the *cercles* Bandiagara and Bankass.[5] The operational area of OMM did not cover the cercle Douentza, except for the *arrondissement central* (see map 1.2). The forestry project did not extend into the cercle Douentza. Outside these areas ODEM is the sole governmental agency with sufficient means and interest to undertake development activities among the pastoral population. Gradually it has also extended its activities from livestock development alone, into domains like health care, education, and the organization of the pastoral population.

ODEM I: an upgraded livestock service

The aims and organization of ODEM evolved considerably from its inception in 1975 until its closure in 1991. We may therefore make a distinction between the programme of ODEM in its first phase from 1975 to 1980 (with an intermediate phase which lasted until 1986), and the second phase of ODEM, which started in 1986 and ended in 1991, when the World Bank decided to extend the IDA loans no longer. After 1991 some of the activities of ODEM have been continued by an NGO in Douentza, the Near East Foundation (NEF), under the name *Programme d'Appui aux Collectivités Locales* (PACL). These activities were financed by the French CCCE (*Caisse Central de Cooperation Economique*). These activities will not be discussed in this chapter, for we had left the area by then.

The core of ODEM is constituted by the former livestock service of the region of Mopti. Only its development part is financed with external sources, which explains the relatively high percentage of government funds (23% of the total, against 77% IDA). The livestock service still provides the majority of the personnel of ODEM. Of the 405 staff members employed by ODEM in 1980, 280 were paid from national funds, and 125 staff were contracted with IDA money. The working area of ODEM covers not only the region of Mopti, but also the cercle Niafunke and parts of the cercle Gurma-Rharus, belonging to the region of Timbuktu: in total about 95,000 km^2. Total investments by ODEM in the period 1975-1985 were 3,633 million FCFA of which 49 % were destined for production (Harts-Broekhuis & de Jong 1993:92).

The aims of the programme were ambitious, and were the following: 1- restoration and preservation of the ecological equilibrium; 2- promotion of the production and productivity

of livestock; 3- improvement of the socio-economic conditions of the population; 4- promotion of the marketing and export of cattle to relieve pressure on grazing land and to earn foreign exchange. The programme consisted of five components: 1- a classical zoötechnical component consisting of inoculation campaigns and experiments to improve pasture management; 2- the organization of livestock markets and the establishment of a slaughterhouse; 3- functional alphabetization of the population and the improvement of health care; 4- the improvement of water availability for livestock in marginal areas to relieve pressure on the Inner Delta of the Niger by digging 70 wells and 50 water ponds; 5- better control over the livestock sector by means of education, extension campaigns, regulations and technical facilities to be channelled through pastoral associations with the aim of reducing pressure on pastures (ODEM 1984, 1985).

It was decided to concentrate these activities on the Seeno-Manngo. The reasoning behind this choice was that the dry land areas in Central Mali had to be upgraded in order to provide an outlet for the Inner Delta of the Niger, which was considered to be overstocked. However, this decision was not based on a thorough analysis of the problems in the livestock sector (see e.g. Chapuis et al.1972). Gallais (1984:236) criticizes this orientation on the grounds that the Seeno-Manngo did not play a role of any importance in the livestock sector at the time, and that the investment was not justified from a pastoral point of view. According to him the project was concluded between the director of the regional veterinary service, a Kummbeejo originating from the Seeno-Manngo, who hoped his clansmen would profit, and the representative of the FAC (*Fonds d'Aide et de Coopération*) the French aid agency, and was pushed through with the donors (Gallais p.c.).[6] He feared that the wells would lead only to a colonization of the area by Dogon cultivators (Gallais 1984:236), an opinion shared by 98% of the livestock owning population of the Seeno-Manngo (ODEM 1978).

The results of the first phase of ODEM (1975-1980) were quite disappointing, from both a technical and a social perspective. The number of wells that was attained was far fewer than the planned target of 70. Not only did they prove far more costly than envisaged - price of a well rose from FM 14 million in 1973 to FM 54 million in 1978 -,[7] but also the hydro-geological situation proved far more complicated than originally envisaged (Gallais 1984:235). It is remarkable that this mistake was made, given the ill-fated attempts under the colonial government to develop water resources in the Gurma (Inspection 1952, 1953). In the end only 11 wells were finalized, and these soon proved to be too shallow to support the number of livestock for which they were designed. In the middle of the Seeno-Manngo some boreholes were drilled, but they were not taken into use, except for one (see below). In short the results were so disappointing that no new programme was drawn up and approved until 1986, when another donor consortium accepted financial responsibility.[8] Gallais summarizes the reasons for this lack of success as: weak technical capacity in the development of water resources and vaccination campaigns; the high degree of centralization; corruption; and lack of trust among the population (Gallais 1984:233-237).

ODEM II: the shift to pastoral associations

Already in the first phase of ODEM plans were made to establish pastoral associations in the project area. According to Gallais, this entailed only a few attempts on the Seeno-Manngo, but no progress was made in the organization of rational use and management of pasturage. The units were organized at the level of the *arrondissement*, which deprived them of any traditional social basis (Gallais 1984:236). Only one of those associations, that of Booni, had a functioning source of water and a protocol for controlled use of the pastures. In 1986, when the programme was revised, a number of new activities were added to the former working plan: 1- promotion of the participation of pastoralists in investments; 2- health care for the pastoral population; 3- the study of production systems (Cissé & Gosseye 1990, van Duivenbooden & Gosseye 1990, Veeneklaas 1990, Veeneklaas et al. 1990); 4- monitoring and evaluation activities.

According to Thompson et al. (1989:85) ODEM II represents '... an important shift in orientation from the essentially 'productionist' objectives of the first project'. The protection of the ecology of the Inner Delta by stock-water and pasture development outside the Delta, and the organization of livestock producer groups became major objectives within this general framework.

In the second phase of ODEM a new concept of the pastoral association was introduced. Livestock producers would have to assume responsibility for the protection and rational use of specific grazing lands and the associations were to pay ten percent of the costs of constructing, and most of the maintenance of, new or improved storage wells (Thompson et al. 1989:85). For this decision-making authority was to be decentralized to the pastoral associations. It was envisaged that, for example, the wells on the Seeno-Manngo would come under the management of local committees, which would assume responsibility for the maintenance and part of the costs of deepening the wells.[9] By systematically developing water resources and pastures outside the Delta it was hoped that 200,000 head of cattle extra could be supported by the drylands during the dry season. Pastoralists from the dry areas would be able to stay in the drylands, because the Delta had become a hostile environment for them (Sylla 1989:16).[10] Development of pastures outside was deemed still more urgent after the 1985 disaster, when a large number of cattle were locked in the Inner Delta, having sufficient water to drink, but no pasture to graze. This led to enormous loss of cattle.[11]

Within this framework the way to approach the pastoral population remained in essence paternalistic, voluntaristic, and authoritarian. Government officials regard the way of livestock management and the grazing strategies of pastoralists as irrational and backward, and hopelessly inadequate for long-term sustainable land use. It was hoped in these circles that because of the drought of 1983-1985, finally the mentality of the pastoralist would be ready for change. '*Le moment paraît particulierement opportun si on envisage des transformations profonds du mode d'élevage. C'est maintenant qu'il faut agir. Dans quelques années, lorsque les anciennes habitudes auront repris le dessous et que les animaux seront réconstitués sur les mêmes bases qu'auparavant, il serait trop tard*' (Sidibé 1989:1). In order to promote pastoral development...'*...il reste encore beaucoup à faire*

pour un changement complet des comportements et des mentalités et parvenir à l'objectif récherché de responsabilisation et de participation effective des éleveurs dans le processus de développement autocentré à la base' (Anon 1989:3).

This attitude once more resulted in a top-down approach on the part of the local Malian administration. The ODEM continued to function as a classic '*encadrement*' extension agency,[12] which entailed that 'technical components were carried out, '*animation*' and '*sensibilisation*' campaigns were executed to prod local populations to accept its programs and conditions, with close supervision of its clientele, and the enforcement of contracts between the agency and the local organizations (Thompson et al. 1989:87). Despite the fact that it is acknowledged that improvement in natural resource management can only be attained with the help of the pastoralists and at their pace (Sidibé 1989:1, 5), protocols for the delineation and parcellation of pastures were prepared in advance, as well as working protocols for the anticipated pastoral associations and western-style job descriptions and membership rules for the boards of these groupings (Sidibé 1989:4-5, Anon 1989:6-8).

The way these organizations are supposed to function makes them an extension of the governmental bureaucracy, and makes them look more like Chinese work brigades than participatory organizations. Three levels were distinguished in these pastoral associations. At the lowest level voluntary groups of 10 families each, which would be grouped together at the second level as a '*cellule pastorale*'. The third level consisted of several of these *cellulles pastorales*, which formed the pastoral association, headed by a board (Shanmugaratnam et al. 1993:20). '*Ce bureau* [the board] *travail en étroite collaboration avec le chef de poste vétérinaire pour la connaissance de l'ODEM et de l'aide qu'elle peut apporter en group, l'élaboration des programmes, la recherche des moyens d'execution, la promotion des éleveurs. La finalité est de créer et entretenir un esprit communautaire et mobilisateur et d'identifier les actions de développement local. Le passage à l'étape suivant se fait sur attestation par l'agent d'encadrement du dégré acceptable de compréhension et de mobilisation atteint par le groupement'* (Anon 1989:6).

An example of this top-down approach is the way the rehabilitation of the wells, which were dug in the 1970s on the border of Seeno-Manngo and Ferro, was executed in 1991. In the course of their existence since the late 1970s the water-table had dropped, and the cemented walls were falling to pieces.[13] Secondly the repair of the wells was considered a good occasion to establish management committees for the wells in the villages concerned. The purpose of the management committee was that the users of the wells would collect and contribute 10% of the real costs, or FCFA 2,000,000, to the rehabilitation of the well, and at the same time learn to organize themselves to undertake development activities, such as the maintenance of the well in the future, and to participate in pastoral associations.

The programme was, however, delayed by a number of other problems concerning these wells. They were not only attractive for cultivators to settle as happened in Tula, Wayre, Daajem and Lennga, where Hummbeebe, Riimaybe, Dogon and Sonrai occupied the land around the well, but formed also a point of attraction for pastoralists from the north in years of lack of pasture, as appeared during the drought of 1983-1985. The loss of cattle around the wells was enormous, because the pastures were seriously overstocked with animals from outside the region. Especially for the Fulbe these issues were very important. Control over

the wells would automatically mean control over the pastures surrounding them. To have control over the wells and pastures they thought they should have the authority to regulate access to the well, and in some places they wanted to re-allocate the agricultural land around the well, now occupied by the cultivators. The last point was very sensitive, because it touched land tenure, the rights of the first occupants, and inter-ethnic relations on the Seeno-Manngo. The reason for the discontent of the Fulbe over the current situation was that the Hummbeebe were now able to use the manure the Fulbe's animals deposited on the land around the well when they were watered. This can be a very sensitive issue as we saw in the conflicts over the boreholes in chapter 10.

The management committees were, however, never meant to be given authority to regulate access to the wells, because ODEM did not have the authority to do so, and the committees were not yet capable of regulating access on their own. In this respect they remained under the supervision of ODEM and the administration. Secondly, the issue of the tenure of the agricultural land around the wells could not be resolved, because ODEM was not allowed to interfere in land tenure, which was considered an administrative matter, and, as we know from chapter 2 and 10, a potential source of (grave) conflicts. Besides, ODEM wanted to have the FCFA 2,000,000 and get on with the programme as fast as possible. The whole programme was four years behind schedule, and the donors were becoming impatient with ODEM (which ultimately led to the closure of ODEM by the end of 1991).

At a meeting of ODEM with Fulbe and Hummbeebe which we observed in Tula, the Fulbe refused their cooperation with the management committee because the ODEM officer did not want to discuss these subjects. Even when they were harangued by a brother of the chief of Dalla, who was with us that day, they held firm. Later on, they had to give in, because if they had persisted in their refusal, the Hummbeebe would have formed their own management committee, and have had the well for themselves. In other places such as Lennga there were similar problems.

At the end of our stay the reconstruction work on the wells had begun. Later on we heard that the firm which was contracted to execute the work went bankrupt, so that the whole project was halted halfway. This had severe consequences for the credibility of ODEM and the government in the eyes of the people (Douma et al. 1995). The people collected their own contribution and then the infrastructural works were not executed in time. In addition the finished storage wells were not constructed according to the specifications. The cemented walls of the wells were not finished properly, so that the local tackle for drawing water, which was made of leather wore out very fast.

Pasture management and pastoral associations

Two views on ecological insecurity

The rational use of pastures is the second main aim of the ODEM rural development programme. The ODEM concept of pasture management rests on two pillars: 1- The adjustment of grazing pressure to the carrying capacity of the range; and 2- the setting aside

of pastures and rotation of grazing by the population. Managerial responsibility was to be brought under the pastoral associations (under close supervision of ODEM of course).

To begin with the first principle for pasture management, this axiom rests on the conviction among range scientists that pastures in the Sahel are chronically overgrazed. To ameliorate this situation the number of animals has to be adjusted to the amount of dry matter available on the range. This philosophy runs through the whole ODEM programme of ecological rehabilitation from its inception in 1975 until its termination in 1991. The restoration of the ecological equilibrium was to be reached by an increase in the off-take rate from the herds, while at the same time promoting the productivity of the livestock. The idea was that cattle which are considered redundant from a meat production point of view should be removed from the range. The second principle is needed to ensure that indeed the grazing pressure can be adjusted to carrying capacity. Without units to measure, no control is possible. The delineation of territory for the setting aside of pastures should, however, not be taken to mean that any territorial claim is assigned to the pastoral association involved, or that ODEM has the authority to do so. The source of insecurity concerning pasture management in ODEM's view is indeed the seemingly chaotic herd movements of pastoralists.

This way of looking at pastoral production is at odds with the Fulbe ways of dealing with ecological insecurity in at least three ways. In the first place ODEM's view presumes that meat production should be the prime production objective of pastoral herd management. As we have seen in the course of this thesis milk production is in normal situations the basis of existence of both the *wuro* and the *fayannde*, the basic social units in Fulbe society. Concentrating on meat production would have a serious negative impact on the position of women and gender relations in general, and on the diet and the health of children. Moreover, it has been shown that in terms of productivity, milk production for subsistence is more rewarding in terms of calories produced per hectare than so-called rational meat ranching (Coughenour et al. 1985). Moreover meat production would make the Fulbe completely dependent on the market for cereals, which is not a secure existence either.

Secondly, the criteria for productivity of ODEM, taken as the growth in biomass of the herd, is a negation of indigenous views on productivity. A Pullo herdsman, and herdswoman for that matter primarily look at the amount of living biomass stored in the herd, and what can be extracted from this herd. In normal English, more cows means more milk. The sale of an overmature bull once a year, to cover all kind of expenses does not negatively affect this productivity. The larger the herd, the more secure the existence of a herding family (cf. Ingold 1980), because the higher the chance that in the event of drought or disease some animals will survive (Horowitz 1986). For this reason a herding family rather sells old cows and overmature bulls, because young animals have a higher chance of survival, and the chance that of two young bulls, having the same biomass as one mature bull, at least one will survive and can be made productive in the future is much higher than the chance of survival of the single old bull. The fact that the Fulbe of Serma at present have to rely on the sale of two-year old bulls and productive cows can be taken as an indication of their poverty. It is counterproductive in relation to their long-term survival. So the strategy ODEM proposed for herd management is followed only by the poor.

Lastly, the way ODEM wants to adjust the number of animals to the carrying capacity of the range, and to create boundaries between pasture zones, is at variance with Fulbe grazing strategies. In the highly variable ecological circumstances pastoral herdsmen cannot adjust the movements of their herds to boundaries. Ecological variability forces herdsmen to lead their herds out of their own territory in order not to let their animals starve. One year they may go this way, another year they go another way. In Serma the herdsmen controlled access to the grazing territory by limiting access to water resources to people who were considered members of the community, or were invited by them to stay for a specified amount of time. If pasture was scarce they moved out of the region, and no people were invited. This system functioned well on the Seeno-Manngo until ODEM began to develop water resources not under control of the local herdsmen: then control over grazing in the dry season was lost.

Livestock development in Serma: a range management scheme

Among the Fulbe settlements on the Seeno-Manngo, Serma is somewhat exceptional, because it does not have an ODEM well. This does not mean that no development of water resources took place in the territory of Serma. Its territory was the location of the only successful attempt of ODEM to develop a range management scheme. In the 1970s an ambitious scheme was designed to rationalize and develop grazing and water resources on the Seeno-Manngo (see Chapuis et al. 1972). Delineation of territory was deemed necessary to control grazing, i.e. to have it controlled by ODEM in accordance with scientific indicators, and also to ensure protection against fire.[14] The questions whether, and how, Fulbe pastoralists controlled grazing in their territory were not even asked. It was assumed that there were no local mechanisms for controlling access to pastures, which was confirmed by a study of local tenure regimes (Diallo no date), in which historical dimensions of territoriality were overlooked.

In the grand scheme of ODEM the Seeno-Manngo was divided into blocks of pastures that were to be equipped with their own boreholes (see Chapuis et al. 1972). The block south of Serma with the code name P-17-bis, an area of 12,000 ha, would be the pilot project. A new borehole was drilled 12 kilometres south of Serma, and was equipped with a solar pump.[15] The borehole was called *Bunndu Naange* (the well of the sun) by the local herdsmen. We will use this name in the rest of this chapter. The scheme was opened in 1977. Grazing in the reserve was regulated, access was limited to about 3,000 head of cattle, depending on the condition of the range. Initially grazing was allowed for six months of the year. Later on the open period was cut back to three months. The pasturing of animals in the rainy season was prohibited, to prevent overgrazing and degradation of the range. Cultivation on the range management scheme was strictly forbidden, as well as the grazing of animals outside the open months. The northern boundary was set just south of the small pool south of Wuro Boggo (see map 3.1). As the western boundary the road from Serma to Duwari was taken. The eastern boundary was set at five kilometres eastward, and started north of Fetesambo.

The range management scheme was officially an undertaking of the pastoral association vested in Booni, and headed by the chief of Booni and other aristocrats. A local committee (*cellule pastorale*) was formed of Fulbe pastoralists from Serma, Lennga, Fetesambo and Yirma, headed by the representative of the chief of the Seedoobe lineage in Serma. This committee was responsible for the daily supervision of the scheme, so that no one grazed his animals in the area outside the months specified. Another task of the committee was the construction of fire-breaks along the boundaries to prevent bush-fires from invading the scheme in the post-harvest season. A local well-digger, a Diimaajo from Booni, was appointed warden of the equipment, solar pump, tanks, and drinking reservoirs. He was instructed by a foreign expert.[16] His task was to maintain the equipment and see to its proper use. He was provided with a modest salary, to be paid by the users of the scheme. The latter paid 25 FM per month per head of cattle to cover these expenses. The director of the ODEM sector in Douentza was responsible for selecting of the users of the scheme. Information from local sources indicates that only local herdsmen were selected, among them the most prominent Jallube of Serma. As far as we know there were no criteria for selection. The only problem at the start of the project seemed to be that the solar pump did not function according to the specifications of the company that delivered it (Gallais 1984:235). Sylla (1989:23) reports that it broke down and that the herdsmen lacked the means to buy spare parts. A third version holds that a conflict arose between the company that delivered the pump and the ODEM. ODEM refused to pay for the pump as long as it was not functioning properly. The company refused repair as long as payments had not yet arrived (Meyersoun p.c.).[17] This problem was solved by allowing fewer cattle on the scheme than was originally envisaged, as a means of limiting water requirements. A couple of years later, in 1983, the pastoral association was provided by ODEM with a generator, an electric pump, a basin of 24 m^3, and two drinking reservoirs (ODEM 1984:55). The association paid FM 500,000 as a contribution to these investments. The official price for water at the borehole was set at FM 300 (FCFA 150) per head of cattle per month. Technical problems continued to plague the scheme, for the technology of diesel motors was not mastered by the herdsmen (Sylla 1989:23), and in case of break-down a mechanic from the head-office of ODEM in Sévaré had to be called in, which cost enormous amounts of time.

A second motor pump was installed on a borehole in Booni, so that the capacity of the area around Booni to support livestock was also enhanced.[18] When we visited Booni in 1987 both sets of machinery were out of use because of lack of spare parts. In the second phase of ODEM the committee was also reorganized. The local committee in Serma was given more decision-making authority, while remaining part of the larger pastoral association in Booni, where the chief remained president of the board. The board of the local committee in Serma was changed into a five member committee who were assigned specific tasks, consisting of a president, secretary, treasurer and two members. From now on they would be responsible for the management of the scheme. The way this organization was formally set up is consistent with what we found about ODEM's planning of pastoral associations (see above). In the course of its existence the scheme changed from an enterprise that was directed from the head office and the level of the *arrondissement* to a

more decentralized association of pastoralists at the lowest administrative level. With respect to Serma this is in fact a non-administrative level, because the settlements on the Daande-Seeno are non-existent in administrative terms. Due to the technology used and the lack of organizational skills at this local level, the scheme had to remain under close supervision of the service, and the members are to a certain extent forced to do what the ODEM requires them to do.

Observer opinions on the pastoral association of Booni

This range management scheme has in general received a good press among outside observers and evaluators. According to Sylla the members of the pastoral association showed much lot of motivation despite the fact that the solar pump broke down. They made trips to the project headquarters and paid dues to have the pump repaired (Sylla 1989:23). He describes the whole set-up in this way:

> The creation of new structures on the basis of grassroots solidarity can be an interesting option if it meets a need for collective action and a genuine common interest. In the case of ODEM, this approach was able to alleviate the deficiencies of the former herder cooperatives, fill an organizational vacuum which was preventing the full exploitation of existing boreholes and finally to organize self-help by grassroots producers (Sylla 1989:17).

According to a report concerning the evaluation of ODEM (IRAM 1991), the pastoral association of Booni is the most successful:

> *Les différentes associations de l'arrondissement de Boni, créées à partir de 1980, représentent un montagne complexe. Au départ quelques initiatives furent prises dans le cadre de l'action cooperative mais c'est l'action de L'ODEM à partir de 1978 qui a véritablement initié un mouvement associatif qui apparaît parmi les plus dynamiques de la région.*
>
> *Il est favorisé par l'influence de la chefferie peule locale qui permet un regroupement des éleveurs. La diversité des structures ne doit pas masquer le poids de cette influence qui se reflète pas la forte représentation en leur sein de cette famille* (IRAM 1991:102).

Nevertheless this situation is preferable to the way of functioning of other pastoral associations because internal tensions are more easily overcome and the interests of the herdsmen are better represented (IRAM 1991:87). In internal documents of ODEM (Anon 1989) the pastoral association of Booni is described as the most successful among many deficient, non-functioning associations, of which a large number were wrecked by internal strife and corruption.[19] The grazing scheme was the showcase of ODEM. Every foreign expert delegation was led to the project to see how successful pastoral development *à l'ODEM* was, it has been one of the two functioning units ever since the ODEM started.[20]

To summarize: the success of the grazing scheme and the pastoral association in Serma and Booni is attributed to the fact that these two organizational units were able 'to alleviate the deficiencies of former herdsmen cooperatives' and 'fill an organizational vacuum which

was preventing the full exploitation of existing boreholes', through 'an influential and charismatic Fulani chief, a strong aristocracy and grassroots solidarity'.

Own observations in the field

A less glorious picture

We cannot help but doubt the conclusions of these experts. They must have been lured by the accounts of ODEM personnel, when accompanied by them and local aristocrats on their evaluation tours and fact-finding missions. Maybe they have overlooked structural problems in the set-up of this kind of range management project, or they did not study the documents provided by ODEM, which, by the way, contain very little information on what is really going on. These observations support all our prejudices about speedy experts doing windscreen, roadside and elite-biased quick and dirty rapid rural appraisals. Indeed it is nicer and easier to talk with members of the aristocracy. They are better educated, better informed, live in large villages, which are easily accessible, and know how to behave towards delegations. In contrast the Jallube in the bush are inaccessible, shy people, who are not familiar with what is going on in the world. At most they are regarded as people who have fallen victim to external circumstances and need help to overcome their situation. It is not easy to gain their trust, but they must also have a voice.

In our opinion the history of the grazing scheme in Serma, from its inception in 1977 to the closure of ODEM in 1991, cannot be depicted as the struggle of a group of motivated pastoralists to overcome the effects of drought and disaster, and to modernize their way of life, if necessary on command. It is rather the story of how the chief and the state, *in casu* the ODEM, gained control over the Seeno-Manngo and the pastoral population. The amount of strife among the pastoralists of the Daande-Seeno, the absence of a coherent and functioning lineage structure, the conflicts between elders and youngsters, fathers and sons, the large differences in wealth, the living conditions in general, which we have discussed in the preceding chapters, do not fit well with a homogenous social movement based on grassroots solidarity by any standards. Sheer poverty precludes any involvement in a scheme which costs officially FCFA 150 per month per head of cattle for the majority of the population in Serma. The conflicts over government wells in the late 1950s indicate that lack of social cohesion manifests itself at moments when new resources are introduced in society, or may even contribute to social conflict and disintegration. Did the organization of the scheme overcome these centrifugal tendencies? Did it mean a rupture with the past? Did it contribute to better management of the pastures of Serma and the other villages in the neighbourhood? Did the inhabitants of these villages gain anything from the pastoral association and the range management scheme? In the rest of this chapter we will discuss these aspects of this pastoral development project as we observed them or were told of them by the people of Serma.[21]

Ecological viability

First we will try to assess the success of the range management scheme in ODEM's terms, and address the question whether the scheme introduced better management of pasture land. It would be a mistake to assume that the area set aside for the scheme was not used in the past. Especially in the rainy season herdsmen based in the settlements north and south of the dunal area roamed the area with their herds. They watered the animals at small pools that formed here and there after heavy rains. When water resources were exhausted they retreated to a permanent well. As long as temperature remained low and relative humidity somewhat higher in the cold dry season, they continued to make two-day treks to the pastures on the Seeno-Manngo. According to older men there were patches covered with perennial grasses, which were burned when there were no more green leaves, so that the cattle could be grazed on the fresh regrowth. The establishment of the reserve thus deprived the herding community of a considerable amount of pasture in the rainy, post-harvest and cold dry season (*ndunngu, yaawnde* and *dabbunde*). Soon after the setting up of the scheme, the perennial grasses disappeared (see chapter 8). Was it because burning was prohibited on the Seeno-Manngo?[22] Because of its imposition on former grazing territory the herds have to make a considerable detour to reach the best pastures of the Seeno-Manngo. An extension of the reserve into adjacent blocks of pastures would be a serious threat to the viability of pastoralism in Serma.

Pressure on the remaining range in the neighbourhood of Serma is also heightened by the herds from the Inner Delta, that have been coming here since the drought of 1983-1985. They remain close to Serma, because of the easy access to water in the big pond, and the food and other products they buy from the Riimaybe women, and of course the company of women that can be found here. Initially they stayed only for the growing season. However, with the deepening of the pond at Debere, and with the Inner Delta becoming increasingly crowded with herds, they have tended to linger for a longer period in recent years. The amount of pasture does not yet form a limitation on productivity. The herds of the people of Serma are so small that little range is needed after the growing season (see chapter 8). One wonders, however, whether the herds from the Inner Delta do not exploit too much of the pastures, so that limitations are imposed on the growth of the herds of the Jallube of Serma during the dry season.

A recurrent problem at present is, however, the quality of the pastures, regardless of the foreign herds. Depending on the intensity of grazing and the distribution of rainfall over the season the quality of the prairies varies enormously. In a normal vegetative cycle grasses and other herbage invest most of the crude protein and carbohydrates in the formation of seeds towards the end of the growing season. The more of this biomass is still present in leaves and stalks the higher the quality of the range. Dutch dairy farmers make use of this phenomenon by mowing grass for hay production when flowering and seed production have not yet started, and quality of the grass is at its highest. With increasing productivity per hectare the mowing date has been advanced considerably. Likewise Fulbe herdsmen know perfectly well that the quality of the range is at its best early in the season. Light grazing in this period stimulates the lateral development of grasses, and contributes to more biomass in

the plant towards the end of the growing season.[23] The interdiction of grazing in the rainy season thus may have a detrimental effect on the amount of biomass available in the dry season.

The herdsmen also complain about the ban on burning the Seeno-Manngo. In the past they used to burn the areas with perennial grasses in the post-harvest season, and areas with annual grasses before the start of the growing season, so they say. The perennial grasses have disappeared, due to lack of rain, so burning in the post-harvest season would be unwise at present, for it would only destroy the annual grasses, which do not regrow after burning. They would, however, like to burn the remains of the grasses before the rainy season to stimulate better growth of grasses in the rainy season. Gillon reports, for example, that the long-term effects of burning in Zambia were that Ph, exchangeable calcium, and phosphate status were markedly improved, especially by late burning. There were no changes in the nitrogen and organic matter content of the soil (Gillon 1983:627). Granier and Cabanis report that one-year-old cattle which feed on regularly burnt pastures show a significantly higher weight gain during the rainy season (43 kilo) than do one-year-old cattle pastured on unburnt pastures (8 kilo) (Granier & Cabanis 1976:272).

Nevertheless, the setting aside of pasture areas has obvious advantages. The scheme provides good grazing and water at a period of the year when most cattle lose weight and the provision with water demands a lot of labour. The cattle thrived while pastured on the scheme.

> I was asked to monitor the performance of the calves of two years old at the beginning and the end of the campaign. After two years there were no animals on the Seeno-Manngo like those of Bunndu Naange. The number of twin calves rose considerably. The director of ODEM asked me to keep the animals at the borehole, so that he could see with his own eyes that one cow provided sufficient milk for two calves.[24]

However, a grazing reserve in this form is only a partial solution. If it is meant to solve the problem of 'overgrazing' it is inadequate. As Gallais noted, a limitation of grazing pressure in a reserve implies that excess livestock is transferred to other areas, where they add extra pressure to the range (Gallais 1984:235). Following this reasoning the problem of overgrazing can only be solved by bringing all available pasture land under rational management. This would mean that either organizations such as ODEM, or the government, would gain complete control over all herd movements in the semi-arid and arid zones of Mali, and that they would be able to integrate 'rational management' into indigenous pastoral grazing strategies. The latter is very unlikely because it goes squarely against conventional pastoral wisdom, for it would entail the abolition of mobility and flexibility, which are absolutely essential for survival in this part of the Sahel. Another possibility is that ODEM may persuade pastoralists to limit the size of their herd to a conservative estimate of the carrying capacity. This is also very implausible. On the contrary, in present circumstances they will try to maximize the size of herds, for these have not yet recovered from the 1983-1985 disaster, and the herd is the most important asset they have. Moreover, the herdsmen of Serma run the risk of being overrun by outsiders from the Inner Delta. Competition for pasture in the rainy season becomes intense, and herd size is an important determinant of success in this struggle. Besides, there are no social or political institutions

in pastoral society able to enforce a limitation on herd size on its members. They are alien to the flexible mode of organization.

So we may safely conclude that from an ecological point of view the scheme is irrelevant, and probably even harmful to the productivity of the land of the grazing scheme. As is shown by experiences in the Senegalese Ferlo, which is characterized by more or less the same climatic circumstances as in the Hayre, the quality of the pastures is not significantly affected by intense grazing over a long period (Valenza 1975). The scientific discourse used to plan and rationalize this type of intervention thus has to be regarded as a strategic discourse that is used to justify interventions in local resource use, and to get more control over natural resources and their users. For the local users the benefits are insignificant. There are hardly any people who are able to make use of the scheme, because they have no animals to make the investment in watering fees profitable.

Organizational dynamics

This brings us to the organizational dynamics of the pastoral association. From the literature we may infer that initially a top-down approach was followed for the organization of the range management scheme, and it was suggested that this approach was unsuccessful (Thompson et al. 1989:85). Later on the organization of the scheme was decentralized, and given into the hands of the pastoral association. What follows is a reconstruction of the organizational dynamics from local sources, herdsmen and local officials of ODEM, supplemented by our own observations.

Although the solar pump did not function properly, the organizational and social design of the scheme looked good on paper. Provisions were made to prevent uncontrolled settlement of agriculturalists at the well, and uncontrolled use by non-participant herdsmen. The protection of the pastures through the establishment of fire-breaks was assured. Every year after the harvest the herdsmen were mobilized to cultivate two strips of land around the scheme 75 metres apart. When this operation was finished the strip in between was burned under control. In 1987 on our first visit to Booni the representative of ODEM in Booni told us it had been very difficult to persuade the herdsmen to do this work, because they despise the labour of cultivation. The only way to do it, he said, was by taking the lead and working as a civil servant along with them.[25] Rules with respect to the number of cattle allowed on the scheme and the timing of grazing were established. Participation of the population was well organized. The pastoralists were represented in the local committee and they supplied labour to the scheme by establishing the fire-breaks. They contributed to the operating costs through the payment of entrance fees.

Soon however difficulties began. A conflict arose between the warden and the chief of Booni, who was directing the scheme on behalf of the pastoral association, over his salary. The chief refused to pay the warden, because, according to rumour, 'he was seducing the women of the herdsmen'. The warden told us that the chief wanted one of his sons to take over his job, and to get control over the water point. The conflict was decided in the warden's favour, after an intervention of the *gendarmerie*, but soon after this he took his

leave. He was indeed replaced by a son of the chief of Booni, who knew nothing about the maintenance of the solar pump, so that before long the pump was wrecked.[26]

The next year the scheme was closed, as no water could be pumped up. In 1983 the pastoral association was provided with new equipment (see above). At local level a *cellule pastorale* was formed within the framework of the pastoral association. In the newly established board of this organizational entity all social categories in Serma were represented. The Jallube took the posts of president, secretary and one of the members. A Diimaajo became treasurer as representative of the Riimaybe, and a Beweejo took the post of member charged with control of the environment. The representative of the Seedoobe chief remained president. The other members were also recruited in Serma.

As a result of all these changes the operating costs of the range management scheme rose considerably. According to the ODEM staff the costs rose from 25 FM to 300 FM per head of cattle per month to pay for fuel, transport of fuel, and the maintenance and investments in the motor pump; this included a contribution of FM 500,000 by the pastoral association to the capital investments. The total revenue from the scheme and costs for the herdsmen were FM 2,700,000 each year, at a stocking rate of 3,000 head of cattle and an open period of three months. At the time that was not a real problem for the herdsmen, for they had sufficient livestock to cover these expenses, and the extra revenues for them in the form of milk, animal health and higher prices for animals sold at the market were considerable.

After this reorganization things did not function properly either. It never became clear to us where the financial responsibility for the scheme was located. Given the people who used the scheme and who did the work of making the fire-breaks, financial responsibility should have been assigned to the *cellule pastorale*. Members of the board in Serma had never 'seen a single coin passing through their hands'. All financial management was done by the president of the pastoral association in Booni, the chief, and his son who acted as warden at the borehole. The chief took responsibility for the provision of fuel, the maintenance of the motor pump and the contacts with the offices of ODEM in Douentza and Sevaré. To perform all these tasks he bought a car on behalf of the pastoral association, initially a second-hand Peugeot, later on a big Landrover.[27] He also assumed responsibility for the collection of fines in cases of illegal grazing on the scheme. Data on fines in the earlier phases of the project were not available. During our stay two cases of illegal grazing occurred. In one case allegedly FCFA 80,000 was paid by a herdsmen from Fetesambo. In another case a herdsman from the Inner Delta was fined FCFA 400,000. It is not known what happened to the money. Even people involved at the level of the board of the pastoral association in Booni said they did not know where the money went. So the local *cellule pastorale* did not have any role whatsoever in the management of the scheme. They were merely sitting there waiting for the directives from Booni.

Although the scheme was officially for all the herdsmen organized by the pastoral association, only a few people were able to make use of it. Given the requirements of rational range management, only a limited number of cattle and small ruminants could be admitted to the scheme. In the dry season of 1984 18 herds consisting of 2,550 head of cattle and 400 small ruminants were admitted to the scheme (ODEM 1984:55). Apparently only the rich were able to make use of the scheme. Nevertheless the poor are expected to

contribute their labour to the laying out of fire-breaks, and to the tree planting activities undertaken by the pastoral association.

So gains and contributions are not evenly distributed over the members of the pastoral association. In 1991 in Serma alone there were 60 pastoral families registered, each potentially disposing of a herd. In 1983, before the drought there were even more families. These cannot all be allowed to make use of the scheme. We were told several times in private that Fulbe herdsmen taking care of cattle for the chief were given preferential access to the scheme, and that people close to the chief did not have to pay fees for entering the scheme.[28] Those who pay for entering the scheme pay FCFA 300 per head of cattle per month, which is double the official amount as given by the ODEM office and representatives of the pastoral association in Booni. This may be explained by the fact that Mali entered the CFA zone in 1985. The FCFA has twice the value of an old Malian Franc. Probably the old price was maintained at the borehole, but now in FCFA. The real costs of the reserve, the expenses of fuel for the motor pump, its maintenance, and repair, and the contributions to the investment costs, if calculated very generously may account for half of the revenues. What happens to the rest of the money is not known.

When the drought set in in 1983 the pastures were not too bad, according to the local herdsmen. According to ODEM:

> *...la mauvaise repartition des pluies durant l'hivernage n'a permis une production fourragère satisfaisante que dans le Mema et dans le Seno-Mango, zone de transhumance d'hivernage. Dès le mois d'avril on a pu constater une forte concentration de troupeaux autour des forages implantés dans ces deux zones favorisant ainsi un surpâturage rapide et critique.* (ODEM 1984:8)

Numerous herds from the north and even from Burkina Faso sought refuge on the Seeno-Manngo during the dry seasons of 1984 and 1985. Dogon and Fulbe from the area, but also Foulankriaabe from Hommbori, Tuareg from Rharous, Gossi, Inadiatafane, Hommbori and Bambara-Maounde, Arabs and Fulbe from Burkina Faso, could be found on the Seeno-Manngo and especially near Serma. The report of ODEM concludes drily: '*La zone de Seno est devenue une véritable centre de convergence des populations pastorales d'horizon très divers.*' (ODEM 1984:53). And this was only 1983. In 1984 the rains failed completely and pastures were bad all over the Sahel and Sahara. Herds from the Gurma, Gao and Timbuktu region poured onto the Seeno-Manngo. They occupied the wells sunk by the government in the Daande-Seeno. Under pressure of the administration, and allegedly seduced by bribes, the chief of Booni, as president of the pastoral association, gave access to the borehole to anyone who needed water for his livestock. Representatives of the people of Serma asked him three times not to do this, but he said that as these people were all Malians and the land was state-owned he could not and would not deny them access, in which he was right according to the law. The range management scheme was so overcrowded that pasture and water were in short supply and a large majority of the animals died. People who sought to escape the disaster lost many cattle while on their way to better pasture areas. The animals were too weak to endure the journey, because the herdsmen had stayed too long at the borehole, thinking it was protected pasture.

In addition a Tuareg chief from the Gurma, just north of the Gandamia mountains, obtained permission from the administration to use the old borehole of Bunndu Hinndu (see chapter 10). This borehole had not been used for years, but it is located only a few kilometres from Bunndu Naange. His herds and those of his dependents, numbering several thousand head of cattle were added to the existing pressure on the range.

In this way the people of Serma lost about three quarters of their livestock because of lack of pasture. From then on outsiders were admitted to the grazing scheme. People with some livestock left were inclined not to make use of the scheme any more, as it had become too costly for them. They preferred either to go on transhumance to barter milk for cereals, or to stay at home in Serma to manure their fields, whose fertility was rapidly declining for want of livestock manure. Consequently, the herdsmen refused to maintain the firebreaks. For the chief this was not really a problem, as he hired a bulldozer from the public works department in Douentza and the ODEM supplied the pastoral association with fuel. What happened to the motor pump on the borehole in Booni remains a mystery. During our stay the people of Booni were literally suffering from thirst in the dry season because there was no adequate water supply, there or in the immediate surroundings.[29] When the motor pump at Bunndu Naange broke down in 1987, the ODEM supplied the pastoral association with a new one, worth FCFA 4.5 million, at a depreciation rate of FCFA 100.000 a year, which the chief paid only once, according to ODEM staff. He asked huge advances from the herdsmen when opening the project, which he did not pay back when the motor pump failed as happened in 1991. The herdsmen felt cheated because of all these incidents.[30]

Local chiefs and development

These happenings call into question the whole set-up of the scheme. The only tangible result has been the regulation of grazing pressure, which we have shown to be a questionable benefit. Socially the scheme has not met any of the goals. The chief of Booni has turned the whole thing into his private enterprise, and seems to be making a lot of money from it. He can do this unhindered because of his traditional authority over the pastoral population. He is a descendant of Maamudu Nduuldi, and is entitled to everything the Jallube own in his realm. This should be taken literally, as was shown in chapter 12. Even in times of scarcity 'dues' are collected. However, the chief is not the only one collecting his 'dues'. His sons, but also the sons of his kinsmen, regularly spent time in pastoral camps and Riimaybe villages, where they pressure herd owners to slaughter goats or even bulls for them. Likewise Weheebe regularly accompany forest agents on patrol, to help them execute their task, which consists mainly of collecting fines. These Weheebe say they do this to mediate between the population and the forest agent, and to prevent abuse, or that the forest agent gets lost (or molested?) in the bush. What the people in the bush probably do not know is that the guide or the witness who brings in offenses is entitled to a percentage of the fines collected.

The general failure of ODEM to set-up viable pastoral associations indicates that the whole format of this pastoral organization is not workable. Also ODEM personnel in Booni

complained that the 'Jallube are not capable of organizing themselves'. They mean that they are not able to control the herd movements of 'irresponsible' pastoralists and their stocking rates, or to change what were labelled '*les anciennes habitudes*', '*mentalités*' and '*comportements*', which are directed only to looking for the best pastures or possibilities for the family to find a place to barter the milk. The ODEM personnel clearly have no understanding of the local dynamics of herding. They just want to change it, being brought up with the idea that pastoralists are bad land managers. But the ODEM staff are not in an enviable position either. On the one hand they are ordered to do something about these irresponsible pastoralists, while at the same time they cannot control these people. In short, the behaviour of the local population is a major source of insecurity for people within the organization of ODEM. If they are unable to control this population they have not performed well in the eyes of the donors, which is a major threat to the survival of their jobs. And so it happened. In 1991 ODEM was closed by World Bank because of its lack of success. Only for the various pastoral associations in the cercle Douentza was money made available further to develop this approach.[31]

Why then was the pastoral association more successful in Booni? We must admit that the most important reason was indeed an 'influential and charismatic Fulani chief' who is also very intelligent. He alone was able to fill the organizational vacuum, and to control the herdsmen in the name of development. He became a key person in the ODEM organization, because he was able to reduce the insecurities which were meant to be controlled by the pastoral associations, namely the local ways of the pastoralists. Because of this capacity the chief was able to exert considerable influence on the ODEM, and draw the benefits from this capacity. He was given motor pumps, other equipment, the command over financial management, food for work programmes, the authority to select participants and to use all these resources for his own benefit and some of his followers. When things went wrong it was covered up by ODEM, glad that they had at least one example of a functioning pastoral association to show to World Bank auditors.

The chief in his turn made use of his traditional authority and these resources to assume the role of a patron promoting development. During a *session de sensibilisation* halfway through a tree planting exercise in Debere he told his audience that he used 'his' resources to promote development and that the government had come to 'help him' organize reforestation. In doing this he claims the right to allocate the resources of the pastoral association as he sees fit. For ODEM it is the only way to promote development, and the Jallube cannot withdraw from the demands the chief imposes upon them. Of course the herdsmen count how many litres of diesel are needed for the motor pumps, and of course they know they have to pay too much money for pasturing their animals, but the scheme is no longer a development organization and has become part of the local political hierarchy to which they have belonged all their lives.

Why did the Jallube not sabotage this hijacking of the scheme, by not participating or refusing to cooperate? We must not underestimate the influence of authoritarian rule in Mali. When complaints against these types of abuse are lodged with the administration or the judge, the plaintiffs are often imprisoned instead of the persons accused. The chief is also said to dispose of supernatural power. When someone refuses him what he wants, he

may use charms against that person, who may subsequently lose all his wealth. In addition the chief plays a game of divide and rule with the Jallube. As we have seen neither the lineage organization - or what remains of it - nor village solidarity are very helpful in defining a common interest in Serma. The differences between people are simply too vast. Moreover, the people profiting from the scheme and the pastoral association are the people rich in cattle, or belonging to the entourage of the chief, and are almost inevitably the political powerful from the most prominent lineages. They with the chief decide who is entitled to enter the scheme and use up the rich pastures and have fat cattle and try to get into the chief's favour. After all he has access to the flow of aid money and other resources such as food aid.

The dispossessed are bound to remain as poor in livestock as they are now. They are even worse off because of the scheme. Their fields are running out of manure, because of the by-laws that were enacted to make the grazing reserve possible, and to protect pastoral interests. The opening of new fields on the Seeno-Manngo is now prohibited. In the area where this is allowed, and where rights to former bush-fields could be re-activated this is not possible because of the pressure of cattle from Serma itself, and the herds from the Inner Delta (see chapter 10). Besides the people have to pay a fee to the administration, when they want to clear land. Those with the fewest cattle are forced to use the worst pastures outside the scheme at the height of the dry season. This is caused by the limitations imposed upon herd movements by the grazing scheme, and the pressure of the visiting herds from the Inner Delta of the Niger. These tenurial bye-laws concerning the scheme neglected the importance of the interaction between herding and farming for the survival of the population, and limited the flexibility of the poorer sections of the people of Serma to shift from one way of production to another. Thus that these regulations have negative effects for dispossessed pastoralists, who are land-locked and cannot make opportunities to rebuild their herd. They have indeed no other choice but to leave.

The use of law

This brings us to the last subject, which concerns the assessment of the role of law in this type of development intervention. The foundation for the appropriation of the land of the grazing scheme was laid by the colonial government. After several revisions the rights of the state in the land are presently defined as '*les terres non-immatriculées, détenues en vertu de droits coutumiers excercés collectivement ou individuellement, font partie du domaine privé de l'État. L'exercice de dits droits coutumiers est cependant confirmé pour autant que l'État n'ait pas besoin des terres sur lesquelles ils s'excercent.*' (Marie 1989:68). This article thus enables the state to dispossess the population of the lands they hold in customary tenure for agricultural and pastoral use. In practice this power of the state has its limits in the countryside, because it does not have the resources at its disposal to enforce its power over the land. ODR's (*Opérations de Développement Rural*) such as ODEM do not have the authority to intervene in land tenure, but their interventions have an enormous impact on local tenure regimes. Intervening in pastoral land use, then, is relatively easy, because

range land was used collectively and pasture areas were more or less controlled by the rights over the water source that makes the exploitation of the range possible. This is why the sinking of wells and the drilling of boreholes with windmills in the 1950s caused such problems. No rights over the water were defined so that the land around the wells acquired at one stroke an enormous additional value, grazing still being an open access resource.

To prevent such difficulties as in the 1950s, and to facilitate the work of ODEM in pastoral development, the land south of the wells of the Daande-Seeno were declared a pastoral reserve by the administration. From then on the clearing of agricultural land on the Seeno-Manngo was prohibited. This bye-law was laid down in a covenant between the *commandant de cercle* and the most important chiefs.[32] National law and this bye-law at *cercle* level form the basis of the delineation of the grazing reserve. On the one hand it is questionable whether the ODEM is entitled to act on behalf of the state, and to give exclusive use rights in these pastures to the pastoral association of Booni, viz. the chief. If not, which is very probable, because ODEM is a parastatal organization and not a government department, the administration may indeed claim the right to open the grazing scheme to everyone. Moreover, the various codes in force in Mali envisage only the delineation of forest reserves and the protection of wild life, and the appropriation of land for urban development. If, on the other hand, the land were registered as the collective property of a specific community, for instance Serma, over which customary rights were entertained, the state and ODEM would lose the right to regulate access of livestock to the grazing reserve, for they would have to dispossess it first for the benefit of the public good.

In practice the tenurial status of the scheme is manipulated. When the interests of powerful people make the opening of the scheme expedient, state law is called in existence. This is made clear by the events of 1985. Then, herds which had suddenly arrived from the north were allowed access to Bunndu Naange, because 'we are all Malians, and the land belongs to the state'. When the less powerful, the poor in Serma and its neighbourhood are to be kept out, the scheme suddenly falls under the traditional tenurial authority of the Fulbe chief in Booni, who levies fines if his (and not ODEM's) authority, encapsulated in a 'development organization', is challenged. So the protection of the grazing can only be assured by the combined authority of the state and the chief of Booni, and the manipulation of the law. In this way the rights of some citizens are maintained (e.g. the Tuareg chief, the rich herd owners, the chief himself and the herdsmen of his animals, and the herdsmen of ODEM personnel), to the detriment of the rights of the majority of the poor, who have to halt the few cows they own several hundred metres south of Wuro Boggo.[33] Herdsmen in Serma cannot decide to limit grazing pressure on a voluntary basis, and to make provision that they all participate and profit together. Herds are the private property of the members of a *wuro*, and are normally not split up or taken on transhumance by groups of herdsmen such as exist in the Inner Delta, and seem to exist in northern Burkina Faso (see Riesman 1977). In pastoral custom each has equal access to the pastures, and an equal chance of exploiting the pastures, if rights of access to the pastures can be validated, regardless of the size of the herd.

However, there is another interpretation of the demarcation of the grazing reserve within customary rules regarding tenure and territoriality. Contrary to what one would expect, the

grazing scheme is not wholly illegal in an indigenous sense. As we have seen, the state had to be accepted as the arbitrator in conflicts over land tenure and territoriality in the course of this century, because local structures for conflict resolution were dissolving with the take-over of power and the liberation of the non-free (chapters 2 and 10). With this breakdown of the political hierarchy indigenous law lost its force as well. We may say that tenure and territoriality as inherent qualities of the political hierarchy of the Fulbe chiefdom lost force. This was exemplified by the conflicts over the boreholes equipped with windmills in the 1950s, and the minor role of traditional authority (the chief of Booni) in these conflicts (see chapter 10).

The drilling of a borehole by the state may be regarded in indigenous terms as an appropriative act with respect to the pasture land. By means of the borehole the state indeed acquires the power to decide who is to graze on the range served by the borehole, by regulating access to water. In the eyes of the herdsmen the state has relinquished power over the borehole to the chief by making him president of the pastoral association. It has become his borehole, which he manages with his family, and similarly his investments, which are given to him by the state. This is also what the chief stresses in his speeches to the herdsmen. He presents himself as the development saviour, who will bring about a new existence in the Hayre. In this perspective it is understandable that nobody protests openly against the way the scheme is managed. It has simply become his land, just as formerly he owned all the land in the chiefdom.

In this way a new political hierarchy is created in the Fulbe chiefdom, but one which is qualitatively different from the old one. In the traditional legal and political discourse of this area the scheme is illegitimate. Local tenure rules are negated by the construction of the fire-breaks and the demarcation of boundaries and the exclusion of people from the scheme on financial grounds. By putting their hoe in the soil, all those who made a contribution to the fire-breaks have rights of access to the scheme. These rights should have priority over other rights, or should not be linked to payment for the water they themselves have helped to develop. Secondly, the chief was the head of the Fulbe community, he was the master of all the land and people in his realm in the political sense. However all people belonging to this community had by virtue of their membership of this community access to the resources that are under the command of the chief. It is illegitimate in indigenous terms to refuse water at the borehole to people who belong to the Fulbe chiefdom. This issue was also at stake in the conflicts in the 1950s. It is a negation of pastoral custom, or at least a source of conflict. In the new political hierarchy, with the state, the ODEM and the chief as the main actors, the rules have changed, though the traditional discourse of power is still used. New rules for the inclusion and exclusion of people have been invented, favouring the rich and the powerful over the poor.

Mysterious fires

Fire is the main threat to the proper functioning of the scheme. The range land is used only at the end of the dry season, so that there is a great risk of unintended grass fires. This risk

is enhanced by the fact that no animals are grazed on the pastures. Grazing creates open spaces between patches of grass, which inhibit the large-scale spread of an accidental fire. Preventing fires is one of the main concerns of the forest service in Mali. By many foresters together with experts on natural resource management fire is regarded as one of the main threats to the ecology of the Sahel. In consequence heavy fines are imposed on the population if fire breaks out. The main labour input in the grazing scheme was the creation of fire-breaks, to check fires at the border of the scheme (and of course to demarcate these boundaries). Since the herdsmen refused to do this work after 1985, no fire-breaks were constructed until 1990. In that year the Public Works department in Douentza provided a bulldozer, and the ODEM four 200-litre barrels of diesel. However, the corridor between the bulldozered lanes was never burnt, and some small fires occurred which also crossed the 'fire-break'. The same procedure was planned for 1991. Before the work was started, the chief, who had not been heard of since the take-over of power in March 1991, sent a couple of his sons at the beginning of October to Bunndu Naange to construct a fire-break around the equipment of the borehole. They asked for volunteers in Serma to join them. None was found, so that the representative of the chief of Booni of Serma had to conscript this task to some youths, which he did only with some hesitation.

Shortly afterwards a huge bush-fire broke out on the Seeno-Manngo. We were spending some time in Douentza, 90 kilometres from the scheme as the crow flies, and each evening we saw the sky colour red. When we were back in Serma the fire was approaching the surroundings of Petegudu and Gawdeeru. It had travelled all the way from the confines of Duma, Wayre and Tula to this sector of the Seeno-Manngo. Apparently the strong winds made it impossible for the small number of people to extinguish the fire. For this concerted action would have been needed from all the settlements involved, as we found out later.

Several days passed, and the area around Petegudu seemed to burn down. One branch of the fire set course to the middle of the Seeno-Manngo. Several young men from Serma began attempts to extinguish the fire at night. Their work was hopeless. When they smothered the fire in one sector, it flared up in another sector, or the fire returned with a change in wind direction. During the day fire-fighting was impossible, because of the heat of the fire, the scorching sun in the post-harvest season, and the absence of sufficient quantities of drinking water. At day columns of smoke stood high in the sky, at night fire seemed to be everywhere around Serma.

Gradually the fire approached Wuro Boggo, where we lived, and the grazing reserve. New fires started in the direction of Monndoro. Now the scheme was in danger from every possible wind direction. Still nobody seemed to bother to put out the fire. The young men ceased their night trips, preparations for several marriages went on as planned. When we were in Booni for some reason we told the vice-president of the pastoral association that the grazing scheme was threatened. But he, the chief, and all the civil servants were very much occupied with preparing the welcome for a group of amateur aviators, who would make a landing in Booni to bring money for a project to save the elephants in the area. Despite the fact that we were not officially invited, we went there that day with a group of men from Serma, who were not invited either.[34] Before the end of the ceremony we left. Every ethnic group in the area presented itself with dancing and singing, except the Jallube, who

were not invited. A large feast had been prepared with gifts from the population, but for the Jallube and *tubakuube* (white people) from Serma there was not even an ounce of meat available.[35] The herdsmen of Serma felt humiliated, and did not say a word on our way home to Serma.

We were sure the fire must have been noticed by the administrators, ODEM officials, and forest agents, who were all present. The columns of smoke and the red sky were clearly visible in Booni. We feared that all the dry season pastures of Serma and neighbouring villages, and the villages themselves would burn down, so we tried to persuade some people to undertake action and to organize a fire-brigade. We proposed to bring drinking water to the fire-fighters. Nothing happened for days. Nobody undertook any action. Even the management committee of the scheme seemed paralysed. Everybody said they were waiting for the chief or the ODEM. One day we were told that people had left to extinguish the fire. So we charged our car with water and left. At eight kilometres from Serma we reached the fire. No one was there. Only the crackling of the dry grass as it caught fire, and the howling of the wind was heard. Sambo Usmaane, who was with us, became alarmed, because the fire was moving north. The grazing scheme was past saving. Everywhere we looked, to the east, south, and west were fires. We went back to Serma. Nobody reacted. Some old men tried to persuade the young men to fight the fire, but they were disinclined to postpone the wedding celebration that was to take place that evening.

We decided that it was their affair and we let it rest. Somehow there seemed good reasons not to react. Meanwhile the fire was approaching Wuro Boggo, and it could be foreseen that all the range land would burn if nothing was done. Out of our sight intensive discussions were going on. Some of the men were deeply ashamed that we had been sent to the Seeno-Manngo while no one was there. Further, the fire was coming close to the village, and something had to be done. The problem was that the young men (*sukaabe*) did not want to go to deal with the fire. They said they were fed up with the old men (*mawbe*) doing nothing, and they wanted to proceed with the marriage celebrations. They demanded that the *mawbe* went in front for the fire-fighting, otherwise they would not go. The *mawbe* had no choice but to accept this condition. The whole village, Riimaybe, Jallube and Weheebe joined the fire-brigade, and we were invited to bring water for the thirsty fire-fighters. On the Seeno-Manngo we found out that the men from Fetesambo were also busy extinguishing the fire. In a few hours everything seemed finished. The next day the fire revived, because the men of Lennga and Bunndu Jaabi had not been able to completely extinguish the fire. Everybody once more set out, and soon the fire was smothered. It was stopped only three kilometres from Wuro Boggo.

At that very moment a car of the livestock service showed up with the director of the *cercle* office and the head of the Booni office of ODEM. They had been coordinating the fire-fighting and bringing water in the Monndoro sector. They had been expecting us to do the same in the sector of Serma. We were congratulated on our work in Serma (sic), and they left. Later in Douentza we went to the office of the forest service to ask for information about the fire. They said that this was the unhappy result if the population was allowed to arrange its own business. They had not been informed about the fire, that was

why they had not intervened. Personally, we estimate that 250,000 ha of pastures burned up in the course of a couple of weeks time.

A couple of weeks later the chief of Booni was called to Bamako to attend a conference on the future in the agricultural sector of Mali. It was immediately whispered in Serma that he had been called there to account for all the irregularities in his chiefdom and projects. However nothing of the sort was going on, and his speech was even broadcast on the radio. When he returned, he showed us proudly all the visiting cards of international consultants whom he had met, and who had promised to visit the chiefdom to identify new development projects.

Clearly this fire was not an unfortunate accident. In the following years after, the scheme also burned down for unknown reasons. However hard we tried to uncover the reasons why the herdsmen of Serma did not extinguish the fire, why the fire was not smothered immediately, why the chief of Booni had the amazing foresight to protect the equipment at the borehole, which was not part of the standard procedure, why ODEM did not intervene directly, nor the forest service, we could not find out. Nobody would inform us: it 'just burned down'. Nevertheless, we venture to propose three possible explanations.

It is possible that indeed the scheme burned down by accident, and that the inhabitants of Serma and of the neighbouring villages were waiting for the administration to intervene, because they were not capable of organizing a fire-brigade by themselves. This would be consistent with the picture of Fulbe society in Serma as a fragmented, impoverished and paralysed community. This seems, however, quite unlikely. When the southern camps were threatened they were competent to organize themselves and they put out the fire almost instantly in a concerted effort. The responsible authorities were aware of the problem, if only because of our warnings. Why then did they not respond?

The second explanation is then that the authorities did not dare to intervene. In the period after the popular rebellion and the fall of the Traoré regime people all over Mali were in a rebellious mood. Especially state departments like the forest service and the police, which were highly unpopular, kept very quiet in those days, and it is very probable that the forest service dared not intervene. An argument in favour of this explanation is that there were fires not only in Serma, but also in the neighbourhood of Monndoro and Duwari, and that these were not extinguished either. The same would be true of the grazing scheme. Resentment amongst the inhabitants of the Daande-Seeno against the scheme may have been so deep, that they simply let the range burn down, and only reacted when the fire approached the most southern camps of Serma and Fetesambo.

This reasoning does not explain, however, why the chief and the ODEM did not react. They were responsible for the scheme. The ODEM is not very popular, but their employees would not run any risk in trying to persuade the population to put out the fire. The chief is not popular, but no one would disobey him to his face. If the ODEM and the chief had really wanted to save the scheme it would have been possible. There were cars, one of ODEM, one of the chief (pastoral association) and our car, to assist the fire-fighters. The wind was not strong. It was only a matter of coordination. Why then did they do this only when the pasture block was completely lost? Was the visit of the amateur aviators of such overriding importance that they could not allocate some personnel and diesel to

extinguishing the fire? The third explanation thus can only be that they let P-17 burn down on purpose. We can only guess why.

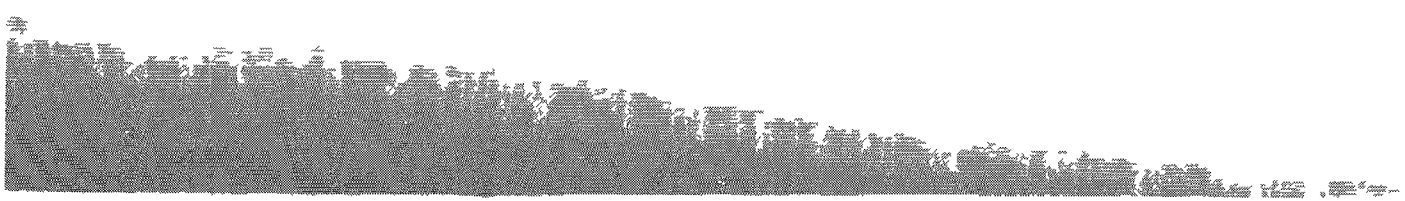
For the people of Serma the grazing scheme at Bunndu Naange is extremely threatening. What they fear, and what was also suggested by a high official of the Ministry of Natural Resources who visited the village when we were there, is that they have to cooperate with the managers and herdsmen of the commercial herds, which visit the area in the rainy season, as equal partners in organizing the management of the Seeno-Manngo. They fear that the government indeed wants to 'rationalize' management of the whole area, so that it becomes fit for the herding of 200,000 head of cattle during the dry season to relieve pressure on the Inner Delta. By means of control over the boreholes with paid access, and the use of local authorities, they have created a political basis for this type of scenario. This is a nightmare for most people in Serma. It will mean that they have to accept many powerful outsiders in their midst, that their fields will never again be safe in the growing season, that their small herds will have to compete with numerous large herds, that the authorities will constantly be bribed to their disadvantage, and that they will have no more say over their pastures. This kind of development scenario will surely mean an end to any possibility for the people of Serma to overcome their problems independently.

Notes to chapter 14

1. The past tense is appropriate, because ODEM was closed in 1991, when our field work ended.
2. This is also the case for refugees of other pastoral groups such as the Tuareg, Bella, and Haratin.
3. In both Dalla and Serma this was a problem. When people in Dalla were not able to pay their taxes, the *gendarmerie* put them all day in the sun without food or drink, to force them to pay. In both villages the people have to collect money to pay off the forest agent, when he comes to collect his 'dues' for alleged infractions of the various forestry codes. In Serma the schoolmaster comes to supplement his income with FCFA 15,000 for every child who is required to attend school in Monndoro. The people of Serma regard western education as a waste of time. They say the children lose contact with their own world, and are subsequently no longer prepared to work long hours on the field, behind the herd or in the household. There are no jobs for them when they have finished school, and if they become civil servants, they take over the same thieving mentality as civil servants, demanding money.
4. Gallais is particularly critical of the urban base of these operations: *'Il est devenu habituel de commencer une opération par un implantation lourde de logements, bureaux, garages, qui absorbe le financement pendant une première phase prolongée. Les habitudes anglo-saxonnes* [!!] *de confortable infrastructure s'accordent avec les intérêts du corps administratif local pour justifier une telle pratique'* (Gallais 1984:238).
5. These *cercles* are also interesting from a tourist point of view, because of the Bandiagara escarpment and the indigenous Dogon culture. There seems to be an unproven connection between attractiveness for tourists and the preparedness of donors to invest money.
6. The Hummbeebe of the cercle Douentza were very influential at both the national and the cercle level. Several ministers in the Traoré government were of Hummbeebe origin, such as Iisa Ongoiba, Minister of the Interior the deputies of the cercle in the last two UDPM (*Union Démocratique du Peuple Malien*) elections under the Traoré regime were both Hummbeebe, Sambo and Umaru Ongoiba. The Fulbe lost their prominent role after their representative Hassan Cissé was defeated.
7. Before 1985, when Mali entered the CFA zone, Mali had its own currency, the Franc Malien (FM). The conversion rate with the FCFA was 2 : 1; FM 100 was FCFA 50 equivalent to FF 1.

8. World Bank 43%, CCCE (*Caisse Central de Cooperation Économique*: France) 31%, national budget 22%, FAD (*Fonds Africain de Développement*) 3% and revenues from the pastoralists 1% (about FCFA 20 million per annum) (Röell 1988:74).
9. Deepening in this context would mean the drilling of a borehole and the construction of a storage well.
10. No doubt this argument was provided by ODEM itself. It is, however, flawed, because the large majority of the herdsmen of the Seeno-Manngo have never even been to the Inner Delta with their herd.
11. However, from the figures given by RIM (1987) and ODEM (1985, 1987), and the descriptions by Lutz (1989) we may conclude that the greatest losses occurred in the dryland *cercles* in the east and northeast of the project area (Koro, Bankass, Douentza, Gourma-Rharous).
12. In the '*Petit Robert*' *encadrement* has senses defined as: *diriger, organiser pour le travail*, which means in the development context of Mali that the population is just told what to do by the extension agents.
13. Too little cement had been used.
14. In fact this principle of boundary demarcation and maintenance underlies most western scientific theorizing on ecology, natural resource management, and planning. Each of these activities presupposes the compartmentalization of the domain of action in order to predict the most rational course of action and to control the outcome of the action. Rationality is, however, restricted to the system that is demarcated. All kinds of external effects outside the boundaries of this system are not accounted for, at least in this example.
15. The borehole of Bunndu Hinndu (see chapter 10) is only 1.5 kilometres away.
16. He spoke no French, the expert spoke no Fulfulde.
17. Meyersoun was one of the foreign experts who was supervising the development of the scheme. We met him in Djibo (North Burkina Faso) in October 1991, where he was working for the Burkinabé livestock service.
18. With the droughts the water table feeding the wells of Booni has dropped enormously so that this pump became necessary even to provide the population with drinking water.
19. During our stay in Bandiagara in 1987, we were able to observe the pastoral association there. It was defunct because the board of the association ran away with the money box.
20. The other unit is the pastoral association at Tin Habu, led by a Tuareg chief. He poses the ODEM and the Malian government with a real dilemma. He wants to have a vast pastoral area of 53,000 ha for his association, which covers a strategic area for many transhumant pastoralists on their way to salt-licks (IRAM 1991). This area is precisely where the old cattle routes from Maasina to Durgama are located (see chapter 2).
21. With the exception of the Fulbe chief of Booni who refused an interview during our entire stay in Mali. Normally he was not so difficult to approach for foreigners.
22. It is striking that several years after the repeated burning of the area (Shanmugaratnam et al. 1993, see also below), and better rainfall, perennial grasses such as *Andropogon gayanus* re-established themselves on the Seeno-Manngo (Douma et al. 1995:116).
23. Dutch dairy farmers, for example, never mow the same field more than twice consecutively, for this negatively affects the subsequent growth of the grass and damages the sod. Grazing in between mowing is preferred, because grazing by cattle stimulates the recovery of the sod after mowing.
24. Interview with the ex-warden of the scheme
25. This is indeed remarkable, because normally civil servants 'direct' work, they never 'do' work.
26. Note that this is the fourth version of the story why the initial set-up of the scheme failed. Three other versions were told in the preceding section. Development indeed has many realities.
27. In 1991 he bought a second car, a Lada four-wheel-drive vehicle.
28. We know of at least one herdsman in Serma who takes care of cattle of ODEM personnel in Booni. We do not know, however, if he regularly makes use of the scheme. As appeared during the interviews with the people of Serma, almost no herdsman in Serma made or intended to make use of the scheme. Most considered the fees for the water too high. We only have very scanty information on who grazed their animals on the scheme in 1990 and 1991. In 1990 we arrived when the borehole at Bunndu Naange had already closed down. In 1991 we intended to observe the scheme in full operation, but because of early rains it had already been closed by the end of May, when we returned from our leave to the Netherlands.
29. When we visited Booni in 1987 we were housed in the *campement administratif*, the official lodging for visiting civil servants, and fed by the chief. However the water was undrinkable. There was so much mud in it that one could not see the bottom of a cup through it.

30. More incidents took place in relation to development initiatives executed by the pastoral association. In 1987 and 1990 the chief organized village tree planting in Serma and at Bunndu Naange. The population would be rewarded with Food for Work, for the labour devoted to planting and watering the plantations. The trees that were planted (*Prosopis juliflora* and *Azadirachta indica*) have no local use - no one would dare to touch them anyway. The people of Serma were ordered to water the plantation. For this they would be given food-aid provided by the World Food Programme. The people received only meagre recompense. According to a cousin of the chief only two bags of corn meal, two tins with sardines and a tin of cooking oil arrived, while there should have been a truck-load. The plantation at Bunndu Naange failed completely, because the borehole was closed at the time of planting and the youths who were supposed to water the trees had to walk 13 kilometres from the village to the borehole.
31. This new project called *Programme d'Appui aux Collectivités Locales* (PACL) was given into the hands of a local NGO, the Near East Foundation.
32. A group of Hummbeebe successfully broke through this covenant during the administration of another commandant, by bribing him to abolish the covenant, and they then obtained permission to open fields at the well of Daajem. This was also against the wishes of the ODEM, which was opposed to this new clearing.
33. Fortunately the reserve does not close off the road to Duwari, which is the boundary of the scheme, but people going to Monndoro or Yirma have to make a considerable detour.
34. This happening had a sequel, for it was rumoured that we told these amateur aviators bad things about the way their earlier gift, for the village pharmacy, had been managed (and it was indeed badly managed). Because of our gossiping, it was said by Jawaambe around the chief, the money (some tens of millions of FCFA, probably about the amount that was spent on the trip with the fourteen sports planes from France to Mali) was not spent no longer on the pharmacy, but on the elephants. This was nonsense, because the decision to spend the money on the elephants was taken long before the arrival of the aviators, and we only met them when they arrived in Booni.
35. What happened to the money these do-gooders sent in advance to organize the feast, history does not tell.



15

Conclusion: Cultural Understandings of Insecurity

Marginalization

The last chapter showed clearly how deeply historical the marginalization of the inhabitants of Serma is. The Jallube and Riimaybe have been integrated into a new political hierarchy, which is a transformation of the old, but today extends into the international community. This new political hierarchy forces the inhabitants of Serma into a new sort of competition with other resource managers, pastoralists from the Inner Delta, agriculturalists, bureaucrats, development agencies, and international consultants. They all try to assume a role in resource management in Serma, without regard for the ways the people of Serma developed to survive in this environment. This new constellation of power makes the people of Serma still more vulnerable to the vagaries of the ecological and economic environment. They lost contact with their own elite, and they lost political influence at the level of the chiefdoms. In this process new authority structures over resources were formed. At the same time the pastoralists especially remained dependent on the outside world for access to pastures and provision with grain and all kinds of other products. In part the pastoralists can find these goods and services among the Riimaybe living among them, and through their own efforts in cultivation, but they remain structurally dependent on markets, chiefs, the administration, and development organizations.

The marginal position of the Jallube also excludes them from participation in modern society, and in regional and national politics. This marginality is to a certain extent self-chosen. From the beginning of the colonial period the Jallube decided to keep the colonial administration at a distance. They provided no conscripts for the colonial army, nor any pupils for the French school. They had their taxes paid via their chiefs, and they shied away from conflicts which would bring them into contact with this alien world. They have continued in this course until the present day, with the result that they have no networks which reach into the state bureaucracy, hardly any contact with the administration, no access to development agencies or modern health care, and no people to mediate on their behalf, except for the Weheebe. Women knew little about vaccinations to protect their children against killing diseases like tetanus, polio, and measles. Most of the people we brought to town and to hospital were literally frightened, because they had never been there. So this marginalization was not only political, and economic, but also cultural. For many people this marginal position resulted in feelings of being lost, of being totally dependent on the circumstances, and in existential insecurity.

However, it would be wrong to depict the pastoral community as an undivided whole, and to assume that the burdens resulting from marginalization and the various insecurities are borne equally by all. Despite the droughts and the social and political insecurity, there are rich and poor people in Fulbe society, and people, for example the Weheebe, who manage better than others. The political struggle between the Fulbe and the outside world permeates to the lowest level of society, the *fayannde*. It has been shown that marginalization is also an important phenomenon within the pastoral community itself. Women, children, old people, the sick are hardly taken care of by their relatives or by the community. At the level of the distribution of resources, specific groups are denied access by other more powerful groups. The dispossessed have in many cases no choice but to leave. Inequality is high, and there are hardly any redistributional institutions apart from Islamic charity.

The droughts of the 1970s and the 1980s have caused in the Hayre a general impoverishment of pastoralists and cultivators alike. The number of cattle available for each family has decreased, and most have hardly any cattle. Furthermore the ownership of cattle is monopolized by men, so that women increasingly lack an independent base of existence. This is aggravated by the fact that men need more animals to market in order to buy grains, because of the low cereal production. As a result the milk economy of the women has virtually disappeared. Only when animals belonging to cultivators are herded may there be some milk to be subsequently bartered for cereals. The strength of the *fayannde*, the solidarity between the mother and children, brothers and sisters in this unit, begins to crumble with the demise of the milk economy. A woman and her children become increasingly dependent on the male head of the *wuro*, who is in charge of the provision with staple food.

Solidarity with respect to the shared responsibility of collateral kin groups for the *fayannde*, i.e. for a woman and her children, and for sick people, also declines. When they need care they are at present shoved back and forth between several categories of kin. A married woman should be taken care of by her own family in case of sickness. If they do not have means, her affines do not automatically take over, even when they have the means. Children, and especially orphans are often shunted back and forth between their father's and mother's kin. This leads to a weakening of the position of women, and lack of care for the children and sick people. Young women who are divorced because their husband has left the region, or who are widowed, are thrust into polygynous unions because their family cannot or does not want to take care of them. Those who take refuge in town or among cultivators are even worse off. They are completely unprotected and have to survive literally at the margins of society. Before getting stranded there they have lost their assets and social networks, which provide others at least with some social security and protection. In this process pastoral values with respect to wealth and power are disappearing. People shift from one discourse to another when they have to cope with deep poverty. They rephrase Islamic values, away from the power discourse of the political elite and the Islamic clergy to a message of charity, to the duty to take care of the poor. Women start to phrase the future of their children in terms of Islam rather than in terms of a pastoral discourse.

There is no wealth any more, and people are no longer a source of strength, because solidarity is lost and many kinsmen have moved.

In this situation a new generation is growing up who have a radically different life experience, having become adult after the onset of the droughts and the decline of living conditions. Their future is no longer assured within the region in which they grew up; so in order to gain a living or to support their families they have to migrate, and to come into contact with other cultural understandings. They become herdsmen in a different kind of pastoralism, and the dependents of patrons with an agricultural or urban basis. They develop different ideas with respect to work, and luxuries, and develop a different perspective on the past. These migrants may be said to form the new core of a new pastoral society.

Ritual is a domain in which cultural change, and in this case marginalization and impoverishment may be observed. Rituals and festivities can be defined as the performance aspect of the cultural understandings in society, i.e. a reflection of rules, norms and ideologies in which the ideal nature of the community and the proper positioning of individuals within the community are acted out. Rituals, however, also reflect the economic and political reality in which people live. The material scarcity of today simply leads to a low frequency of rituals, and to a minimalization of the festivities. In the Hayre this leads to a loss of those aspects of rituals that may be labelled custom: cattle are no longer slaughtered ritually. The *wulleeru*, the festival for the selection of the best herdsman, has become a children's festivity in which the cattle have been replaced by goats. Marriages are postponed, and if they are held there is little animation to the wedding festivities. The absence of visitors from outside, except some cattle owners from town, reflects the isolated position of the Jallube in the political domain, and their subordination to the rich cattle owners.

In this scarcity of ritual women especially try to keep to the rules. They still strive to perform the ceremonies in an appropriate manner. They regard the division of food, and the ritual division of kola nuts and cigarettes, as indispensable for a successful festivity, and more importantly they prepare the food, regardless of whether in fact there are guests or whether it is eaten or not. Men seem to have lost their interest in festivities and they limit themselves to the Islamic part of the rituals. There is a clear tendency for Islam to oust custom in ritual. If the present scarcity continues, eventually Fulbe customary rituals will change profoundly and take an Islamic form.

Only the name-giving ceremony, which is an Islamic ritual, is always celebrated, together with the associated festivities. Men and women alike try to conduct this according to Islamic and customary rules. The permanency of this ritual, the fact that one cannot but welcome a new member of society, and the investments in the ritual, emphasize the continuity of society, and the wish to integrate a new member into society. It emphasizes the importance of the *fayannde/wuro* complex as the basis of life for this new individual, because it is the only occasion where the man and the woman collaborate in order to start a new herd for the new *fayannde* or *wuro* which will be formed by the child. This does not however guarantee their stability as is clear from the high rate of divorce and the many changes taking place in the organization of the *wuro*.

The only other ritual which is essential for social continuity is the burial of the dead, and the condolences delivered afterwards. There are however no rituals, of customary or of Islamic origin, which are held in commemoration of the dead. After the condolences, in which the solidarity of the community with the immediate kin of the deceased is expressed, everyone has to cope with his grief on his own.

This is the clearest expression of the existential insecurity people are confronted with. It is one thing to lose one's possessions, to suffer from hunger from time to time, to be ill, but as the people of Serma say *'solla waratаa bii jawngal'* (dust does not kill a guinea fowl); it is quite another thing to live in a fragmented society, to have the feeling of being left alone, forgotten, and isolated. These feelings add an extra dimension to insecurity. Doing research in Serma was difficult, but Jallube as well as Riimaybe always appreciated the attention we had for them, be it only because of our endless questioning. They still feel themselves to be people of worth, who should expect support in resuming a worthy existence.

This situation can be understood as an example of economic, social and moral disintegration in a context of unremitting decline of ecological, economic and political conditions. However, the way the people themselves view the situation denies this. They suffer, their situation is bad, but they remain distinctively Fulbe, with all the variety that this entails. This paradox was resolved by redefining a concept of context or environment, and our concept of culture. In this study we began from the assumption that an environment is not a stable entity, but instead a source of insecurity and instability; and we adopted a more flexible concept of culture, to comprehend cultural understandings of insecurity, as well as of more stable characteristics of daily life, so that the dynamic character of day-to-day reality, decision-making, and cultural forms could be described more adequately. In this way the observed changes in the pastoral way of life, natural resource management, the distribution of productive resources, and redistribution in the form of social security arrangements, could be fitted into historical, cultural and ecological contexts. At the same time these processes of change show how complex are the interrelations between insecure environments, day-to-day reality and cultural understandings.

In the rest of this conclusion we want to address three broader issues in which the historical and thematic research questions come together. The first is the more general point of the relation between a society and its ecological environment, as exemplified in our instance in the pastoral way of life. The second issue to be raised is the dialectical relation between flexibility and control in the pastoral pursuit. As will appear, the present situation is just a point in a larger on-going historical process, and in this process the pastoral way of life changes as a mode of resource exploitation as well as a cultural ideal. In the last section we will try to sketch some of the consequences of this approach for scientific understandings of pastoralism, and for the study of societies and development issues in semi-arid zones.

The pastoral way of life reconsidered

One of the domains in which the dynamic character of reality is particularly visible is the relation between the ecological environment and society. The pastoral way of life has been defined in the introduction as a specific mode of relations between people, animals, culture and their ecological environment, in short as a way of dealing with ecological insecurity. A first attempt to order the themes considered in this book into an explanatory framework would suggest that ecological insecurity, combined with the incorporation of the Fulbe into new political hierarchies which are based on a different economic rationality, is at the basis of most of these phenomena encountered in the Hayre. However, it is wrong to conclude that the situation we analyzed in the preceding chapters is the result of the droughts and political marginalization only. Fulbe society may have manifested some of these characteristics before the situation degraded with the droughts in the 1970s and the 1980s. The Fulbe of the Hayre had to cope with droughts, and the capricious environment, and have dealt with outside powers, oppressive rulers, and other adverse conditions for centuries. As far as our information goes the Hayre has always been a marginal poverty-stricken area. The organization of pastoralism was transformed from a loose structure of families and lineages led by a band-leader, into a distinct politically and socially differentiated unit in the 19th century, and towards a marginal part of society in the course of the 20th century. Over time the relation of the Fulbe with their environment has changed considerably, as was exemplified by the organizational changes of land use in Dalla under the Diina, and in Serma in the course of the 20th century.

These findings are hard to reconcile with an approach based on the assumptions that culture and the ecological environment can be described and behave like systems, and that functional relations determine the interactions between the ecological environment and society and individuals. Under these assumptions one would presuppose that at some stage in the development of a society there is a situation of equilibrium between a society and its ecological environment. This equilibrium may be dynamic, or may change over time, but in its essence both systems are oriented towards equilibrium, and after a calamity, such as droughts or pests, there is a move back to this equilibrium. However, from the descriptions of land use it became clear that the high variability in ecological circumstances precludes this adaptive response to changing circumstances. In order to cushion oscillations in production people rather react to each other, and to the availability of natural resources, and the ways to gain access to these resources. These ways are always cultural, because meaning is given to nature in this process. Specific social categories attach different values to varying qualities of the ecological environment. Nature is thus never a thing in itself, not in Fulbe society, and, by extension, not in our own scientific understandings.

So the way in which people engage nature in their undertakings is in its essence cultural. They have to relate to each other within Fulbe society, and with outsiders from other ethnic groups, with political hierarchies, because in all these domains access to resources is defined. As history and the chapters on property and tenure showed the present situation is but a moment in time. The political and social marginality of the Jallube and Riimaybe, the inequality in society, the competition for resources, and the plurality of understandings of

these processes, have to be placed in a historical context in which political struggles, interaction with the outside world, and the internal dynamics of Fulbe society come together. There is a close connection between the position people have in this on-going process and the way in which they perceive their environment. They attach meaning to specific qualities of the environment, and not to others.

So nature is engaged by society in at least two ways. It is part of an on-going political struggle, in which the distribution of resources takes place. The social relations, at the level of society, the lineage, social category, camp, village or family, which are the result of that struggle determine who is to use what, and in which period of the year for what purpose. At a second level of analysis these resources are managed in a specific way by the individuals or groups who have gained access to these resources. This mode of management is dependent on a variety of factors, individual as well as from a higher social order. Both ways of engaging nature in society are meant to deal with insecurity, of both a political and an ecological origin.

The outcome of the political struggle over resources is of the utmost importance for the possibilities of developing new successful strategies in a situation of resource scarcity occasioned by droughts and pests. The changing political context for the use and management of natural resources in the colonial period, and again in the 1970s and 1980s has severely limited the options for Jallube and Riimaybe to respond in a flexible manner to ecological variability. The claims of the state and development agencies on resources, and their attempts to change local ways of management of these resources, limit the flexibility of the people of Serma, promote the interests and claims of wealthy and powerful outsiders, and lead to more intense resource competition. In this struggle the poor lose out, and are forced to leave, for there is no chance of recovery for them within the framework of Fulbe society in the Hayre. The unprecedented sequence of disasters which have plagued the Sahel since the beginning of the 1970s further contributed to the demise of the pastoral way of life.

However, it would be wrong to attribute change solely to outside pressure from the ecological and political environment. Life in the Hayre in the past as well as in the present was centred around the reduction of insecurity in one way or another. Fulbe society always had its own dynamic ways of resolving problems originating from various insecurities. The present strategies of Jallube, Riimaybe and Weheebe have their origin in the specific histories of these groups. The accumulation of cattle and the control over the labour of the Riimaybe, so that cereals could be accumulated, were always the basic means of survival for the nobles. In the present these claims on status, property, and power over lower status categories can no longer be made effective, and this inhibits the Jallube from undertaking other activities. The reliance on slave labour, and the presence of a political centre, which was responsible for the distribution of resources such as land, labour (slaves) and cattle (loot), led to the organization of society in relatively small units. Extreme insecurity with respect to agricultural and livestock production, and the high co-variance of risk between small resource-owning units, led to a strategy of self-insurance, in which few distributional links were established between these units. Rules and norms with respect to the distribution of resources were present only at this level. Linkages between lineages and neighbours may

have been important in a political framework, but they had only limited importance from a redistributional point of view. Rather, links were established with a strong political centre to ensure that when assets were depleted political and military power was organized to collect new resources. However, when this political centre was built into a new hierarchy, the lack of social security mechanisms turned into a liability for the poor, because the scope for help relations and concerted action has been and is extremely limited.

So there is not one kind of Fulbe pastoralist or Riimaybe cultivator, nor a single resource use strategy which may be deemed the most successful. A resource use strategy can only be successful under a specific set of ecological and societal conditions. As both cannot be controlled by an individual herd owner or cultivator, and as individuals are set in varying social and political positions in relation to each other, and may have a different definition of him- or herself, e.g. the difference between pastoralist and farmer, everyone has to develop his own way of dealing with the conditions. Thus the compartmentalization in social categories, and the fragmentation of Fulbe society in small resource-owning units, in combination with large variations in agricultural and livestock production gave rise to a tremendous variety in land use strategies. The ecological environment does not determine society, it is society that determines how the ecological environment is to be partitioned between the members of society, how natural resources should preferably be used, and how production is to be distributed. Given the variety of circumstances, of configurations of resources within the production units, and of people's cultural understandings of how to deal with these conditions and insecurity of production, divergent responses to the ecological environment are the rule rather than an exception. There were shown to be strong links between the choices individuals make and the position they occupy in the social setting of Fulbe society, and the ways they define themselves. Within Fulbe society radically divergent opinions and ideals co-exist. Moreover reality does not have to conform to the cultural ideals embedded in the self-definitions. Most pastoralists cultivate and most cultivators own livestock. What keeps this amalgam together are the historical connections between these population groups, exemplified and reproduced by the oral traditions. The physical marks they have left in the landscape in the form of villages, settlements, rights to land and water resources, create a sense of belonging somewhere. The invisible social ties and networks which form the tracks along which people move through the landscape. In short there is an area of common understanding of the situation and of what the Hayre is, which is the core of Fulbe society and the pastoral way of life. In this setting the interplay between political, economical and ecological insecurities, the strategies of people to cope with these insecurities, and the cultural understandings of these contexts and strategies are acted out in very diverse arid ways.

The dialectics between flexibility and control

The pastoral way of life is always balancing between the needs for both flexibility and control. On the one hand the pastoralist needs to have control over natural and social resources in order to be able to manage his or her existence. At the level of society political

power vis-à-vis other societies is of paramount importance. As we have seen for the Hayre, the position of the various social categories in the political hierarchy indeed defined to a large extent their possibilities for coping with the insecurities in their lives. When control over natural resources and the labour of Riimaybe was lost in the 20th century due to political changes, the capacity of the Jallube to control insecurity diminished.

On the other hand, there are disadvantages linked to controlling resources. Some political centralization is needed. This political apparatus may become a burden when the political class acquires its own interests, no longer represents the interests of the pastoralists, and starts to impose limits on the flexibility of the individual users of resources. This flexibility is absolutely essential in order to respond in an appropriate manner to fluctuations in resource availability. At the level of the community and the herding families it expresses itself not only in geographical mobility in order to deal with ecological fluctuations, but also in the ways people relate to each other, redistribute natural resources over society, and mediate access to social resources which may provide some protection in bad times. However, flexibility without any control at a political or cultural level would result in chaos. Without control no claims can be made on resources. Cultural understandings, in the form of rules and norms with respect to the distribution of, and access to, natural and social resources, of oral traditions explaining the position of individuals and groups in society, and of normative complexes, may be seen as other means to control the flexibility of the pastoralists. In the whole history of the Fulbe in the Hayre this dialectical relation between flexibility and (political or 'cultural') control may be observed. In a number of instances some groups or individuals indeed lose political or cultural control over the flexibility of others, and leave society.

At the level of social organization it has been shown that lineages, residential units, age groups, marriage ties, kin groups, the Muslim community in the form of Koranic schools and networks of *moodibaabe*, form a complex network of human relations, to which people orient themselves in often ambiguous ways. Individuals, but also small groups such as the *wuro*, shift from one network to another in order to survive. In any event a different way of solving a social security or resource management problem is devised. This is primarily done in a process of negotiation, in which control of the situation may shift from one group or individual to another, depending on the bargaining power of a person or group.

Flexibility is found at the level of the basic production units in society. Jallube as well as Riimaybe do not follow fixed patterns of activities in the course of the year, or from one year to another. Mobility is one of the primary strategies to cope with variations in production. The shift from herding to cropping, and *vice versa*, is another strategy. The transformation in land use around the middle of the 20th century points at another interesting phenomenon, i.e. the capacity of local producers to intensify and again extend production, and to develop new water resources on their own. Herdsmen and cultivators consciously try to manipulate soil fertility in accordance with their perceptions of rainfall patterns. They keep fields with different levels of fertility, to have at least one productive field in a variety of circumstances. They segregate fields in space to gamble on the spatial variation in rainfall. Herding families move with their herds to look for the best pastures or to select the village where the possibilities for the bartering of their milk for millet will be

the most easy. In order to do so, and to keep the feeling of belonging to a culture, flexibility as an integral part of life is a prerequisite.

The way in which production is organized and resources are divided at the level of the *wuro* reflect the inherent tensions and oppositions between its members. Young and old men compete for control over labour, men and women for control over cattle and their produce, milk. Each of these actors has different interests at stake in this unit. If the conflicts are too deep the unit is dissolved, which is clearly visible in the high rate of divorce, in the high rate of migration of young men, and in the very diverse ways the *wuro* is organized. The position of women and the *fayannde* may be viewed in a similar way. The unclear status of a woman between kin and affines, and the relatively small investments of both her own family and her husband's family in a new *fayannde*, allowed her and her children a relatively independent position, and an important fall-back option. This option was often used by women, as well as by children, who often decided to ally with their maternal uncles instead of their own *suudu baaba*.

This flexibility is rooted in the plurality of cultural understandings. People rely in almost every situation on a variety of norms, values, and rules to orient their behaviour and to guide the actions of others. In the domain of property relations rules from Islam and Fulbe custom stand side by side. Depending on the circumstances preference is given to one interpretation or the other. The rules are also broken or manipulated if practical circumstances make this expedient. In land tenure several layers of rights over fields were found, which were derived from very diverse systems of law, and were embedded in various units of social organization. The spatial organization of land use in Serma is only a partial reflection of these overlapping use rights. Flexibility is an inherent feature of control over pastures. Here we find an extremely loose body of rules, which permits every herd owner in Serma to gain access to pastures. Rules with respect to exclusion of outsiders are only activated in case of calamity, and depend primarily on the extent to which the pastoral community in Serma is able to organize itself and exert political power over its domain. Labels such as communal tenure, open access resources, and private property do not fit in this constantly shifting pattern of use rights.

With respect to the position of the poor and the alleviation of poverty, and to sick people and health care, the same plurality of cultural understandings may be observed. The ways of coping with these problems are very diverse. Norms and values embedded in kinship, in Islam, both in the sense of a doctrine and of a social network, and in other belief systems, are used to define ways to gain an income, or to arrive at the correct diagnosis of illness. People shift from one explanation to another, and from one network to another, in order to secure some food or access to health care in some form. They create new links with people who may provide them with food and care, and try to transform existing relations. In this domain too it is hard to discern systems of beliefs, or standard procedures or institutions to tackle these problems. An institution like *zakat* is put into practice in a very personalized and informal manner. It is manipulated to cover all kind of other obligations embedded in kinship.

So, flexibility is the basis of virtually all forms of organization, agricultural techniques, resource distribution, social security arrangements, and normative frameworks. People base

their choices hardly ever on considerations in only one domain. When, for instance, selecting a village for the yearly transhumance they may do so on the basis of the harvest in that village. However, the presence of a host, who is generous, or relatives who may be able to give some support, or the presence of an important *moodibo*, with whom one can seek salvation and blessings for the future, the stock of cereals at home, the need to manure the fields, are all part of the considerations people weigh in the decision-making process. So the strategies people follow do not reflect environmental conditions only. In order to be free to choose as one likes a variety of cultural understandings is a precondition.

The wide variety of strategies, and the large range of options open to any individual, and the plurality of normative frameworks, indicate that the primary locus of control in daily reality is the individual. In the end there it is where the decisions are taken. Though the identity and personality of the Fulbe were not part of our research framework, we may say something about this aspect. Identity is for the Fulbe an important part of their lives. This was made especially clear in those instances when the necessity of a flexible response to calamities, poverty, and starvation, came into conflict with norms with respect to nobility, and the appropriate manner to survive. This conflict may be resolved by a reorientation from pastoral values to Islamic values. It may also result in the migration of the people concerned, which is in most cases definitive. It is at these moments that the processual character of day-to-day reality is made very explicit. Reality emerges in interaction with each other and with the environment. When the means are lacking to make the cultural ideal emerge in reality, embedded in the cultural understandings of Fulbe society, society must change of dissolve.

Scientific and policy understandings

At the end of all we felt that it was necessary to make some statements on understandings of pastoralism and the Fulbe in our own culture. Throughout the book we have attempted not to make unnecessary generalizations nor to reduce reality to an explanatory scheme. We have tried to give as much space as possible to our observations and data, which we gathered in interaction with the people of Serma, Dalla and sometimes other places. During the fieldwork, and in the process of writing up the results of the fieldwork, we have changed considerable in our own understandings of the situation of the Fulbe in the Hayre. In the course of the fieldwork we gradually dropped our attempts to develop a systematized approach to problems of land use, resource distribution and social security in a pastoral society. In this process the research questions originally underlying the fieldwork gave way to different questions and concepts. While in the field we were hardly aware of this, because we became involved in the daily problems and concerns of the Jallube, Riimaybe and Weheebe, and their efforts to reduce, cope, deal with all the contingencies which occur in their lives. When back home we had to face the problem of reformulating our framework for analysis, and the relevant questions to be answered from the data.

When we reflected on the methodological consequences of the approach we followed throughout the field research, and afterwards when writing up the results, we were

inevitably dealing with ourselves. The development in our thinking about pastoralism, natural resource management, property and tenure regimes, social insecurity, and the historical perspective we developed on these themes, is of course strongly influenced by our personal experiences and feelings while doing fieldwork in the Hayre. As will have become clear, we did not remain neutral observers throughout the fieldwork; nor did we ever fully participate, because we would not have been able to bear the physical strain of such an existence. Moreover, we often had the impression that people preferred us to stay outsiders to some extent. Fulbe society is one of the few societies where outsiders are more easily trusted than insiders.

Yet, this high degree of participation in what most of us would regard as a difficult situation posed us for a methodological problem. It made us aware that problems of drought, hunger, ecological strain, political marginalization, social insecurity, and control over resources are closely interrelated, and need a comprehensive treatment if we are ever to arrive at greater insight into the nature of political, social, and ecological crises. However, scientific understandings of the problems we described in this study have increasingly been fragmented in the course of time, in their subject matter as well as their methodological approaches.

There is an enormous amount of literature of anthropological, geographical, historical, and agricultural origin as well as from policy-oriented circles, on pastoralists, range management, the political history of West Africa, drought problems and development. Comparative little anthropological research has been conducted in hazardous environments, and if work has been done it is mostly not on crisis situations. Studies of pastoralists mostly concentrate on the pastoral economy, and on the pastoral aspects of culture. The role of non-pastoral groups in society and the occurrence of non-pastoral activities are often neglected or analyzed as a deviation from the norm. Geographers gathered enormous amounts of data. However, integration of analysis across geographical scales has lagged behind. Historians of West Africa traditionally concentrate on the political, religious, and cultural aspects of the great savanna empires and the workings of colonial policy. Little attention is given to the formative role of history in the day-to-day struggle for resources, and its ideological and cultural role in the formation of strategies for survival. Agricultural science has devoted most of its attention to research and the development of new technology, and has been geared towards controlled change. Range scientists have devoted most of their attention to the development of models of primary biological production.

This fragmentation and the lack of cooperation are exacerbated by the conceptual and/or paradigmatic incommensurability between all these scientific understandings. Each discipline has its own norms and values with respect to sound scientific work, and in most cases there is little regard for each other's merits. It is sometimes hard to grasp what precisely are the reasons why specific problems are researched, and not others, and whose questions are addressed in research and whose questions are left uninvestigated. Each of these scientific understandings seems to be formed within a specific scientific arena, with its own peer reviews, journals, and sources of funds. Communication across disciplinary boundaries is often limited, and most scientists do not know what is going on in other disciplines. As a result science has divided reality into numerous sub-domains, in which specific questions

and data are given a central importance, while others are neglected. This leads to detailed, but very fragmented knowledge about these sub-domains. This knowledge gives the impression that this sub-domain may be controlled in practice.

A similar problem is manifest in the domains of policy and development. The compartmentalization of reality can be traced back to the way government agencies and development organizations dealing with these problems are structured both internally and as an organizational system. Government agencies and development agencies also divide the world into sub-domains, and form their own policy and political arenas around these domains. Just as in science, these bureaucracies have their own dynamics which are very relevant for the way possible solutions for the problems of people in the Sahel are implemented. As we have shown, the reduction of insecurity for the bureaucracy itself may be one of the most important factors behind its workings as an agent of change. Accordingly questions underlying policy analyses may reflect mainly the anxieties and problems of governments and development agencies, who are confronted with issues of governance, controlled change, and authority over resources which are growing out of control.

So, scientific, policy, and development efforts are mainly oriented towards control of insecurities, and the reduction of complexity into a more simple image of reality. However, in this process it is merely the insecurities of scientists, policy makers, development workers that are reduced rather than those of the people, who are the object or the subject of research and development. Ultimately knowledge is reduced into a normative framework, to which reality has to conform. These norms are put into practice in policy and development, and ultimately law. Development seen from this perspective is indeed a project for controlling people. Knowledge is used as a means to control our image of the world, and arguments are used to make others accept this image. In this sense research and development are thoroughly political undertakings, and those who control science and development will eventually have control over people, hidden in discourses of rationality, predictability, and regularity, promulgated by science.

As this study shows this approach leads to a distorted picture of reality, and eventually flawed policy measures and development efforts. It is therefore that we want to suggest a number of further topics for research and development. To begin with it is clear that we need much more information about this type of situations. Anthropologists have devoted little attention to the study of crisis, famine and human suffering, and they should concentrate more on the dynamics and the changes set in motion by these crisis conditions. Scholars from other disciplines have mainly studied these situations from outside or from a problem solving oriented framework. However, to better understand the dynamics of insecurity in (semi-)arid environments a different approach is needed, which must cross both regional and disciplinary boundaries. A comparative study of diverse societies in various political and ecological sets of conditions may broaden our understanding of the relation between permanency and change, control and flexibility, culture and the ecological environment, the dynamics of ecological conditions, and the ways people are dealing with these dynamics. This should preferably be done in an interdisciplinary framework. As we have argued in the introduction most disciplines fail in appreciating the diversity,

irregularity, and insecurity embedded in crisis situations in (semi-)arid environments. However, in each of these disciplines new research can be started in this direction. The lack of predictive capacity is a nagging problem for most disciplines. A first step to do something about this problem could be to investigate the nature and content of the various insecurities we treated in this study, and their relevance for our scientific understandings. This study is only a first attempt in this respect.

This can only be done if scholars from these disciplines start accepting each others peculiarities, and try to formulate a set of problems and questions relevant for all. The leading theme in this questioning of reality should be the problems of people in dealing with their capricious environment, and not the issues at stake in science or policy. As this study shows we can only hope to understand these problems by engaging the inhabitants of (semi-)arid environments in the process of research and development, which on its turn implies that long-term fieldwork and engagement of researchers with these societies is absolutely necessary. In addition we need middle level and historical studies to expand our understanding of arid ways in time and space, and to link the results of studies to theoretical and methodological concepts of higher order. Lastly members of all disciplines involved should accept to be made aware, that famine, survival and change in (semi-)arid environments are always thoroughly political issues. As we have shown political struggle is everywhere, on all levels of society, over all kinds of resources. The question whether these resources are natural, social, economic, legal, political or symbolical is not relevant, because in the end they can all be transformed into each other, and all struggles are interconnected by the social relations of people using and managing these resources.

When writing this study we often wondered whether we were touching upon a more general problem of insecurity, poverty, control, and governance, or whether we had just run into an isolated group of people who had bad luck. Those who have accepted the gist of our argument will agree that this situation is far more widespread than just the Hayre or some cattle camps. At present Africa is full of impoverished people, pastoralists and agriculturalists alike. Droughts will reappear in the Sahel and elsewhere. Civil strife is rampant in the Horn, Sudan, Rwanda, Liberia, Sierra Leone and Angola. There are other countries where people are displaced because of the building of dams, the construction of irrigation works, or loose their habitat as a result of uncontrolled logging of forests. In many areas research has indeed become impossible because of these problems. Comparative research by all kinds of disciplines is needed to gain better insight into the ways in which people deal with all these calamities. This knowledge is urgently needed in order to do better in the future. While building this knowledge we should be as clear as possible, by naming things for what they are, and not for what they should be.

Glossary

aawde	to sow
aawdi	seeds
al'aada	custom
alkaali	kadi, Islamic judge
alsilaamaaku	Islam
alsilaame, pl. *alsilaame'en*	Muslim, in plural from also Islamic community
alsilaame'en	Islamic community, Muslims
aluwal, pl. *aluuji*	wooden plate, front of bed
aluuji, sg. *aluwal*	wooden plates
amiiru	chief
ana wuli	being hot
anndal	knowledge, also used for 'secret' knowledge
ardo, pl. *ardo'en*, or *ardube*	warlord or band leader
baaba, pl. *baabiraabe*	father
baabiraabe, sg. *baaba*	fathers
banndiraabe, sg. *banndiraado*	siblings, parallel cousins
banndiraado, pl. *banndiraabe*	sibling, parallel cousin
bappaanyo, pl. *wappaybe*	paternal uncle
barke	*baraka* (Arabic), 'holy power', blessings
battu mawdo	*assemblée* (French), under the Diina the ulamaa
beembal	granary
beweejo, pl. *weheebe*	vulture (literally), political elite
bibbe, sg. *biddo*	children
bibbe yaaya, sg. *bii yaaya*	maternal parallel cousins
bibbe wappaybe, sg. *bii bappaanyo*	paternal parallel cousins
biddo, pl. *bibbe*	child
bii bappaanyo, pl. *bibbe wappaybe*	paternal parallel cousin
bii yaaya, pl. *bibbe yaaya*	maternal parallel cousin
biile, sg. *wiinde*	old camp sites
biraadam	fresh cow's milk
bokkoreeji	type of millet spike
bolaare	low lying area with abundant growth of grasses, herbs and vegetation
bonngobi	non Islamic healer and magician
buka	millet dessicated before completely ripe
buguuru	hut of herdswoman made of grasses and millet stalks
bunndu	well
burgu	nutritious herb, *Echinochloa stagnina*, growing in Inner Delta
burti, sg. *burtol*	passages for animals
burtol, pl. *burti*	passage for animals
buubi	cold, coolness
buubu	dress of a Fulbe herdsman

cabbugal	betrothal, arranged marriage
cammbol	headache, syphilis
ceedoowo, pl. *seedoobe*	the one who separates, also lineage name of Jallube
ceedu	hot season
ceekol	low lying area with abundant growth of grasses, herbs and trees
cercle (French)	literally circle, administrative unit comparable to a district, see also chapter 2, note 11
cibooli	tree, *Grewia* spp.
cobbal	millet porridge
cokki	game, sort of checkers
cuubi	hairy type of millet spike
cuudi, sg. *suudu*	houses
dabbunde	cold dry season
dabare	witchcraft
dabia	mental illness
dampitaade	sowing in ridges while cultivating
dampitiri	system of sowing millet in ridges while cultivating
debbo, pl. *rewbe*	woman, wife
debere	cultivation hamlet
demal nyaamko	first weeding cycle
denndiraabe, sg. *denndiraado*	cross-cousins
denndiraado, pl. *denndiraabe*	cross-cousin
dewgal	marriage
dewordo, pl. *reworbe*	non-kinsman, stranger
dhikr (Arabic)	prayers recital
dimo, pl. *rimbe*	a noble person
diimaajo, pl. *riimaybe*	*protégé* (French), member of former slave group
diina	Islamic law, also Islamic empire of Seeku Aamadu 1818-1862
dodaade	to pull out, weed
dodal	second weeding cycle
doggu reedu	diarrhea
dunti	herd going on transhumance in the bush
duwaawu	blessing
dukaari	millet dessicated before completely ripe
dude diina	Koranic schools
ebe njiilan	they wander around
eedi	tree, *Sclerocarya birrea*
eelude	asking for small gifts
eggol	transhumance
enndam	'friend', 'family'
enndude	to raise in a friendly manner
enndu	breast
esiraabe, sg. *esi* or *esiraado*	affines
esiraado or *esi*, pl. *esiraabe*	affine
fajiri	morning, time of daily prayer
fayannde	cooking pot, the unit of mother and children
feccude	to cut, to clear a field
ferro	tiger bush
fijude	to celebrate, to feast
futuro	sunset, one of the five daily prayers

gaaribaabe, sg. *gaaribu*	Koranic students
gaaribu, pl. *gaaribaabe*	Koranic student
galle	compound (sedentary)
gargasaabe, sg. *gargasaajo*	woodworkers
gargasaajo, pl. *gargasaabe*	woodworker
gawri	millet
gawri ana yidi ndiyam sanne	the millet is very dry, wants water very much
gendarme (French)	police-man
giigiile	tree, fruit, *Boscia senegalensis*
gilooji	tree, *Grewia* spp.
goggiraabe, sg. *goggo*	paternal aunts
goggo, pl. *goggiraabe*	paternal aunt
gorko, pl. *worbe*	man, husband
griot (French)	person from social cast of craftsmen and praise singers
gulle, sg. *wulleere*	small millet plants, seedlings
gure, sg. *wuro*	groups of huts in a rainy season camp, rainy season camps
gursoohi	tree, *Grewia* spp.
haandi	mental illness
haaram	first month of the Islamic year
haarima	pastures for the calves and small ruminants near the village
haasidaare	jealousy, wrath, grudgery
hakkile dillii	his/her wits have gone
hayre	rock, stone, region in Central Mali
henndu	wind, spirit, illness caused by spirits
hiiri	evening, one of the five daily prayers
hoodere	star
hoore nawoore	headache
horbe, sg. *kordo*	female house slaves
hubeere	large official sedentary village, administrative centre, town
hururuy	bad mouth, tongue, gossip
id-al-adha (Arabic)	literally 'the big feast', Islamic feast on which the offering of Abraham to Allah is celebrated by slaughtering a sheep
irtotoodi	mental illness
jaalenyol	lineage, clan
jabirgal	long hoe for making seed holes
jakka	*zakât* (Arabic), Islamic tax
jallo, pl. *jallube*	member of a Fulbe clan
jallube, sg. *jallo*	members of a Fulbe clan
jalo	hoe
jawaambe, sg. *jawaando*	merchants, members of social category
jawaando, pl. *jawaambe*	merchant, member of social category
jawdi	wealth, all cattle owned by a person or family
jihad	holy war
jinnaaji, sg. *jinnaaru*	*jinn* (Arabic), spirits
jinnaaru, pl. *jinnaaji*	spirit
jonte	fever
jom-henndu	person possessed by spirit, see also *henndu*
jom-jawdi sanne	rich person
jom-suudu	wife, possessor of the house
jom-tubal	chief, the one who owns the drum of war

juulde	literally to pray, also Islamic rules or orthodoxy
juusi	mental illness
kaadam	sour milk, butter milk
kaake	household utensils, pots and pans
kaaral	bare, degraded tract of land
kaawiraabe, sg. *kaw*	maternal uncles
kalawa	*khalwa* (Arabic), retreat
kasoori gorko	type of millet spike
kaw, pl. *kaawiraabe*	maternal uncle
kebbe	grass, *Cenchrus biflorus*
kelli	tree, *Grewia* spp.
keefi	illness, with vomiting
kettal	harvest
kikiide	evening, one of the five daily prayers
kitaangal	period of drought and hunger of 1913-1914
kirikiri	mental illness
kollongal	heavy clayey soil
koorka	*ramadan* (Arabic), the month of the Islamic fast
koreeji	family
kordo, pl. *horbe*	female house slave
kosam	milk
kosam daaniidam	milk overnight, sour milk
kurtungal	wedding
la'al, pl. *la'e*	wooden bowl
laamu	power, ability to command
laasara	around 4 p.m., one of the five daily prayers
laatike enndam	to have become family
lacciri	cous-cous
ladde	bush, non-human space
lamru, pl. *lamruuji*	name giving day and ceremony
lamruuji, sg. *lamru*	name giving day and ceremony
layya	see *id-al-adha*
layyaari, pl. *layyaaji*	he-goat or sheep to be slaughtered at *id-al-adha*
leeso	bed
lekki	literally tree, also 'traditional' medicine
lenyol	clan, lineage
leydi	land, ground
liibude	stick-fighting
loofal	mud, marshland
magaami	charm
makaari	paste made of fermented seeds of *Hibiscus* spp.
maama, pl. *maamiraabe*	grand-parent
maamiraabe, sg. *maama*	grand-parents
maaro	rice
maccube, sg. *maccudo*	slaves
maccudo, pl. *maccube*	slave
makki	tree used as charm and medicine
mawbe ndongo	first inhabitants of the Hayre
mawdo, pl. *mawbe*	old person, pl. also the group of old people
mawni, pl. *mawniraabe*	elder brother or sister

mawniraabe, sg. *mawni*	elder brothers or sisters
mbayeeri	sorghum
mbedu, pl. *bedi*	calabash cover
mburutu	guinea worm
minyiraabe, sg. *minyi*	younger brothers or sisters
minyi, pl. *minyiraabe*	younger brother or sister
moodibo, pl. *moodibaabe*	Islamic learned man
moodibaabe	Islamic clergy, social category in Fulbe society
mud	measure for grain
muddu	*zakat-al-fitr* (Arabic), tax paid at the occasion of the feast at the end of the month *koorka*
muumri	first unripe millet harvest eaten roasted
naange	sun
naati	entered
nawliraado	co-wife
ndimu	rules to behave like a noble
ndimaaku	nobility
ndiyam	water
ndunngu	rainy season
nebam	butter
ngesa, pl. *ngese*	agricultural field
njaabi	tree, *Ziziphus mauretania*
njabbi	tree, *Tamarindus indica*
njaatigi, pl. *njaatigaabe*	host
njaatiraabe, sg. *njaatiraado*	great-grand-parents
njaatiraado, pl. *njaatiraabe*	great-grand-parent
nyaamko	first weeding cycle
nyaw reedu	stomach ache
nyebbe	beans
nyeenyo, pl. *nyeeybe*	person from social cast of craftsmen and praise singers, *griot* (French)
nyeeybe, sg. *nyeenyo*	social cast of craftsmen and praise singers
nyiiri	millet dough
nyiiwa, pl. *nyiwaaji*	elephant, also drug against chronic headache
omo yiilan	he is wandering around
oro	sauce made of leaves of the baobab (*Adansonia digitata*)
paggiri	wild fonio, *Panicum laetum*
peewri	rheumatism
peyye	clearing of bush
pilkol	turban
pooli	illness caused by spirits in birds, birds
pulinti kado	type of millet spike
pulaaku	Fulbe community
rewbe, sg. *debbo*	women
rewde	to follow, to obey
reworbe, sg. *dewordo*	non-kin related persons, strangers
rimbe, sg. *dimo*	noble persons
riimaybe, sg. *diimaajo*	*protégés* (French), members of former slave group
saaya	robe, garment covering upper part of the body
sadaka	*sadaqa* (Arabic), alm, instition of alms-giving
safaare	'modern' medicine

safannde	money to be payed by family of groom, or groom at marriage
sakiike, pl. *sakiraabe*	family member
sakiraabe, sg. *sakiike*	family members
salât (Arabic)	daily prayer, see also *juulde*
salifana	afternoon around 2 p.m., one of the five daily prayers
seedaani	bad spirit
seeno	sand, dune
Seeno-Manngo	the great sands
semmbe	power, force
shariya (Arabic)	Islamic law
siiri	secret
singedeeru	type of millet spike
sommoya	ingredients for the sauce
songorooji	type of millet spike used for seeding
suka, pl. *sukaabe*	child, pl. the young people, or the group of young people
sukunya, pl. *sukunyaabe*	witch
sukunyaabe, sg. *sukunya*	witches
sunuri	first millet harvest from wildshoots, has a bitter taste
suudu, pl. *cuudi*	house
suudu baaba	the house of the father, paternal kin-group, also community
suudu yaaya	the house of the mother, maternal kin-group
taadordi	circumcision
taaliibo	Koranic student
taani, pl. *taaniraabe*	grand-child
taaniraabe, sg. *taani*	grand-children
taara	slave woman who married a noble man
tabaski	see *id-al-adha*
talkuru, pl. *talki*	charm
tanni	tree, *Balanites aegyptiaca*
tarikh	history
tariqa	Islamic brotherhood
tiile	permanent fields on dunes
tubal, pl. *tube*	war drum, symbol of power of Fulbe chief
waalde	age group
wappaybe, sg. *bappaanyo*	paternal uncles
weheebe, sg. *beweejo*	vultures, members of the political elite
wiinde, pl. *biile*	deserted camp site
worbe, sg. *gorko*	men
wulleere, pl. *gulle*	small millet plants, seedlings
wuro, pl. *gure*	group of huts in a camp
yaagude Alla	to ask God
yaawnde	the post-harvest season
yaaya, pl. *yaayiraabe*	mother, maternal aunt
yaayiraabe, sg. *yaaya*	mothers, maternal aunts
yimbe	people
yimbe am	my people
yonki	soul
yurmeende	pity
zakât (Arabic)	Islamic tax/gift, see also *jakka*

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Samenvatting

Deze studie is het verslag van bijna twee jaar veldwerk bij de Fulbe van Centraal Mali, meer in het bijzonder de Fulbe die een gebied bewonen ten zuiden van de bergketen tussen het Bandiagara plateau en Mont Hommbori. Lokaal wordt het gebied de Hayre genoemd, wat bergen of stenen betekent in het Fulfulde, de taal van de Fulbe (zie kaart 1.2). Dit gebied behoort tot de Sahel, een enorme strook land die zich uitstrekt van de Atlantische Oceaan naar het oosten van het Afrikaanse continent. Deze regio wordt gekenmerkt door een semi-aride klimaat. De neerslag is tussen de 300 en 600 mm per jaar, en is geconcentreerd in één seizoen. Het overgrote deel van de neerslag valt in de drie zomermaanden. De rest van het jaar wordt het klimaat gekenmerkt door het ontbreken van regenval, hoge temperaturen en een lage luchtvochtigheid. Daarbij zijn de klimatologische omstandigheden aan grote variaties onderhevig. Hierdoor zijn periodieke droogtes, mislukte oogsten, massale sterfte van vee en hongersnood regelmatig terugkerende verschijnselen. De vijfentwintig jaar sinds 1968 worden daarbij gekenmerkt door een lagere dan normale regenval, waardoor de bevolking van de Sahel keer op keer door rampen werd getroffen.

De Fulbe hebben een lange geschiedenis in het gebied. De periode van hun eerste binnenkomst is onbekend, maar in historische bronnen worden zij al genoemd als aanwezig in de Gurma, het gebied in de bocht van de Niger, in de 16e eeuw. In deze tijd vestigden zij zich tussen reeds aanwezige meer sedentaire bevolkingsgroepen, die leefden van akkerbouw, jacht en verzamelen. In de 18e eeuw waren er volgens orale tradities enige tendensen naar politieke centralisatie in de Fulbe samenleving in de Hayre in de vorm van een erfelijk politiek leiderschap over de regio. Ook zou het eerste contact met de Islam uit deze periode dateren. In de 19e eeuw kreeg de politieke structuur van het (kleine) Fulbe vorstendom in de Hayre vastere vorm binnen het kader van het Maasina rijk (1818-1862), een door Fulbe gesticht en op Islamitische grondslag gevormd rijk, dat als kerngebied de Binnendelta van de Niger had, maar zich ook uitstrekte over de niet overstroomde gebieden ten oosten (Gurma) en ten westen (Mema) van de Binnendelta. De economie van de Fulbe in het Maasina rijk berustte voor een groot deel op het houden van rundvee. Vandaar dat het noodzakelijk was om in het regenseizoen, als de Delta overstroomt, over gronden voor het weiden van de kuddes rundvee te beschikken. Dit maakte controle over de buitengebieden onvermijdelijk, ook in verband met groepen Tuareg, die van tijd tot tijd strooptochten ondernamen in de regio. Binnen deze politieke constellatie bleef de Hayre enigszins autonoom. Wel werd de organisatie van landgebruik en de politieke hiërarchie gemodelleerd op die van het Maasina rijk. De sociale structuur, de onderverdeling van de Fulbe samenleving in functionele en hiërarchisch geordende groepen, kreeg in deze tijd min of meer haar uiteindelijke vorm, alsmede de hieraan gekoppelde identiteiten.

Aan de top van het Fulbe vorstendom stond de politieke elite (Weheebe). Zij vormde het politiek en militair leiderschap. Zij werden hierin bijgestaan door de Islamitische

geestelijkheid (Moodibaabe) en een groep raadgevers, annex handelaars (Jawaambe). Daarnaast bestond er een groep van ambachtslieden (Nyeeybe), die tevens een rol vervulden als lofzangers (griots genaamd in de franstalige literatuur). De economische basis van de samenleving werd gevormd door de (semi-)nomadische pastoralisten[1] (Jallube), die tevens een belangrijke bijdrage leverden aan de militaire kracht van het vorstendom. Al deze groepen samen vormden het vrije deel van de Fulbe samenleving, de nobele klasse. Aan de onderkant van de samenleving stonden de slaven (Maccube), die akkerbouw bedreven voor de nobele klasse. Zij kunnen worden onderverdeeld in twee groepen. Namelijk de bevolking die van oudsher het gebied bewoonde en een bestaan vond in de akkerbouw en tot horige gemaakt werd door de elite, en de krijgsgevangenen die slaaf werden gemaakt, en direct te werk werden gesteld op de akkers van de elite en bij hun huishouding hoorden. Na hun bevrijding ondergingen de slaven een naamsverandering. Nu staan zij bekend als de Riimaybe. Gedurende de periode van het Maasina rijk begon de spreiding van Islam op het platteland en werd de basis gelegd voor het normatieve kader van de Fulbe cultuur waarbinnen pastorale ideologie en Islam in een dialectische relatie tot elkaar staan. Deze maatschappelijke onderverdeling met de daarbij behorende ideologische en bij de identiteit behorende attributen bestaat tot op de dag van vandaag.

Met de verzwakking van het Maasina rijk na 1853 nam de politieke onzekerheid in de Hayre toe, met als resultaat dat de intensiteit van de strooptochten van de Tuareg, en de druk van de politieke elite op de bevolking toenam. Als een reactie hierop ontstond er een rivaliserende politieke eenheid in het oosten van het vorstendom. Na de machtsovername in Maasina door de Futanke onder leiding van El Hadj Umar Tall in 1862 werd op basis van deze politieke eenheid een nieuw vorstendom gecreëerd, Booni genaamd. Tot aan de koloniale verovering in 1893 en enige tijd daarna bleef de politieke situatie erg onzeker. Alle bevolkingsgroepen in de Gurma, Tuareg, Futanke, Fulbe, Mossi, ondernamen van tijd tot tijd strooptochten om hun vorstendommen van slaven en vee te voorzien. Pas rond 1920 verkreeg het Franse koloniale bestuur volledige controle over het gebied.

Het koloniale bestuur liet de politieke structuur van de vorstendommen aanvankelijk grotendeels intact. De politieke leiders werden verantwoordelijk gemaakt voor de inning van de belastingen en de uitvoering van een aantal bestuurlijke taken. Hierdoor nam de sociale afstand tussen de politieke elite en de pastoralisten toe. Slavernij werd afgeschaft, maar in de praktijk verkregen veel slaven pas na de Tweede Wereldoorlog de zeggenschap over hun eigen bestaan terug. De semi-nomadische pastoralisten (Jallube) lieten hun zaken met het bestuur behartigen door de Weheebe. In de jaren dertig begon het Franse bestuur zich meer en meer te bemoeien met de economie. De Hayre en de Gurma werden vooral gezien als geschikt voor de produktie van slachtvee voor de export. Investeringen in het gebied hadden dan ook voornamelijk tot doel de produktie en vermarkting van slachtvee te bevorderen. In de periode na de onafhankelijkheid nam de bemoeienis van de overheid en de internationale gemeenschap met de regio toe, vooral na de catastrofale droogte van 1971-1973. Dit leidde tot nieuwe investeringen in de veehouderij, en een uitbreiding van het overheidsapparaat, maar niet tot een substantiële verbetering van de sociaal-economische positie van de bevolking.

Geografisch kan het gebied onderverdeeld worden in drie zones (zie ook bijgevoegde losse kaart). 1- De bergen die spaarzaam zijn begroeid. Deze worden bevolkt door mensen die voornamelijk leven van sedentaire akkerbouw, Sonrai, Dogon, en vroegere slaven (Riimaybe) van de Fulbe, aangevuld met een paar kleine groepen semi-nomadische pastoralisten. 2- De vlakte aan de voet van bergen, voornamelijk begroeid met dicht struikgewas met hiertussen open ruimtes afgewisseld met hier en daar een meer open type vegetatie vlak bij de bergen. Deze zone wordt vanouds bewoond door de sedentaire strata van de Fulbe samenleving, de Weheebe, de politieke elite, de Moodibaabe, de Islamitische elite, en Riimaybe, de vroegere slaven. Dit gebied is vooral geschikt voor het weiden van geiten en kamelen, maar niet voor rundvee en schapen, vanwege het goeddeels ontbreken van een kruiden vegetatie. Water is niet beschikbaar in dit gebied gedurende een groot gedeelte van het droge seizoen van oktober tot juni. 3- Op ongeveer 30 kilometer van de bergen gaat deze strook abrupt over in een totaal ander landschapstype, namelijk zandduinen, begroeid met een savanne vegetatie, waarin kruiden en met name eenjarige grassen dominant zijn. Dit gebied is geschikt voor het weiden van rundvee, en schapen en voor het bedrijven van akkerbouw van voornamelijk gierst. Ook hier vormt water een belangrijke beperkende factor voor exploitatie buiten het regenseizoen. Alleen in de overgangsgebied tussen het bos- en het weidegebied is voor een langere periode water aanwezig, die meer permanente exploitatie van het gebied mogelijk maakt.

Het onderzoek speelde zich af op een aantal lokaties. Het overgrote deel van het veldwerk speelde zich af in Serma, een groep van kampen van de semi-nomadische pastoralisten (Jallube) rondom een dorpje van vroegere slaven (Riimaybe) die zich daar in de loop van de koloniale tijd hebben gevestigd na hun bevrijding. Deze nederzetting bevindt zich in bovengenoemde overgangsgebied. De hoofdstukken die betrekking hebben op het heden (hoofdstuk 3 t/m 14), zijn gebaseerd op de gegevens die zijn verzameld op deze lokatie, alsmede een aantal andere lokaties in de regio, waar we korte bezoeken aan brachten. Om een goed inzicht te krijgen in de historische wording van de Fulbe samenleving in de Hayre werd additioneel veldwerk verricht in Dalla, de hoofdplaats van het oudste vorstendom van de Fulbe in de Hayre. Dalla wordt voornamelijk bewoond door leden van de politieke elite (Weheebe), de Islamitische elite (Moodibaabe), de handelsklasse (Jawaambe) en de ambachtslieden (Nyeeybe) alsmede hun Ŗiimaybe. In Dalla werden orale tradities verzameld, gegevens met betrekking tot landgebruik in de prekoloniale tijd, en documenten met betrekking op het Maasina rijk en het rijk van de Futanke. Daarnaast werd archiefonderzoek verricht in de nationale archieven van Mali in de hoofdstad Bamako, en in 1993 in de nationale archieven van Frankrijk in Parijs. De voornaamste resultaten van dit historisch onderzoek zijn vastgelegd in hoofdstuk 2.

De situatie in de Hayre, zoals wij die aantroffen van maart 1990 tot februari 1992 had alle kenmerken van een zware crisis. Niet alleen hadden de mensen in Dalla en Serma geleden onder de droogtes van de laatste twee decennia, maar ook waren zij de meeste van hun rijkdommen in de vorm van vee en graanreserves kwijt geraakt. In de tachtiger jaren hadden de inwoners van Serma slechts éénmaal een voldoende gierstoogst kunnen binnenhalen. Hun grootste rijkdom, de veestapel, was in de droogte van 1983-1985 massaal omgekomen, naar schatting van officiële instanties 75% van het totaal. Na deze ramp was

de situatie niet beter geworden, vanwege de mislukte oogsten, de hoge graanprijzen, en de hoge migratie van vooral jonge mensen uit het gebied. De hoge graanprijzen leidden ertoe dat mensen van hun sterk verkleinde veestapel nog meer vee moesten verkopen om in leven te blijven. Op deze wijze kwamen ze in een spiraal van verarming terecht. Zelfs de rijkeren in de samenleving hadden moeite zich van voldoende eten te voorzien, laat staan de armen die vaak in een situatie van chronisch voedseltekort verkeerden. Door deze verarming hadden bovendien velen besloten te vertrekken, waardoor de sociale infrastructuur, bijvoorbeeld in de vorm van netwerken van verwanten, ontwricht was. De meest kwetsbare mensen (vrouwen, ouderen, kinderen, zieken) bleven vaak achter zonder adequate verzorging. Hulp van buitenaf was nagenoeg afwezig. Migranten kwamen vaak in een moeilijke situatie terecht en ondersteuning van verwanten in het oorsprongsgebied behoorde niet tot de mogelijkheden. Ontwikkelingsprogramma's in de regio drongen niet door tot de pastorale bevolkingsgroepen. Pogingen van de veterinaire dienst om een weideverbeteringsprogramma uit te voeren leidden tot een vergroting van de ongelijkheid en een beperking van de flexibiliteit van de pastoralisten en niet tot enige verbetering van de ecologische omstandigheden. De crisis uitte zich ook in mentale of ook wel existentiële onzekerheid, omdat veel mensen zich door de crisis genoodzaakt zagen activiteiten te ondernemen die in strijd waren met hun identiteit en ideologie. Deze situatie leidde ook tot snelle sociale veranderingen, waardoor de positie van de zwakkeren, vrouwen, ouderen, kinderen, nog problematischer werd dan zij al was.

Het centrale doel van deze studie is het beschrijven van de wijzen (*arid ways*) waarop agro-pastorale Fulbe in Centraal Mali omgaan met ecologische, sociale en politieke onzekerheden, die een zo belangrijke rol spelen in hun bestaan. Meer specifiek richt de studie zich op het dynamische samenspel tussen ecologische en historische realiteiten, waarbinnen ecologische, sociale en politieke onzekerheden hun vorm krijgen, de wijzen waarop mensen omgaan met deze onzekerheden in de vorm van het gebruik en beheer van natuurlijke en sociale hulpbronnen, en de culturele expressies van deze contextuele factoren en de ontwikkelde strategieën in de Fulbe samenleving (*cultural understandings*) in de vorm van normen en waarden, regels ten aanzien van toegang tot hulpbronnen, religie, ritueel, orale tradities etc. Uitgangspunt van de studie is dat in een situatie van chronische en vaak grote onzekerheid ten aanzien van de basis van het bestaan zelf, een dynamisch begrip van cultuur, ecologische omstandigheden, en handelen gehanteerd moet worden. Praktisch gezien betekent dit dat de startpunten van analyse in deze studie de dagelijkse realiteiten en de dilemma's zijn, waarvoor men zich gesteld ziet in de Fulbe samenleving in Centraal Mali bij het zoeken naar oplossingen voor de onzekerheden in het bestaan. Op ieder moment is een terugkerend thema de relatie tussen flexibiliteit en controle en begrip van de situatie, context en gebeurtenis, verandering en continuïteit, systeem en variabiliteit, norm en praktische realiteit, actor en structuur. Daarom zijn alle in deze studie behandelde vraagstukken in essentie historisch van aard, omdat deze dagelijkse realiteiten en dilemma's altijd een plaats hebben in een historische en ruimtelijke context.

Dit heeft enige methodologische consequenties voor de studie van pastorale samenlevingen en meer in het algemeen samenlevingen in semi-aride gebieden. Onzekerheid moet als een inherent kenmerk van pastorale manier van leven gezien worden. Onzekerheid

bedreigt de pastoralist niet alleen in de zin dat droogte en veeziektes het voortbestaan van zijn kudde bedreigen, en dus ook dat van de pastoralist, maar deze onzekerheid wordt vergroot door het feit dat door het beschermen van gedomesticeerd vee tegen predatie en natuurlijke sterfte, de aantallen vee te groot kunnen worden, waardoor een droogte, een epidemie een veel groter effect heeft op de aantallen vee, dan onder natuurlijke omstandigheden. Een tweede bron van onzekerheid is dat bijna geen enkele pastoralist kan bestaan zonder een aanvulling van plantaardig voedsel op zijn dieet. Daarom moeten pastoralisten hetzij in ruilrelaties treden met de sedentaire buitenwereld, hetzij relaties van politieke en militaire dominantie over deze buitenwereld creëren, nl. over sedentaire landbouwers, hetgeen een bedreiging vormt voor de flexibiliteit van de pastorale levenswijze. Ten derde is een essentiële voorwaarde voor de pastorale levenswijze toegang tot voldoende natuurlijke hulpbronnen om de veestapel van voldoende voedsel en water te kunnen voorzien. Omgekeerd, vormen deze drie voorwaarden voor de pastorale familie en *mutatis mutandis* voor de pastorale samenleving drie fundamentele bronnen van onzekerheid, niet alleen ecologische onzekerheden moeten worden opgelost, maar ook economische (graan) en politieke (toegang tot hulpbronnen) en uiteindelijk ook sociale onzekerheden (wat te doen bij schaarste). Het moge duidelijk zijn dat er een grote samenhang bestaat tussen wat er gebeurt in het ene domein en de consequenties daarvan in het andere domein

In deze studie worden deze meervoudige onzekerheden uitgewerkt in drie thema's: 1- gebruik en beheer van natuurlijke hulpbronnen; 2- toegang tot natuurlijke hulpbronnen; en 3- sociale onzekerheid. In ieder van deze domeinen is de rol van onzekerheid cruciaal. Een onderzoeksbenadering gedefinieerd vanuit onzekerheid zal daarom niet de regelmatigheid, wetmatigheid, of de systeem karakteristieken van sociale en ecologische verschijnselen als uitgangspunt nemen, maar daarentegen juist de variabiliteit, instabiliteit en meervoudigheid. Concreet betekent dit dat in de studie van gebruik en beheer van natuurlijke hulpbronnen de beslissingen van individuen centraal zullen staan, de variatie in hun reacties op al die vormen van onzekerheid, en de diversiteit en variabiliteit van agrarische produktie. Gezien de nadruk op verschillen tussen actoren en de variabiliteit in produktie omstandigheden, niet alleen in tijd, maar ook in ruimte, zijn wetten en regels met betrekking tot toegang tot natuurlijke hulpbronnen van cruciaal belang om aan al die individuele variabiliteit een plaats te bieden. Deze complexen van regels en normen, worden daarom geanalyseerd vanuit een uitgangspunt waarin pluraliteit voorop staat. Hetzelfde geldt *grosso modo* ook voor degenen die zodanig verarmd zijn omdat of waardoor ze geen toegang meer hebben tot natuurlijke hulpbronnen. Allerlei sociale hulpbronnen worden aangeboord om met deze sociale onzekerheid om te gaan. Ook hier staat pluraliteit voorop. Immers geen mens is gelijk aan de ander. Bovendien mag verwacht worden dat in een situatie van grote onzekerheid en snelle veranderingen, sociale hulpbronnen in de vorm van netwerken van verwanten, instituties met betrekking tot herverdeling van voedsel etc. aan een net zo snel veranderings- en differentiatieproces onderhevig zullen zijn.

Het eerste deel van het boek bestaat uit één hoofdstuk, en heeft tot doel de geografische en historische achtergrond van de onderzoeksregio en de behandelde onderzoeksvragen te schetsen. In dit (lange) hoofdstuk wordt de samenhang geschetst tussen de fluctuerende

klimatologische omstandigheden, lokale politieke structuren, en de hiermee geassocieerde normen en waarden, en grotere regionale politieke structuren zoals het Maasina imperium, het koninkrijk van de Futanke, de koloniale staat, en de onafhankelijke staat Mali. Met deze beschrijving worden twee doelen gediend. Ten eerste geeft het een historische verklaring van de huidige situatie in de Fulbe samenleving. Ten tweede geeft het inzicht in de dynamiek van de politieke, sociale en ideologische scheidslijnen in de Fulbe samenleving die tot op de dag van vandaag van groot belang zijn.

Het tweede deel van het boek behandelt het verleden in het heden. Hoofdstuk 3 gaat over de erfenis van het verleden in Serma, een groep van tijdelijke nederzettingen van agro-pastorale Fulbe. Dit verleden betreft niet de historie op zich, maar de ruimtelijke organisatie van deze gemeenschap, de ecologische omgeving, de economische organisatie en de arbeidsverdeling tussen de verschillende groepen van de samenleving. In de daaropvolgende hoofdstukken (4 t/m 6) komen verschillende aspecten van de normatieve kaders en de sociale organisatie van de Fulbe samenleving in de Hayre aan de orde. De sociale organisatie van de inwoners van Serma is het onderwerp van hoofdstuk 4. De Jallube pastoralisten en Riimaybe akkerbouwers zijn primair georganiseerd op het niveau van kleine families, die tevens het niveau zijn waarop agrarische produktie wordt georganiseerd. Binnen deze families zijn moeder-kind eenheden de bron van basisbehoeften, zoals zorg, herverdeling van voedsel en inkomen, en andere sociale zekerheidsregelingen. Echter ook deze eenheden zijn uiterst flexibel. Hogere niveaus van organisatie zoals de gemeenschap, de grootfamilie, afstammingsgroepen, en het vorstendom spelen in het dagelijks leven nauwelijks een rol van betekenis. Hun betekenis is in de loop van de geschiedenis afgenomen. In hoofdstuk 5 wordt de organisatie van religieuze Islamitische gemeenschap besproken, die een integraal, maar te onderscheiden onderdeel van de Fulbe-samenleving vormt. Religie vormt een belangrijk orientatiepunt voor mensen. In hoofdstuk 6 wordt aandacht besteed aan andere normatieve complexen, die men zou kunnen betitelen als behorend bij de pastorale manier van leven en die ook een belangrijke rol spelen in de vorming van de identiteit van de Fulbe, Jallube zowel als Riimaybe. Deze normatieve complexen vormen een ondeelbaar geheel met Islamitische normen en waarden, en men gaan heen en weer tussen één complex van normen en waarden naar het andere. In dit hoofdstuk wordt de betekenis en inhoud van deze normen en waarden nader bepaald mede door een bespreking van Fulbe etnografie.

In deel III, de hoofdstukken 7 tot en met 10 staat het gebruik en beheer van natuurlijke hulpbronnen centraal, hoe mensen met ecologische en economische onzekerheid omgaan, en met de toenemende concurrentie om hulpbronnen. In hoofdstuk 7 wordt een beschrijving gegeven van de beslissingen die van dag tot dag worden genomen met betrekking tot het gebruik en beheer van natuurlijke hulpbronnen. Hierbij wordt speciaal aandacht gegeven aan de rol van eventualiteiten en risico in het beslissingsproces in de twee jaren die het veldwerk besloeg. Blijkens de gegevens spelen niet-ecologische en niet agrarische overwegingen uiteindelijk een sleutelrol in de beslissingen die genomen worden door de bewoners van de onderzoekslokatie. Een analyse in kwalitatieve zowel als, voorzover mogelijk, kwantitatieve zin wordt ondernomen in hoofdstuk 8. Deze analyse dient twee doelen. Ten eerste, het vaststellen van patronen in het samenspel tussen de veehouderij- en

akkerbouw-strategieën en de dynamische ecologische omstandigheden. Het tweede doel van deze analyse is om te onderzoeken hoe de mensen, Jallube pastoralisten en Riimaybe akkerbouwers erin slagen om de eindjes aan elkaar te knopen, in een situatie van telkens terugkerende misoogsten en zonder een basis om op terug te vallen in de vorm van een kudde die voldoende groot is om de gevolgen van deze misoogsten op te vangen.

In hoofdstuk 9 worden de achtergronden van het falen van de pastorale en akkerbouw families om voldoende voedsel te produceren onder de loep genomen. Dit wordt gedaan aan de hand van de organisatie van arbeid, en de verdeling van produktieve hulpbronnen, zoals vee, akkerland, en water reservoirs tussen de leden van de familie en een bespreking van de regels met betrekking tot de overgang van deze hulpbronnen van de ene naar de andere generatie. De interne contradicties tussen de regels onderling en tussen de regel en de praktijk worden verergerd door de moeilijke situatie. Uit deze bespreking blijkt dat bepaalde groepen, oudere mannen, de zeggenschap over deze hulpbronnen proberen te mobiliseren, ten koste van anderen. Dit leidt onder andere tot allerlei concurrentieverhoudingen en conflicten binnen de familie. Dit thema wordt voortgezet in hoofdstuk 10, waar de regeling van de toegang tot hulpbronnen op het niveau van de gemeenschap wordt besproken. Om de regeling van toegang tot akkerland en het gebruik van weidegronden goed te begrijpen, moeten we teruggrijpen op de geschiedenis. Uit een historische overzicht van de ontwikkeling van rechten op grond en weidegronden wordt duidelijk dat deze stelsels van regels zeer dynamisch zijn, en dat dit geresulteerd heeft in een grote variatie aan rechten van toegang tot akkerland, weidegronden en waterbronnen. Sociale relaties en sociale organisatie zijn de belangrijkste sleutel om deze rechten op land te begrijpen. Tegelijk echter met hun politieke marginalisatie hebben mensen de controle over deze natuurlijke hulpbronnen verloren.

In deel IV worden de strategieën van mensen besproken die niet meer deel kunnen nemen aan de agrarische produktie, omdat ze daar de essentiële hulpbronnen, arbeid, vee, land, water, voor missen. De nadruk in dit deel zal liggen op hoe mensen sociale en culturele hulpbronnen (sociaal en symbolische kapitaal) gebruiken en beheren in dit proces, namelijk het omgaan met de sociale onzekerheid die het gevolg is van hun positie in de lokale gemeenschap en de verminderde bestaansbasis van de gemeenschap. Degenen die nog over voldoende hulpbronnen beschikken om agrarische produktie te ondernemen, en nog enige welvaart genieten, hoe gering ook, zij leiden immers ook regelmatig honger, hebben weinig reserves oor herverdeling onder de echte armen. In hoofdstuk 11 wordt de positie van vrouwen in hun huwelijksrelaties bekeken. De ondermijning van sociale zekerheid die ontleend kan worden aan het huwelijk leidt tot de verzwakking van de onderhandelingspositie van vrouwen ten opzichte van hun echtgenoot en schoonfamilie. De mogelijkheid om terug te vallen op de eigen familie was altijd echter erg belangrijk voor vrouwen, hetgeen onder meer blijkt uit een hoog scheidingspercentage in het verleden. Deze mogelijkheid wordt tegenwoordig echter steeds minder voor vrouwen omdat hun eigen familie vaak ook verarmd is, en niet over de mogelijkheden beschikt om hun terugkerende zuster op te vangen en te voeden.

In hoofdstuk 12 worden de mogelijkheden en strategieën van degenen die helemaal niets meer hebben, de armen, de invaliden en de ouderen op een rijtje gezet. Besproken worden

hun strategieën, de normen en waarden waar zij een beroep op doen, en de sociale en symbolische kapitalen, die zij gebruiken. Voor deze groep verliezen de normen en waarden die samenhangen met en voortkomen uit de pastorale levenswijze langzamerhand hun betekenis en waarde. Deze normen en waarden belemmeren mensen ook vaak om bepaalde vormen van arbeid aan te pakken, omdat zij hiermee hun identiteit als pastoralist, als nobele, verliezen. Zij vertrouwen hoe langer hoe meer op de normen en waarden ingebed in de Islam, en de visie van de Islam op armoede en liefdadigheid. Indien dit ook geen soelaas biedt, en men zijn identiteit niet meer kan handhaven rest nog migratie, waarmee vaak de banden met de oude samenleving worden verbroken. Een andere groep van kwetsbare individuen wordt besproken in hoofdstuk 13, namelijk de zieken. Zieken zijn met name kwetsbaar, omdat zij vaak van anderen, verwanten zowel als specialisten, afhankelijk zijn. Dit hoofdstuk laat zien hoe zij ondersteuning zoeken voor hun situatie door genezing te zoeken bij verwanten, en verklaringen voor hun ziektebeeld en genezing bij specialisten. Daarbij zijn het symbolische en sociale kapitaal van de zieke, samenhangend met zijn of haar positie in de samenleving, en de sociale relaties die een zieke kan mobiliseren voor zijn of haar genezing beiden van groot belang voor de mogelijkheden die openstaan.

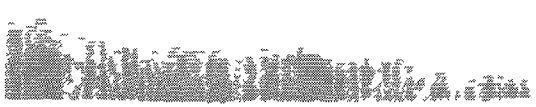
In deel V, hoofdstuk 14, staat de historische en politieke context van deze samenleving nogmaals centraal. Hierbij ligt de nadruk op de relatie tussen de Fulbe samenleving en de buitenwereld en de staat in deze droogte situatie. De voornaamste expressie van deze relatie is een weideverbeteringsproject ten zuiden van Serma, één van de onderzoekslokaties. Dit weideverbeteringsproject werd gestart na de droogte van 1972-1973. Getoond wordt in dit hoofdstuk hoe dit project ingrijpt in de ecologische situatie en in plaats van bij te dragen aan de verbetering van de sociaal-economische situatie van de Jallube en de Riimaybe akkerbouwers, leidt tot het verlies van zeggenschap over weidegronden aan de staat en toenemende ongelijkheid van de samenleving. In dit proces worden oude hiërarchische structuren gebruikt door de uitvoerende organisatie, waardoor lokale elites een sterkere greep krijgen op hun vroegere onderdanen. Door dit project en de gevolgen voor de inwoners van Serma, worden de nieuwe realiteiten van macht en machteloosheid op een dramatische wijze geïllustreerd.

In de conclusie, hoofdstuk 15, tenslotte wordt ingegaan op een drietal belangrijke meer omvattende thema's van het boek. Ten eerste worden de ontwikkelingen die geleid hebben tot de marginale positie van de Fulbe, en binnen de Fulbe samenleving de marginale positie van sommige groepen, met name de Jallube, en daarbinnen vrouwen, oude mensen en de zieken nogmaals op een rijtje gezet. Daarna worden de consequenties hiervan voor de visie op pastoralisme en de pastorale levenswijze, met name de relatie tussen ecologische omstandigheden en de samenleving geschetst. In de derde plaats zal worden getoond hoe al deze ontwikkelingen zich laten beschrijven als een dialectische relatie tussen de noodzaak voor flexibiliteit om in de ecologisch en politiek onzekere situatie te kunnen overleven en het gegeven dat controle over het bestaan, in de vorm van politiek organisatie, zeggenschap over hulpbronnen, en de creatie van allerlei sociale netwerken die uitstijgen boven het individu en de kleinste sociale eenheden op basis van verwantschap (de *wuro* en de *fayannde*) deze flexibiliteit en individuele keuzevrijheid onvermijdelijk inperken. Tot slot

worden de consequenties van dit alles voor wetenschappelijke en beleidsmatige benaderingen van deze samenleving geschetst.

Noot

1. Pastoralist is geen mooi Nederlands. Echter het betere Nederlandse woord 'veehouder' suggereert een heel andere, sedentaire, bestaanswijze. Om verwarring te voorkomen wordt daarom in de voorkomende gevallen 'pastoralist', dan wel 'agro-pastoralist' gebruikt.



Mirjam de Bruijn was born on June 21, 1962 in Utrecht, the Netherlands. From 1974 to 1980 she attended 'Het Oosterlicht College' in Utrecht, where she obtained her Atheneum-B diploma. From 1981 to 1985 she studied Cultural Anthropology at the Utrecht University where she got her the B.A. degree. From 1985 to 1988 she studied Cultural Anthropology at Leiden University. During this period she participated in the programme Environment and Development of the Centre of Environmental Studies. In 1988 she received her M.A. degree. From February 1989 to March 1995 she was a Ph.D. student at the department of Anthropology Utrecht University. During this period she received a research grant from the Netherlands Foundation for the Advancement of Tropical Research (WOTRO), and published several articles on pastoralism and social security. She had several short term assignments for lecturing and supervising students. From October to December 1993 she was visiting research fellow at the EHESS in Paris on the invitation of CNRS. She did fieldwork in Spain in 1983, in Cameroon from October 1985 to June 1986, in Mali from August 1987 to February 1988 and from March 1990 to February 1992.

Han van Dijk was born on May 22, 1961 in Gouda, the Netherlands. From 1973 to 1979 he attended the Bonifacius college in Utrecht, where he obtained his Gymnasium-B diploma. From 1979 to 1988 he studied Forestry at Wageningen Agricultural University (B.Sc. and M.Sc. degree). From 1981 to 1988 he studied Cultural Anthropology at Utrecht University and obtained his M.A. degree. From Octobre 1988 to March 1990 he was a part-time lecturer at the department of Forestry, Wageningen Agricultural University. In March 1990 he received a grant from the Netherlands Foundation for the Advancement of Tropical Research (WOTRO). From March 1990 to September 1994 he was Ph.D. student at the Departments of Forestry and Agrarian Law at Wageningen Agricultural University. During this period he published several articles on pastoralism and land use, and had a short assignment as lecturer at the Forestry department. From October to December he was visiting research fellow at the EHESS in Paris on the invitation of CNRS. He did fieldwork in Indonesia from May 1984 to February 1985, in Mali from August 1987 to February 1988, and again from March 1990 to February 1992.