



Universiteit
Leiden
The Netherlands

Bridging the urban-rural divide: multi-spatial livelihoods in Nakuru town, Kenya

Owuor, S.

Citation

Owuor, S. (2006, April 26). *Bridging the urban-rural divide: multi-spatial livelihoods in Nakuru town, Kenya*. *ASC Research Report*. African Studies Centre, Leiden. Retrieved from <https://hdl.handle.net/1887/4637>

Version: Not Applicable (or Unknown)

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/4637>

Note: To cite this publication please use the final published version (if applicable).

Bridging the urban-rural divide

Multi-spatial livelihoods in Nakuru town, Kenya

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor
aan de Universiteit van Amsterdam
op gezag van de Rector Magnificus
prof. Mr. P.F. van der Heijden

ten overstaan van een door het College voor Promoties ingestelde
commissie, in het openbaar te verdedigen in de Aula der Universiteit
op 26 april 2006, te 11.00 uur door

Samuel Ouma Owuor
geboren te Nakuru, Kenya

Promoter: Prof. dr. A.J. Dietz
Co-promoters: Dr. D.W.J. Foeken
Prof. R.A. Obudho

FACULTEIT DER MAATSCHAPPIJ- EN GEDRAGSWETENSCHAPPEN

African Studies Centre
Research Report 81 / 2006

Bridging the urban-rural divide

Multi-spatial livelihoods in Nakuru town, Kenya

Samuel Ouma Owuor

This project was part of the *Nakuru Urban Agriculture (Research) Project* (NUAP) of the African Studies Centre, Leiden, The Netherlands. As also a PhD undertaking, the study fell within the Research School for Resource Studies for Development (CERES) and the Amsterdam Institute for Metropolitan and International Development Studies (AMIDSt). The Netherlands Foundation for the Advancement of Tropical Research (WOTRO) funded this project (WB 53-316) while the African Studies Centre provided the institutional support.

Samuel Ouma Owuor
Department of Geography
University of Nairobi
P.O. Box 30197 – 00100
Nairobi, KENYA
samowuor@yahoo.com

Published by
African Studies Centre
P.O. Box 9555
2300 RB Leiden
The Netherlands
asc@ascleiden.nl
<http://www.ascleiden.nl>

Photographs: Sam Owuor (except Photo 1: Dick Foeken)

Printed by: PrintPartners Ipskamp BV, Enschede

ISBN-10: 90-5448-066-1

ISBN-13: 978-90-5448-066-2

© African Studies Centre, 2006

*This book is dedicated
to my parents, Dismas & Florence Ouma RIP
to my wife, Dorothy
and daughters, Cobby & Kiky
for their support, love and encouragement*

Contents

List of boxes	<i>x</i>
List of figures	<i>x</i>
List of maps	<i>xi</i>
List of tables	<i>xi</i>
List of photos	<i>xii</i>
Glossary	<i>xiii</i>
Acknowledgements	<i>xiv</i>
1 THE ISSUE: URBAN POVERTY, LIVELIHOOD STRATEGIES AND URBAN-RURAL LINKAGES	<i>1</i>
Introduction	<i>1</i>
The concept of poverty	<i>3</i>
Urbanization, economic crisis and urban poverty	<i>7</i>
The concept of livelihood and the livelihood framework	<i>11</i>
Urban livelihood strategies	<i>16</i>
Urban rural linkages	<i>21</i>
Conceptual framework	<i>33</i>
The present study and its objectives	<i>35</i>
Organization of the book	<i>36</i>
2 THE SETTING: KENYA AND NAKURU TOWN	<i>37</i>
Kenya: Background information	<i>37</i>
Nakuru town	<i>44</i>
3 METHODOLOGY	<i>55</i>
The study set-up	<i>55</i>
The household as a unit of research and analysis	<i>56</i>
General approach and sampling procedures	<i>61</i>
Methods of data collection	<i>66</i>
Data analysis: Some considerations	<i>72</i>
Characteristics of the sampled households	<i>75</i>

4	MULTIPLE SOURCES OF LIVELIHOOD: MANAGING THE HOUSEHOLD TO SURVIVE IN TOWN	81
	Regular gainful occupation	83
	Farming and non-farming income-generating activities	85
	Income and expenditure	95
	Survival of the poorest: The case of Sofia Lela	98
	Living “beyond” full-time employment: The case of Reuben & Rita	103
	Diversification as “life becomes expensive in town”: The case of Alfred & Alice	108
	Managing the household to survive in town: Some observations	111
5	RURAL FARMING BY URBAN HOUSEHOLDS: THE PRACTICE	115
	Rural plots	115
	Rural crop cultivation	125
	Rural livestock keeping	138
6	RURAL FARMING: SOURCE OF FOOD AND INCOME	145
	The importance of rural farming as perceived by the respondents	145
	The “fungible income” earner	149
	Livestock as “reserve wealth” for the household	151
	Multi and mono-spatial livelihoods: Two livelihood profiles compared	152
	Three examples	157
7	URBAN-RURAL LINKAGES: NATURE, EXTENT AND DIRECTION	167
	The “urban house” and the “rural home”	168
	Social reciprocity between urban and rural areas	172
	Economic interactions: Flows of goods and money between urban and rural areas	180
	Return migration	184
	Three examples	186
	Emerging trends or changing nature?	192
8	COMPARING “THE POOR” AND “THE NON-POOR”	195
	Some basic characteristics	196
	Economic activities and expenditures	199
	Rural plots	201
	Rural farming: Practices	203
	Rural farming: Source of food and income	206
	Urban-rural links	210

9	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	213
	Introduction	213
	Summary of findings and conclusions	214
	Recommendations	223
	Appendices	227
	References	257
	Summary	267
	Samenvatting	271

List of boxes

1.1	Costs of living in town	7
1.2	Household livelihood assets or resources	14
1.3	Risking death for survival: How the urban poor struggle to survive	19
1.4	A family living in crippling poverty	22
2.1	An urban dweller's perception of poverty	43
2.2	Making a meaningful living out of rubbish	52
4.1	Living from the <i>shamba</i>	88
4.2	Improving the household's income through the ECLOF-Kenya loan scheme	94
4.3	<i>Chang'aa</i> : Illegal but affordable	100
5.1	Loss of family labour through multiple deaths within 12 months	131
5.2	School accepts livestock, cereals as fees	139
6.1	From a researcher to a visitor	152
7.1	Attachment to the rural home	169
7.2	The <i>dala</i>	170
7.3	The long journey to Alfred's rural home and the <i>boda boda</i> experience	174

List of figures

1.1	Conceptual framework	34
3.1	Schematic operational overview of the relationship between mono/multi-spatial <i>households</i> and mono/multi-spatial <i>livelihoods</i>	59
3.2	Tenure status	78
4.1	Livelihood sources for urban households	82
4.2	Importance of rural non-farming economic activities	91
4.3	Coping with food shortages	95
4.4	Household monthly income situation	96
4.5	Sofia Lela's livelihood sources	101
4.6	Reuben & Rita's livelihood sources	106
4.7	Alfred & Alice's livelihood sources	109
5.1	Use of inputs for crop cultivation	132
5.2	Non-livestock keepers: Main reason for <i>not</i> keeping livestock in the rural area	138
5.3	Inputs for livestock keeping	142
6.1	Importance of rural farming activities	149
6.2	Reuben & Rita: Importance of rural farming	162
7.1	Changes in visiting rural plots	177
7.2	Alfred & Alice: A visual impression of changes in rural-urban linkages	187
9.1	Asset portfolio, vulnerability context and livelihood strategies of Nakuru town households	215

List of maps

2.1	Kenya and the location of Nakuru town	38
2.2	Municipality of Nakuru: Boundary changes, 1923-1992	46
2.3	Municipality of Nakuru: Settlement structure	48
2.4	Municipality of Nakuru: Economic structure	50
3.1	Distribution of study locations in Nakuru Municipality	64
5.1	Location of rural plots	118

List of tables

2.1	Kenya: Gross Domestic Product, 1964-2001	40
2.2	Urbanization trends in Kenya, 1948-1999	41
3.1	General survey sampling procedure	62
3.2	Selected variables for analysis: Operational definitions and frequency distributions	73
3.3	Migration history of the household heads	76
4.1	Occupational status	84
4.2	Engagement in <i>other</i> economic activities, by type and location	86
4.3	Estimated monthly average expenditure	97
4.4	Estimated monthly expenditure by selected characteristics	98
4.5	Reuben's regular monthly monetary expenses	105
5.1	Access to rural plots	116
5.2	Location of rural plots by province and district	117
5.3	Ownership and use of rural plot	119
5.4	Relationship between ownership of rural plot, how plot was acquired and person using it	121
5.5	Effect of distance on how plot was acquired and person using it	121
5.6	Engagement in rural farming	123
5.7	Major crops cultivated on rural plots	133
5.8	Mean harvest and value (all crops) by crop size	134
5.9	Constraints on rural crop cultivation	136
5.10	Livestock kept on rural plots	140
5.11	Ownership and purpose of rearing livestock	141
5.12	Production figures for milk and eggs	144
6.1	Reasons for practicing rural farming activities	146
6.2	Multi and mono-spatial livelihoods: Urban-rural links	153
6.3	Multi and mono-spatial livelihoods: Summary of selected household characteristics	154
6.4	Multi and mono-spatial livelihoods: Summary of household head characteristics	155
6.5	Multi and mono-spatial livelihoods: Summary of general food security	156
6.6	Alfred & Alice's "average" yearly harvests from rural crop cultivation in Siaya and its use, by crop type	158

7.1	Visits to the rural plot in the last quarter of 2001	173
7.2	Frequency of visiting rural plots by selected household characteristics	175
7.3	Urban-to-rural flow of money	182
7.4	Reasons for sending wife and children to live at the rural home	185
8.1	Poor and non-poor: Characteristics of household heads	197
8.2	Poor and non-poor: Household characteristics	198
8.3	Poor and non-poor: Engagement in farming and non-farming activities	200
8.4	Poor and non-poor: Estimated monthly average expenditure by item	201
8.5	Poor and non-poor: Plot characteristics	202
8.6	Poor and non-poor: Number of animals kept in rural area, by type	205
8.7	Poor and non-poor: Reasons for practicing rural farming by type	207
8.8	Poor and non-poor: Importance of rural farming activities	207
8.9	Poor and non-poor: Summary of general food security in 2000	208

List of photos

1	A view of a medium-density residential estate in Nakuru town	54
2	Reuben & Rita's rural home	54
3	John & Jane in their one-room house in Nakuru town	80
4	Alice is proud of her "bigger" house at their rural home	80
5	Rita in her <i>sukuma wiki</i> garden in Nakuru town	114
6	Income-generating activities in the neighbourhoods of Nakuru town	114
7	Crop cultivation (maize & bananas) in one of the rural homes	166
8	Nakhumicha with "their" cows	166
9	Maize ready to be harvested from one of the rural plots	212
10	Source of income: Women taking tea to a buying center	212
11	A <i>matatu</i> in Siaya town: An important means of transport in the rural areas	226
12	William visits his wife and children at their rural home	226

Glossary

<i>Boda boda</i>	Bicycle taxi
<i>Chang'aa</i>	Traditionally brewed alcohol
<i>Dala</i>	Home
<i>Debe</i>	Measurement comparable with a bucket
<i>Githeri</i>	A meal of cooked maize and beans mixed together
<i>Gorogoro</i>	A standard measure for cereals (a 2-kg cooking oil tin)
<i>Jua kali</i>	Hot sun; informal sector
<i>Kunde</i>	Locally grown green vegetables (Cowpea leaves)
<i>Mabati</i>	Iron sheet
<i>Matatu</i>	Commuter taxi
<i>Mboga</i>	A general name for all types of vegetables
<i>Mitumba</i>	Second hand items (i.e. clothes)
<i>Mrere</i>	Locally grown green vegetable
<i>Ndengu</i>	Green grams
<i>Omena</i>	A species of small (finger-size) fish
<i>Shamba</i>	Plot, garden, land or field
<i>Sufuria</i>	Cooking pot
<i>Sukuma wiki</i>	Kale
<i>Uji</i>	Porridge
<i>Ugali</i>	Stiff (heavy) dough made out of maize flour
<i>Unga</i>	Maize flour (or maize meal) mainly for making <i>ugali</i>

Exchange rate of the Kenyan shilling in 2000: 1US\$ = KSh. 78

Acknowledgements

Although writing a PhD may be said to be an individual undertaking, I would like to acknowledge the support I received from of a number of individuals and institutions that contributed to the successful completion of this study. They are, however, not responsible for the mistakes, omissions or errors which remain in the final product. While it is difficult to mention all the individuals by name, I would like to take this opportunity to assure those whose names I fail to mention here that their contributions, in whatever form, were all greatly appreciated.

First and foremost, this study could not have been carried out without the cooperation of my respondents in Nakuru town and several others in the rural area. Even as they went about sourcing their livelihoods, they were more than willing to share (parts of) their lives with me. To them I say *ahsanteni sana*. I am indebted to Dick Foeken who not only initiated this research project within the Nakuru Urban Agriculture Project (NUAP) but who also greatly assisted in the writing of the research proposal for this study, which was funded by the Netherlands Foundation for the Advancement of Tropical Research (WOTRO) in 2001. I am grateful to WOTRO for the four-year research grant that enabled me to complete my PhD at the University of Amsterdam within the framework of the Netherlands' Research School for Resource Studies for Development (CERES).

To my promoters, Prof. Ton Dietz (University of Amsterdam), Prof. Robert Obudho (University of Nairobi) and Dr. Dick Foeken (African Studies Centre), I say *dank u wel*. They formed a great and inspiring team and I deeply appreciate their professional guidance, supervision and enthusiasm that led to the successful and timely completion of this work. In one way or another, all three have inspired me in the course of my academic career. Prof. Obudho introduced me to the field of urban geography, and together with Dr. Foeken and Prof. Dietz, made sure that I produced a PhD. I will always be grateful to them for the guidance they gave me so I could reach this apex of academic achievement.

During my stay in the Netherlands, I benefited immensely from Prof. Dietz and Dr. Foeken's experience on the subject under study. Their informed critiques on various issues and their flow of arguments greatly enhanced the quality of this manuscript. I can only admire their patience, detailed comments and skilled editing on the initial drafts of this manuscript. In particular, I am heavily indebted to Dr. Foeken who provided me with crucial day-to-day supervision, guiding me with a lot of dedication and enthusiasm. In a way, he has been the backbone of this project during all its stages, partly because I was based at the African Studies Centre (ASC) in Leiden for the entire period of my stay in the Netherlands.

I would like to acknowledge the institutional support I received from the ASC. I wish to thank the former director Dr. Gerti Hesseling most sincerely for granting me

the opportunity to be a visiting research fellow for the whole time I was in the Netherlands. I felt very privileged, especially since my fellowship extended for four years – far more than the stipulated three-month period most visiting fellows are able to stay. I would also like to thank the present director, Prof. Leo de Haan, for continuing to facilitate my stay at the ASC and also for taking a keen interest in my work.

The ASC has always been an inspiring place to work and I would like to thank all the research, library and support staff for the assistance they offered me in one way or another. In particular, Joop Nijssen for making my stay in, and the transition between, Nakuru (Kenya) and Leiden (Netherlands) so smooth financially; Marieke van Winden for welcoming me initially to the ASC; the secretariat (Maaïke Westra, Gitty Petit and – until early 2005 – Hester Sanderman) who did everything possible to ensure my life in the Netherlands was comfortable; Willem Veerman for his assistance with computers; Jan Hoorweg who took time to help me with statistics; Wijnand Klaver, my colleague in NUAP; and Ann Reeves who took a special interest in the progress of this work and finally did the language editing at very short notice. In addition, I wish to thank my theme group (Ecology, Economy and Exclusion) members for their intellectual support and all the visiting fellows who came to the ASC, especially Isaïe Dougnon, Saïbou Issa, Sam Kariuki, Prof. Barasa Wangila, Otrude Moyo and Peter Kagwanja. We had good discussions together.

Back in Kenya, I am grateful to my employer, the University of Nairobi, for granting me study leave and all the assistance I received. I look forward to continuing my teaching and research assignments there. I would like to thank all my colleagues in the Department of Geography at the University of Nairobi, and in particular, the Chairman Dr. E.M. Irandu, Prof. F.F. Ojany, Prof. R.S. Odingo, Prof. E.H.O. Ayiemba, Prof. C.G. Macoloo, Dr. M. Opondo, Dr. F. Mwaura and Mr. I.A. Nyandega for their endless encouragement and support during the entire period of this study. I am also grateful to Dr. A. Agwanda, Dr. A. Khasakhala, Dr. P. Bocquier, Dr. W. Mitullah, Dr. B. K'oyugi and Mr. W. Obwa. In Nakuru, I thank all the local officials who assisted me in one way or another.

My research assistants were invaluable: Milly Gathoni, John Gitari, Steve Kariuki, Michael Nguru, Alex Obado, Daniel Okoo, Jane Wairimu (for the general survey), Josephat Atunga, Reuben Oduor, Supa Waceke (for the in-depth interviews), and Joyce Kariuki who participated in both surveys. I greatly appreciate all the work they did and the great moments we had together. Special thanks go to Okoo for the job he accomplished as field supervisor. The same goes for Jane and Joyce for the extra role they played as data entry assistants. Atunga, Joyce and Reuben were amazingly resourceful during the in-depth interviews. My thanks also go to Nicole Versleijen, now a dear family friend. We spent four months together in the field while she was doing her fieldwork for her Masters thesis. Her broad knowl-

edge of fieldwork, her critical analysis of issues and assistance, mixed with a great sense of fun, was very helpful.

Back in the Netherlands, several people made my stay in the country below sea level not only comfortable but also memorable. With them, I felt at home away from home. I would like to thank Dick Foeken & his family – Marijke, Gijs & Steven – for all the moments we shared together. I will feel part of their family for many years to come. They took time to show me various parts of the Netherlands and made sure that my stay in Holland was both happy and enjoyable. My appreciation also goes to the families of Jon Abbink, Mirjam de Bruijn & Han van Dijk, Ton Dietz, Jan Hoorweg, Marijke van der Lee, Henk Meilink and Marcel Rutten for the evenings we spent together.

Special thanks are due to the Ambassador of the Republic of Kenya to the Netherlands, H.E. Mrs. Kalimi Mworira. Her constant encouragement and advice was of great importance and a source of strength. And so was the Kenyan community in the Netherlands (UKEA), all of whom really made me feel at home, not only sharing good moments but also eating together, reminding me of the social nature of Kenyans – in particular, the families of Norbert Abachi, Lucy Kamau, Alice Kubo, Alex Musyoka, Onyango Odeny and Willy Sagala. The good times we had together helped ease the potentially lonely life of this PhD scholar abroad. In addition, the company of my comrades-in-arms – Dr. W. Adano, Alfreda Ibui, Sam Muniafu, Dr. W. Mwangi, Julie Ndaya, Karin Nijenhuis, Dr. J. Njogu, Francis Obeng, Paul Schrijver and Kiky van Til – kept me going. Though they were on their own journeys, we shared experiences when things seemed to be reaching the end of the road.

I am also grateful to all the electronic friends and colleagues I had both at home and abroad, including the *Daily Nation* and the *East African Standard* online papers for keeping me informed of developments and news in Kenya. I am proud to have been able to use some of your captivating articles in this book. To my brothers (Tom & Gero), sisters (Sidindo, Judy & Gaudensia) and other family members, I say *erokamano*. I must also not forget my extended family abroad: Arjan & Grace Groeneveld (in Canada), Baba & Mama Gijs and Henk & Kinny Veldhuis (in Holland & Belgium). I am deeply grateful for their parental care, support and most important, love, during my MA and PhD studies abroad.

It is difficult to find the right words to express my gratitude towards my dear wife and friend, Dorothy, for shouldering the responsibility of taking care of our two daughters, Cobby & Kiky, during the long periods while I was away in the Netherlands. I extend my very sincere and special thanks to the three of them for their love, understanding, support and patience. Kiky, you were born when I was miles away in the Netherlands. Cobby, you spent your first three years in primary school without papa. I hope that one day you will understand why papa was not there for you. May both of you grow to be papa and mama's best ambassadors.

Finally, I am very sad that my father-in-law (Mzee Dena), my loving sister (Mary Anyango), my aunt (Dorry Arrumm), colleagues (Prof. Obara and Dr. Akech), family friends (Mama Lisa and Mama Shiko) and respondents (Jacob, Caroline, Florence and Mzee Ombati) never lived to see the final outcome of their contributions to this study. To all of you and others not mentioned here: Rest in Peace and thanks for your support.

The issue: Urban poverty, livelihood strategies and urban-rural linkages

Introduction

As soon as Opiyo Jamaranda, a civil servant working in Nairobi, receives his KSh. 24,000 salary at the end of the month, he feels miserable. He knows he is only holding the money momentarily, in trust for its rightful owners as it were. Before the end of the day, he will have deposited KSh. 12,000 in his landlord's bank account before going to the small fast-food restaurant where he has his lunch daily, to pay the owner her dues, usually around KSh. 2,500. In the evening he will pay *Mama Mboga*,¹ the estate kiosk owner and vegetable vendor where he gets his daily provisions like milk, bread and *sukuma wiki* (kale). The remaining amount goes towards the monthly bulk shopping, water and electricity bills and fares to and from work. His fare to and from work is KSh. 40 each day, which comes to about KSh. 800 a month. By the time he is through, there is nothing much left for an occasional drink with his friends on Fridays. Things are tougher when he has to pay school fees for his two school-aged children. But he considers himself lucky because his mother often sends maize and other fresh foodstuffs from the village. (Daily Nation Online Edition, Wednesday 10 November 2004)²

This situation is typical of a significant proportion of wage earners not only in Kenyan towns but also in other sub-Saharan African countries. It is a true reflection of what the majority of urban households go through to make ends meet or just to survive “when there is so much month left at the end of the money”. The

¹ A female vegetable vendor is popularly known as *Mama Mboga* to her customers.

² I wish to acknowledge the writer, Kwamboka Oyaro, for the story on “A nation imprisoned by debt”, part of which I have quoted here. To maintain anonymity, the name in this excerpt has been changed from the one originally used by the writer.

situation is even worse for those who earn less than Opiyo Jamaranda or those without a regular source of income (see e.g. related stories in Boxes 1.3 and 1.4). However, Opiyo Jamaranda is lucky because of the additional food he receives from his rural home.

This book is about *rural* livelihood sources for *urban* households. It explores the hypothesis that with the present trends of economic hardships, the decreasing purchasing power, increased cost of living and urban poverty, “falling back” on rural areas and specifically reliance on rural food and income sources is, or has become, more important in the livelihood of many urban dwellers in sub-Saharan Africa, perhaps more than is generally acknowledged. Although the study does not solely focus on the urban poor, this category receives special attention. Undoubtedly, they are the ones who are suffering most from the economic recession that has been going on since the 1980s. The study touches on the scientific debates about urban poverty, food security, income diversification, urban-rural linkages, migration and livelihood strategies. Besides situating the study problem and the overall thesis of this book, this chapter provides a theoretical base for the empirical chapters that follow.

The chapter starts by bringing into perspective the concept of “poverty” as it has been defined and conceptualized in numerous policy documents and the scientific literature. While doing this, the context of poverty in urban areas, i.e. “urban poverty”, is highlighted.³ Against a review of relevant literature and debates, it then examines the relationships between urbanization, economic trends, global changes, food security and urban poverty before introducing another concept: livelihood. It then presents the various livelihood strategies adopted by urban households. The emerging issues from these discussions, largely on sub-Saharan Africa,⁴ then lead to the conceptual framework and the focus of the present study. Finally, the chapter outlines the organization of the rest of the book.

Before proceeding, three introductory comments are important for a better understanding and positioning of the chapter in its intended perspective. First, as much as the common denominator in the following discussions is urban poverty, this chapter does not necessarily focus on “the” urban poor as a distinct or an exclusive group. Urban poverty is hereby used within the context of a process affecting urban dwellers while at the same time not losing sight of the poorer groups. As such, reference is now and then made to “the” urban poor. Secondly,

³ According to Satterthwaite & Tacoli (2002: 59), key differences between rural and urban contexts are not recognized in much of the literature on poverty. They give as an example the World Development Report of 2000/2001 which focuses on poverty but hardly discussed these differences.

⁴ According to Rakodi (1997: 19), Africa is a continent of enormous contrasts. North Africa, with its political, economic, and cultural ties to Europe and the Middle East, is frequently dealt with separately from sub-Saharan Africa.

individual sub-Saharan African countries depict a variety of characteristics of poverty levels, urbanization trends and responses to economic crisis. These variations occur not only between countries but also within them and between regions of Africa. While acknowledging the existence of these variations, and with the usual constraints of space, this chapter can only present the general trends common to many sub-Saharan African countries. Third, it is not the intention here to redefine the already complex concepts of poverty and livelihood, but rather to use them to understand and explain the problem under discussion.

The concept of poverty

From a uni-dimensional issue to a multi-faceted phenomenon

The concept of poverty revokes all kinds of questions, such as: what is poverty, who is poor, and according to whom are they poor. Two major conclusions can be drawn from the growing body of literature that has attempted to answer these questions. First, it is now well established that poverty is a multi-dimensional and multi-faceted phenomenon (Mitlin 2003; Odhiambo & Manda 2003; Van Vuuren 2003; Kamete 2002; Rakodi 2002a; OECD 2001; Satterthwaite 2001; World Bank 2000). For instance, in her systematic analysis of the concept of poverty, Van Vuuren (2003: 30) shows that the concept has developed from “a rather simple one” into the current one “with its multi-dimensional meaning”, in both policy documents⁵ and scientific research. The dimensions of poverty cover distinct aspects of human capabilities: economic (income, livelihoods, work), human (health, education), political (empowerment, rights, voice), socio-cultural (status, dignity) and protective (insecurity, risk, vulnerability) (OECD 2001). Secondly, poverty should be defined not only as a state but also as a process in which people’s choices and the level of well-being they have achieved are narrowed.

Despite the many conceptualizations of poverty, there has been a tendency to reduce the concept of poverty to a uni-dimensional issue, i.e. poverty of income (Pradhan & Ravallion 1998 as cited in Van Vuuren 2003: 29). From an income perspective, one may refer to either absolute poverty or relative poverty. Absolute poverty is based on the cost of the minimum of basic food and other necessities needed to sustain human life. Globally, this minimum is estimated at US\$1 a day – in 1993 Purchasing Power Parity (World Bank 2000). Relative poverty refers to consumption equal to a proportion of total or average consumption (Odhiambo & Manda 2003; Rakodi 2002a). In other words, households or

⁵ These policy documents are mainly a product of international institutions such as the World Bank, International Monetary Fund (IMF), the United Nations Development Fund (UNDP), the Organization for Economic Co-operation and Development (OECD), and the Department for International Development (DfID), etc.

individuals are considered poor when the resources they command do not enable them to consume sufficient goods and services to achieve a reasonable minimum level of welfare (Rakodi 2002a).

It is, therefore not surprising that poverty is first and foremost associated with a situation in which a person is not able to meet certain basic demands or needs, i.e. an economic state in which lack of income or consumption prevails. This emerges from the utilitarian and welfare perspectives that explain poverty purely in terms of income-expenditure and nutritional-consumption deficiencies. Although the income level at which the poverty line is set is widely used, Mitlin (2003: 395) argues that “it may be unrealistically low in relation to the costs of necessities in many cities”⁶ and in some way “under-estimating the scale of urban poverty” (see also Rakodi 2002b; Satterthwaite & Tacoli 2002). Some of these costs and other aspects of urban poverty are highlighted in the next sub-section.

It is worth mentioning at this point that other forms, faces or more recently, “dynamics” of (income) poverty have been distinguished. These are “chronic poverty” and “transient poverty” (OECD 2001; World Bank 1996). The former refers to those people who have a chronic incapacity to work and earn an income. This is usually the result of a physical or mental disability, long-term illness or old age. They remain poor for much or all of their lives, and many will pass their poverty on to their children (CPRC 2004). Those suffering from “transient poverty” are faced with a temporary inability to provide for themselves, as a result of loss of employment, for example.

Besides income, two other dimensions of poverty have been consistent in the scientific literature and in policy documents: poverty of access and poverty of power (Odhiambo & Manda 2003). Poverty of access refers to the inability of the poor to access basic infrastructure and services. For example, the poor in most urban settings live overcrowded, unsanitary and insecure slums and squatter settlements. They lack adequate health facilities, safe drinking water, housing and other basic services. The poor at the same time lack tenure security and are vulnerable to insecurity, disease and natural and man-made disasters. They have limited or no certainty that consumption can be maintained if their income falls (Mitlin 2003).

Because of their inability to influence decision-making in their settings, the poor also suffer from “poverty of power” and abuse of citizen rights. They are voiceless and powerless within political systems and bureaucratic structures (state and private), leading to a reduced possibility of receiving entitlements. In addition, Mitlin (2003) strongly believes that the poor have limited accountability from aid agencies, NGOs, public agencies and private utilities and little opportu-

⁶ The terms “city”, “town” and “urban centre” will be used interchangeably throughout this book. It is also important to note that the definition of an urban centre varies greatly from one country to another.

nity to participate in defining and implementing programmes aimed at urban poverty reduction. This list could go on and on as the conceptual definition of poverty becomes more multi-faceted.

In general, the conceptual definition of poverty has been widening and now includes other aspects such as deprivation, vulnerability, entitlements and (social) exclusion. These concepts have been useful for analyzing what increases the risk of poverty and the reasons why people remain poor. They “have helped to generate additional instructive insights into the understanding and measurements of poverty” (Van Vuuren 2003: 30). By and large, poverty is associated with various deprivations which make the working, living and social environments of the individual, the household or society extremely insecure. Deprivation occurs when people are unable to reach a certain level of functioning or capability, so defining a household as poor in terms of consumption may not include all deprived households and individuals (Rakodi 2002a: 5). Deprivation has dimensions that are physical, social, economic, political, and psychological/spiritual and includes forms of disadvantage under the denominator of poverty (Van Vuuren 2003: 30).

Vulnerability is now a widely accepted concept in social science (Van der Geest & Dietz 2004). It is generally defined as the insecurity of the well-being of individuals, households or communities in the face of a changing environment (Moser 1998). Vulnerability is closely linked to access to and control over assets or resources. These assets are outlined below in the section dealing with the livelihood framework. In general, the more assets people have, the less vulnerable they are. In other words, the concept of vulnerability is directly associated with survival (Frayne 2004). Poverty is thus characterized not only by a lack of assets and the inability to accumulate a portfolio of them, but also by a lack of choice with respect to alternative coping strategies. Poverty also means being vulnerable to crises, stress and shocks, and having little capacity to recover quickly from them. In some cases, the poorest and most vulnerable households are forced to adopt strategies that enable them to survive but not to improve their welfare (Rakodi 2002a).

Entitlements refer to the complex ways in which individuals or households command resources which vary between people over time in response to shocks and long-term trends. The mere presence of resources or means of subsistence may not entitle a person or household to use them. Entitlement must be enforced and an individual's or a household's capacity to do so will determine their control of resources or means of subsistence. Poverty can thus be defined as the failure of certain capacities that are important for the well-being of an individual or a household. These failures can depend on the social, cultural, political or environmental conditions in certain localities (Krokkors 1995: 55).

Social exclusion is a state of ill-being and disablement or disempowerment and inability that individuals and groups experience. It is the lack of access to social security, employment, safety, human rights; in brief, to a decent living (De Haan 2000). Not all members of a given society have equal access to social security arrangements; particularly the poor tend to be excluded (Kaag *et al.* 2004: 60). Exclusion from social, political and economic institutions is part of a vicious circle in which exclusion leads to lower capabilities, which in turn reduces the prospects for escaping poverty and people's ability to assert their rights (CPRC 2004). De Haan (2000) convincingly argues that processes of social inclusion and exclusion remain the focus of development studies and parallels the notion of social exclusion to the concept of sustainable livelihood.⁷ In other words, if livelihood is sustainable, it is synonymous with social *inclusion*; if not, it equates with social *exclusion*.

Poverty in the urban context

Simply put, the urban poor are urban residents who live in poverty (Kamete 2002). Although in certain ways urban poverty and rural poverty are comparable, there are features that are more likely to be found or to be severe in poor urban settlements than in rural areas. This results in different coping mechanisms on the part of the poor and demands different interventions to reduce poverty (Meikle 2002; Satterthwaite & Tacoli 2002; Wekwete 1994).

Wratten (1995)⁸ provides a useful categorization of the main characteristics of urban poverty, i.e. those aspects of poverty that are specific to urban areas: 1) urban environmental and health risks: diseases from contaminated food and water and from lack of hygiene; diseases associated with poor drainage and inadequate garbage collection; overcrowding and poor ventilation; open fires; landslides and flooding; accidents; etc.; 2) social diversity, fragmentation and crime: more impersonal relationships due to ethnic diversity; relatively many female-headed households with fewer income-earning opportunities; 3) vulnerability arising from the intervention of the state and police: unsympathetic bureaucracy (evictions, etc.), police corruption; and 4) vulnerability arising from commercial exchange: poor people without savings are extremely vulnerable to changes in the demand for labour and in the price of basic goods and services.

The last point is particularly important. In urban settings, people rely largely on market exchanges to obtain basic necessities such as food, shelter, water and electricity – making the urban poor vulnerable to market vagaries such as

⁷ The concept of sustainable livelihood is discussed later in this chapter.

⁸ See also Baker & Schuler (2004); Ali (2002); Harpham & Grant (2002); Meikle (2002); and Satterthwaite & Tacoli (2002).

inflation and the removal of government subsidies. Box 1.1 enumerates the basic necessities that require a cash income in urban areas.

Box 1.1 Costs of living in town

- *Transport to and from work:* Transport costs, to and from work, are becoming unbearable for most urban dwellers, and especially for poorer groups living far from their places of work. It is no longer an exception to see a large number of wage earners streaming to and from work on foot, almost on a daily basis.
- *School fees:* Fees for school-aged children and associated costs are often higher in towns. Even where education is free, some costs, e.g. transport, uniforms and homework books, are still present.
- *Housing:* A large majority of city dwellers are tenants who have to pay their monthly rent or face eviction. Even those who live in slums and squatter settlements are known to pay rent to landlords or landowners.
- *Water:* Those connected to piped water, usually by the local authority, are charged on a monthly basis through bills. However, the poor – with no access to piped water – depend on water vendors who charge exorbitant prices.
- *Food:* Generally, food is expensive in town, especially for those who do not grow their own. People in town rely more on purchased food.
- *Health care:* Although the health facilities may be better in town, they are expensive and may be beyond the reach to many. Even in the government hospitals, cost sharing is the norm – one has to buy drugs.
- *Pay-as-you-use-facilities:* These vary from one neighbourhood to another and can include child care (ayah), sanitation, garbage collection, security, access to latrines, bribes, fines, etc.

Source: Satterthwaite & Tacoli (2002).

Regardless of the well-known measurement problems, income remains the central component of urban poverty. The ability to earn income thus becomes an important determinant of urban poverty. This ability depends on the functioning of the urban labour market, the nature of activities that the poor engage in, and the safety nets and labour protection the markets accord (Odhiambo & Manda 2003). Those in casual and wage employment are susceptible to sudden unemployment (retrenchment), low pay and poor working conditions. In addition, dependence on the cash economy frequently means that the poor are vulnerable to debt (Meikle 2002) as was experienced by Opiyo Jamaranda.

Urbanization, economic crisis and urban poverty

Urbanization and economic trends

Urbanization is a process of town formation and growth. It is a function of population increase, both natural and migratory, and the spatial expansion of the settlements to accommodate increasing populations. Most developing countries today are undergoing a process of rapid urbanization and are seeing a dramatic

movement of people to towns. In the mid-1970s, Africa was the least urbanized continent in the world, with only 25% of its population living in urban settlements. By the year 2000, 38% of the African population was living in urban areas and in 2025 it is projected that this figure will be more than 50% (United Nations 2003).⁹ Although these figures are still lower than for other continents and for the world as a whole, the annual growth rates of the urban population are highest in Africa (Cohen 2004; United Nations 2003; Nelson 1999; UNCHS 1996). As far as 39 countries in sub-Saharan Africa are concerned, the total population increased about three-fold between 1950 and 1990 (United Nations 1995), but the urban population increased about ten-fold during the same period. In Kenya, the share of its urban population increased from 7.8% in 1962 to 20% in the year 2000 (Kenya 2000).

As the (urban) population increased, the overall economic growth rates for sub-Saharan African states have generally declined since the mid-1970s (Amis 1990). This decline is mainly a function of recession in the global economy, but also has an important internal dimension, although with variations between countries (Tacoli 2002). Per capita incomes fell considerably in the 1980s and 1990s and real wages continued to decline (Kanji 1996; Jamal & Weeks 1988) while open unemployment and cuts in government spending on infrastructure and services increased (Rakodi 1995a).

The fact that urban poverty is increasing at a faster rate than rural poverty is of particular importance to any study of the nature of urbanization in Africa (Potts 1997). Furthermore, despite the variations between countries, the harsh economic conditions of the 1980s and 1990s have in many ways been felt even more acutely in the cities than in the rural areas (O'Connor 1991). The International Monetary Fund policies, i.e. limiting subsidies, increasing food prices and restricting wage levels, have been disproportionately borne by the urban poor (Bah *et al.* 2003; Rakodi 2002b; Tacoli 2002).¹⁰ As a result, the African urban poor have become an increasingly vulnerable group (Amis 1990).

Economic crisis and increasing urban poverty

For urban and rural populations in sub-Saharan Africa, global changes in the last two decades have resulted in deepening social differentiation and increasing poverty (Tacoli 1998, 2002).¹¹ Several World Bank, International Monetary Fund

⁹ See Dietz & Zaal (2002) for a more detailed account on population growth and urbanization in Africa.

¹⁰ Tacoli (2002) and Bah *et al.* (2003) draw on findings from case studies conducted between 1997 and 2001 in three sub-Saharan countries: Mali, Nigeria and Tanzania. They are similar products of the International Institute for Environment and Development (IIED) project on "Rural-Urban Interactions and Livelihood Strategies in Africa". The findings were first presented as an IIED Working Paper and later published in the journal *Environment & Urbanization*.

¹¹ The global changes in the last two decades are mainly, although not necessarily restricted to, the Structural Adjustment Programmes (SAPs) imposed by international organizations and donors. SAPs

(IMF), Organization for Economic Co-operation and Development (OECD) and United Nations Development Programme (UNDP) reports, including national studies, show that over 40% of the population of sub-Saharan Africa is living in absolute poverty or on a Purchasing Power Parity of less than US\$1 per day. In fact since the late 1980s, the absolute number of people living on less than a dollar a day in Africa has grown five times more than the figure for Latin America, and twice that for South Asia (World Bank 2001). Based on the same measurement, national studies suggest that in several of the poorest African countries, more than half the urban population can be considered poor, i.e. are living below the poverty line.

The impact of both economic crisis and economic reform under structural adjustment on urban centres has been well documented. Urban economies in sub-Saharan Africa declined markedly during the 1980s and 1990s and urban poverty appeared to be increasing in much of the continent (Maxwell 1999). Life in urban areas has become more expensive while employment in the formal sector has gone down and real wages have not kept up with price increases or even declined in absolute terms (Dietz & Zaal 2002; Simon 1997; UNCHS 1996; Jamal & Weeks 1988). Standards of living have deteriorated and urban unemployment reached levels never before attained (Beauchemin & Bocquier 2003; Kanji 1996). As indicated earlier, increases in food prices and service charges and cuts in public expenditure on health, education and infrastructure have been felt more severely in the cities and particularly by lower income groups. According to the IDRC Cities Feeding People Program Initiative (CFPI 2000), households in nearly half of the largest urban areas in developing countries, particularly in Africa, spend 50-80% of their income on food as a result of increases in food prices.

In many sub-Saharan countries, wage employment in the public sector has been seriously cut and as such has fallen in absolute terms over time (Odhiambo & Manda 2003), particularly in the lower echelons. The formal sector, of which parastatal enterprises were an important part, has been reduced, and workers have turned to self-employment or informal employment (Beauchemin & Bocquier 2003). As Jamal & Weeks (1988, 1993) noted over a decade ago, the distinction between the formal and informal sectors is becoming blurred. The difference in income that can be earned in the two sectors is decreasing, as is the difference in lifestyles and living standards. With the fall in formal-sector employment, many former wage earners have moved into the informal sector. As such, the growth in

focused on reducing public expenditures by privatization and civil service reforms (staff cuts and retrenchments); limiting subsidies; increasing food prices; restricting wage levels, etc. Many sub-Saharan countries are currently facing the negative impact of the global recession in the 1980s, and by implication that of SAPs.

the informal economy is largely in response to the real constraints on employment in the formal sector.

The proportion of the labour force in formal employment is very low; for example, 10% in Zambia and 5% in Tanzania (Kanji 1996). In Zambia, informal markets and petty trade have absorbed growing numbers of people due to employment retrenchment in both the public and private sectors (Hansen 2004). Retrenchments of public sector-workers¹² and restrictions on wage levels have affected both formal-sector workers and the informal-sector activities that depend on their demand (Bah *et al.* 2003; Tacoli 2002). As a result, urban incomes in most countries have fallen dramatically, and the relative position of the urban population compared to the rural ones has drastically changed as will be highlighted later in this chapter, but from a different perspective. In terms of gender, women, who tend to be concentrated at the lower end of the occupational hierarchy, have been affected to a greater degree than men (ILO/JASPA 1992), leading to a “feminization of poverty”.

The manufacturing sector was also badly hit due to the effects of structural adjustment, shown by, for instance, shortages of imported materials, reduced investment, declining demand, etc (Gilbert 1994). These processes have led to “survivalist enterprises”, “informal economy of bare survival” (Rogerson 1997) and the “informalization” of the urban economy in Africa (Hansen & Vaa 2004; Stren 1992). Nowadays, “the majority of the urban workforce are (...) engaged in a highly differentiated range of small-scale, micro-enterprise or informal activities” (Rogerson 1997: 346). For some time now, the informal sector has been the most rapidly expanding employment sector of African urban economies (Hansen & Vaa 2004; Fall 1998). As Ogbu & Ikiara (1995: 54) pointed out, “the African urbanization process is now largely driven by the opportunities which exist in the urban informal sector”. As a result, the low-income and slum areas in African cities are generally the fastest-growing areas. Diversification and multiple sourcing of cash income, especially in the informal sector, will be revisited again while discussing urban livelihood strategies.

Urban poverty and food (in)security

Like urban poverty, food security as a concept gained momentum during the 1980s and more than ever during the implementation of structural adjustment programmes in most sub-Saharan African countries. The World Bank defines food security as access by all people at all times to sufficient food for an active healthy life. More technically, the reference food poverty line is 2,250 kilocalories per adult equivalent, which implies that adequate consumption must be

¹² This group (i.e. the retrenched public-sector workers who still manage to live in town) is sometimes defined as the “new poor” (Beall & Kanji 1999).

at least that minimum (Nyoro 2002). Maxwell (1999) asserts that food insecurity is primarily concerned with vulnerability, and with the ability of individuals or households to cope with nutritional, quantity and quality shortfalls. He adds that in urban areas, this primarily concerns the ability to secure sufficient income to be able to afford food and other basic necessities, which is in turn dependent on wages and prices as opposed to the physical and climatic factors that traditionally dominate rural food security concerns.

As noted above, the urban poor devote large but variable proportions of their total incomes to purchasing food (Potts 1997), which to a large extent means that urban food insecurity is a manifestation of poverty (Owuor 2005; Koda 2002; Maxwell 1999). The gap between food costs and urban wages has risen not only because wages have fallen in real terms but also because there have been significant price rises for food items (Potts 1997). Even then, urban food security depends on both food production as well as food purchasing power. The source of food could be through (own) production by the household in a farm setting or through purchase or both production and purchase. Household food production and household income therefore are important factors in household food security. Prices are also important because they determine the food value of household incomes. As such, Nyoro (2002) argues that policies that affect food production, incomes and prices will definitely have an impact on food security. Related to this, Potts (1997) is of the opinion that strategies for reducing the impact of food purchases on meagre cash resources should involve obtaining food from sources other than the market. An overview of urban and rural farming, i.e. own production, as an additional source of food is presented separately after the next section.

The concept of livelihood and the livelihood framework

Livelihood defined

Livelihood is the way people (rich and poor alike)¹³ earn a living, be it in town or in the rural areas or both, and according to De Haan & Quarles van Ufford (2002) it is not necessarily the same as having a regular occupation or employment. But drawing from Chambers & Conway (1992), a livelihood comprises the capabilities, assets and activities required for a means of living (DfID 2002). In his “notes for a geography of livelihoods”, Painter (1996: 79-80) defined livelihood strategies as “how individuals, households or other corporate groups gain access to, use and exercise control over any number of resources that they identify as important for their well-being”.¹⁴ In other words, livelihood strategies are the

¹³ And because of that, the livelihood framework or approach discussed in the next sub-section is applicable to both rich and poor individuals, households and groups.

¹⁴ However, according to Rakodi (2002a), some analysts cast doubt on the extent to which poor households have sufficient control over their assets.

activities that people undertake and the choices they make to achieve their livelihood goals. In fact, livelihoods are becoming increasingly complex, multi-local and multidimensional (Kaag *et al.* 2004; De Haan & Zoomers 2003).

The livelihoods concept is, therefore, a realistic recognition of the multiple activities in which households engage to ensure their survival and improve their well-being (Rakodi 2002a). This may involve deploying different activities in one locality (e.g. in town), but also spreading activities over different locations (e.g. in town and in the rural areas) (Kaag *et al.* 2004). According to De Haan, the poor in particular undertake manifold activities which yield food, housing, and a monetary income (De Haan & Quarles van Ufford 2002; De Haan 2000). Even then, Kaag *et al.* (2004: 59) warn that

Livelihoods are never stable and especially poor people in developing countries regularly worry about whether there will be enough food for their families and whether they will have work, money (...) When confronted with misfortune in the family, i.e. illness, income failure (...) or on a larger scale, i.e. economic crisis (...) the consequences are often most severe for vulnerable categories of people.

There is already a growing body of scholarship documenting a wide range of livelihood strategies in rural Africa, especially in times of crisis. One area of research focuses on how individuals and households deal with risk in unstable (physical) environments,¹⁵ while the other related research looks at livelihood diversification in rural Africa.¹⁶ Although mainly from the rural livelihood perspective, various concepts have been used to define individuals' or households' responses to short-term or long-term risks, shocks and stresses: *coping* strategies, *survival* strategies, *adaptation* strategies, *pathways*, etc.

In the early 1990s, Dietz *et al.* (1992) found that households had various *livelihood options*: peasant households could be engaged in different *household livelihood strategies*, as micro decision units and partly in inter-household networks of mutual assistance. They attempted a typology of livelihood strategies that included accumulation strategies (improving the means of production); betterment strategies (improving the consumption situation); sustenance or adaptive strategies (social manoeuvring to preserve a consumption and/or wealth level); mechanisms to cope with seasonal stress; and survival strategies to cope with exceptional crises.

Griep (2001) argues that when times are normal, people's activities are called *livelihood strategies*, but in times of crisis they change into *coping* or *survival strategies*. However, she accepts that in the last few decades one cannot speak of

¹⁵ See e.g. Van der Geest (2004); De Bruijn & Van Dijk (2001); Griep (2001); and Van Steenbruggen (2001).

¹⁶ See e.g. Niehof (2004); Bryceson (1996, 1999, 2002a, 2002b); Ellis (1998, 2000); Francis (2000); Bryceson & Jamal (1997); Tellegen (1993, 1997); Dietz *et al.* (1992); and Evans & Ngau (1991).

a “normal situation” and concludes that *coping strategies* have become part of daily life and have changed into *adaptation strategies*. De Bruijn & Van Dijk (2001) consider individual strategies and livelihood patterns, which they describe as *pathways*. According to them, there are as many pathways as there are people because people have different experiences (*habitus*) and different assets and resources at their disposal when interacting with their environment and other people, and consequently take different decisions when confronted with similar environmental conditions.

While recognizing attempts by a number of scholars to redefine these concepts, this study adopts De Haan’s (2000: 347, 348) already self-explanatory definition:

Because of the contextual shocks and stresses, livelihood strategies temporarily take the shape of safety mechanisms called “coping strategies”. These are short-term responses to secure livelihood in periods of shocks and stress (...) In the periods of economic stress people are inclined to (...) develop alternative sources of income (...) Coping strategies are thus short-term or temporary responses to external shocks and stresses. However, because shocks and stresses appear more frequently, the temporary coping mechanisms develop into more permanent “adaptive strategies”, which is, in the long-run, considered to be a normal livelihood strategy.

The livelihood framework or approach

According to the livelihood framework or approach, a household’s livelihood strategy, and so its level of well-being, depends on the assets or resources it has access to (see below); the factors that mediate their access (for instance, gender relations or how markets operate); and contextual factors (such as macro policies or shocks). Both local factors and wider regional, national and global factors are important influences of living conditions. This is stressed by De Haan (2000: 346; De Haan & Quarles van Ufford 2002: 245) when explaining that nowadays livelihood, even in the remotest corners of the world, is subject to a multitude of influences from a broader national and international economic, social and political context.

The livelihood approach distinguishes five “vital” assets,¹⁷ although their boundaries are not always that clear nor is the categorization exhaustive (Rakodi 2002a). These are human, natural, physical, financial and social assets or resources (see Box 1.2).¹⁸ Although the livelihood approach distinguishes five assets, the importance of “cultural asset” in livelihood studies should also be recognized. Such cultural aspects as language, taboos, cultural institutions,

¹⁷ See e.g. Mitlin (2003); De Haan & Quarles van Ufford (2002); Griep (2001); De Haan (2000); Carney (1999); Chambers (1995); Blaikie *et al.* (1994); and Chambers & Conway (1992).

¹⁸ While some scholars prefer to use the word “capital”, the terms “asset” or “resource” will be used in this book interchangeably, except when citing others.

religion, etc, may have an important influence on an individual's or a household's pursuit of livelihoods.

Box 1.2 Household livelihood assets or resources

1) *Human resources*: capabilities, skills, experience, labour, knowledge, creativity, health, etc. These are important to the fulfillment of productive and reproductive tasks. Capacity to work is the main asset of the urban poor. Lack of skills and education affects the ability to secure a livelihood in towns more directly than it does in the rural areas.

2) *Natural resources*: land, water, pastures, etc. Natural assets may be less significant in an urban setting (Meikle 2002), but with increasing reliance on agriculture (both urban and rural), access to land, security of tenure and function is largely an important "asset" to urban dwellers (see Payne 2002), directly or indirectly.

3) *Physical resources*: basic infrastructure and services (shelter, transport, water, energy, communications, hospitals), equipment, tools, inputs, food stocks, household assets, live-stock, etc. Payne (*ibid*) argues that land in urban areas can as well be categorized as a physical asset that enables households to access shelter, has locational attributes that provide access to other livelihood possibilities and has investment potential.

4) *Financial resources*: savings, loans, credit, wages/salaries, pensions and remittances. Urban households are highly monetized and so access to a monetary income is essential for survival.

5) *Social resources*: formal and informal networks from which various opportunities and benefits can be drawn by people in their pursuit of livelihoods. These are mainly reciprocity and trust embedded in social relations, social structures and societal institutional arrangements. Closely linked to social resources are *political resources* based on access to the political process and decision-making (see Devas 2002). Meikle (2002: 42) elaborates that the urban poor are linked into structures of governance through their dependence on or exclusion from the delivery of infrastructure and services by municipal authorities.

Every group, household and individual has "a stock of assets" at its disposal to achieve a sustainable livelihood. A livelihood is sustainable when it can cope with and recover from stresses and shocks,¹⁹ maintain or enhance its capabilities and assets, while not undermining the natural resource base (Scoones 1998: 5, as cited in Rakodi 2002a: 18). It embodies resilience, i.e. the ability to cope, adapt and improve well-beings. In other words, resilience is the ability to mobilize assets to exploit opportunities and resist or recover from the negative effects of the changing environment. Inability to cope and recover is mainly caused by a lack of resources, alternatives and buffer capacity, associated with poverty (Van der Geest & Dietz 2004). The shocks and stresses can be natural (e.g. earth-

¹⁹ According to De Haan & Quarles van Ufford (2002: 246) shocks are violent and come unexpectedly while stress is less violent but can last longer and both have their impact on one or more of the vital assets.

quakes, floods, droughts), political (violent conflicts) and economic (unemployment, price policies).

This “stock of assets” can be stored, accumulated, exchanged or depleted and put to work to generate a flow of income or other benefits. In that case, the strategies adopted by the household aim to cope with and recover from stresses and shocks; to maintain or improve capability or assets; and to offer sustainable livelihood opportunities. As such, *access* to resources or assets allows an understanding of why people survive in the way they do (Griep 2001) and each individual or household decides on a choice of livelihood strategies on the basis of *access* to one or a combination of the “stock of assets” available (De Haan 2000). This is because the existence of assets alone is not sufficient to promote livelihoods – what is important is their accessibility (Meikle 2002).

The strategy open to a household depends on the stock of assets available and on the household’s capability to find and make use of livelihood opportunities. The latter in turn depends on the household’s composition (Chambers & Conway 1992). With reference to livelihood outcomes, Rakodi (2002a: 16) summarizes that “if the outcomes of the livelihood strategies adopted by poor people are to be positive, they should improve incomes, increase well-being, reduce vulnerability, improve food security and make more sustainable use of natural resources”.

Even though the livelihood framework was developed and later widely applied to explain rural livelihoods,

(...) the sustainable livelihoods framework has certain key concepts that are valuable for a better understanding of urban poverty (...) The importance for most poor households of a stronger asset base both for higher incomes and for reducing vulnerability to shocks and stresses is valid for both urban and rural areas (Satterthwaite & Tacoli 2002: 61)

Whereas experience with the livelihoods approach is strongly biased towards rural areas, interest in urban applications is increasing (Bryceson *et al.* 2003). Many urban households rely on a combination of both rural-based and urban-based assets and sources of income. As in the rural areas, access to land (natural resources), labour and skills (human resources), tools (physical resources), income (financial resource) and social resources are minimum requirements to sustain one’s livelihood in town.

While recognizing (a) the contextual differences that exist between urban and rural areas (see Box 1.2 and elsewhere in this chapter); (b) the diversity in urban contexts (Satterthwaite & Tacoli 2002); (c) debates about its utility in the urban context (see e.g. Beall 2002; Devas 2002); and (d) the fact that the livelihoods debate is an evolving one (Kaag *et al.* 2004; Jones 2002), the livelihood framework is still useful for understanding livelihoods that straddle the urban-rural divide. Moreover, one of the strengths of the livelihood approach to policy

making is that it encourages its users to examine in detail how poor people manage their lives (Kaag *et al.* 2004; Rutherford *et al.* 2002).²⁰ According to Kaag *et al.* (2004: 49), what current livelihood studies have in common is that they concentrate on the actions and strategies of people trying to make a living in adverse circumstances. This study largely draws on the framework for analysis as outlined by Rakodi (2002a). In a recent reader on urban livelihoods by Rakodi & Lloyd-Jones (2002), various other scholars have used the livelihood framework in the urban context.

Urban livelihood strategies

As in rural areas, urban households seek to mobilize resources and opportunities and to combine these into a livelihood strategy (Owuor & Foeken 2006; Rakodi 2002a). Urban households, rich or poor, have adopted a number of livelihood strategies in their attempts to manage (in particular but not necessarily restricted to) the changes in their economic environment and circumstances. However, as is already clear from the above, because of the economic, environmental, social and political context in which they live, the livelihood strategies of urban (poor) households may be different from those of their rural counterparts. From an urban perspective, Potts (1997: 488) provides the following useful definition of a strategy:

A “strategy” implies some alteration in an individual’s or household’s (usually economic) behaviour, in order to lessen the adverse impact of, for example, declining incomes or deteriorating infrastructure or services. A strategy may be a long-term planned response to circumstances (e.g. embarking upon urban agriculture) that yields generally positive benefits.

She explains that poor urban households have adopted two major coping strategies that have so far been well documented: *multiple sourcing of cash incomes*, especially from the informal sector and *urban farming*. In addition, she acknowledges the importance of *urban-rural links* in the livelihood of poor urban households. In the same book, Simon (1997) is categorical that the continued urban residence of migrants can be explained in terms of *economic diversification* and *risk-minimizing strategies* by *multi-active households* and *straddling town and the rural shamba*²¹. According to De Haan & Zoomers (2003), livelihood studies ascertain that during the last decade, increasing numbers of people have opted for a development path characterized by *multi-tasking* and *income diversification* (i.e., as they broadly call it, *economic fragmentation*).

²⁰ A number of agencies (e.g. CARE, UNDP, Oxfam, the FAO and DfID) have adopted a livelihoods approach and make use of the (sustainable) livelihoods framework.

²¹ This is a Swahili word that means (a cultivated) plot, garden, land or field.

On the same discourse, Maxwell (1999) distinguished between *diversification of income-generating strategies* and “a variety of coping strategies”, while Rakodi (1995a) distinguished three types of strategies in her review of conceptual issues in the study of urban poverty: 1) *strategies to increase resources*: entering more household members into the workforce, starting businesses, growing own food, etc; 2) *strategies to mitigate or limit a decline in consumption*: reducing or eliminating consumption items such as meat; buying cheaper food or second-hand clothes, etc; and 3) *strategies to change household composition*: migration, etc. Later, Rakodi (2002a) adds that households and individuals adopt a mix of these strategies according to their own circumstances (e.g. household characteristics) and the changing context in which they live, and that economic activities form the basis of an urban household’s strategy.

Most of the remaining sections of this chapter will be devoted to a discussion of these livelihood strategies by urban households in the context of existing theoretical and empirical studies. For simplicity and clarity of discussion, the strategies have been roughly categorized into diversification of income-generating activities, own food production in town (urban farming), reducing the household’s expenses, and rural livelihood sources.²² Because the latter is the focus of this study, it is dealt with in a separate section on urban-rural linkages.

Diversification of income-generating activities

It is now clear that the major response at household level to the current economic crisis has been the diversification of income-generating strategies, but the scope for such diversification varies between households, which have different degrees of resilience and vulnerability (Rakodi 1995b). According to Potts (1997), diversification involves an increase in informal-sector activity, with previously non-earning household members entering the petty commodity sector, as well as wage-earners taking on supplementary cash-earning activities. Urban households diversify their income sources to raise or maintain their incomes. In other words, households construct an increasingly diverse portfolio of activities and assets to survive and to improve their standard of living (Ellis 2000).

The study by Bigsten & Kayizzi-Mugerwa (1992) in Kampala, Uganda, provides strong evidence of this. By 1990, three-quarters of the households in Kampala were engaged in some kind of profit-generating activity, with “business” income accounting for almost half of the total income. A decade later, Uganda had a far more informal economy with casual labour, self-employed production and services accounting for roughly 60% of cash-earning activities (Bryceson *et al.* 2003). Falling real wages in the formal economy forced many

²² These “categories” are not mutually exclusive nor are they exhaustive.

employed workers to search for a supplementary income source in the informal economy (Rogerson 1997). Just like Opiyo Jamaranda,

In most cases their monthly salaries provide for only a very small proportion, perhaps only a few days' worth, of their monthly needs. They therefore commonly undertake a variety of additional jobs and activities, mostly in the informal sector, to supplement their incomes (Meikle 2002: 39).

As the urban formal sector declined, labour specialization also declined and urban dwellers entering the informal sector juggled diverse activities and became "jacks of all trades" (Bryceson 2001), a strategy Painter (1996: 80) referred to as "risk-spreading or risk management strategies". For many urban households, the key to survival changed from specialization to diversification (Dietz & Zaal 2002). Coupled with that, participation of both women and children in the labour market has been growing (Beall 2002; Moser *et al.* 1993). In a context of economic uncertainty, a household develops survival strategies to ensure a better standard of living and therefore women's contributions to the household economy become important.

Those already in employment work longer hours and older people work for years beyond retirement age. Thus, although unemployment may go down, the number of people earning incomes below the poverty line increases because incomes are so low. Livelihoods are more and more dependent on the informal sector and on casual work. In Kenya, for example, it was estimated that in the early 1990s informal self-employment was growing at a rate of 40-60% per year (Jones *et al.* 1995). In addition, growing numbers of the urban poor engage in home and neighbourhood-based income-generating activities (Owuor & Foeken 2006; Kazimbaya-Senkwe 2004). These informal income-generating activities may be genuine to the people concerned but "illegal" in the eyes of authorities. For example, hawking without a license and in forbidden areas is common. Women, in particular, engage in brewing prohibited liquor and in prostitution, with all the health risks involved (see Box 1.3). Drug trading and peddling is on the increase as well (Kanji 1996).

Vaa *et al.* (1989) described some of the socio-economic niches where poor women find for themselves in the city, and the economic and social strategies they employ to make ends meet. Women have generally less education, fewer skills and less access to resources than men. Even in terms of the available opportunities, women are disadvantaged relative to men and have been particularly vulnerable to the downward pressures on incomes (Rakodi 2002b). Moreover, they almost always earn less than men, even within the informal sector (Frayne 2004). As Kanji (1996: 12-13) points out, "women-run businesses start smaller, grow significantly slower and live shorter than those of their male

counterparts, (...) women tend to be concentrated in less lucrative informal sector activities, [and] women are working longer hours for less profit". In short, women tend to modify their lives more than men, also by taking greater cuts in their consumption, and spending more time shopping to look for cheaper goods (UNCHS 1996).

As economic hardships have worsened in sub-Saharan Africa, the normally broad responsibilities of women both in production and reproduction have increased to include a larger economic burden (Owuor & Foeken 2006; Frayne 2004; Painter 1996). Among slum dwellers in Kampala, Uganda, all women, married or single, contributed over 70% towards household expenditures, mainly on food and basic necessities for the family (Bantebya-Kyomuhendo 1999: 118):

In an attempt to broaden their incomes the women have become "occupational pluralists", participating in numerous smaller businesses, or alternatively changing from one activity to another depending on demand, anticipated profit margins or simple convenience.

Box 1.3 Risking death for survival: How the urban poor struggle to survive

Lucy Nduta, who looks much older than her 28 years, has been a commercial sex worker in Nairobi for close to three years now, ever since she parted ways with her husband. Jobless, and with two children to support, Nduta soon joined other women already plying the prostitute's trade in Korogocho slum's "Sodom" area. Her children, a boy and girl aged 10 and 5, are not at home. They usually go to their father's food stall at lunch for something to eat because there's nothing in the house. On a good day, Nduta may service five clients but sometimes she only gets one. Charges are only KSh. 20 per client and no form of protection or contraception is used – too expensive. Sometimes she has to conduct her business while her children sleep in the next room, a ragged curtain servicing as a thin partition. The children don't go to school as there is no money for uniform and books.

Source: East African Standard Online Edition, Wednesday 17 November 2004.²³

Drawing on findings from case studies conducted in rural and urban Mali, Nigeria and Tanzania, Tacoli (2002) concluded that diversification among low-income households is often a survival strategy for risk minimization and income stabilization whereas among higher-income groups, by contrast, it is often an accumulation strategy aimed at maximizing profits by investing across sectors. In other words, poor households are forced to diversify to make ends meet whereas richer households also diversify their economic activities as a path to accumulation (Murray 2001). Ellis (2000) stresses that diversification is pervasive and enduring in the sense that the phenomenon occurs everywhere and seems to be

²³ I wish to acknowledge the writer, Lilian Aluanga, for her story on "How the urban poor struggle to survive in filth", part of which I have quoted here. To maintain anonymity, the name in this excerpt has been changed from the one originally used by the writer.

transient. As a result, De Haan & Zoomers (2003: 356) argue that diversification does not mean having an occasional earning besides a main activity: it means multiple income sources.

Own food production in town (urban farming)

Another form of diversification, which is discussed separately because of its growing importance, is own food production, be it in town or in the rural areas. This section deals with the former – that is, the development of food-growing by urban households on any available patch of arable land within and around the urban area. The latter is discussed under urban-rural linkages. Studies that have been carried out across the continent²⁴ show that an increasing number of the urban poor in sub-Saharan Africa have started to grow food within city boundaries.²⁵

It was estimated that at the beginning of the 1990s as many as 40% of the urban population in Africa was involved in urban agriculture (Mougeot 1994a, 1994b, 1998). This has become an important livelihood strategy in the context of cuts in food subsidies, rises in the cost of living and declining family purchasing power (Owuor & Foeken 2006; Nugent 2000; Kanji 1996). As a result, the growth of urban agriculture since the late 1970s is largely understood as a response to escalating poverty and to rising food prices or shortages that were exacerbated by the implementation of structural adjustment policies in the 1980s (Foeken 1998; Tacoli 1998; Drakakis-Smith 1992; Gefu 1992).

For the poor, increasing their food security is usually the main motivation for farming in town, and for some it is even a survival strategy. Nevertheless, many of the poor also sell some of their produce, partly to be able to pay for other basic household needs but also because some crops are perishable and cannot be stored and/or because storage space is unavailable. For middle-income and high-income households, commercial considerations are usually of more importance than among the poor, although the consumption of self-produced vegetables and milk is often highly valued. But for most of these households, the basic reason to do so

²⁴ See e.g. on *Africa*: Obudho & Foeken 1999; *Botswana*: Byerley 1996 (Gaborone); *Ethiopia*: Egziabher 1994 (Addis Ababa); *Ghana*: Armar-Klemesu & Maxwell 2000, Obosu-Mensah 1999 (Accra); *Guinea-Bissau*: Lourenço-Lindell 1996 (Bissau); *Kenya*: Mwangi & Foeken 1996, Mwangi 1995 (Nairobi), Foeken 2006, Foeken *et al.* 2002, Versleijen 2002, Foeken & Owuor 2000a, 2000b (Nakuru); *Mozambique*: Sheldon 1991; *Nigeria*: Gbadegehin 1991 (Ibadan), Gefu 1992 (Zaria); *Senegal*: Mbaye & Moustier 2000 (Dakar); *South Africa*: Rogerson 1994 (Cape Town); *Tanzania*: Mlozi 1996, Mlozi *et al.* 1992 (Dar es Salaam), Foeken *et al.* 2004 (Morogoro and Mbeya); *Uganda*: Maxwell 1995 (Kampala); *Zambia*: Sanyal 1985 (Lusaka); *Zimbabwe*: Mbiba 2000, Drakakis-Smith 1992 (Harare).

²⁵ See also www.ruaf.org for an extensive online bibliographic database, annotated bibliography, reader on urban agriculture and a tri-annual urban agriculture magazine. ETC/RUAF is a global Resource Centre on Urban Agriculture and Forestry based in the Netherlands.

is the same as for the poor, namely, as is often stated by the farmers themselves, “to subsidise my income” (Foeken forthcoming).

Reducing household expenses

Diversification of food and income sources may not necessarily fulfill the household’s food and income demands adequately. In such situations, the household is forced to reduce some expenses, alongside other livelihood sources. Households may reduce their expenditure on material expenses (e.g. resorting to second-hand goods), as well as on consumption and food items. In addition, cutting expenses is done on such services as housing (going for smaller, cheaper rental units), transport (walking to work), electricity (using kerosene or charcoal for cooking), water, education (keeping children out of school) and health (seeking treatment only when the situation is serious). This is because under structural adjustment these goods and services have become almost unaffordable for many of the poor.

In Harare, Zimbabwe, for example, it was found that among a randomly selected group of households in a typical low-income area, in a one-year period, expenditure on food declined in real terms by 14%, with the greatest decline among lower-income households (Kanji 1995). Most households made changes in their diet. There is also evidence that urban households substituted cheaper foods for preferred foods (e.g. eating more staples such as maize); have cut down on or virtually stopped the addition of high-protein items such as meat, milk, or fish; and have cut out some daily meals altogether (Potts 1997; see also Box 1.4).

Maxwell *et al.* (1999: 414) outline four categories of consumption-related coping strategies based on the content analysis of a wide range of coping strategies in Uganda, Sierra Leone, Ghana and Tanzania. They explain that in the short term, when there is insufficient food or insufficient money to buy food, the household can apply one or more of the following strategies: 1) dietary change strategies: altering the diet and doing with less expensive foods, depending on the money available; 2) food-seeking strategies: doing something to increase the amount of food available in the short term; 3) household structure strategies: decreasing the number of people to be fed in the short term; and 4) rationing strategies: managing (with) the insufficiency. Reducing the number of “dependents”, as will be further discussed in the next section, is done by sending one or more household members to the rural home.

Urban-rural linkages

A final and very important survival strategy involves the strengthening and adaptation of the urban-rural linkages that have always been such an important

Box 1.4 A family living in crippling poverty

The last time Agnes Achieng' had meat for a meal was on Christmas day last year at her brother's house. "I do not remember the last time I had taken meat. I even have no idea what it costs now," she said. But Agnes, 33, is not alone. She is among millions of Kenyans living below the poverty line and who can neither afford a balanced diet, a decent house, clean piped water nor clothing. When she left her rural home in Kisumu in 1985, she had hoped to find a better life in the city. But she ended up in Kibera, one of Africa's largest informal settlements. Agnes joined her husband in manual jobs in neighbouring estates and hawking food to make ends meet. But her life changed for the worse when he died in 2000. She [then] tried her hands in hawking, investing KSh. 200 in her business, selling fruits and vegetables in the evenings. Agnes has been thrown out of her hovel thrice because she could not raise the KSh. 500 rent demanded by the owner. But on all occasions, the local chief came to her assistance. She said she spends about KSh. 800 "in a good month", including paying her rent. The family survives on a single meal of *ugali* and KSh. 10 worth of *sukuma wiki*²⁶ (kales) or none, a day. Breakfast is not in the family's menu and they prefer taking lunch rather than supper "when things are good". But Agnes is happy that her [four] children now go to school, thanks to free primary education.

Source: Daily Nation Online Edition, Thursday 28 October 2004.²⁷

part of urbanization processes in sub-Saharan Africa (Potts & Mutambirwa 1990). In the urban sector, interest has focused primarily on urban and peri-urban agriculture, but little attention has been given to wider spatial aspects of urban livelihoods (Tacoli 2002). Many urban households also have rural components to their livelihoods and retain strong links with rural areas, while some keep part of their asset base in rural areas (Owuor 2005). The combined urban and rural residences and livelihoods is a situation called "multi-spatial livelihoods" by Foeken & Owuor (2001). Rural livelihood sources by urban households are embedded in the linkages, interaction and reciprocity that is evident between them and their rural household members, homes or areas.

Recent International Institute for Environment and Development (IIED) Working Papers on "Rural-Urban Interactions and Livelihood Strategies" (i.e. Tacoli 2002; Diyamett *et al.* 2001; Lerise *et al.* 2001; Okali *et al.* 2001) suggest that rural-urban interactions include *spatial* linkages – flows of people, of goods, of money and other social transactions between towns and the countryside – and *sectoral* interactions – "urban" sectors in rural areas (e.g. rural non-farm employment) and "rural" sectors in urban areas (e.g. urban agriculture). De Haan & Quarles van Ufford (2002) view these spatial interactions to be reciprocal

²⁶ Kale is commonly referred to as *sukuma wiki* in Swahili. Literally translated, *sukuma wiki* means "to push the week". The crop, a typical ingredient in the diet of many households, got its name since it helps people go through difficult financial periods, i.e. one is able to keep the week going by feeding on *sukuma wiki*, which is relatively affordable. It grows fast, gives high yields and has a high nutritional value.

²⁷ I wish to acknowledge the writers, Lucas Barasa and Mumbi Murage, for their story on "Families living in crippling poverty", part of which I have quoted here. To maintain anonymity, the name in this excerpt has been changed from the one originally used by the writers.

rather than exploitative. They further argue that urban-rural interactions can only be properly understood if analyzed as a manifestation of people's livelihood strategies. Through these interactions or linkages, households increasingly rely on both rural and urban-based resources for their livelihoods – that is, many households straddle the city and village for their livelihoods (Satterthwaite & Tacoli 2002).

Urban-rural linkages in sub-Saharan Africa

Urban-rural interactions are not a new phenomenon in sub-Saharan Africa (Okali *et al.* 2001; Nelson 1999; Fall 1998). For instance, in the early 1940s, Read (1942) noticed that the majority of (temporarily) urbanized Africans maintained links with their village of origin. As an important part of urbanization processes in sub-Saharan Africa, urban-rural linkages have been well documented in broader migration and urban-rural interaction studies²⁸ and there is no doubt that these linkages continue to date. Using the example of Nairobi in Kenya, Warah (1999: 21) explains why nostalgically clinging to rural roots is by no means a recent phenomenon:

Since colonial times, Nairobi²⁹ has always been a place where people came to work, not to settle down permanently. (...) A range of policies encouraged Africans to come to town as “single” male migrants, rather than as families. The indigenous male population, therefore, viewed Nairobi merely as a place where they could earn wages which could be repatriated to their families “back home”. Unfortunately, this trend continues to this day. Many people living in the city, even those who have lived in Nairobi for generations, view themselves as migrant workers who are merely transient residents of the city. Many men working in the city still have their wives and children “back home”.

There is no doubt that migrants still maintain close relations with their rural homes even from a distance: they return to visit; they invest in housing, some in social activities, education and health amenities; they send money and sometimes receive goods or host visiting relatives (Beauchemin & Bocquier 2003). Gugler (1971; 1991) noted that building a house in the rural area is the expected expression of continuing commitment to it. It emphasizes the migrant's desire to maintain the rural home-based part of his social field. In another example from Kenya, the majority of smallholder workers were found to have retained ties with the rural areas as shown, for example, by the extent of remittances and home visits (Bigsten 1996). Without these visits, and without the social cohesion provided by regular interaction, the strength of rural-urban links would be weakened as migrants lose touch with their rural situations (Frayne 2004: 500).

²⁸ See, for example, the detailed studies by the Scandinavian Institute of African Studies (SIAS): Baker (1990, 1997a); Baker & Pedersen (1992); and Baker & Aida (1995).

²⁹ Like other towns in Kenya and in Africa.

On the other hand, remittances are a crucial component of rural households' incomes and a key element of the continued links between migrants and their rural home area, across all wealth groups (Bah *et al.* 2003: 20). Moreover, sending money to your parents or relatives at the rural home is perceived as a moral obligation, as well as a way to maintain claims and assets in rural areas (Tacoli 2002).

In Nigeria, remittances flow both ways: urban residents send a variety of items to relations in the rural communities – cash, clothing, factory-processed goods such as beverages, sugar and milk, and unprocessed foodstuffs including rice, beans, onions and so on. Remittances from the villages to urban-based relations include locally-produced foodstuffs, especially *garri*, condiments and leafy vegetables (Okali *et al.* 2001: 36). The scenario is the same elsewhere in sub-Saharan Africa as observed, for example, in Namibia (Frayne 2004); Senegal (Fall 1998); in the low-income areas of South Africa (Smit 1998); in Tanzania (Diyamett *et al.* 2001; Lerise *et al.* 2001; Tripp 1996); and in Zimbabwe (Rakodi 1995): town dwellers continue to retain strong links with their rural home areas.

Although urban dwellers have always maintained links with the rural areas, the economic recession and structural adjustment in the last two decades seem to have caused three fundamental and interrelated changes in urban-rural linkages. The first concerns the vanishing gap between urban and rural, at least in relation to income and poverty. The second is about sectoral changes in urban and rural areas. The last part concerns the changing nature of urban-rural linkages: new forms of migration, falling back on rural land or home, flows of food and money, rural farming by urban households, etc.

About two decades ago, Jamal & Weeks (1988: 274) had already observed that due to the global processes described above the “dynamics of income distribution between urban and rural areas has changed”: the urban-rural income gap had substantially narrowed or, in some cases, even closed. It is not surprising from the previous discussions in this chapter that recent studies in sub-Saharan Africa share the same conclusion: since the mid-1970s, economic decline has greatly reduced the gap between real urban incomes and real rural incomes in the region.³⁰ In addition, and related to this observation, there is a relative shift over time in the locus of poverty, from rural towards urban areas (Kanji 1996), “partly because of the effects of recession and adjustments, partly because of the in-migration of the rural poor, and partly because of the increased share of the urban population in the total” (Rakodi 2002b: 30). And although there is still far more rural poverty than urban poverty in sub-Saharan Africa, urban poverty is increasing at a faster rate. Moreover, the harsh economic conditions of the 1980s

³⁰ See Chapter 2 for Kenya's economic performance since independence.

and 1990s have been felt even more acutely in the cities than in the rural areas, as life is generally more expensive in urban areas.

Another consequence of these processes concerns the sectoral changes in both rural and urban areas (Tacoli 1997, 1998, 2002). In general, non-agricultural rural activities have become a widespread feature of sub-Saharan Africa. Typical urban activities like manufacturing are now increasingly taking place in rural areas as well. The increasing emergence of sectoral interactions, at least as reflected in rural areas, is one aspect of what Bryceson (1996; 2001: 194; 2002a: 726) refers to as “deagrarianization” (i.e. a “process of occupational adjustment, income-earning reorientation, social identification and spatial relocation of rural dwellers away from strictly peasant modes of livelihood”), leading to diversification into non-farm activities, but not necessarily to abandoning farming.

On the other hand, agriculture – an activity typically associated with the rural areas – has become a widespread phenomenon and a permanent part of the landscape in most sub-Saharan African towns and cities (see previous discussion on urban farming). This is sometimes referred to as the “ruralization” of African cities (Rogerson 1997; Bigsten & Kayizzi-Mugerwa 1992), although this may also occur when rural assets serve as safety valves for urban dwellers (Krüger 1998). According to Dietz & Zaal (2002: 273), urban life became expensive and the urban poor had to spend so much money on basics that they had to “ruralize” their urban lives. On the other hand, Vennetier (1989) talks of the process of “rurbanization”, whereby urban dwellers are “colonizing” villages and agricultural land around the cities of Brazzaville (Congo) and Cotonou (Benin).

What these changes in the two areas have in common is the element of risk spreading or risk management (Painter 1996): households perform a wide range of different activities to maintain a certain level of living or even to avoid starvation. It is nowadays common to find households in both urban and rural areas relying on the combination of agricultural and non-agricultural income sources for their livelihoods. This is what Jamal & Weeks (1988: 288) called the “trader-cum-wage earner-cum-*shamba* growing” class.

The last consequence of these processes, i.e. the changing nature of urban-rural linkages, is highlighted below.

Changing nature of urban-rural linkages: The current debate

African urban residents have long maintained strong social and economic links with their rural “home” areas, although the nature of those links has varied over time, as the nature of migration streams has adapted to changing economic and political circumstances, and from country to country with variations in factors such as colonial policy, urban history, and land tenure and land availability. The recent era of severe economic decline and structural adjustment has seen such linkages assume a new and vital significance. (Potts 1997: 449)

First, new forms of migration have emerged or old ones have intensified and others have slowed down (Tacoli 1997). There are indications that the rate of rural-urban migration has decreased, while return migration, i.e. from the city to the rural home, is emerging (Okali *et al.* 2001; Tacoli 1998; Baker 1997b; Potts 1997; Tripp 1996) and circular migration between urban and rural areas is increasing (Smit 1998). A review of recent empirical evidence on migration and urbanization in Francophone West Africa suggests that economic crisis may increase circular migration between towns and villages, especially for young people seeking employment and for whom integration difficulties exist in town but also in villages (Beauchemin & Bocquier 2003). While acknowledging that urban out-migration is not a new phenomenon, Beauchemin & Bocquier (*ibid.*: 10) argue that

It seems to be increasing in importance (...) In addition to the traditional return flows of migrants, a new kind of urban-to-rural migration, linked to economic crisis, has appeared in West African countries since the early 1980s. (...) The job market degradation and the deterioration of the standard of living created new relationship between migration, employment and education. In the past, people moved to town to attend school or to find a job. Today, the opposite is quite frequent. A large number of people who have been fired from formal sector jobs return to villages. Most first try to find a new job in cities or towns, sometimes using their “golden handshake” to launch a new career (...) If they fail (as many do) the village is the last resort. In addition, some urban residents with jobs, confronting their incomes to the urban cost of living, choose to return to rural areas where incomes are lower but where food and housing are almost free.

In contrast, one of the findings from a study on migrants’ long-distance relationships and social networks in Dakar, Senegal (Fall 1998) suggests that urban social networks or integration into the city may help weaken links between town and village. The study analyzed migrants’ relationships with their rural home areas from the perspective of urban networks, by generation and sex. He develops his argument further by explaining that the emergence of new forms of relationships in the city illustrates the dynamic process of the integration of migrants in Dakar, and therefore fewer rural links. However, in spite of that, 90% of the male and 80% of the female migrants in Dakar maintained links with their places of origin.

According to Meikle (2002), there is an ongoing debate about whether the urban poor suffer from conditions of social disintegration and community breakdown or whether they rely on strong networks of solidarity between groups and individuals. In the same reader, Rakodi (2002a: 10) argues that “social networks are not all supportive of the poor or effective as social capital and are generally thought to be less robust in urban areas because of the mobility and heterogeneity of their populations”. Whereas it is true that social disintegration may undermine social interaction in urban areas, social interaction between town and village

remains strong as will be seen below. For example, Frayne (2004: 496) found that intra-urban social networks are poorly established in Windhoek, Namibia, with links being rural-urban, rather than urban-urban. However, it has to be recognized that in some instances, the linkages between city and village may not always be strong,

(...) especially where migrants have limited or no access to rural assets such as natural capital, especially land (...) and as a result have little reason to maintain links or invest in their home areas. (Satterthwaite & Tacoli 2002: 55)

Second, rural links have become vital safety-valves and welfare options for urban people who are very vulnerable to economic fluctuations (Frayne 2004; Potts 1997: 461; Smit 1998; Gugler 1991). There is evidence of a significant shift in the nature of transfers of goods and cash between urban and rural households, in the sense that remittances from urban to rural areas are declining (Bah *et al.* 2003) and transfers of food from rural to urban areas are increasing, not only in amount and frequency but also in importance.

It appears that far more food is now being brought in from rural areas, which of course greatly enhances urban residents' vested interests in maintaining their social and economic rural links. These transfers can rely on surpluses generated by existing rural kin or on urban residents returning in the rainy season to cultivate, which they would probably not choose to do if they could afford urban food prices or could gain access to sufficient land in town to grow food. (Potts 1997: 466)

Based on empirical research in Windhoek, Namibia, Frayne (2004) demonstrates that urban households with limited social connections to rural areas are the most vulnerable to hunger.³¹ In contrast, those with active rural-urban linkages enjoy significant transfers of food from rural areas that offset hunger and vulnerability in the urban context. The findings in this study support the position that:

... rural-urban migration is creating dynamic and entrenched socio-economic relationships between the rural and urban sectors. On average, 86% of the respondents (migrants and non-migrants) visit their relatives and friends in the rural areas a few times in a year or at least once a year. While the majority of visits are for "family reasons" (...) the second most important reason (...) is farming related. (*ibid*: 500)

In Zimbabwe, people in the rural areas felt that urban residents were looking to rural areas as a subsistence fallback (Bryceson & Mbara 2003). In some cases, rural dwellers were supporting urban relations rather than the other way round.

³¹ Frayne's study, undertaken in 2000, explores coping mechanisms that city residents use to mitigate rising economic stress. The study examines vulnerability and the role of migration and rural-urban links in promoting urban food security at the household level in Windhoek, Namibia.

Some of them complained of “sustaining families in town by sending them mealie-meal”, “receiving fewer groceries from the urban dwellers” and “Aids patients being dumped on us” (*ibid*: 342). In addition, there is evidence that remittances to rural areas are declining as urban households find it harder to spare any money (Potts 1997: 466). According to Frayne (2004), remittances from urban to rural areas are declining despite being important for rural households.

The decline in remittances in amount and real terms is a consequence of increasing employment insecurity and the cost of living in town. Greater economic hardship and other important aspects such as the increasing cost of education, health care, housing and food have led to migrants sending less in remittances than before. This is an indication that strong urban-rural links at household level mean that increased poverty in town often impacts negatively on rural areas and vice versa (Satterthwaite & Tacoli 2002). Despite the decline in urban to rural remittances, social links between migrants and their rural home areas remain as strong as ever (Tacoli 2002). For many migrants, this is not only a part of their social identity but also a way of spreading their assets (and risk) across space and maintaining a safety net which helps in times of economic and social insecurity in cities (Bah *et al.* 2003: 20).

Third, to reduce the household's expenses, a husband may return his wife and all or some of the children to the village while he remains in town. Potts (1997) refers to this strategy as “adaptations in household composition” or “changing household composition”. In Zimbabwe, Rakodi (1995b) observed that in nearly three quarters of the “separated” or “split households” one or more of the children were living in rural areas, in a quarter the wife and children, and in the remaining 5% the wife only. More common was a pattern whereby the wife goes to the rural areas for a substantial period during the main agricultural season and visits at other times of the year for shorter periods. The situation is similar in neighbouring Namibia where 70% of the children up to 18 years of age are sent to stay with relatives elsewhere (mainly in the rural areas) because there is not enough money to support them in town (Frayne 2004).

With the wife returning to the rural home to engage in farming and children to attend school in the village, the family can face economic hardships better (Beauchemin & Bocquier 2003) and at the same time the rural base is kept as “a safe haven” (Bigsten 1996). Similarly, young people unable to find jobs in town may return to the rural home out of choice or be sent there by their parents. Fostering urban children at the rural home is also common among female-headed households. For example, Muzvidziwa (2001) and Nelson (2001) found that female-headed households in Zimbabwe and Kenya, respectively, sent their children to stay at the rural home as a cost-cutting measure. The high costs of

education in urban schools may push parents to return children to rural areas where schools and other related expenses are relatively cheaper (Potts 1997). The most common practice is for children to be sent to live with their grandparents, while they (i.e. the urban household) send money to assist with the costs of raising the child, including school fees. Muzvidziwa (2001: 95) adds that besides being a cost-cutting measure, the practice of “split-household residential patterns” by urban households is a form of mobilizing both rural and urban resources. Another reason for leaving family members behind in rural areas is a lack of housing in town (Potts & Mutambirwa 1990).

For Beall (2002), such arrangements support the argument that the livelihood strategies of urban households cannot be seen in isolation from their wider context. In that case, the practice illustrates the role played by rural families in helping to reduce vulnerability for urban households (Frayne 2004). In a more sociological context, he goes on to explain that this practice also assists in promoting the “rural” as a legitimate lifestyle for the younger generation, ensuring that migration to the city does not necessarily result in isolation from the rural sector and that it does have the important effect of maintaining ties between urban and rural households (*ibid*: 502).

Lastly, Potts (1997) makes it clear that the decline in real incomes may have encouraged the re-emerging practice of urban residents to leave some people behind or send some to the rural home. She goes on to explain that this practice is particularly reinforced by an urban household’s desperate need for food: people at the rural home can grow food, some of which can supplement urban sources. From an urban perspective, it reduces the food demand and consumption of urban households. Access to rural assets is therefore, according to Krüger (1998), at least a supplementary if not essential element for securing and stabilizing the livelihood systems of many vulnerable urban households.

Rural livelihood sources (food, income): Rural farming by urban households

Despite the emerging importance of *rural* livelihood sources of *urban* households in sub-Saharan Africa, studies focusing on the topic, and in particular *rural farming* by urban households, have received little attention (Owuor 2005; Tacoli 2002; Foeken & Owuor 2001; Krüger 1998). What is known about the topic has been derived from mostly urban studies that were broader in scope and usually recognized the practice of rural farming by urban households but only in passing.

The most common finding in all these studies is the high percentages of urban households claiming to have access to rural land “back home”. Based on general samples of urban households, these percentages range from 35% in Harare, Zimbabwe (Drakakis-Smith 1992) to 80% or more in Biharamulo, Tanzania (Baker 1996) and Enugu, Nigeria (Gugler 1971; 1991). Among the low-income

households, percentages ranged from 24% in Harare (Drakakis-Smith 1992) to 64% in Nairobi, Kenya (Mwangi 1995). In a general survey on urban agriculture on a national scale that was undertaken in Kenya in the mid-1980s, 52% of the households claimed to have access to rural land (Lee-Smith *et al.* 1987).³² Moreover, at least one third of the households stated that they had livestock back in the rural area (Lee-Smith & Memon 1994). In Gaborone and Francistown in Botswana, 37% of the low-income households were cattle owners, with an average herd size of more than 20 animals (Krüger 1998). In Gaborone alone, some 50% of all low-income urban households maintained pastoral and/or arable farming activities in their rural home areas (*ibid.*).

From a number of studies it is clear that claiming access to a plot of rural land does not imply its actual use by urban households. For instance, very few of the urban workers in Kano and Kaduna maintained direct involvement in farming at the rural home (Andræ 1992).³³ In the high-density areas of Harare, the proportion of households using their rural plots productively – that is, to produce crops³⁴ – increased from 50% in 1985 to 75% in 1986 and 1987 (Potts & Mutambirwa 1990). Surprisingly, five years later Drakakis-Smith (1992) found that only 21% of “his” poor households in Harare who had access to rural land cultivated it themselves.³⁵ However, among the households in the slums of Korogocho in Nairobi, the figure was about 50% (Mwangi 1995). Satterthwaite & Tacoli (2002) explain that investing in property such as housing, land (e.g. farming) or cattle in the rural home area is often an important constituent of a migrant’s livelihood strategy, and relatives and kin are the ones most likely to take care of these assets in the migrant’s absence.

For those who actually used their plots, the importance of rural produce for urban households with access to rural land should not be underestimated. Many low-income households in Enugu, Nigeria “partly relied on food produced in the rural home”, both in the 1960s and later in the 1980s (Gugler 1971; 1991). In his first survey carried out in 1961-62, Gugler (1971) found that immigrants from eastern Nigeria who lived in Enugu town “lived in a dual system” belonging to both the town and to the village they came from. Twenty five years later, the

³² In 1985, Lee-Smith *et al.* (1987) carried out a general survey in six Kenyan towns that were considered to be representative for the whole Kenyan urban population. The six towns were, in decreasing order of size, Nairobi, Mombasa, Kisumu, Kakamega, Isiolo and Kitui. Although the survey focused almost entirely on *urban* farming, a question on access to *rural* land was also included.

³³ While the percentage may be small, many urban households engage in rural farming activities not only directly (by themselves) but also indirectly through the cooperation of family members or relatives in the home village and occasionally through hired labour. For example, whereas only 3% of the households in Kano and Kaduna had maintained direct involvement in farming at home, another 17% of Kaduna and 8% of Kano workers paid labourers to work on their land (Andræ 1992: 217). The large majority of the plots were farmed by relatives.

³⁴ Most of the literature on rural farming is on crop cultivation.

³⁵ See previous footnote on Kano and Kaduna.

situation had hardly changed – virtually all immigrants maintained important relationships with their rural home community (Gugler 1991: 403). According to him, this is an indication that due to the deterioration of the urban economy, the “home village” as a safety net had certainly not become less significant. For textile workers in Kano and Kaduna, Nigeria, the claim to rural land was “important as a security mechanism” during adverse times (Andrae 1992).

According to Krüger (1998: 128), the “long-lasting rural-urban linkages” in Botswana were more important for the food security situation of urban households than for instance urban farming. This is because “if all other means in the city fail to provide enough income or food, then a goat or cow can be slaughtered or sold, or one can fall back on grain and vegetables produced in the home village” (*ibid*: 129). In the slums of Korogocho, Nairobi, over one third of those with access to rural land stated that the plot was “a regular food and/or income source” (Mwangi 1995). Tripp’s (1996) study on *urban* farming in Dar es Salaam gives examples of *rural* farming by Dar households, for both subsistence and income. In one of them, the household head worked as a security guard, while the wife had supplemented their source of food by farming in their rural home since 1985. The woman made the following statement on the importance of rural farming:

I farm [at home] and I harvest. If you have food you eat. I cannot remain in town and die of hunger. (As cited in Tripp 1996: 107)

Tripp (*ibid*) observed that with the declining standards of living in the city, many Dar es Salaam dwellers began to feel that agriculture and village life held more promise than city life. Surprisingly, some of them wanted to go into farming as a full-time occupation or to relocate to their rural homes to concentrate on farming. In a study by Baker (1996) in the small town of Biharamulo in northern Tanzania, an attempt was made to calculate the contribution of the sale of rural agricultural produce to urban households’ incomes, which resulted in the surprisingly high figure of 70%. In Tanzania’s southern town of Lindi, farming was found to be the main occupation for over half its inhabitants and the second occupation for another quarter. In the more prosperous northern town of Himo, farming was the main occupation for 13.5% of its inhabitants, but a second occupation for another 40% (Bah *et al.* 2003).

In Harare, 20% of the respondents claimed to receive gifts of food, mainly traditional basic crops, from the rural areas, which led Drakakis-Smith (1992: 276) to conclude that “there is still a substantial subsidy from rural to urban households”. In a city-wide survey on urban maize meal consumption patterns in Nairobi, Mulinge & Jayne (1994) found very interesting and important results: over 40% of the households in Nairobi received some maize from their rural

homes. More recently, Frayne (2004) observed that two-thirds of the households in Windhoek receive food from relatives (and friends) in the rural areas. For the large majority, food from rural areas was important for the household's food security situation.

81% of respondents reported the food they receive from the rural areas to be "important" or "very important" to the household, with a further 10.5% reporting that the food they receive is "critical to their survival". (*ibid*: 503)

Equally, migration case histories of four female heads of households in Masvingo, Zimbabwe revealed that "the respondents at times used their rural networks to source food for their own consumption and their households in town" (Muzvidziwa 2001: 94).³⁶ That is, they relied on food aid from the rural areas using their networks. Despite the women's desire to stay and source a living in town, they kept one foot in town and the other in the village.

It is already evident from the few studies cited above that besides being a source of food, rural areas can also be an additional source of cash income to urban households. In Harare, rural produce represented "a fairly significant addition" to household incomes (Potts & Mutambirwa 1990: 690). Correspondingly, in the smaller town of Gweru, some households practicing rural farming produced a surplus to sell in normal years while others did not need to buy maize for their own needs (Rakodi 1995b). Also in Dakar, Senegal, there was a considerable flow of cash and food supplies from the rural homes to the urban areas: about 15% of male migrants and about one third of female migrants received financial support from the rural home (Fall 1998).

A comparison was made in a few studies between households with an economic base in both the urban and the rural area and households with only one spatial economic base. Baker (1996: 46) found that "the most economically successful and most secure group of households are those which combine crop production and marketing with a variety of non-farm and off-farm income-generating activities". These households, with a foot in both urban and rural economies, were not only found in Biharamulo but also in surrounding villages. Without a foot in the countryside most women in the provincial town of Masvingo would not have been in a position to survive in town (Muzvidziwa 2001). Among slum dwellers in Nairobi, those with access to both urban and rural land were somewhat better off in terms of the welfare level, food intake and nutritional condition of their children than those without such access (Foeken & Mwangi 1998). Likewise, Krüger (1998: 134) found that a number of poor urban households in Botswana lacking a rural foothold were "living under severe risk".

³⁶ The four women were part of a larger sample of some 50 female heads of households.

Finally, Frayne (2004) argued that the transfer of food from rural areas to urban households appeared to be particularly important in the urban food security equation in Windhoek.

Conceptual framework

This section presents a conceptual framework (Figure 1.1) that seeks to capture the main components of the theory of urban poverty and urban livelihood strategies and their interrelationships, as outlined in this chapter. The conceptual model cannot claim to be exhaustive. Inevitably, any framework is an oversimplification of a complex reality and should be treated merely as a guide or lens through which to view the world (Rakodi 2002a). The arrows in this case portray dynamic and complex relationships and influences, not direct causality.

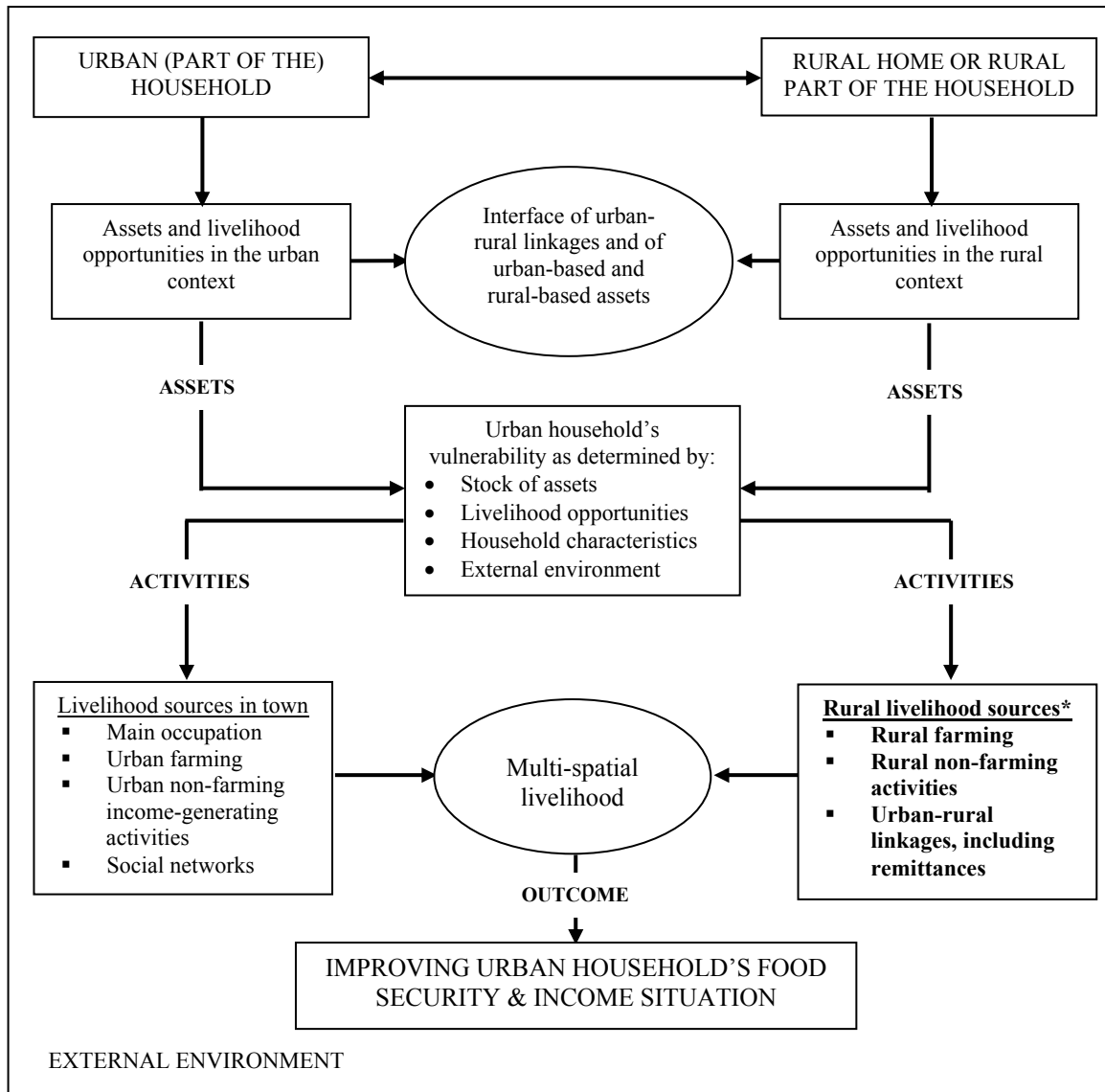
This study is concerned with *rural* livelihood sources of *urban* households and as such the focus is on: (a) the *urban* household (see Chapter 3 for a discussion on “household”); and (b) the linkages between the *urban* (part of the) household and the *rural* home or plot, *rural* part of the household or rural-based family members, inasmuch as these linkages affect the livelihood of the *urban* household. That is the first set of relationships that can be seen in the model. It is these connections to the rural areas that provide the social assets required by urban households to employ the range of economic and “demographic” coping strategies evident (Frayne 2004; Moser 1998).

In the next step, the model recognizes that urban households construct their livelihoods on the basis of assets and livelihood opportunities available to them, both in town and in the rural home. This leads to the not easily definable interface of urban-rural linkages and of urban-based and rural-based human, natural, physical, financial and social resources or assets. The assets available to the urban household constitute the “stock of assets”.

It follows logically that urban households’ vulnerability to crises, shocks and stresses, is first and foremost determined by the livelihood opportunities and stock of assets available to them. In addition, the complex web of household characteristics (size, composition, family life-cycle stage) and external environment (policies, institutions and processes) comes into play. Changes that increase the urban household’s vulnerability may include, but are not limited to, decreases in employment opportunities, declining incomes, attendant income insecurity and deteriorating infrastructure or services.

To counter the short and long-term crises, stresses, shocks and trends, the urban household will, besides its *main* occupation, develop a mix of other livelihood sources, be it in town and/or from the rural home, plot or rural part of the

Figure 1.1 Conceptual framework



* With a highlight on the focus of the present study

household. These livelihood sources may include own food production (farming), diversification and multiple sourcing of cash incomes (non-farming income-generating activities) and social networks, including urban-rural reciprocity. Through these livelihood sources, the aim is to generate a flow of income, food or other benefits (increased well-being, reduced vulnerability) and thereby improve the urban household's food security and income situation. A household combining urban and *rural* livelihood sources is a household with a multi-spatial livelihood (Foeken & Owuor 2001).³⁷

³⁷ The concept of multi-spatial livelihood, as used in this study will be introduced in Chapter 3.

The “external” mediating environment directly influences the internal workings of the “assets-activities-outcomes” relationship. It provides the context within which household decision-making processes unfold, mediating access to household assets and the use to which they can be put, influencing the strategies, i.e. the set of activities, households adopt and their potential outcomes.

The present study and its objectives

Whereas exchanges between urban-based and rural-based households or relatives take place in both directions, in sub-Saharan Africa flows from rural areas to urban areas are increasingly becoming an important element in the livelihood of urban households, particularly in the present circumstances of urban poverty and unemployment. However, the focus has so far predominantly been on the urban dwellers contributing to the livelihood of those in the rural areas, usually through remittances from family members living in the city. Though acknowledged in the last two decades, the reverse flow, i.e. the extent to which urban households realize part of their livelihood from rural sources, remains poorly understood.

Though limited in the present focus, the general scenario that arises from the literature overview cited above is that the importance of rural farming (that is, access to *rural* food and/or income sources) for the livelihood of urban households should not be underestimated. Without a foothold in the rural economy, poor urban households are likely to face severe hardships. A number of studies have indicated that households with access to both urban and rural economies (multi-spatial livelihoods) are relatively better off than those with only one spatial economic base (mono-spatial livelihood). Most of the studies discussed did *not* focus on multi-spatial livelihoods, however, let alone specifically on the topic of rural sources in the livelihoods of urban households.

This study is, therefore, an attempt to fill this gap by using Nakuru town, Kenya, as a case study. The fact that a large majority of the Nakuru townspeople have access to a rural plot, more often than not “back home”, is in itself a platform for linkages between the two geographic and social spaces. The two broad objectives of this study are: 1) to investigate how far urban households depend on rural sources for their livelihoods; and 2) to determine the extent urban-rural linkages have changed due to increased urban poverty since 1980. The specific objectives that emanate from the broad objectives include:

1. To identify the livelihood strategies of the urban households.
2. To describe the practice of rural farming and non-farming activities by urban households.

3. To determine the importance of rural farming and non-farming activities for the livelihood of urban households in terms of food security and income.
4. To determine the past and present nature, extent and direction of urban-rural linkages in terms of resource and person flows.

Organization of the book

The book is structured as follows. Chapter 2 outlines the physical, historical, human and economic geography of Nakuru town, the study area. It also presents some background information on Kenya to situate Nakuru in the national context. The third chapter is methodological, detailing the study set-up, design, sampling, data collection methods and field experience. The characteristics of the sampled households are also discussed in this chapter. The empirical findings of this study are presented in the next five chapters. Chapter 4 outlines the livelihood strategies adopted by urban households in Nakuru town, including three case examples. Chapter 5 describes the practice of rural crop cultivation and livestock keeping in terms of persons involved, use of labour and material inputs, crops cultivated, crop yields, livestock kept, and animal products. It also presents aspects on access to rural plots by urban households and plot characteristics, namely plot sizes, their location, ownership and use. Chapters 6 and 7 are related and complement one another: Chapter 6 deals with the importance of rural farming for urban households' food security and income situation, and Chapter 7 discusses the nature, extent and direction of urban-rural linkages. Chapter 8 compares the "poor" and "non-poor" income groups on a number of issues that have been discussed in the previous chapters. Finally, Chapter 9 presents a summary of the findings, conclusions, recommendations and areas for further research.

The setting: Kenya and Nakuru town

This chapter presents background information of the study area – Nakuru town or municipality – in terms of its geographical characteristics, historical background, population, housing, economic activities and employment. For a broader perspective, the chapter starts by situating Nakuru in the national context of Kenya.

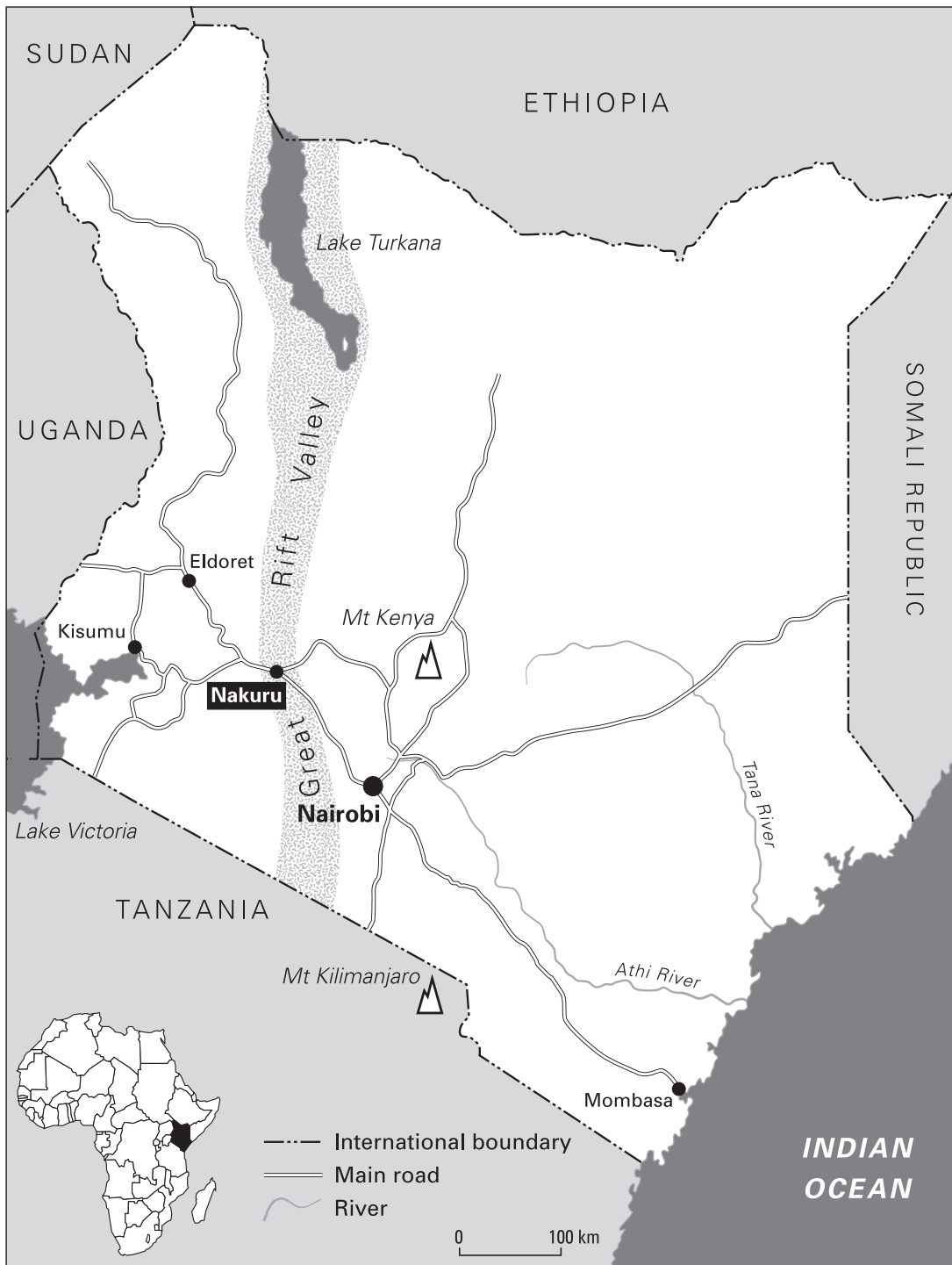
Kenya: Background information

General characteristics

Kenya is located on the east coast of Africa, and shares borders with Somalia to the east, Uganda to the west, Tanzania to the south, Ethiopia to the north and Sudan to the northwest (see Map 2.1). The equator runs almost straight through the middle of the country. The country covers an area of approximately 587,000¹ square kilometres, of which 11,000 and 576,000 square kilometres are water and land mass respectively. Only about 20% of the latter is of high and medium agricultural potential, largely because it receives adequate and reliable rainfall. The rest can be classified as arid and semi-arid lands, mainly used for wildlife conservation and extensive livestock production, such as ranching and pastoralism (Kinyua 2004). Most of the land of high or medium potential for farming lies in the Western Highlands, around Lake Victoria and Mt. Kenya, and along the coast.

¹ Other official documents cite 582,000km² while others use 582,644km² as the area of Kenya.

Map 2.1 Kenya and the location of Nakuru town



The country's altitude ranges from sea level to 5,199 metres above sea level. Thus the climate varies greatly from the humid temperatures at the coast to the often cold and wet regions of Aberdares, Cherenganyi, Mount Elgon and the freezing temperatures at the top of Mount Kenya. Two rainfall patterns are evident across most parts of the country: March to May is the season of the so-called long-rains while the period from October to December is the season of the short rains. Land is the main asset in agricultural production and limited availability of productive land is a major constraint to increased agricultural production. To most Kenyans, access to land is the means of livelihood that determines their levels of prosperity or poverty, fulfills social obligations and also confers social status and political power.

Kenya's economy is heavily dependent on agriculture. It is estimated that 75% of Kenyans make their living from farming, producing both for local consumption and for export. The main feature of Kenya's agriculture is the predominance of small-scale farmers who account for about 75% of total agricultural production. On average, small-scale farmers produce over 70% of maize, 65% of coffee, 50% of tea, 90% of sugar, 80% of milk, 85% of fish and 70% of beef and related products. Large-scale farming accounts for 30% of marketed agricultural production, covering mainly tea, coffee, horticulture, maize and wheat, as well as keeping livestock for commercial purposes (Kinyua 2004).

The country is divided into eight provinces, which are further subdivided into districts (see Map 5.1). Nairobi, the capital city, is considered a separate province and is not subdivided into districts, unlike the other provinces. There are about 42 ethno-linguistic groups and most of the provincial demarcations closely follow these linguistic groups. The main ethnic groups in terms of population size are: Kikuyu, Luhya, Luo and Kamba.

Population and economic trends²

Kenya's population was estimated at 28.7 million in 1999 and is projected to rise to 34 million by 2005. Population density increased from less than 10 persons per square kilometre in 1948 to 49 persons per square kilometre in 2002 on average,³ but 80% of the population live on the 20% medium-to-high potential agricultural (arable) land. The population distribution in Kenya is influenced by a number of factors: physical, historical patterns of economic development, and policies related to land distribution and settlement. The population distribution varies from 230 persons per square kilometre in high potential areas to three persons per square kilometres in arid areas (Kenya 2003b).

² This section draws on Agwanda *et al.* (forthcoming).

³ The total area of Kenya was not exactly the same from one date to the other.

Kenya's population rose steadily by about 2.5% per annum in 1948 to around 3.8% per annum in the 1980s, a growth rate that has been described as one of the fastest ever recorded in world history (Agwanda *et al.* forthcoming). However, economic production did not increase at the same speed (Table 2.1). While the population rose at a constant annual rate of 3.4% from independence in 1963 to 1989, GDP annual growth was about 6.6% in the years immediately following independence and decreased progressively to 4.5% on average in the 1980s. Related to the population, GDP annual growth actually decreased from 3% to 1% in the same period.

Table 2.1 Kenya: Gross Domestic Product, 1964-2001⁴

	Census date:	1964	1969	1979	1989	1999	2001
Population (in millions)		9.2*	10.9	15.3	21.4	28.7	30.4*
Inter-census population growth rate (%)		3.4	3.4	3.4	3.4	3.0	2.9*
Inter-census 15-59 population growth rate		---	3.9	3.6	3.5	3.8	3.9*
GDP current prices (in Billion KSh.)		6.6	9.5	39.6	149.0	639.1	772.9
GDP constant prices in Billion KSh. of 1964		6.6	9.1	15.7	24.3	31.1	31.4
Inflation (% annual)**		---	0.9	9.8	9.7	13.2	9.5
Per capita GDP constant prices KSh. of 1964		720	836	1024	1134	1038	1032
GDP annual growth constant prices (%)		---	6.6	5.6	4.5	2.5	0.5
Per capita GDP growth constant prices (%)		---	3.0	2.0	1.0	-0.5	-2.4

Source: Agwanda *et al.* (forthcoming) who relied on Kenya Population Census Reports (1969, 1979, 1989, 1999) and Economic Surveys (1970 to 2001). * Agwanda *et al.*'s estimates. ** Mean difference between GDP at constant and current prices.

Per capita GDP was at its highest in 1990, i.e. KSh. 1,146 in 1964 constant prices, and began to decline from 1991. In the 1990s, economic growth was negative (-0.5%) while population growth rate, though decreasing, was still high (3.0% as against 3.4% in the preceding decades). Inflation⁵ rose in the 1990s (to its highest level since independence: 13% per annum) but this did not match economic growth, as is sometimes the case of growing economies, but instead matched economic depression. At the turn of the century, inflation dropped to more reasonable levels (less than 10% a year, a level comparable to that in the 1970s and 1980s). However, per capita GDP was following a definite opposite trend (-2.4%) to population growth (+2.9%). In 2001, per capita GDP reverted to its level of 20 years earlier.

⁴ It is not easy to say from this table what it means in terms of Purchasing Power Parity.

⁵ As measured for the economy as a whole and not only in the so-called housewife's shopping basket used to measure household expenditure.

In short, economic growth has been declining since independence, to the extent that it became negative in the 1990s. After experiencing moderately high growth during the 1960s and 1970s, Kenya's economic performance during the last two decades has been far below its potential. In other words, Kenya's economy has declined in per capita terms. As a result, the standard of living for the vast majority of the population has decreased poverty levels have risen alarmingly (Kenya 2001).

Urbanization and urban poverty

Urban growth rates have been increasing since independence. The proportion of those living in urban areas increased from 5.2% in 1948, and 7.8% in 1962 to about 35% in 1999 (Table 2.2). Rapid urbanization is, therefore, a post-independence phenomenon reflecting the high rates of rural to urban migration over the same period. The growth of urban centres both in numbers and population accelerated after independence when Africans were allowed to migrate to urban areas without any legal or administrative restrictions (Obudho & Owuor 1994, 1997).

Table 2.2 Urbanization trends in Kenya, 1948-1999

	Kenya (‘000)	Urban (‘000)	% urban	Urban growth rate (%)	Number of urban centres
1948	5,406	285	5.2	---	17
1962	8,636	671	7.8	6.3	34
1969	10,943	1,082	9.9	7.1	47
1979	15,334	2,314	15.1	7.9	91
1989	21,444	3,864	18.0	5.3	139
1999	28,686	9,997*	34.8*	10.0*	---

Source: Compiled from the 1948, 1962, 1969, 1979, 1989 and 1999 Kenya Population Census Reports.

* These figures might not reflect the existing core urban population since the 1999 Census compiled data for 201 local authorities, regardless of the size of the towns and their limits. It is therefore not easy to determine the “official” number of urban centres in 1999.

The high rate of urbanization in Kenya has been added to the long list of potentially devastating development problems that must be addressed. The continued high rate of urbanization in general has led to problems such as: urban poverty; a lack of urban services, especially to the urban poor; poor provision of urban services; considerable strain on existing urban infrastructural facilities; street children; urban unemployment; urban transportation problems; displaced persons; urban crime; a proliferation of slums and squatter settlements; and urban environmental degradation (Owuor & Nyandega 2003; Obudho & Owuor 2001;

Obudho 1999; Obudho & Owuor 1994). Approximately 60% of urban dwellers live in informal settlements and are often poor, living on less than a dollar a day.

The fundamental problem is that the urban population is growing very fast while economic growth and development transformations necessary to support this growth and enhance the quality of urban life are not occurring at the same rate (Owuor 1995; Stren & White 1989). In addition, Gross Domestic Product (GDP) per capita has fallen, while unemployment quadrupled and real wages continued to fall further. High rates of urbanization combined with poor economic conditions and neglect of urban informal settlements help explain the trend in urban poverty. Generally, poverty in Kenya remains a pervasive national problem presenting formidable challenges that call for urgent action: at least one in every two Kenyans is poor (Kimalu *et al.* 2002; Kenya 2001).

In the Poverty Reduction Strategy Paper for the period 2001-2004, the Kenyan government defines poverty as inadequacy of income, deprivation of basic needs and rights, and lack of access to productive assets as well as to social infrastructure and markets (Kenya 2001). In the Participatory Poverty Assessment Reports (as quoted in the Poverty Reduction Strategy Paper),⁶ poverty was mainly defined as the inability to meet people's basic needs. Poverty was associated with features such as lack of land, unemployment, inability to feed oneself and one's family, lack of proper housing, poor health and the inability to educate children and pay medical bills (*ibid*, see also Box 2.1). In quantitative terms, the absolute poverty line is the income needed to obtain basic food and non-food items. For urban areas, this was KSh. 2,648 per month per person in 1997, which was equal to the official minimum wage as set by the government at that time.⁷ In rural areas, the absolute poverty line was estimated to be KSh. 1,239 (Kimalu *et al.* 2002; Kenya 2001).

As a result of the sharp deterioration in economic performance, the poverty situation in the country has continued to worsen. According to a recent study that gave startling but no new facts and figures about inequality in Kenya, the gap between the rich and the poor is widening everyday, and for every shilling a poor Kenyan earns, the richest gets KSh. 56 (SID 2004). The number of people living in poverty is estimated to have risen from 11 million or 48% of the population in 1990 to 17 million or 56% of the population in 2001 (Kenya 2003a). The wealthiest 10% of the population control about 42% of the country's income, while the poorest 10% earn less than 1% (SID 2004).

⁶ Over the past decade, data on poverty came from three Welfare Monitoring Surveys (1992, 1994 and 1997) and two Participatory Poverty Assessments (1994 and 1996).

⁷ In May 2002 (during Labour Day), the minimum monthly wage was raised to KSh. 3,500. In 2005, the minimum wage was again raised to KSh. 4,817. However, these official measures usually have little impact on the wages employers pay their employees.

Box 2.1 An urban dweller's perception of poverty

When a slum resident of Soweto Ward in Kibera, Nairobi, was asked to define poverty, he said that "Poverty is me, look at me! Look at my clothes. I did not have anything this morning and I am not sure if I will eat anything today. My children are not in school and should they fall ill, I cannot afford to take them to the hospital."

Source: Kenya (2001: 13, quoting the Participatory Poverty Assessments)

Although poverty in Kenya is both a rural and an urban phenomenon, the proportion of the poor who live in urban areas is rising fast. In 1992, the percentage of urban poor was estimated at 29% compared to 42% in the rural areas. In 1997, the figure had risen to 49% compared to 53% in the rural areas (Odhiambo & Manda 2003). The percentage of people below the poverty line is projected to increase to 66% in 2015 if the current trend continues (Kenya 2003b). In 1997, food-poor households, i.e. those that spend less on food than what could guarantee a minimum level of dietary consumption of 2,250 kilo calories per day per adult equivalent, were estimated at 51% in the rural areas and 38% in the urban areas (*ibid*). In the same year, the food poverty line was estimated to be KSh. 927 per person per month in the rural areas and KSh. 1,254 in the urban areas (Kimalu *et al.* 2002; Kenya 2001).

In Nairobi, the proportion of people living below the poverty line – on less than one dollar a day – is 44% (SID 2004). According to the Welfare Monitoring Survey that was held in 1997 (WMS III), 26,378 (or 41%) of the households in Nakuru Municipality were living below the absolute poverty line (Kenya 2001). Importantly, the 1997 figure implied a substantial increase in the prevalence of urban poverty compared with three years earlier when the number of households below the absolute poverty line stood at 30% (Foeken, forthcoming). This is related to the fact that "only a fraction of the [Nakuru] labour-force is actually employed" (MCN 1999: 62). As a result, "there is a high dependency ratio, increasing unemployment and increasing urban poverty" (*ibid*).

One of the factors to increased poverty in Kenya concerns the global changes described in the previous chapter. According to a report of a seminar held in Kenya a decade ago on "Adjustment policy, employment and labour market institutions in Kenya", the Government of Kenya started to implement Structural Adjustment Programmes (SAPs) in the early 1980s. However, it was not until 1992 that the government showed serious commitment to the reform programme (IPAR 1996). Some of the observations that emanated from the seminar, which was jointly organized by the International Labour Organization (ILO), Geneva and the Institute of Policy Analysis and Research (IPAR), Nairobi, confirm the general trends observed in other sub-Saharan countries.

The report noted that the institution-oriented policy reforms (parastatal sector reforms, public expenditure control, labour market reforms) had serious direct negative effects on employment while the competition-enhancing policies (trade liberalization) had mixed effects on employment, with some causing a contraction of employment, and others having expansionary or insignificant effects on employment. Whereas employment levels decreased in the formal sector, informal-sector employment expanded. The formal sector's share in total employment declined from 59% in 1990 to 45% in 1994. Correspondingly, the informal sector's share rose from 41% to 55%. In addition, real wages and job security declined significantly during the SAP period (IPAR 1996). A number of academic and policy commentators in Kenya point out that the unemployment situation is likely to worsen as more civil servants are retrenched, and this is likely to increase poverty among those losing jobs.

Nakuru town

Geographical characteristics

Nakuru is located in the heart of the Great East African Rift Valley, 160 km northwest of Nairobi (see Map 2.1). The largest part of the town lies at an altitude of about 1,700 metres above sea level. In the northern part, on the slopes of the Menengai Crater, the altitude rises to about 1,859 metres. The town is sandwiched between Lake Nakuru National Park⁸ and the Eburu Hills in the south and the Menengai Crater and its associated volcanic landscapes in the north, giving the town its elongated, east-west shape. To the northeast of the town are the Bahati Highlands and to the southwest the Mau Escarpment. Consequently, current expansion is occurring mainly to the east and the west. With an average annual rainfall of between 950mm in the south and 1200mm in the northern section, Nakuru has a dry sub-humid equatorial climate. There are two rainy seasons: the long rains from March-May and the short rains from October-December.

At present, Nakuru is the fourth largest town in Kenya (after Nairobi, Mombasa and Kisumu) with a 1999 population of 239,000 (Kenya 2000). It is the district headquarters of Nakuru District and the provincial headquarters of Rift Valley Province, the largest administrative region in the country. Nakuru Municipality is one of the administrative divisions in Nakuru District. Nakuru's location along the Kenya-Uganda railway and the Trans-African highway, linking the coastal region, Nairobi and the western parts of Kenya, has played an important role in its growth. Other factors include its attractive climate and rich

⁸ This is the home of the famous lesser (pink) flamingos.

agricultural hinterland. The rail line and the highway through Nakuru enhance migration to the town and the subsequent urban-rural linkages.

According to Mwangi (2002: 105), Nakuru town is representative of Kenya “in a nutshell”. Nearly all the 42 ethnic groups are represented, with the Kikuyu, the largest tribe in Kenya, being the majority in Nakuru as well. People from diverse ethnic backgrounds, languages, religions and customs, both Kenyan and foreign, co-exist in Nakuru (De Meulder 1998), and there are no neighbourhoods of particular ethnic groups (Mwangi 2002). In general terms, the greater Nakuru District is one of the most urbanized districts in Kenya and is endowed with scenic sites, four beautiful lakes, a variety of hot springs and two dormant volcanoes. This makes Nakuru District a popular tourist destination (*ibid*: 105).

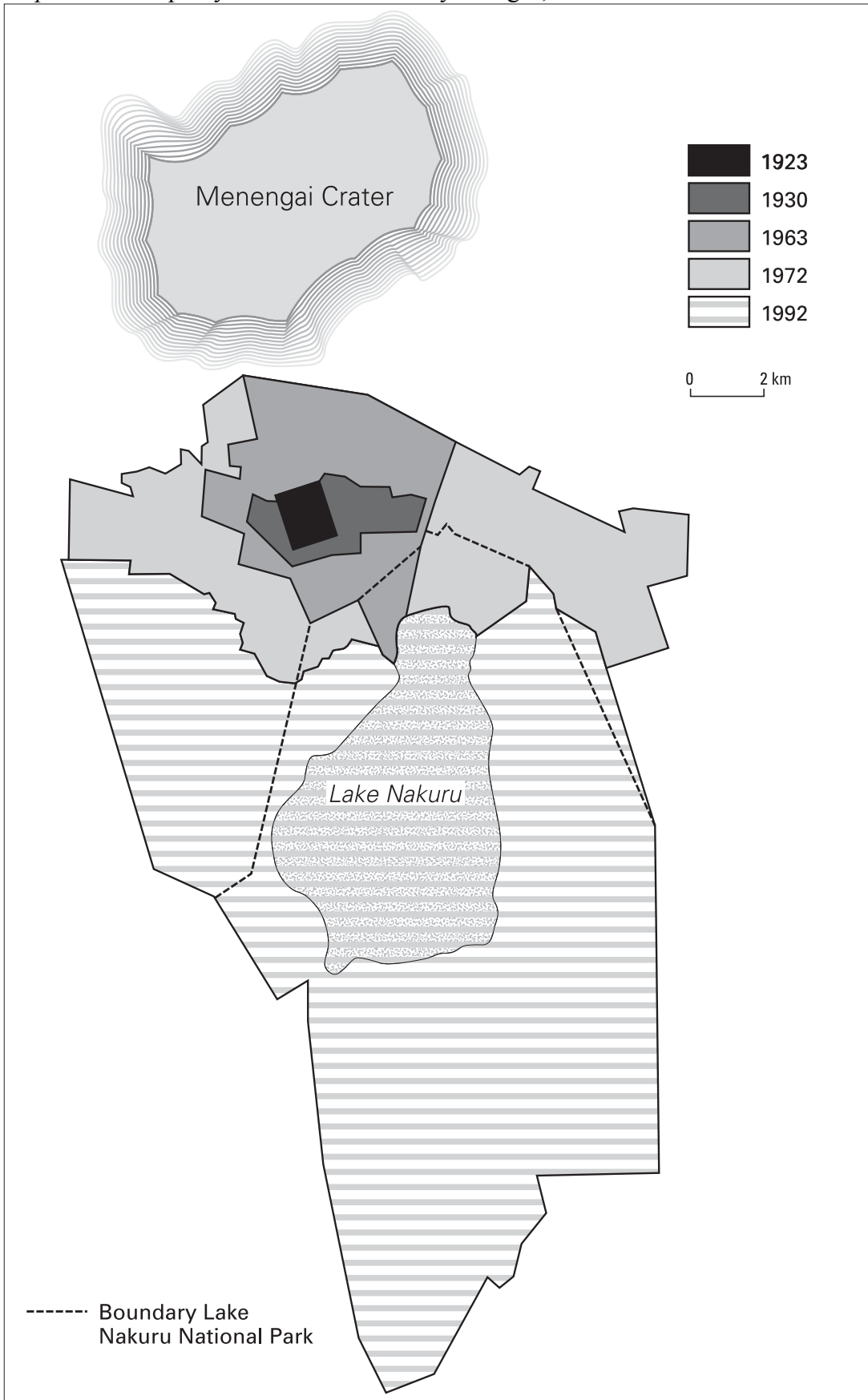
Historical background

The area which today constitutes Nakuru was formerly occupied by nomadic pastoral communities, mainly the Maasai, as grazing land until the arrival of the railway at the beginning of the 20th century (MCN 1999). The Maasai named the place *Nakurro*, meaning a “place of winds” or a “dusty place”. Due to its location on the floor of the Rift Valley with its volcanic soils, Nakuru is usually engulfed with whirlwinds of dust during the dry season. Like Nairobi and Kisumu, the town owes its existence to the Kenya-Uganda railway. Nakuru came into existence in 1904 as a railway station on the great East-African railway (or Kenya-Uganda railway) and soon developed into an important regional trading and market centre because of its strategic location in the so called “White Highlands”⁹ (Mwangi 2002; Foeken & Owuor 2000a; MCN 1999; De Meulder 1998).

During the colonial period, Nakuru was a well-planned settlement, i.e. a square grid cut in two by the railway. During the 1920s, the town began to grow outside its original boundary. In the zoning plan of 1929, Nakuru’s further expansion was laid down in accordance with the then generally accepted principles of functional zoning, i.e. with an industrial quarter, residential districts for the various social classes, a suitable location for a hospital and cemetery, recreational facilities, a site for the airfield, etc (Foeken & Owuor 2000a). Since independence, Nakuru Municipality has had three major extensions of its boundaries, namely in 1963, 1972 and 1992 (see Map 2.2). The 1992 extension included Lake Nakuru National Park and the agricultural land to the northwest and northeast boundaries of the park within the municipality’s boundaries (Mwangi 2002). Due to the subdivision of former farms into small plots for residential use, this stretch is now largely a sub-urban area and is part of the Nakuru planning area (or Metropolitan Nakuru as it is called) (Foeken & Owuor

⁹ This was the area of large farms owned by European settlers.

Map 2.2 Municipality of Nakuru: Boundary changes, 1923-1992



2000a). The total area of the municipality is about 300 square kilometres, of which Lake Nakuru covers 40 square kilometres (MCN 1999).

In Nakuru, land was communal during pre-colonial times but nowadays, all land is in public or private ownership. Public land is owned by either the Municipal Council or the central government and is either used for municipal and government purposes or leased out for a specified period to individuals for various pre-determined urban land-use activities (MCN 1999). In general, public land constitutes the bulk of the municipal area.

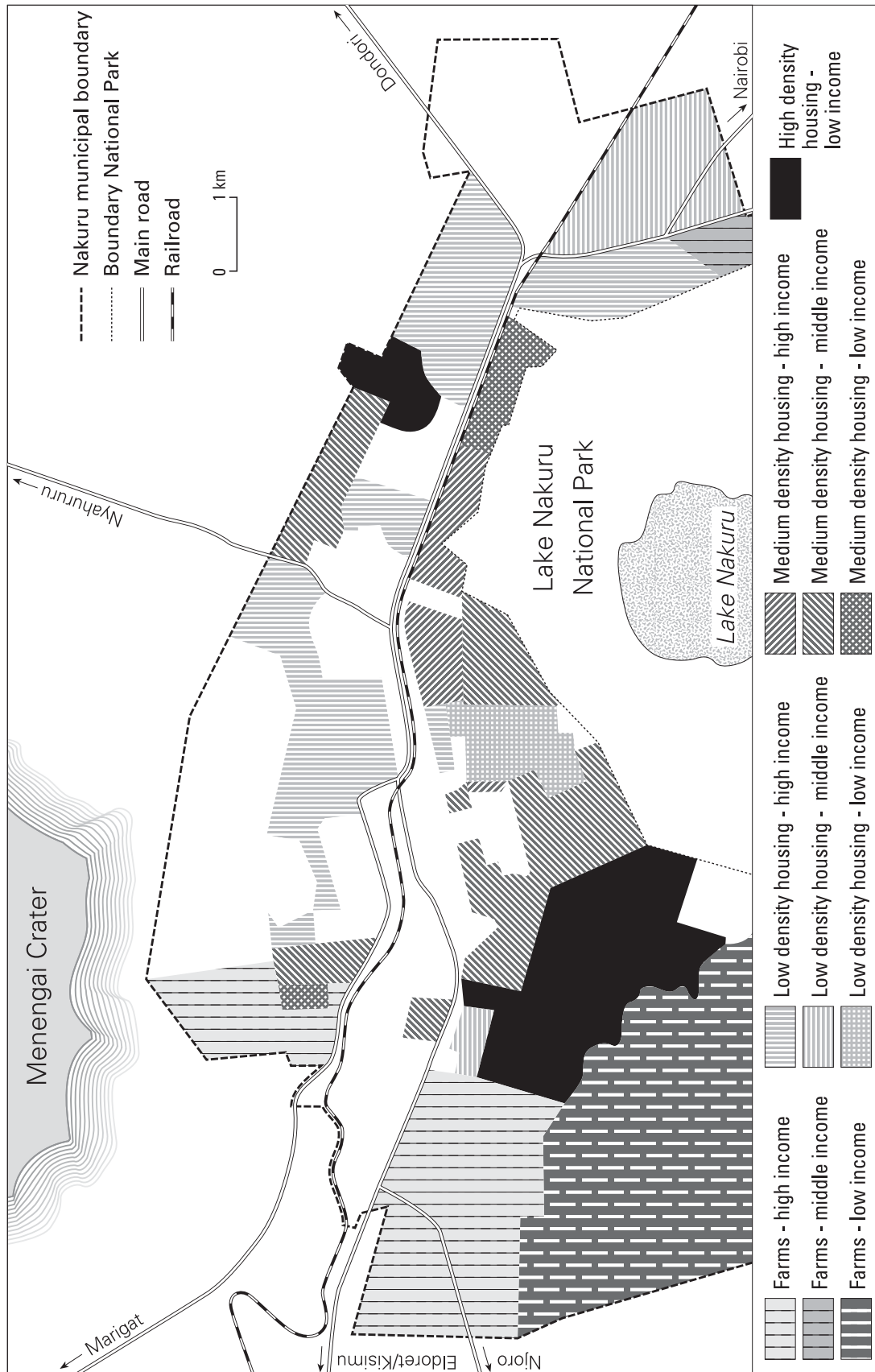
Population and settlement structure

Over the past 30 years, the population of Nakuru town has increased fivefold from 47,000 in 1969 (Kenya 1970) to 239,000 in 1999 (Kenya 2000). The average annual growth rate between the censuses of 1989 and 1999 was 4.3%, which was much lower than the figure of 6.5% in the previous decade. By the year 2015, the population is projected to increase to 760,000 (MCN 1999). Population growth has been influenced by natural urban increase, rural-urban migration from the local hinterland and other parts of Kenya and boundary extensions (Mwangi 2002). Other factors include its cosmopolitan character, favourable climate as mentioned earlier, the availability of various services, relatively low-cost housing and the intensive sub-division of former large co-operative farms which has encouraged immigration to the outskirts of the town by those looking for low-priced land for housing developments (Majale & Albu 2001). This is the sub-urban area mentioned above.

The development of the town's infrastructure and regulatory structures has failed to keep up with the rapid population growth. As a result, a large proportion of the population lives in informal, unregulated and poorly serviced settlements (Majale & Albu 2001). Public housing, which consists of central government and Municipal Council houses forms about 40% of the officially recognized housing stock in Nakuru and takes up only 5% of the total residential area in the municipality. The rest is private-sector housing that provides both formal and informal accommodation with the latter increasing in importance as the poor population increases. The houses are built by individuals for rental or for own habitation (*ibid*). The informal housing is affordable for the lower income groups but is lacking in many services and infrastructure.

Most of the Municipal Council housing is rented out while the rest are tenant-purchase whereby tenants will eventually own their houses after having paid towards the cost of the house over a stipulated number of years. Although they

Map 2.3 Municipality of Nakuru: Settlement structure



are well planned, most of them have a dilapidated look (*ibid*)¹⁰ because the Council has failed to adequately maintain the structures, provide the much-needed services and add new housing despite increases in usage resulting from an increasing population (MCN 1999). The Municipal Council housing stock was intended to cater mainly for the low-income group and as such, like all other Council houses, their rents are still subsidized. Council rents are subsequently about 60% below comparable private-sector rents (Majale & Albu 2001) and as a result they are in great demand.

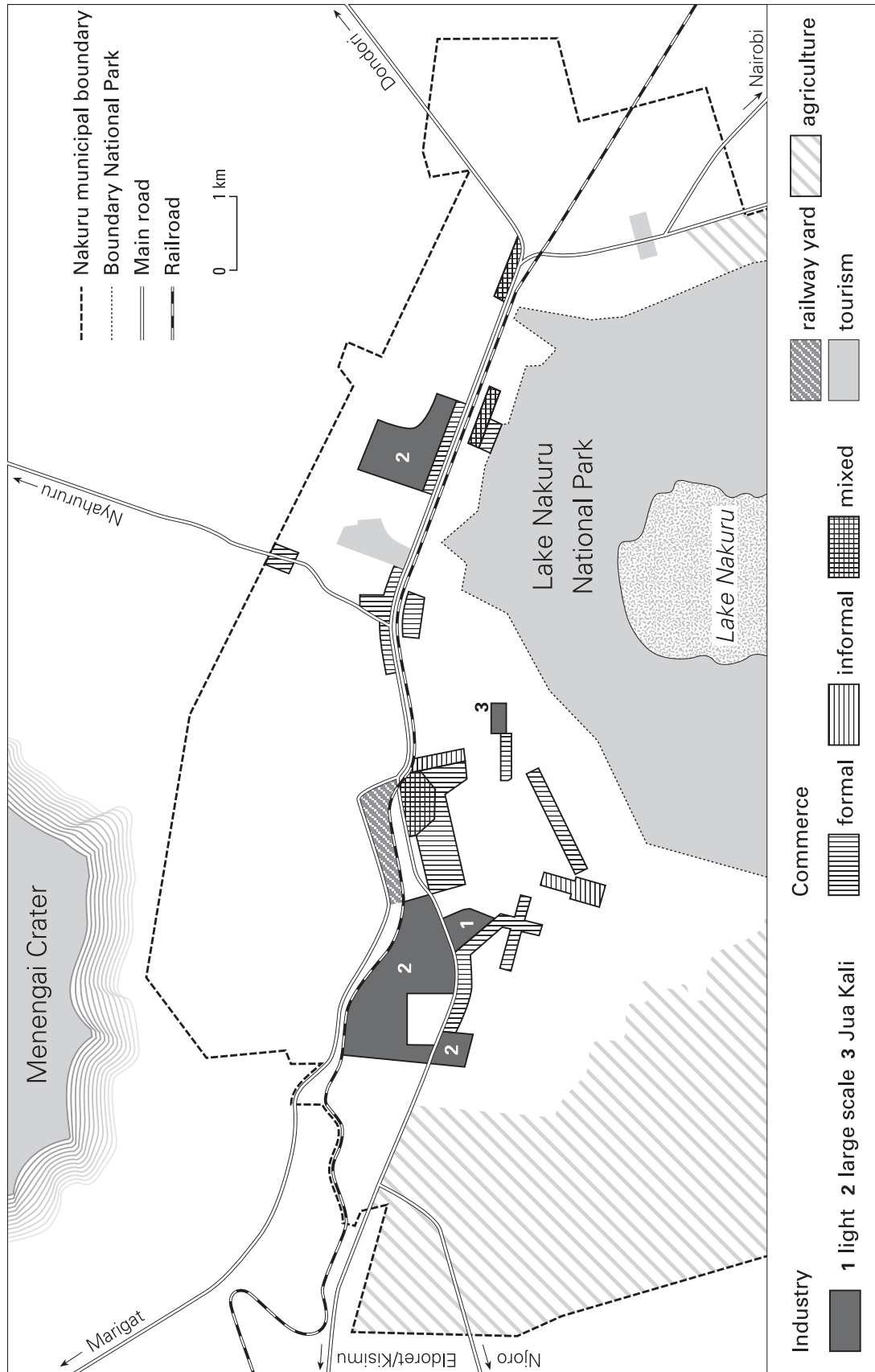
The spatial structure of housing has evolved from racially based differentiation to zoning based on socio-economic status. Housing density is in most cases a reflection of the socio-economic status of the neighbourhood, i.e. high-income areas are associated with low housing densities while low-income areas have a high-density housing (see Map 2.3). Generally, the high-income low-density is found in the north, northwest and east of the municipality. Middle-income medium-density areas are found south of the Trans-African highway and in the northeast of Nakuru. Low-income high-density housing is mainly prevalent in the south and southwest of the town. The western part of Nakuru is little developed due to its susceptibility to faulting. A huge proportion of the population is concentrated in the low-income settlements of Kwa Rhonda, Kaptembwa, Mwariki, Lakeview, Bondeni, Kivumbini and Free Area (Mwangi 2002; MCN 1999). The quality of infrastructure also decreases with an increase in housing density. Rental units in the low-income settlements often consist of single rooms. In Kwa Rhonda and Lakeview approximately four people live and sleep in each room, while in Bondeni this is three people (Majale & Albu 2001). It is, nonetheless, within these crowded conditions that many income-generating activities thrive.

Economic activities and employment

The economic structure of the municipality is important because it affects the way of life of the residents. The important economic sectors of Nakuru are commerce, tourism, industry, agriculture and tertiary services (MCN 1999; see also Map 2.4). The principal activities in the commerce and trade sector are wholesale and retail trade, supermarkets, restaurants and hotels, employing a sizeable number of employees. In terms of tourism, there are several tourist attractions in and around the town. Of these, Lake Nakuru National Park is by far the most important, attracting visitors from all over the world. Minor attractions are the Menengai Crater and two archaeological sites. Nakuru also offers a

¹⁰ The oldest municipal rental housing units were constructed in 1949. The bulk of the houses, however, were built in the 1950s and 1970s (Majale & Albu 2001).

Map 2.4 Municipality of Nakuru: Economic structure



central point of departure to various other attractions in the Rift Valley region (such as Lake Bogoria and Lake Baringo) (Foeken forthcoming).

The town also serves as a centre for agro-based industrial and manufacturing activities for its rich agricultural hinterland. There are over 100 agro-industrial establishments ranging from food processing to farm machinery assembly plants (MCN 1999). As such, the economy of Nakuru town largely depends on its rich agricultural hinterland. Besides being the “farmers’ capital”, there is both large-scale and small-scale farming within the boundaries of the municipality (Foeken forthcoming). There is increasing growth in small-scale agricultural activities within the metropolitan area, mostly located in the peri-urban areas of Bahati, Kiamunyi, Engashura, Kiamunyeki and Mwariki where the sub-division of former large farms into small-holder portions is rampant (Mwangi 2002).

Besides these economic activities, Nakuru town is an important transport and administrative centre. The ‘rail-road ribbon’ of both the Mombasa-Nairobi-Kisumu/Uganda railroad and the Mombasa-Nairobi-Eldoret/Kisumu/Uganda road runs through the centre of the town. This ribbon has attracted all kinds of support facilities such as petrol stations (Foeken forthcoming). As mentioned above, Nakuru town doubles as the district headquarters as well as the provincial headquarters, performing various administrative functions.

Only a fraction of the labour force in Nakuru town is actually employed in the formal sector (Mwangi 2002). Formal-sector employment in Nakuru is mainly restricted to those working in provincial administration (central government), teachers employed by the Teachers Service Commission of Kenya, employees of parastatals (e.g. Kenya Railways, Kenya Power and Lighting, Telkom Kenya and the Postal Corporation of Kenya). The other sources of formal employment are agro-based industries such as Kenya Cooperative Creameries, Nakuru Oil Mills, the Cereals Board of Kenya and the Pyrethrum Board of Kenya, which formed the basis of Nakuru’s industrialization. Over time, other non-agricultural-based industries have developed (e.g. Eveready battery factory) and offer employment opportunities (Majale & Albu 2001).

However, limited access to formal employment has resulted in the rapid increase of informal trading activities not only in the Central Business District (CBD) but in the residential areas as well. In the CBD, as in the residential areas, there are numerous informal commercial activities such as the hawking of inexpensive goods and commodities, sales of *mitumba* (second-hand clothes and shoes), food and vegetable kiosks, etc. For a lack of any other opportunity, others venture into unimaginable and yet innovative sources of livelihood (see Box 2.2).

The informal industrial sector (*Jua Kali*¹¹ enterprises), which comprises a variety of small-scale industrial enterprises involved in motor-vehicle repair, metal work and furniture work, has also grown (*ibid*). These informal activities occur in both designated and unauthorized open spaces across the municipality, except for in the high-income Milimani residential area. As such, the informal sector plays a very important role in generating employment and livelihood for a large proportion of Nakuru town's population.

Although it is not possible to give the exact number of wage employees in the *Jua Kali* sector, quite a substantial number of people draw their livelihood from this sector, and its contribution to the district's economy is significant. (Kenya 1997: 42)

However, as in other urban centres, there are conflicts between informal-sector operators and the municipal authorities. This is because many of these activities are not licensed, they therefore do not pay taxes and they tend to operate in any available space. During the fieldwork for this study, I witnessed the demolition of "illegal business premises" and was on a few occasions caught in running battles between the hawkers and Municipal Council authorities (sometimes assisted by the police). According to Mwangi (2002: 114):

Such actions will not achieve the desired objectives and they tend to create tension between the informal operators on the one side, and the municipal officers on the other. There is need to designate areas where the informal workers are allowed to operate freely as their role in generating incomes for the low-income population is very important.

Box 2.2 Making a meaningful living out of rubbish

The [municipality] dumpsite, 10 minutes drive West of Nakuru town has over the years been considered a no-go area by many locals. But Waceke has set up a business [and home] at the dumpsite (...) Every morning, the family rummages through the tons of garbage ferried to the site by refuse trucks in search of recyclable polythene bags, metal objects and bones. The paraphernalia are later piled outside their house before they are sorted out, weighed and sold at between KSh. 2 and KSh. 4 per kilogram [to recycling companies]. That has been Waceke's source of livelihood (...) To them, life must go on (...) Being a jobless, single mother, she decided to look for a place to live where no one could bother her with rent, unpaid electricity and water bills (...) "I cooked food and sold it to people in the estate before but I was not making enough money for rent, water and electricity bills," she says (...).

Source: East African Standard Online Edition, Wednesday 17 November 2004.¹²

¹¹ *Jua Kali* is a Swahili word that means "hot sun", referring to small-scale informal activities, usually in the open air or hot sun.

¹² I wish to acknowledge the writer, Steve Mkawale, for his feature on "The family that calls rubbish dump home", part of which I have quoted here. To maintain anonymity, the name in this excerpt has been changed from the one originally used by the writer.

Because of their role in employment creation and poverty reduction, the *Jua Kali* sector in Kenya is in fact officially recognized and supported; for example, through the creation in 1987 of a Small Scale Enterprises Unit within the Ministry of National Planning and Development (Robertson 2002), through the establishment in 1988 of the Ministry of Technical Training and Applied Technology, nicknamed the *Jua Kali* Ministry (Macharia 1994), or through the Sessional Paper No. 2 of 1992 on the Small-Scale and *Jua Kali* Enterprises (Kenya 2002a). In Nairobi, metal sheds were erected to hide from the fierce sun in Kamukunji, which is a way to give more dignity to these activities. Successive National Development Plans since 1997 have stated that government institutions will collaborate with non-public organizations to promote informal-sector growth (Agwanda *et al.* forthcoming).

Photo 1 A view of a medium-density residential estate in Nakuru town



Photo 2 Reuben & Rita's rural home



Methodology

This chapter gives a comprehensive picture of the research methods used in this study. It endeavours to answer the obvious but fundamental question: “how was the research conducted?” To achieve this, the chapter elaborates on the research set-up, units of research and analysis, sampling procedures and the methods of data collection. In addition, the chapter provides insight into the researcher’s field experiences and data analysis considerations. It then concludes by highlighting some selected characteristics of the sampled households.

The study set-up

This study was part of the Nakuru Urban Agriculture Project (NUAP) involving researchers from the African Studies Centre (ASC) in Leiden, the Netherlands, and the Centre for Urban Research and the University of Nairobi, both in Kenya. The main objectives of the project were: 1) to determine the scope of farming within the Municipality of Nakuru; 2) to determine the importance of urban farming for the food security and income situation of the households involved; 3) to assess the interrelationships between the different aspects of urban agriculture; and 4) to assess the importance of rural food and income sources for urban households.

This last objective was the point of departure for the present study. According to the larger survey, an *urban farmer* is a person living in town and practicing any agricultural activity either within the administrative boundaries of Nakuru town (*urban farming*) or in the rural areas (*rural farming*). This study deals *not* with farming in town, but with farming *by* Nakuru townspeople in the *rural*

areas. It follows therefore that the choice of the study area and the scope of this study are within the larger project's aims and objectives. The need for a detailed study on the topic of *rural* livelihood sources (food, income) for the *urban* households in Nakuru arose from the 1999 NUAP general survey results.¹ Among other things, aspects about agricultural activities outside Nakuru town (rural livelihood sources) and the general food security situation were asked. From the results it was evident that rural crop cultivation and livestock keeping were important components in the Nakuru townspeople's food security and income situation.

As part of a larger project, for the present study, it was initially planned that a sample of "rural farming households" would be drawn from the 1999 NUAP general survey households. However, after a brainstorming meeting it was realized that there would be strong logistical merits in using a totally new sample. This is because the 1999 NUAP households had been subjected to many other surveys in the same year and were therefore likely to be experiencing "response fatigue".² This, according to one experienced Statistical Officer in Nakuru, could lead to a general unwillingness by the respondents to respond to new questions. In addition, we discovered that many households in the original study population had relocated and this could have meant a high attrition rate, thus lowering the sample size needed for comparative purposes.³

The household as a unit of research and analysis

Scientific research on Africa often considers the household as the basic unit of social analysis. However, most authors agree that the concept of household is rather complicated and that it contains many aspects that are difficult to combine into one clear definition (Van Vuuren 2003: 16). Variation between one community and another makes it even more complex (Corbett 1988). Like Van Vuuren and Corbett, Chant (1998) questioned whether the search for any universal definition of household was feasible or desirable. According to her, households are not "natural" units with fixed forms and meanings across space and through time but are socially constructed and inherently variable. The term "household" covers a wide range of residential forms, groupings of people and functions, making a universal definition of "household" impossible (Beall *et al.* 1999). In

¹ See Foeken & Owuor (2000a); and Foeken (2006).

² The 1999 general survey used the Central Bureau of Statistics clusters with the help of Statistical Officers normally assigned to work in them. Clusters are conveniently defined smaller units (or areas) in space, specifically for national sample surveys. There are 15 clusters in Nakuru Municipality for administrative purposes that at the same time form a convenient choice for most researchers.

³ One would expect a relatively higher inter- and intra-urban residential mobility than in the rural areas.

addition, households change shape and form over time, as they evolve through a life-cycle.

Conventionally, households are defined as spatial units characterized by shared residence and daily reproduction, primarily cooking and eating. In Kenya, a household is usually considered to consist of a person or a group of persons who live together in the same compound/homestead but not necessarily in the same dwelling unit, have common housekeeping arrangements and are answerable to the same household head (Kenya 2002b). The head of the household is that person living in the same household who is acknowledged by the other members as its head. Such a person holds some primary authority and responsibility of the household's affairs, mainly economic and cultural (Otieno 2001). This conventional definition has been used over the years in Kenya for population census purposes and as such has been easily adopted by many researchers.

However, in the context of urban households with strong rural links, the above definition of a household is not really satisfactory because some members may spend significant amounts of time in rural areas (e.g. cultivating, going to school or living there). Such households may have a considerably more fluid composition than the classic definition – and membership would require consideration of where they live most of the year and of their own perceptions of their primary household affiliation (Potts 1997). Importantly, Beall *et al.* (1999: 161) argue that

It is also vital to acknowledge the role of members who are not directly part of the immediate household. Non-resident family members often make contributions to urban households (...) They also contribute to rural households through remittances and in-kind contributions. Moreover, rural family members might support urban households through production of subsistence foodstuffs (...) or through looking after the children (...) The strong ties and reciprocal support between urban-based and rural-based individuals and units suggest that in many instances households are better defined as “multi-spatial”. Membership can then be defined on the basis of the commitments and obligations individuals maintain towards units in which they may not reside, either temporarily or even on a semi-permanent basis. This two-way flow of resources and reciprocal relationships highlights the importance of recognizing rural-urban linkages for understanding household-level strategies and livelihood systems in Africa.

Kaag *et al.* (2004: 68) develop a similar argument but from the livelihood perspective. They stress that the spatial dimension (of a household) deserves more attention in livelihood research:

Furthermore, the concepts of networks, multi-local and multi-spatial livelihoods could be useful in overcoming the rather restricted perspective of the traditional household, which is often employed in livelihood studies. Livelihood units have proven to be far more flexible. Especially the multi-spatial dimension deserves more attention, not only because it is

important for the analysis of livelihood processes, but also because it presses us to take a far broader range of contextual factors into consideration in livelihood research.

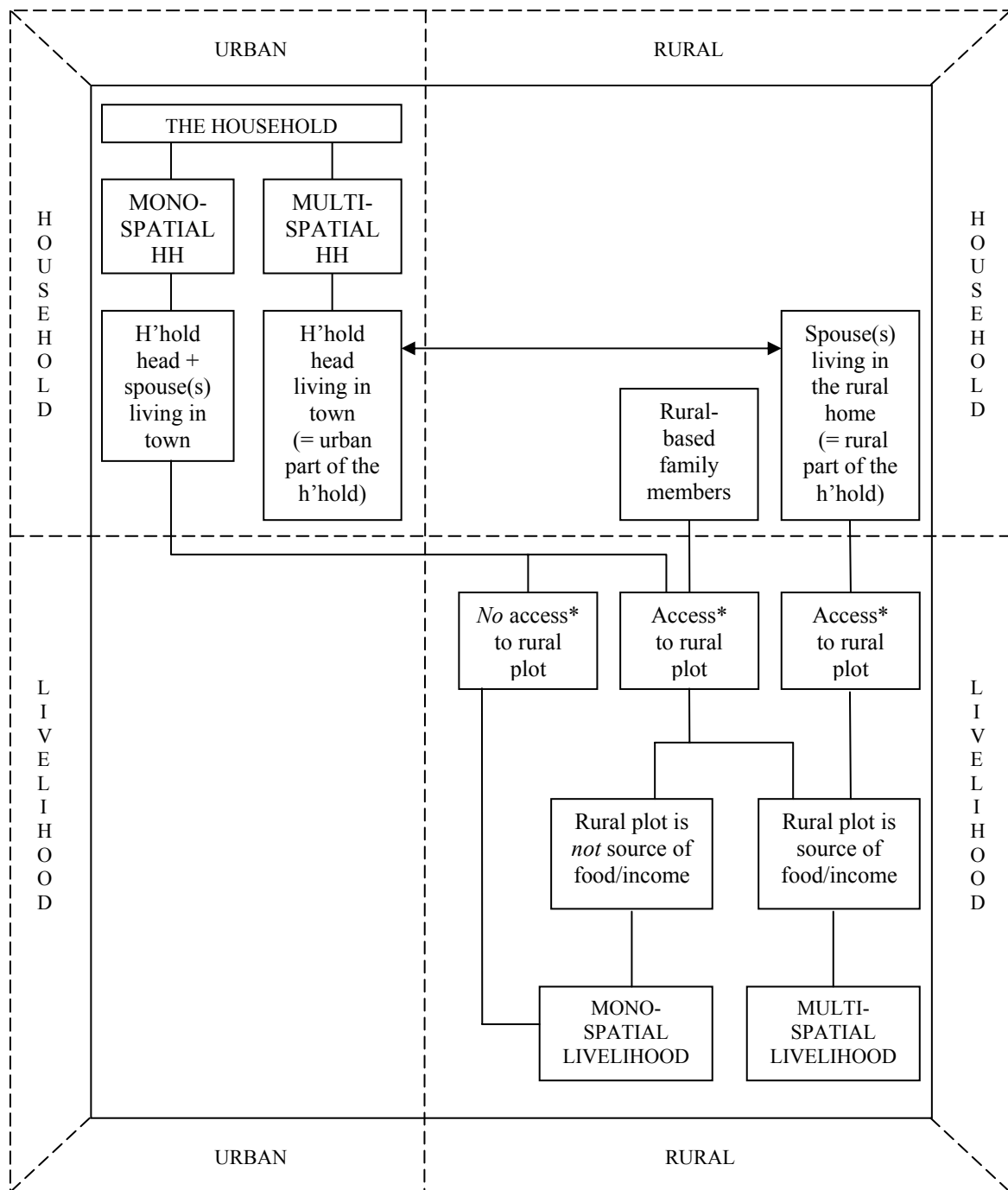
It is with the above observation and recognition that a number of researchers in this field have developed different terminologies to refer to urban households that go beyond the urban sphere. For example, Rakodi (1995b) uses “*separated or split households*” when the wife and/or one or more of the children live in the rural area. Smit (1998) refers to “*multiple-home households*” when the household maintains both an urban and rural base. For Tacoli (1998), it is the widely used “*multi-spatial households*”, with some members residing in the rural areas and others in town. In another example, Muzvidziwa (2001) refers to the practice of “*split-household residential patterns*” as a form of mobilizing both rural and urban resources. As such, (some) individuals are no longer necessarily or strictly organized as co-resident groups (i.e. concentrated in space) but instead resemble individual cells or units connected to each other by social networks, along which flow remittances, information and food (Kaag *et al.* 2004; De Haan & Zoomers 2003).

What, therefore, constitutes a household? In an attempt to capture the spatial dimension highlighted above and because of the focus of the present study, a household comprises (1) all individuals, who at the time of the survey, were considered to be resident in the same house or compound as the household head, and (2) the family members who were living in the rural area/home, in as far as they had an impact on the household’s activities (production, consumption, reproduction and livelihood). As such, this study distinguishes between (a) the *urban* (part of the) household, and (b) the *rural* part of the household (see the upper part of Figure 3.1). The former consists of all members regularly present (or living) in Nakuru town while the latter includes cases where the wife of the male head and children live in the rural area/home (i.e. they are regularly absent from Nakuru town).

Throughout this book, we use “*rural part of the household*” or “*rural household members*” (with the emphasis on “*rural*”) when referring to urban household members (i.e. wife and/or children) who reside in the rural area. It is because of the strong ties and reciprocity between the urban-based and rural-based individuals and units that such households are defined as multi-spatial or split households. It follows that households in which all members were living in Nakuru town at the time of the study are termed “*mono-spatial*” or “*non-split households*”, as illustrated in Figure 3.1 (upper part).

There is also a conceptual difference between “*rural household members*” and “*rural family members*”, the latter being the (male) head’s parent(s), siblings, etc.

Figure 3.1 Schematic operational overview of the relationship between mono/multi-spatial households and mono/multi-spatial livelihoods



* From the urban household perspective

living in the rural home. However, this conceptual difference may blur the practical situation, particularly in cases where the head's wife lives in the rural home and is farming together with her family-in-law. For mono-spatial households, rural-based parents and siblings are indeed their rural family members.

From a livelihood perspective, this study has gone a step further to distinguish between households with “mono-spatial livelihoods” and those with “multi-spatial livelihoods”. As illustrated in the lower part of Figure 3.1, multi-spatial livelihoods refer to cases in which the rural plot is a source of food and/or income for the urban household, i.e. households with a livelihood foothold in both the urban and the rural areas. On the other hand, mono-spatial livelihoods refer to those households with *no* access to a rural plot or where the rural plot is *neither* a food *nor* income source for the urban household.⁴

Looking at the whole of Figure 3.1, it is clear that a mono-spatial household can have *either* a mono-spatial *or* a multi-spatial livelihood, while a multi-spatial household has by definition a multi-spatial livelihood. This is one way of overcoming the conventional definition of a household that does not consider the growing number of households with more than one place they can use for shelter and as a livelihood basis (Dietz & Mulder 2005; Kaag *et al.* 2004; Hosegood & Timaeus 2002).

Even then, when looking at how people provide for their daily needs, we cannot do without the household in whatever form. This is the reason why the household has been used as the unit of research and analysis. Despite the emerging social change towards Western types of living arrangements,⁵ especially in cities, the household is still an important socio-economic unit in most of Africa. The household is important in livelihood, poverty, vulnerability and social security research (Dietz & Mulder 2005).

As will be evident in the next chapter, it is therefore not surprising that people engage in multiple sources of livelihood to “feed my/our family”, “pay school fees for my/our children”, “to supplement my husband's income”, etc. In most African societies, decisions about production, consumption and investments are normally taken at the household level. How decisions are reached within the household and by whom are complex issues which vary from household to household (Corbett 1988).

⁴ A discussion on mono- and multi-spatial livelihoods in Nakuru town is presented in Chapter 6.

⁵ For example, the tendency towards nuclearization of households as opposed to extended families; emergence of single-person households, female-headed households or non-related-persons households; declining fertility and therefore smaller household sizes; erosion of community life; non-working wives engaging in income generating activities instead of relying on their husbands, etc.

General approach and sampling procedures

The fieldwork for this study was carried out in three phases between 2001 and 2003. The first phase was a general survey of 344 households using a standardized pre-coded questionnaire. Before that, literature research was done on the topic to gain a clearer perspective and deeper understanding of the research problem presented in Chapter 1. The second phase consisted of in-depth interviews or case studies with 16 households drawn from the initial sample. Of these 16 households, five were further selected for the third phase – the rural visits, which were basically a continuation of the in-depth studies but in the respondent's rural home.⁶ The next two sub-sections give a systematic account of how the households were selected for the study.

Selection of households for the general survey

Based on a representative sample and using the household as the unit of research, the general survey aimed at generating quantitative data to obtain an overall view of the Nakuru townspeople's (a) household characteristics, (b) income sources and expenditures in town, (c) rural livelihood sources, e.g. food and income, with emphasis on rural farming activities, (d) urban-rural links, (e) household food security situation, and (f) housing conditions and amenities in the municipality. To achieve this, a multistage stratified proportionate random sampling procedure was used. The steps in this process involved systematically answering the following questions related to the sampling design.

(1) How should Nakuru Municipality be stratified?

Nakuru Municipality is one of the administrative divisions in Nakuru District comprising four locations and five sub-locations. A sub-location is the lowest administrative unit in Kenya. The municipality was first stratified into its administrative sub-locations, namely Lanet, Afraha, Baharini, Viwanda and Baruti (Table 3.1, column 1).⁷ For a wider spatial coverage, all the sub-locations were represented in the sample. By doing this, the survey expected to capture as far as possible the diverse population of the municipality in terms of socio-economic status and density.

(2) How many households should be interviewed?

Even with a mathematical formula, there are no universal laws about the sample size (Mugenda & Mugenda 1999). However, guiding principles do exist. We

⁶ As in other NUAP surveys, we decided to start with quantitative data collection (to answer the “what” questions) and follow this with qualitative in-depth interviews (to answer the “why” questions).

⁷ Administratively, Baruti, Lanet and Viwanda (also known as Kaptembwa) are both locations and sub-locations. Afraha and Baharini Sub-Locations are in Central Location.

decided on a workable sample of 360 households based on two main considerations. We were guided, firstly, by the experience gained in previous NUAP surveys in the municipality, and secondly, by the available resources (financial, human) and time. In our view, the figure of 360 was large enough not to invoke sampling errors and also manageable given the available resources and time.

Table 3.1 General survey sampling procedure

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sub-location	H'holds in sub-location	H'holds for sample	EAs in sub-location	Sampled EAs	Households in EA	Sampled h'holds	Interviewed h'holds
Lanet	10,119	53	82	Teachers	74	39	40
				Naka	26	14	12
				=	100	53	52
Afraha	6,692	35	69	Freehold	102	35	30
Baharini	14,663	77	142	Kivumbini	100	41	33
				Abong' Lo Weya	90	36	31
				=	190	77	64
Viwanda	34,806	183	305	Bangladesh	99	27	28
				Shabaab	108	29	31
				Kaptembwa	95	26	28
				Kwa Rhonda	82	22	18
				Mwariki	91	24	26
				Kaloleni	110	30	31
				Ngei	95	25	28
=	680	183	190				
Baruti	2,048	12	20	Baruti	40	12	8
Total	68,328	360	618	13 EAs	1,112	360	344

Source: The number of households and Enumeration Areas (EAs) in each sub-location is from CBS – Nakuru office. During the calculations, the number of sampled households in Baruti was rounded off to 12. In some EAs we interviewed one, two or three more households than sampled. It is common for one or two people to request to be included in the sample.

(3) How many households should be interviewed in each sub-location?

The number of households to be interviewed in each sub-location was determined proportionately to the total number of households in each.⁸ As such, sub-locations with many households had a larger sample drawn from them (Table 3.1, columns 2 and 3).

⁸ The calculation was as follows: (total number of households in the sub-location) / (total number of households in Nakuru Municipality) * (the sample size).

(4) How manageable will it be with households scattered across the sub-locations?

While upholding spatial distribution *across* the sub-locations, it was necessary to concentrate the sampled households in a few manageable clusters *within* each sub-location. During previous NUAP surveys, it became clear that the best time to interview urban households was in the evenings on working days (Monday to Friday) and in the afternoons at weekends (Saturday and Sunday).

It is difficult to talk to respondents during the day because the household head and/or spouse are at work or are busy sourcing for their livelihoods elsewhere. Moreover, conducting interviews late in the evenings for a dispersed sample within a sub-location was not only risky (in terms of security) for the researcher and his assistants but was also not convenient for the respondents. It is within this context that we further sub-divided the sub-locations into manageable Central Bureau of Statistics (CBS) Enumeration Areas (EAs).⁹

(5) How many EAs from each sub-location should be included in the sample?

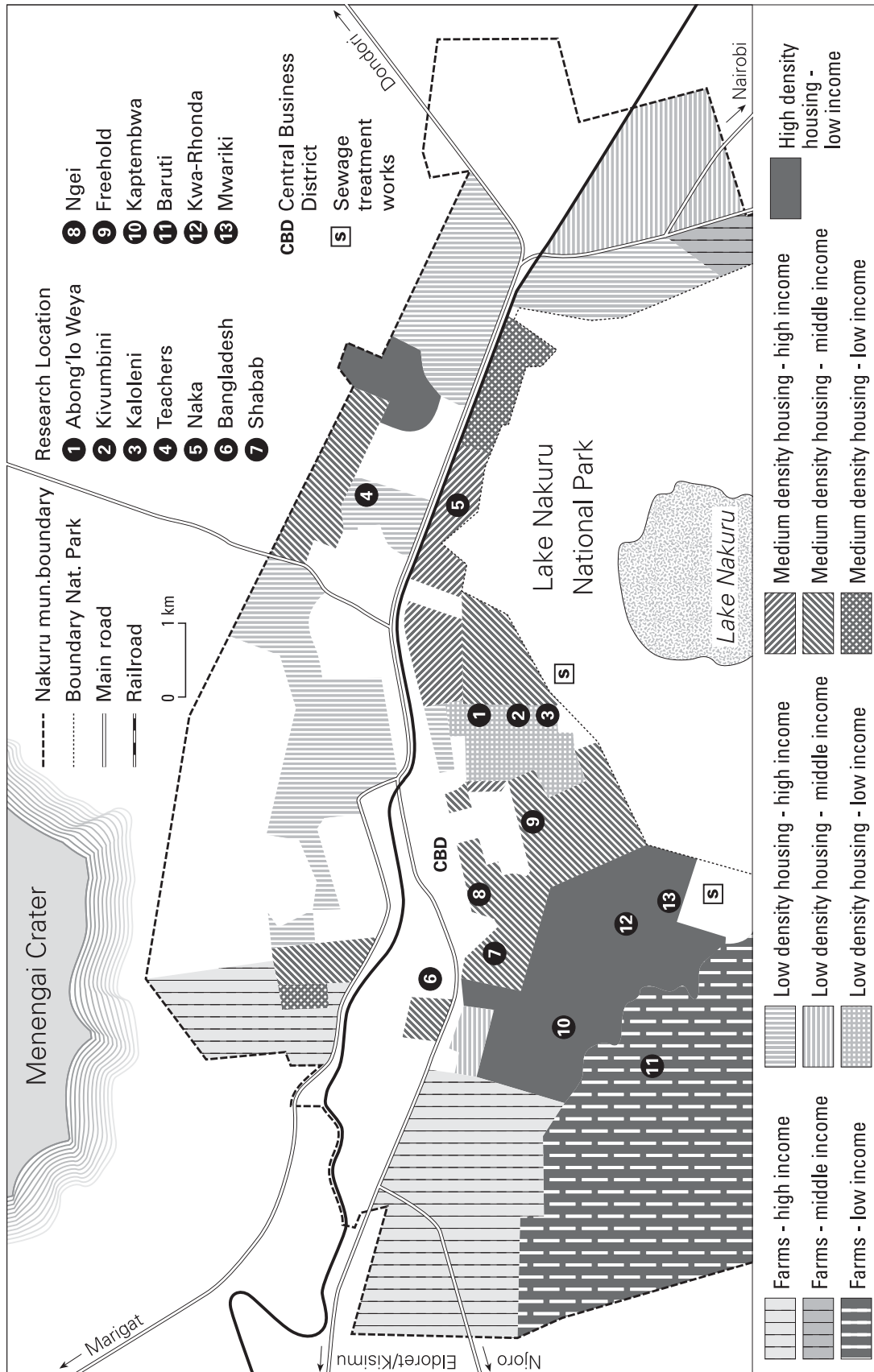
Of the 618 EAs used in the municipality during the 1999 Kenya population census, 13 (2% of the total) were selected for the sample. The 13 EAs were distributed proportionately to the number of EAs in each sub-location (Table 3.1, columns 4 and 5). To avoid clustering of EAs next to one another, their selection in each sub-location was done in such a manner that only one EA was picked in a particular residential neighbourhood (i.e. residential estate).¹⁰ As such, 13 residential neighbourhoods are represented in the survey, as shown in Table 3.1, column 5 and Map 3.1.¹¹ Twelve of these are truly “urban” residential areas. Only Baruti, which is located in the southwestern part of the municipality, is largely rural in character.

⁹ Enumeration Areas are conveniently determined and used by the Central Bureau of Statistics (CBS) for census purposes. An EA has a number of households, more often than not a block or blocks of several houses.

¹⁰ The EAs were picked randomly but in such a way that two or more successive selections did not fall in the same residential neighbourhood as guided by one of the Statistical Officers from the CBS Nakuru Office. For example, if the next successive EA was in the same neighbourhood as the previous one, it was discarded and the same process repeated until spatially separated EAs had been picked in succession.

¹¹ Since the EAs do not have definite names, we refer to them by the name of the residential neighbourhood they fall in. These residential neighbourhoods, according to the Statistical Officer, are a good representation of the various socio-economic strata and housing densities in Nakuru Municipality. As such, both the “poor” and “richer” households/neighbourhoods are represented in the sample.

Map 3.1 Distribution of study locations in Nakuru Municipality



(6) How should the sample finally be drawn?

The sample of 360 households was finally drawn from the selected EAs. In addition, the number of households to be interviewed in each sub-location had already been determined. With the help of 1999 CBS census household listings and maps, a sampling frame was established for each selected EA. For sub-locations with only one selected EA (i.e. Afraha and Baruti), the already pre-determined number of households to be interviewed was randomly selected from the sampling frame. For sub-locations with more than one selected EA (i.e. Lanet, Baharini, and Viwanda), the number of households to be interviewed in each EA was not only based on the number of households in the corresponding EA, but also on the aggregate number of households in the two or more EAs of that particular sub-location (Table 3.1, columns 6 and 7).¹²

By the end of the survey, a total of 344 households had been interviewed, representing 31% of the total number of households in the selected EAs and 0.5% of the total number of households in Nakuru Municipality. The 4% loss was mainly due to refusals or the unavailability of the household head and/or spouse to respond to the questions. Under normal circumstances, replacing these households would have been the best option to achieve the 360 household target. However, through my personal field experience, I decided not to introduce “replacements” during the survey because the researcher can use this option as an easy justification to replace households without sound reason. As much as we had planned to do the replacements after the survey, but this did not happen because of the experiences and challenges we had already gone through (see section on field experience, memories and reflections).

Selection of households for in-depth interviews

The selection of households for the in-depth interviews was not random. The 16 cases were selected based on a number of criteria. A first condition concerned the importance of the rural plot to the urban household, particularly rural farming and it being a source of food and/or income. The in-depth interviews were therefore selected from households in Nakuru town *having a foothold* in their rural plots or homes. Secondly, the age of the household head and the year s/he came to Nakuru Municipality was taken into account. At least half of the household heads were more than 40 years old and had lived in Nakuru town since 1980 (i.e. for the last 20 years).¹³ This was to enable an evaluation of, if any, the house-

¹² The calculation was as follows: (total number of households in the EA)/(total number of households in the n+1 EAs in the sub-location) * (the number of households to be interviewed in that sub-location).

¹³ See Appendix 1, Table A1.1 for an overview of the characteristics of the households selected for the in-depth interviews.

hold's livelihood strategies, the importance of rural farming, and the changes over time in urban-rural linkages.

Third, the household's monthly income situation in 2001 was also taken into account. The "high-income" households were purposely excluded from the in-depth studies.¹⁴ Lastly, for the necessary variation, the cases should differ in terms of location of rural plot; rural plot inherited versus rural plot purchased or rented; household size; female-headed households versus male-headed households; and rural crop cultivators versus rural livestock keepers. Other practical considerations were the proximity of the respondent's residential neighbourhood to the researcher's hotel and the respondent's willingness to have repeated visits and interviews. The residential neighbourhoods were within reach of each other and the researcher's hotel, making it convenient when arranging appointments, in reaching the households and in moving from one household to the other.¹⁵ Without the people's willingness, the in-depth interviews would have been much more difficult to carry out, especially in the urban environment.

The study continued with the in-depth interviews at the rural plots or homes of five of the initial 16 households. The rural homes were located and thereafter detailed information was collected from the *rural* household members, family members or other individuals living there. The five cases comprised one female-headed household having access to her mother's rural plot in Turkana, three households with rural plots in Siaya and Kakamega but where the wife and some of the children went to live at the rural home at different times of their lives, and one household with their rural plot in Kisii but whose members all lived in Nakuru town.¹⁶ One of the households had a rented plot in Rongai, i.e. besides their rural home. Initially, seven households were selected for rural visits but towards the end of the interviews I decided to abandon two rural visits to Nyeri for two reasons: one, after several last-minute cancellations of the trips by the household heads, it became clear that they were not willing to extend the interviews to their rural homes, and two, I had already collected adequate information from them during the Nakuru visits where they willingly responded to my questions.

Methods of data collection

The household general survey

Data collection for the general survey was carried out between September and December 2001 using a standardized pre-coded questionnaire. The survey was

¹⁴ See below for income categorization.

¹⁵ At the end of the survey, the in-depth interviews were collected from households in Abong' Lo Weya, Kaloleni and Ngei.

¹⁶ See Map 5.1 for the relative location of these rural plots.

preceded by an intensive period of re-familiarization with Nakuru Municipality, developing the sampling design, pre-testing the questionnaire¹⁷ and training the five field assistants. One of the assistants, a Statistical Officer with the CBS Nakuru office doubled as a field supervisor. This, however, did not prevent the researcher from being intensively involved in data collection.

Having been involved in NUAP surveys, the researcher had the advantage of having prior knowledge of the town and research experience in almost all the neighbourhoods of the municipality. Using locals as field assistants and an officer from the CBS Nakuru office, it was easy to establish rapport with the respondents after a brief introduction. Except for a few cases, the respondents rapidly understood the importance of the study and willingly offered the information required even when most people were already pre-occupied with election fever that was rocking the country during that period. The respondent to the questionnaire was either the household head or the spouse, as either or both of them were felt to be best informed about the household's consumption and production patterns. Where the household head or spouse could not be found for an interview, the interviewers made several "call-backs" or "re-visits" to the household. For them, this was part of their research.

The general survey questionnaire

The general survey questionnaire was organized in four main parts but with various sub-sections.¹⁸ The first part consisted of questions regarding the household's demographic characteristics such as sex, age, marital status, level of education and occupation (Form 1) and their involvement in urban non-farming (Form 2) and farming activities (Forms 3 and 4).

The second part focused on questions dealing with the nature and extent of the rural farming activities: rural crop cultivation (Form 5) and livestock keeping (Form 6). The main issues covered in these two sections were the characteristics of the rural plots, farming practices (crops cultivated, animals kept, crop harvests, production of milk and eggs, persons involved, use of inputs) and the contribution of these activities to the household's food security and income situation. To obtain a complete picture of the urban households' dependence on rural sources, questions on rural non-farming economic activities (Form 7) were addressed in this part as well.

Whereas the second part of the questionnaire was designed to address mainly the first broad objective of the study – the extent to which households in Nakuru town depend on rural sources for their livelihoods – the third part concentrated

¹⁷ The pre-testing was important in two ways: it exposed a number of ambiguities in the original questionnaire which were re-written, and it made it possible to improve the codebook.

¹⁸ See Owuor (2003) for the questionnaire.

on the second objective, urban-rural linkages (Form 8). It sought information on the migration history of the household head and spouse(s), the nature of visits (frequency, purpose, flows) and attachment to the rural home. The last part of the questionnaire provided further insight into the food security situation of the household and because of their sensitive nature, questions regarding income and expenditure were included in this section (Form 9), and not at the beginning of the interview. The questionnaire was concluded with questions regarding household conditions and amenities (Form 10).

At the end of the questionnaire, the interviewer was required to record the duration of interview, relevant observations made during the interview and the house number according to the researcher's field maps. Information on the physical address of each household was important for future visits. In addition, the interviewer was expected to record the date of the interview, the name of the EA, and the names of the interviewer, the supervisor and the respondent. This information proved to be useful, not only as the general survey progressed but also during the in-depth case studies. The respondent to the questionnaire was either the household head or the spouse. Given the higher likelihood of finding the wife at home, it is not surprising that about two-thirds (64%) of the respondents were female.

Field experience, memories and reflections

In this section, I share some of my field experiences, memories and reflections with other urban researchers. The task of carrying out research and data collection in an urban environment is highly dependent on the availability, patience, trust and willingness of the urban population. Urban surveys are also challenging due to hostility, insecurity and suspicion of town-dwellers towards any non-resident or visitor and, for that matter, researchers in general. What is important is the approach the researcher takes to minimize these problems, before and during the visit.

As mentioned before, finding respondents at home during the general survey was not an easy task. As could be expected, most of them were busy sourcing for their livelihoods elsewhere in their places of work, be it at the office, market, shop, roadside or kiosk. As such, most of the interviews for this study were conducted at weekends¹⁹ and on weekday evenings, with adequate care taken over security (and safety) concerns, the timing of the interview and the availability of the respondent for an interview at that particular time.

¹⁹ This, however, should not be taken to mean that all respondents were free and available at weekends. For those in informal employment, weekends were as busy as other days. Even then, weekends are normally used for other family or private commitments and, as such, the availability of the respondent and the timing of the interview became important.

To “identify ourselves” in the area, the first visit to each sampled EA was made by the entire research team. During these initial visits, I personally accompanied the research assistants and enthusiastically introduced them to “their households”. I humbly identified myself with my university identification card and research permit before explaining my research work and asking for their kind cooperation.²⁰ In addition, I took time to explain to anybody who cared to ask about our mission in the area. Besides reducing hostility and suspicion prevalent in urban areas, this had an added advantage in that over time the sampled households, including some of the non-sampled residents, easily identified the research assistants and my study as “*kazi ya mwalimu wa chuo kikuu*”.²¹ Consequently, it was possible to visit or re-visit the sampled households, also in the evenings, without fear.

During the evening interviews, the research assistants developed their own safety precautions by “walking and working” in pairs. And to avoid “eating into the household’s private time” no interviews were made after 7 pm. However, there were two exceptions to this. First, being far away, all the interviews in Baruti were carried out during the day²² and second, all the interviews in Naka, a high-income estate, were done at weekends and where necessary by appointment. In other EAs, making appointments never worked. Due to other engagements, most of the respondents never kept to their appointments, particularly time. We therefore resorted to random visits and notification that “we will pass by another day”.

Generally, when the household head or spouse was not at home, we simply returned on successive days until one of them was available. As could be expected, the wife was more likely to be found at home attending to household chores than the husband who normally arrived home late. This explains why two-thirds of the respondents were female. We succeeded after several attempts to visit all the selected households, in some cases talking to both the household head and spouse. By doing so, the non-response was minimal (4%). These were households in which the respondent refused to be interviewed even after my intervention or where the household head or spouse was never available. One of the respondents who refused to be interviewed had this to complain about:

²⁰ This procedure was adopted by all the research assistants thereafter. All of them were issued with a research identification card (complete with a passport photograph), a letter of introduction from the researcher (on official university letter-head) and a copy of the research permit from the Ministry of Education, Science and Technology. In addition to their national identification cards, they were expected to have these documents on them at all times during their research.

²¹ Literally: These are people working with [that] University [of Nairobi] Lecturer.

²² Baruti is largely rural in character and relatively far from the city centre for an evening expedition. Coupled with few public vehicles, it was only logical that we arranged for the interviews during the day. This did not pose a problem because of the few households involved. Out of the 12 sampled households we managed to interview eight (Table 3.1).

“We are tired of these questions of yours. Every year you people come and ask us various things concerning our lives and yet we do not see anything beneficial coming out of it. I am sorry; I am busy looking for money to feed my family. We are not even sure what you do with all this information you take from us.”

These and other problems were easily solved or solutions provided for, during our daily morning briefings and review of the previous day’s work. This provided an opportunity for the research assistants to be fully involved in the implementation of the research. With the guidance of the researcher, they identified the problems and provided workable solutions to them. These meetings were also used to go through the previous day’s completed questionnaires. Where necessary, for example when the answers given on a questionnaire were inconsistent, the researcher sought clarification from the supervisor, interviewer and/or respondent.

The rapport the researcher had established with the respondents was particularly important (again) during the in-depth interviews in Nakuru and in the rural areas. Although the logistical preparations for the rural visits were challenging, the involvement of the respondents in organizing these visits proved useful. In a few instances, the journey had to be cancelled at the last minute due unforeseen commitments. These visits were eventually successful except for two as already mentioned above.²³

Collection of information during in-depth interviews

Through in-depth interviews, the case-study approach used in phase two and three of this study generated a wealth of information on the problem under investigation. In-depth interviews in Nakuru town were carried out between September and December 2002 after a preliminary analysis of the general survey results, and again between January and April 2003. Whereas detailed information was collected on all aspects of the general survey questionnaire, the preliminary results also provided a basis for some of the discussions: the “what” and the “why” questions. As many as possible of the in-depth interviews in Nakuru were conducted by the researcher but the services of two field assistants was invaluable due to the number of visits and re-visits made within a short period of time in all the 16 cases. Two assistants who participated in the general survey were re-trained to assist in collecting in-depth interviews.

The interviews were conducted with household heads and their spouses on the assumption that they were best placed to respond to the questions adequately and comprehensively. In addition, they were able to bring into focus the role of other actors (e.g. other household and/or rural home members) in relation to how these people affect the household’s sourcing for livelihood. In the end, we managed to

²³ See the section on the selection of the households for the in-depth interviews.

do on average five successful visits per household, excluding those visits to make appointments or where a respondent, for one reason or another, requested to be interviewed on another date. To avoid taking up too much of the respondents' time, the interviews were restricted to not more than one and a half hours per visit. In many instances, this time included the niceties and interruptions here and there. During these visits, signs of exhaustion were rare because the researcher and his assistants managed to put the respondents at ease, win their confidence and, very importantly, be jovial with them.

Unfortunately, the two assistants were not available during the rural visits carried out between January and April 2003 and again between August and December of the same year. During this time, the researcher was accompanied on the rural visits by a postgraduate student participating in NUAP. He was not only a resident of Nakuru town but was also fairly familiar with most of the areas where the selected rural plots were located. For planning purposes, he did the advance familiarization tours of the selected rural homes with the household head or spouse prior to the actual visit by the researcher. This arrangement discouraged situations where the *rural* household members or other individuals in the rural home were interviewed in the presence of their already interviewed urban counterparts. In this case, we were able to conduct independent interviews with them. The researcher twice visited the rural homes of the five selected households, namely in Siaya, Turkana, Kisii and Kakamega.²⁴

During the in-depth interviews, both in Nakuru and in the rural homes, the use of an interview check-list and a tape recorder was very helpful. The interviews were conducted as informally as possible. However, sometimes it became necessary for the researcher to control and guide the discussion without intimidating the respondent. Generally, the respondents were, in both cases, extremely patient, understanding and willing to answer the many questions we asked. After the interviews, the results were transcribed onto a computer. In addition to the general survey and in-depth interviews, observations were made, especially during the rural visits: types of crops in the fields, areas under crops, animals kept, prices of food items on the market, the nature and arrangement of the homestead, household belongings, etc.

To express our gratitude, the researcher decided to give "a small package of appreciation" to the 16 households several weeks after the completion of the interviews in Nakuru. The time frame was intended to make it look like a normal visit from a person (researcher) who had come to find out how his friends (respondents) were doing. And for each rural visit, we carried with us, again, "a small package of appreciation", which we later gave to the rural-based respon-

²⁴ See Map 5.1 for the relative location of these rural plots.

dents after talking to them. The “small package” contained purchased food items such as sugar, salt, cooking fat and tea leaves.

Data analysis: Some considerations

Data entry, cleaning and analysis of the general survey data was done using the Statistical Package for the Social Sciences (SPSS). The unit of analysis for the quantitative general survey data is from the perspective of the *urban* household. The quantitative and qualitative methods of data collection used in this survey provided a wealth of information on the topic under study. The strategy adopted during the in-depth interviews brings together the *urban* and the *rural* components of an urban household. However, given the orientation of this study, urban-rural linkages will be analyzed from the *urban* perspective and not from the commonly used *rural* perspective. While the general survey data can be said to be representative of the Nakuru population, the aim of the in-depth survey was not to be statistically representative, but to complement and add “voices” to the general survey results.

Before data analysis, some variables in the dataset were thought to be particularly important and therefore were consistently subjected to (further) analysis. These included: 1) the household’s monthly cash income; 2) the gender of the household head; 3) the age of the household head; 4) the household size; 5) the distance to the rural plot from Nakuru town; 6) mono-spatial versus multi-spatial household; and 7) mono-spatial versus multi-spatial livelihood. These variables and their frequency distributions are summarized in Table 3.2. Below I explain why the variables were initially considered to be important.

(1) Urban households are highly monetized so access to a (monthly) cash income is essential for their survival. Despite the many conceptualizations of poverty evident in the introductory chapter, cash income remains the central component of urban livelihood. It would therefore be interesting to compare the different income categories, and especially “poor” versus “non-poor” households. The household’s monthly cash income has been operationalized as: very low (i.e. up to KSh. 5,000); low (i.e. KSh. 5,001-10,000); medium (i.e. KSh. 10,001-20,000); and high (i.e. over KSh. 20,000) (Table 3.2). The very-low-income category compares roughly to the minimum monthly wage of about KSh. 3,500 in 2002.

(2) Another important characteristic is the gender of the household head. How do female-headed households differ from male-headed households? Are female-headed households disadvantaged in terms of making a livelihood compared to male-headed households?

Table 3.2 Selected variables for analysis: Operational definitions and frequency distributions

Variable	Categories	Operational definition*	%
Household's monthly cash income (in KSh.)	Up to 5,000	Very low	24.4
	5,001-10,000	Low	30.5
	10,001-20,000	Medium	22.4
	More than 20,000	High	22.7
	<i>Total</i>		<i>100</i>
Sex of the household head	Male	Male-headed household	81.1
	Female	Female-headed household	18.9
	<i>Total</i>		<i>100</i>
Age of the household head	Less than 30 years	Young	24.2
	30-49 years	Middle	58.6
	50+ years	Old	17.2
	<i>Total</i>		<i>100</i>
Household size	1-2 members	Small	22.4
	3-5 members	Medium-sized	49.7
	6+ members	Large	27.9
	<i>Total</i>		<i>100</i>
Distance of rural plot to Nakuru town**	Nakuru District	Nakuru District	36.2
	Neighbouring districts	Inner-ring	17.0
	All other districts	Outer-ring	46.8
	<i>Total</i>		<i>100</i>
If wife and/or children live at the rural home	Yes	Multi-spatial household	11.3
	No	Mono-spatial household	88.7
	<i>Total</i>		<i>100</i>
If rural plot is source of food and/or income	Yes	Multi-spatial livelihood	84.9
	No	Mono-spatial livelihood	15.1
	<i>Total</i>		<i>100</i>

Source: 2001 Survey (N=344 households except for the distance variable N=491 plots). * These are the author's operational definitions. ** The frequency distribution does not differ from the one of distance of rural *home* to Nakuru town: Nakuru District (28.2%); inner-ring (19.5%) and outer-ring (52.3%).

(3) It has been argued that the adoption of livelihood strategies changes over time and is determined by the family life-cycle stage of the household – basically related to the age of the household head. As such, it is assumed that the livelihood strategy of, for example, a young married couple with no children will not be the same as that of a household with four children, some of whom may be in (secondary) school. For this purpose, the age of the household head has been

operationalized as follows: young (i.e. up to 29 years), middle (i.e. 30-49 years) and old (i.e. over 50 years) (Table 3.2).

(4) Related to the previous variable is household size. With an average household size of four members, a small household was considered to have one or two members, a medium-sized household between three to five members, while a large household was operationalized as having six or more members.

(5) The distance of the rural plot and/or home to Nakuru town may determine the interactions that take place between the two spaces. The distance variable was operationalized as follows: 1) “Nakuru District”, 2) the “inner-ring” consisting of the neighbouring districts to Nakuru (Kiambu, Nyandarua, Laikipia, Baringo, Kericho and Narok), and 3) the “outer-ring” consisting of all other districts (Table 3.2).

(6) It has been argued in the literature that if the wife and children return to the rural home, the family can better face economic hardships (e.g. Beauchemin & Bocquier 2003) in two ways. First, it reduces the household’s expenditure in town and second, the wife can engage in rural farming and therefore produce food not only for her own consumption but also for the urban part of the household. As such, are multi-spatial households better-off in terms of food and income security than mono-spatial households?

(7) From the livelihood perspective, it is important to find out whether households with multi-spatial livelihoods were able to reach a higher level of urban food security than those with mono-spatial livelihoods. So far, in a few studies where such a comparison has been made, households with a foothold in both the urban and the rural areas seemed to be better-off in terms of food and income than those with one spatial livelihood base. Does that also apply to Nakuru town?

During data analysis and subsequent writing, it was found that income is by far the most important variable that cuts across almost all aspects discussed in this study. As such, and because of the focus on poor households from the outset, a separate chapter (Chapter 8), largely based on the quantitative survey data, has been devoted to “the poor”. Another important variable besides income is mono-versus multi-spatial livelihoods, discussed in a separate section in Chapter 6. For the other variables, only relevant and important relationships with other variables are mentioned in the text.

After describing the methodological procedures that were used in this study, the next section presents some selected characteristics of the sampled house-

holds. A more detailed discussion on income and expenditure of the Nakuru townspeople is presented in the next chapter, which will also highlight some of the inherent problems and the reliability of the income data used in this study.

Characteristics of the sampled households

The most important characteristics of the sampled households are presented in Table 3.2, some of which do not need further explanation. A more general observation is that the majority of the households were of the nuclear type, consisting of the household head, spouse and their (biological) children. The average household consisted of four members, the same as the overall Nakuru average (Kenya 2000). Even then, one fifth of households were small in size, while one quarter could be classified as large, with at least six members, basically implying “more mouths to feed”.

Like the larger Kenyan picture, male-headed households dominated Nakuru Municipality. Female-headed households accounted for one fifth of the total. The large majority of the household heads were within the active age cohort of 30-49 years of age²⁵ and were in marital unions, most of them monogamously.²⁶ In all eleven polygamous households, one of the spouses was living at the rural plot/home. It is also important to note that although the percentage of widowed, divorced and separated household heads was small (11%), they can be very vulnerable to the escalating trends in (urban) poverty, especially for the females in the low-income brackets (Van Vuuren 2003; Vaa *et al.* 1989).

Finally, two-thirds of the Nakuru household heads had attained at least a secondary-school leaving certificate. Another one eighth of them had not gone to school at all or for some reason had dropped out of primary school.²⁷

A summary of the data on the migration history of the household heads is presented in Table 3.3. The Kikuyu, being the local community in Nakuru and its surrounding districts, were the dominant ethnic group of the household heads, followed by the Luo. The Luhya, Kalenjin, Kisii and Kamba formed fairly small minorities, amongst many other ethnic groups represented in the sample. Over three-quarters of the household heads were migrants, i.e. not born in Nakuru town. About a third of those were from Central Province, a quarter from Rift Valley, a fifth from Nyanza and an eighth from Western. Nairobi and Coast Provinces were under represented. The leading districts of origin were Nyeri, Nakuru, Muranga, Nyandarua, Kakamega, Kiambu, Kisii, Kericho and Siaya, in that order. As will be seen later in Chapter 5, this correlates with the location of

²⁵ The official retirement age from the civil service in Kenya is 50.

²⁶ See Appendix 1, Table A1.2.

²⁷ See Appendix 1, Table A1.2.

rural plots, confirming the contention that the location of the rural plot reflects the province and district of origin of the migrants to Nakuru.

Table 3.3 Migration history of the household heads (%)

Ethnic background (N=344)	Kikuyu	51.2
	Luo	16.0
Migration status (N=344)	Born outside Nakuru town	79.4
Province of origin (migrants only: N=273)*	Central	34.8
	Rift Valley	24.5
	Nyanza	18.7
	Western	11.7
Year of coming to Nakuru (migrants only: N=269)**	Before 1980	24.5
	1980-1989	29.7
	After 1990	45.8
Main reason for coming to Nakuru (migrants only: (N=273)	To look for work/to work	74.4
	Came with parents	8.4
	Had relatives in Nakuru	7.0
	Followed spouse	4.4

Source: 2001 Survey (For more details, see Appendix 1, Tables A1.3, A1.4, A1.5 and A1.6). * Those that were not born in Nakuru town. ** For unexplained reasons, four household heads declined to indicate when they came to Nakuru town.

A quarter of the migrant household heads came to Nakuru town more than 20 years ago, i.e. before 1980, while about another third came between 1980 and 1989. Slightly less than half of them can be regarded as recent migrants, as they came to Nakuru town after 1990. In answer to the question about the *main* reason for coming to Nakuru town, about three-quarters mentioned that they came to work or to look for work. Undoubtedly, employment is central to all rural-urban migration theories because the search for a job is seen as the primary, if not the only, motivation for migration (Beauchemin & Bocquier 2003: 13). Heads from the very-low-income households are more likely to have come to Nakuru to look for work than those from the high-income households.²⁸ This is because half of the high-income household heads were already in employment when they came to Nakuru town, i.e. they came on a job transfer, as opposed to about one eighth from the very-low-income group.

Some household heads came to Nakuru town because they followed their spouses, had relatives in the municipality or came with their parents (when they were young). Over half of the male migrants' wives followed their husbands to

²⁸ 48% of the heads from the very-low-income households came to Nakuru to look for work compared to 31% from the high-income households.

Nakuru town, while one sixth came to work or look for work. Other less important reasons mentioned were lack of land or work in the area of origin, displacement due to ethnic clashes, and schooling. Others simply came to stay with their relatives before, for example, getting a job or getting married:

*Rita*²⁹ was born in her rural home in Siaya District and later joined her father in Nairobi where she completed secondary school. She came to Nakuru in 1997 to help her aunt in their salon business. A year later she met and married *Reuben*, her husband.

*Housing conditions and amenities*³⁰

The majority of the residents in Nakuru are tenants (83%), mainly renting dwelling units (houses) from the local authority (public housing) and individuals (private housing) (Figure 3.2). While the provision of public housing is currently minimal, the role of the private sector in the provision of housing is increasing. Abong' Lo Weya, Kivumbini, Kaloleni and Ngei³¹ are local authority (Municipal Council of Nakuru) estates and therefore all the houses are rented from the local authority.³² Tenants pay subsidized rents to the Municipal Council of Nakuru, depending on the type of dwelling unit. Unlike the three other local authority estates (see below), houses in Ngei are fenced individual dwelling units with their own compounds. The houses have two separate bedrooms, a kitchen and a sitting room.

Because of their subsidized rents, the local authority estates are known to have a relatively stable population that is not prone to a high rate of intra-urban residential mobility. As a result, a house might change hands between members of the same family over several years, as was the case with this resident:

“An uncle of mine who was retiring was kind enough to leave this house for us. We were lucky because it is very difficult to get a Council house without paying something small to the person leaving it. We now have a place we can live for a long time. Council houses are cheaper and better than those rented from individuals. In private houses, landlords increase rents as they wish and keep on harassing tenants, especially when you cannot afford to pay your rent on time.”

Bangladesh, Freehold, Kaptembwa, Kwa-Rhonda, Mwariki and Shabaab are estates where residents predominantly rent houses from individuals. Those in Teachers and Naka usually live in owner-occupied houses that have been

²⁹ The names of all “my” respondents during the in-depth interviews have been changed to maintain their anonymity. For convenience and ease of reference, no two respondents share the same name. Where the name is in *italics*, it means that more references will be made (or have been made) to the respondent in this book.

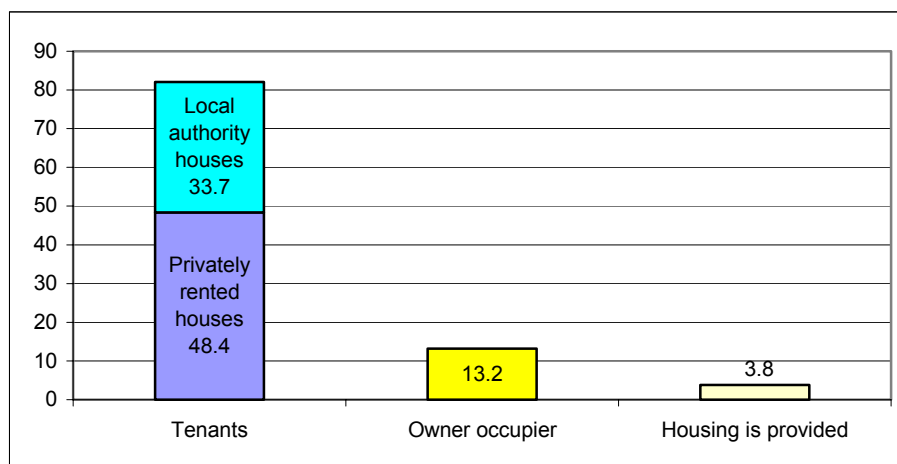
³⁰ Detailed figures on housing conditions and amenities are presented in Appendix 1, Table A1.7.

³¹ These are the local authority residential neighbourhoods in the sample.

³² Though illegal, there are instances where sub-letting occurs on these local authority estates. However, there were no cases of sub-letting in the sampled households.

constructed by the owners themselves (in fact many houses in Naka were still under construction).

Figure 3.2 Tenure status (%)



Source: 2001 Survey

The dominant roofing, wall and floor materials were corrugated iron sheets, stone and cement, respectively.³³ On the other hand, most households had access to piped water, though intermittently, and used the main sewer for human waste disposal. The Municipal Council of Nakuru by and large provides these services. The use of charcoal and paraffin as cooking fuel reflects the fact that gas and electricity (as cooking fuel) are still relatively expensive for an average Kenyan. Most households preferred electricity for lighting than for cooking purposes.

Many of the in-depth interviews for this study were carried out in Abong' Lo Weya and Kaloleni estates. Characteristic of many local authority estates in Nakuru's low-income high-density residential areas, Abong' Lo Weya and Kaloleni have one-room rental units. Other people manage to rent two rooms. The bathrooms and toilets, which are not very hygienic, are communal.³⁴ The source of piped tap-water is also communal, located in the same block as the bathrooms and toilets. The examples given below are a snap-shot of the living conditions of four respondents in these two estates:

*Baba Karo*³⁵ lives in a one-room house in Abong' Lo Weya. The room is scantily furnished with a simple bed, two stools, a table and an old cupboard for utensils. A few clothes are hung on the wall and in one of the corners is a stove for cooking. Unable to pay his bills,

³³ See Appendix 1, Table A1.7.

³⁴ The toilets drain into the main sewer.

³⁵ Literally: father of Karo, whereby Karo is the first-born. It is common in Kenya to address people in this way as soon as the first child is born. In that sense the wife becomes *Mama Karo*.

electricity in Baba Karo's house has long since been disconnected. He now uses paraffin as the main type of lighting and charcoal or paraffin as cooking fuel.

Reuben & Rita are renting two rooms in Abong' Lo Weya estate. One of the rooms is used as a "kitchen" during the day and a "bedroom" for the children at night. The second room is used as the "sitting room" and "bedroom" for the parents. In this room, a curtain conveniently separates the two compartments. Smartly arranged in the sitting room are a 14-inch colour television set placed on a medium-sized wooden cupboard, a radio, a three-piece wooden sofa set, stools and a coffee table. In the bedroom one quickly recognizes a wooden bed neatly covered with a coloured bed cover. The kitchen is scantily filled with utensils, *jiko*³⁶ and a paraffin stove for cooking and a steel bed used by the boys for sleeping. The household uses electricity for lighting and kerosene for cooking.

Alfred & Alice: Since 1996, Alfred and his family have been living in Kaloleni estate. They rent a modest one-room house with a curtain to separate the "bedroom" and the "sitting room." Adorning the sitting room is a wooden sofa-set, two wooden stools, a coffee table, a modest cupboard, a 14-inch black-and-white television set and a radio. During the night the furniture (except for the cupboard) is put on one side of the sitting room to make space for the children's sleeping area. Their main cooking fuel is charcoal, although they also use a paraffin stove. For lighting, they use electricity. For this house (or room), Alfred pays a monthly rent of KSh. 560, including water. The bill for lighting is separate.

John & Jane: For the past 37 years, John has been living in his one-room house in Kaloleni estate. The room is divided by a curtain to hide where their bed is. The compartment facing the door is the sitting area with a wooden sofa set, a table, some stools and a small cupboard on which there is a 14-inch colour television set. Squeezed behind the sofa is John's bicycle. Besides the cupboard and directly facing the door, are a stove and a *jiko* for cooking. The household's main cooking fuel is paraffin while electricity is used for lighting.

Unlike in Kaloleni, what is noticeable in Abong' Lo Weya is that there are small vegetable gardens in front and at the back of the houses, indicating the reliance on urban farming as a source of livelihood for the residents living there.

³⁶ A charcoal stove used for cooking.

Photo 3 John & Jane in their one-room house in Nakuru town



Photo 4 Alice is proud of her “bigger” house at their rural home



Multiple sources of livelihood: Managing the household to survive in town

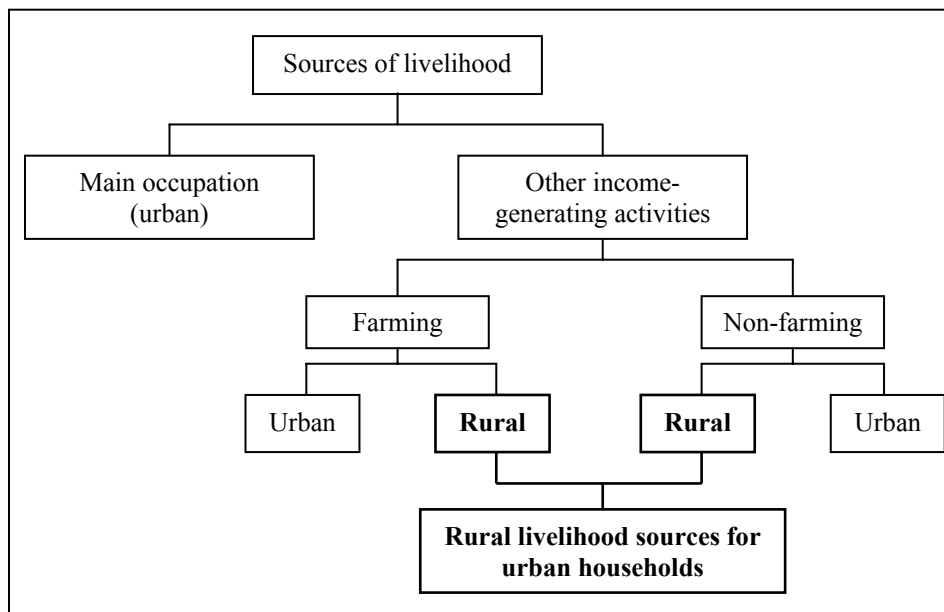
Many people in Kenya continue to migrate to the cities in the hope of finding some kind of regular gainful employment with a monthly salary or wage. If they were to choose, a large majority would obviously rank formal employment as their first preference. A formal job provides an individual and his/her dependent household members with a more reliable income, and thus generally ensures greater economic security. Due to the bad prospects of entry into the formal-sector job market, however, the bulk of them and the urban poor at large resort to the informal sector as their main source of employment. Even then, whether in formal or informal employment, urban households *also* engage in a wide range of *other* income-generating activities and sources of livelihood, i.e. besides the *main* activity or occupation, in order to maintain a certain standard of living – or even to survive (Owuor 2003).

Broadly, these other income-generating activities can be categorized into “farming” and “non-farming”.¹ For both categories, a further distinction can be made between the location of the activity; that is, either urban or rural. While this categorization is intended to capture the various livelihood sources for urban households, it is particularly important because of the focus of this study: *rural* livelihood sources for *urban* households (see Figure 4.1).

¹ At first sight, this distinction may seem a bit odd in an urban context. However, the usefulness of this typology will become increasingly clear as the book proceeds.

Based on Foeken & Mwangi's (1998: 20) definitions, *urban non-farming* livelihood strategies refer to all income-generating activities in an urban context outside income derived from agricultural activities in town. *Urban farming* strategies are deployed by those who manage to access a piece of land within the city boundaries. Urban farming includes all types of agriculture within the urban environment and has grown enormously in importance since the 1980s (Foeken & Owuor 2000a). Rural farming and non-farming strategies reflect the socio-economic relationship of urban households with their rural homes. *Rural farming* strategies concern farming activities carried out by one or more members of the urban household, usually in the rural home area or on rented plots outside the city boundaries. Urban households may still have access to a plot of land in the rural areas, either purchased or inherited, which they use for themselves and which serves as a source of food and/or income (Foeken & Mwangi 1998: 20). Finally, some urban households engage in *rural non-farming* income-generating activities in the rural areas.

Figure 4.1 Livelihood sources for urban households



* With a highlight on the focus of this study

Although strategies and circumstances differ between households, one fundamental aim remains constant: managing the household to survive (Van Vuuren 2003). This chapter outlines the various livelihood sources of Nakuru townspeople both in town and in their rural homes or plots. The chapter begins with an overall view of the occupational status of the household heads and other house-

hold members. It then describes the farming and non-farming income-generating activities practiced by Nakuru town households, in Nakuru Municipality and those at the rural homes or plots, besides their main occupations highlighted in the first section. This will also include an overall view of other livelihood strategies adopted by the Nakuru townspeople. The next section presents the households' average monthly income situation and a picture of their monthly expenditure patterns. The rest of the chapter is devoted to three case studies which are, by and large, representative of the different sources of livelihoods of the Nakuru townspeople.

Regular gainful occupation

It is clear from the previous chapter that the large majority of the household heads are migrants who came to Nakuru town from different parts of the country, mainly to work and/or to look for work. Some of those in formal employment, and especially those working for the provincial administration and Teachers Service Commission, came to Nakuru as a result of job transfers from their previous place of work, while others came to work in Nakuru as their first station. Regardless of the sector, about half of the household heads came to Nakuru town to look for work:

“I was born at home in Busia District. I never went to school because my parents were too poor to afford the needed fees. I came to Nakuru town in 1976 to look for work and stayed with my uncle for some time. After a year, I got a job with the Municipal Council of Nakuru as a toilet cleaner, a job I do to date. While looking for a job, I worked for somebody as a *shamba* boy as a way of earning a living.”

Valid as the reason for coming to Nakuru may be, and for non-migrants (i.e. those born in Nakuru) as well, it is *not* surprising then, that almost all the household heads were engaged in regular gainful work in Nakuru town, either employed in the formal sector with a monthly salary or self-employed in the informal sector (Table 4.1, column 1). However, one could also say that it is surprising that with the current retrenchment programmes, so many Nakurians still have a job in the formal sector. For some of them (15%), the available option was temporary and casual employment. Those in informal employment engaged in all forms of self-employment and small-scale family enterprises or businesses. There were no household heads in self-employment (or business) who could be categorized as formal-sector business people, i.e. legally registered under the Companies Act of Kenya. This is an indication of the small-scale nature of these enterprises.

With limited access to formal jobs, the importance of self-employment or informal-sector employment is clearly emerging in Nakuru town, at least according to the results presented in Table 4.1. One household head stated that he was unemployed, three said they were homemakers and one was retired. This does not necessarily mean that these households did not have a source of income. The unemployed household head looked upon his wife who engaged in business to provide for the family. In addition, they practiced farming, both in town and at their rural home, as an additional source of food for the household. Two of the homemakers were widows being taken care of in their old age by their children, who at the same time survived from casual employment in town. The third homemaker was the head of a household who depended on income from his wife's job and urban farming. Lastly, besides waiting for his paltry pension at the end of every month, the retiree's wife engaged in selling second-hand clothes to generate additional income for their family. More often than not, retirees prefer going back to their rural homes.

Table 4.1 Occupational status (%)

	(1) H'hold heads (N=344)	(2) All others 15+ years* (N=601)
Regular formal employment	43.3	11.3
Informal sector/self-employment	40.7	16.0
Temporary/casual employment	14.5	12.4
Unemployed/Homemaker/Retired	1.5	31.6
None (student)	0.0	28.6
Total	100	100

Source: 2001 Survey. * Taken as the labour force participation age.

The degree of establishment, i.e. the length of stay in Nakuru, appears not to have any effect on access to employment, whether formal or informal. Both the "old" and "recent" migrant household heads were equally represented in the two categories of employment. One might have expected that the longer the migrant had been in Nakuru town the higher the likelihood was of being in employment. A possible explanation is that some of those who were employed long ago may have retired or been retrenched from (formal) employment. Looking at it from a different perspective, the equal representation of both the "old" and "recent" migrant household heads in employment is an indication that migrant household heads who come to Nakuru town while unemployed are able to quickly integrate into urban life by gaining entry into employment. Whereas the proportion of

male household heads in formal employment is higher than that of female heads (60% vs. 48%), the proportion of the latter is higher in informal (self-)employment (39% vs. 50%). As will be seen later in this chapter, wives of male household heads are also actively venturing into informal trading activities to supplement their husbands' incomes.

Contrary to the notion that farming by urban households is a side activity, 12 household heads mentioned "farming" when asked about their regular gainful occupation in Nakuru Municipality. According to them, they were "self-employed" with "farming" as their "type of occupation", i.e. their household's main source of food and income. Conspicuously, seven of these household heads were over 50 years of age, three were in their late 40s while the other two were 34 and 20 years old, respectively. Though they never mentioned it (except for two of them), most of these household heads may have left or retired from active employment and were living (largely or partially) from their farming activities, in town and/or in their rural homes. Four of them engaged in urban farming, another four in rural farming while the rest were engaged in both urban and rural farming. Even then, this may be an indication of the importance of farming to urban households with no access to any other form of regular employment or income. Unlike what might be expected, these 12 households were from all income categories (see Appendix 2, Table A2.1 and Box 4.1).

It is not only the household heads who are engaged in gainful employment (Table 4.1, column 2). Fewer than half (i.e. 40%) of *other* household members who had attained labour force participation age but who were not in school at the time of the survey were engaged in some kind of employment (working for pay). However, compared with the household heads, very few of them had a job in the formal sector. One third of these other household members who were not in education but had reached labour force participation age were unemployed.

Farming and non-farming income-generating activities

Table 4.2 shows the numbers and percentages of households in Nakuru Municipality engaged in farming and non-farming income-generating activities, i.e. as an additional source of income besides their main occupation.² The results show that *rural* farming by urban households is more common amongst the Nakuru townspeople than farming within the municipality. Over half of the households could be classified as rural farmers – that is urban households practicing rural crop cultivation and/or livestock keeping – while two-fifths could be classified as

² Engagement in farming activities was asked for the year 2000 to capture the entire agricultural cycle while engagement in other non-farming economic activities was asked for 2001, the year of the actual survey.

urban farmers, that is households practicing crop cultivation and/or livestock keeping in town. As concerns the type of farming, half of the Nakuru households cultivated crops in the rural areas and about a third were livestock keepers.³ On the other hand, a third of the households practiced crop cultivation in Nakuru town and a quarter kept livestock.⁴ In all, three-quarters of the Nakuru townspeople engage in agricultural activities, either in the rural and/or in the urban areas.

Table 4.2 Engagement in *other* economic activities, by type and location*

	Total		Urban		Rural	
	(N)	%	(N)	%	(N)	%
Farming	265	77.0	148	43.0	194	56.4
Crop cultivation only	99	28.8	56	16.3	83	24.1
Livestock keeping only	40	11.6	30	8.7	21	6.1
Mixed farming**	126	36.6	62	11.0	90	26.2
Non-farming activities	164	47.7	150	43.6	35	10.2

Source: 2001 Survey. * % of all households (N=344). ** Practicing both crop cultivation and livestock keeping.

Not unexpectedly, there were far more households (44%) engaged in other non-farming income-generating activities in Nakuru Municipality than in the rural areas (10%). This excludes other livelihood sources (e.g. merry-go-rounds) because these were not captured in the general survey. An account of urban farming, urban and rural non-farming income-generating activities and other livelihood sources is given below, while detailed information on rural farming by urban households will be presented in the following two chapters. It is evident from the previous chapters that within the context of the larger project (NUAP), this study lays particular emphasis on *rural* farming by *urban* households. For that reason, rural farming is *not* discussed in this chapter, except for a brief general overview. Though important to the households involved, rural *non-farming* activities seem not to be prevalent amongst the urban households. Therefore, engagement in such activities is discussed in this chapter.

³ Calculated as 26.2% of the mixed farmers plus those who practiced *rural* crop cultivation only, or plus those who practiced *rural* livestock keeping only.

⁴ Calculated as 11% of the mixed farmers plus those who practiced *urban* crop cultivation only, or plus those who practiced *urban* livestock keeping only.

Urban farming

The summary on urban farming presented in Chapter 1 reveals that farming, an activity typically associated with rural areas, has become very common in urban areas, Nakuru included.⁵ However, access to a plot in town is an important determinant of whether one practices urban farming. Half of the households in Nakuru town did *not* practice urban crop cultivation in 2000 because they had no access to land. Based on the response to the question about the location of the plot, three types of urban farming can be distinguished amongst the Nakuru households. First, households grew food or kept animals in their own compounds, also called “on-plot” farming. Second, crops were cultivated or animals kept on unused, open spaces within or outside one’s residential estate. This can be labeled as “off-plot” and is typical among the urban poor. Finally, there were those households we can refer to as “peri-urban” farmers, i.e. those who cultivate in formerly rural areas that have now become part of the municipality.⁶

Although a wide range of crops were cultivated by the urban farmers, vegetables – notably, kale (*sukuma wiki*), spinach, onions and tomatoes – were prevalent, cultivated merely for subsistence purposes. Other commonly cultivated crops were maize, beans and Irish potatoes, mostly for subsistence as well. For the large majority of the urban farmers, the need for (additional) food was mentioned not only as one of the reasons but also the *main* reason for engaging in the activity. The need for food is central as household size increases: 59% of those who engaged in urban crop cultivation had more household members than the average household size (four). The money that is saved by having to buy less food is therefore put to other uses. Furthermore, “eating from my *shamba*” can raise the household’s level of food security, as recounted by this respondent:

“I no longer purchase *sukuma wiki*, spinach, onions and tomatoes in this house. I get them directly from my *shamba*, fresh, clean and almost throughout the year. We rarely go to sleep hungry in this house because we are able to eat from my *shamba* even when we do not have money to buy food. The *sukuma wiki* and spinach I get from my *shamba* almost daily can cost between 30 and 50 shillings at the market.”

For some households, urban crop cultivation is also a commercial undertaking, earning the household additional income when the crop is sold. Others, for example *Hester Njeri* (Box 4.1), have been able to survive from crop cultivation in town for most of their lives. As for livestock keeping in town, small animals and especially chickens were by far the most common. The major problem was

⁵ For more detailed studies on urban farming in Nakuru town, see Foeken (forthcoming); Foeken & Owuor (2000a); Foeken & Owuor (2000b); Foeken *et al.* (2002); and Versleijen (2002).

⁶ “Peri-urban” is defined here as the zone between the built-up area and the municipality’s boundary. In this study, peri-urban does not include the areas outside the municipal boundary.

the lack of space for keeping animals. Those with enough space kept cattle, sheep, goats and sometimes pigs.

Box 4.1 Living from the *shamba*

Hester Njeri, popularly known as *shosho*⁷, was born 62 years ago in Murang'a District. Hester married when she was 17 years old and together with her husband, came to Nakuru in 1960 "to engage in business". Hester and her husband were blessed with nine children, all of whom are married, working and living elsewhere. Unfortunately, her husband passed away in 1997 "due to old age but fortunately after educating all the children". To raise school fees for their children, Hester explains that she worked very hard cultivating and selling vegetables while her husband "did small businesses here and there". Initially, it was not all that easy for them, especially with the first four children, i.e. before the older ones started helping their parents. Hester started cultivating and selling vegetables in Nakuru in 1963. She cultivated mainly *sukuma wiki* and spinach and occasionally tomatoes and onions. Between 1963 and 1978, Hester sold vegetables that she cultivated in open spaces, which were found near Kaloleni estate.⁸ The vegetables were also used for consumption in the house. She recalls that there were "many unutilized open spaces" in the neighbourhood that people "freely cultivated". Many of these were unutilized land that belonged to Nakuru Municipal Council. Hester had three plots located in different places, each measuring about half an acre. The dispersal of plots was a strategy to spread the risks from theft or repossession of land by the "owner". Being young and energetic, Hester did all the work by herself, more often than not cultivating throughout the year because "there was reliable rainfall and fertile soils". As the municipality expanded, Hester and other "farmers" were in 1978 "pushed" further to the open spaces near the sewage plant where she again "acquired" three plots of about the same acreage as before. She continued cultivating *sukuma wiki* and spinach on these plots for the next 22 years until the year 2000 when they were "chased" by the Municipal Council of Nakuru. Hester is proud that with the proceeds from selling her vegetables, they could comfortably pay school fees for their children, at least until the early 1980s "when things started to be expensive". Even after being chased from the municipal land, Hester has continued to cultivate to date. She now rents a half-acre plot in Abong' Lo Weya where she has cultivated maize and beans since 2000, mainly for consumption. Besides, she cultivated maize and beans in their one acre plot in Rongai, which they purchased in 1982. Until 2000, when she stopped farming in Rongai, Hester sold most of the maize and beans she realized from the plot. She is happy that the money helped to raise and educate the younger children. She concedes that farming was more important while raising and educating their children because her husband earned very little from his business.

Urban non-farming income-generating activities

Besides their regular and main occupations, Nakuru townspeople also engage in a wide range of other urban non-farming economic activities ranging from petty trade to casual employment and small-to-medium-sized businesses.⁹ In general, these are small-scale, mostly family-operated or individual activities that are not legally registered. They are practiced by not only the household head or spouse,

⁷ *Shosho* (Kikuyu = *cucu*) means grandmother.

⁸ Hester has lived in Kaloleni estate since 1963. At the time of these interviews, she lived in their two-roomed house, together with two grandchildren and a niece.

⁹ See Appendix 2, Table A2.2 for a list of urban non-farming income-generating activities carried out by the Nakuru townspeople, besides their *main* occupations.

but also by other household members, either on a part-time or full-time basis. In this study, 44% of the households engaged in urban non-farming activities (Table 4.2). For the majority of the households, the main reason to engage in these activities was to supplement their incomes. More important still, one third of the household heads indicated that they “could not survive” without these activities.

The aggregate number of these activities (by the 150 households who practice them) more than tripled from 23% in 1994 to 77% between 1995 and 2001.¹⁰ This implies that engagement in multiple non-farming economic activities by the Nakuru townspeople may have been a response to the hard economic times of the 1990s. It is also noteworthy that engagement in these activities was witnessed in all income categories. Equally important, 60% of these households were in formal wage employment, thereby confirming Pott’s (1997) contention that wage earners in town take on supplementary cash-earning activities to raise or maintain their incomes.

Based on my personal observations during the interviews, the unemployed women are particularly engaged in petty businesses and food selling in their neighbourhoods as a side activity, besides their house-making arrangements.¹¹ Most of them do this because of the present economic realities.

“My husband can no longer afford to provide everything. He is struggling to feed us, pay school fees for the children and to provide for other needs. I have to help. The little profit I get from my small business of buying and selling vegetables here can buy sugar and milk for the children. I can also use the money for my personal needs.”

While this female respondent’s main concern was to supplement on the little her husband earned, the following respondent started her own business under different circumstances, but also related to the household’s economy:

“In 2000, I was retrenched from my job as a secretary, a job I had done since 1969. As a result, I decided to start a kiosk business using my savings. From this kiosk, located near my house, I sell small items such as bread, milk, sugar, etc. I make a profit of about 2,000 shillings per month. I started this business because I wanted to be economically independent like the period when I was in employment. Being used to my own salary when I was working, I was forced to find something to do to keep me economically independent as before.”

¹⁰ The percentages are in relation to the total number of all economic activities. This is based on the year in which the activity was started and does not include the activities that may have been discontinued at some point in the past.

¹¹ Though in a general way, the survey data confirms this observation: About two-thirds of the spouses (of the male head) were engaged in self-employment or informal-sector activities.

Rural non-farming income-generating activities

The respondents were asked if any member of the household engaged in any income-generating economic activities in the rural area outside crop cultivation and/or livestock keeping. However, during data analysis the most frequently-mentioned of these activities appeared to be rural land renting, which, in a sense, can be considered farming-related. But since the “farming” does not involve the urban household, it can be argued to retain the activity in the non-farming category.

As is clear from Table 4.2, rural non-farming activities seem not to be prevalent amongst urban households. Not many households in Nakuru Municipality (10%) engaged in non-farming activities at their rural plots or homes.¹² In spite of the fact that many households would have liked to engage in non-farming income-generating activities in the rural areas, a large number of them stated that they were committed to their current occupations in Nakuru and therefore lacked the time to engage in “other business activities at home”.

The respondents explained that, while away in Nakuru, such rural-based activities require closer supervision and the use of hired labour or a trustworthy rural home member to take care of the enterprise. However, it does make a difference when the wife lives at the rural home though to a lesser extent than expected. Nine out of the 39 households where the wife was at the rural home engaged in rural non-farming economic activities. Many of these activities were part-time undertakings for the urban households involved and mainly popular amongst the relatively “well-off” households. Apart from two, all the households engaged in rural non-farming economic activities were male-headed.

The common type of activity that the Nakuru townspeople engaged in during the calendar month prior to the survey was rural land renting. About two-fifths (43%) of the rural non-farming activities concerned land renting, the frequency being far higher than with any other type of activity.¹³ Instead of leaving the land idle, some preferred to rent it out, thus earning the household additional income. This, in a way, also frees the household from the “closer supervision” talked about above. The only thing they need to do is to occasionally travel to the rural plot to collect rent. Other activities were petty trade, shop keeping, renting out houses, running a bar, butchery and salon businesses, tailoring, and a *posho* mill¹⁴ business, amongst others.

As expected, a large majority of the households engaged in rural non-farming economic activities did so because the activity – as they perceived it – is an

¹² And only 5% (i.e. 16 households) if “rural land renting” is excluded.

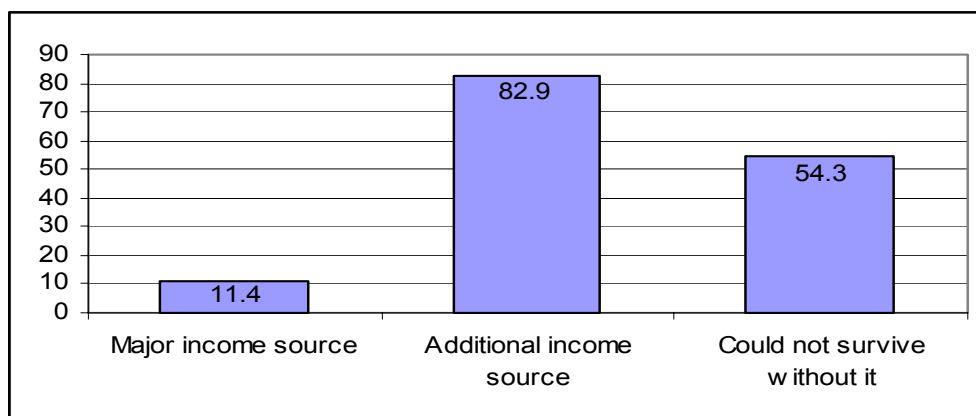
¹³ See Appendix 2, Table A2.3 for a list of rural non-farming income-generating activities carried out by Nakuru townspeople.

¹⁴ A *posho* mill is a grain-grinding mill operated by diesel or electricity.

additional source of income for the urban household. For some, though few in number, it is even a major income source (Figure 4.2).

Despite the fact that these activities tend to be small-scale in nature and do not have big profit margins, i.e. contributing only a small percentage of the household's income, about half of the households "could not survive" without them, at least, according to the respondent. This is an indication of the potential of such activities in enhancing the income situation of the urban households involved.

Figure 4.2 Importance of rural non-farming economic activities (%)



Source: 2001 Survey (N=35; Total > 100% due to combined answers)

Rural farming

Rural farming includes farming activities carried out by one or more members of the urban household, usually in the rural home area or on purchased or rented plots elsewhere outside the city boundaries. As will become clear in the next two chapters, many Nakuru townspeople have access to a plot of land in their rural areas, either purchased or inherited, which they use for themselves and which serves as an additional source of food and/or income for the household. According to the data presented in Table 4.2, more than half of the Nakuru town households engage in rural farming – that is, growing crops and/or keeping livestock in the rural areas. Like farming in town, rural farming is an additional source of food and/or income for the households involved. As said before, a detailed account of rural farming by urban households in Nakuru is presented in Chapters 5 and 6.

Other livelihood sources

Besides the livelihood sources outlined above, the urban population in Kenya has developed other societal or neighbourhood-based mechanisms to "make ends meet and have something to fall back on", as one respondent summarized the

phenomenon.¹⁵ Common amongst them are the widespread and popular social networks and neighbourhood merry-go-round groups, particularly (but not exclusively) amongst women. They are organized in various forms: formal and informal; neighbourhood, gender, age, ethnic, kinship, religion, political, work, and friendship-based; small and large in membership; rigid and flexible, etc. The main aim is to help each other through a given pre-arrangement mostly by regularly contributing money that is given to each of them in turn. They are identified by all sorts of names that give a clue to their tribal lineage or purpose. Maendeleo¹⁶ women's group helps each other in business. Their aim is to indirectly encourage daily savings:

“We are 10 women who sell vegetables. Every day each one of us contributes 40 shillings. The total amount of 400 shillings is then given to one of us in turn on a daily basis to buy more goods for sale. Normally, I am not able to save that amount of money if left alone. But through our group, when I get my share after 10 days, it is like I have been saving 40 shillings every day.”

The objective of the Upendo¹⁷ group has both social and economic connotations:

“I am a member of a women's merry-go-round group in the estate with the aim of helping one another and pooling our scarce financial resources. We are 30 women in total, each contributing 20 shillings on a daily basis and another 100 shillings on a weekly basis. The daily contribution is meant for “a joint household shopping” at the end of the month. We buy sugar, soap, salt, etc, in bulk and at wholesale prices and then equally distribute them amongst ourselves. The weekly amount is received in turns. Every week, one of us receives a total of 3,000 shillings.”

Mirembe¹⁸ group is tribal but again with the same aim:

“I am a member of Mirembe women in this neighbourhood. This group is restricted to women from the Luhya community. We contribute money on a monthly basis to help one of our own during a problem. We are a branch of a larger association in Nakuru.”

According to another respondent, “apart from the normal contributions we make, the members mourn together in the case of death in a family and celebrate together in times of happiness”. The bond between the group members, especially for the ethnic or kinship-based networks, can be clearly seen when one of them or a member of the family dies. The group members contribute money to transport the body and give it a “decent burial at home”. However, the help is

¹⁵ See also Owuor & Foeken (2006).

¹⁶ Maendeleo is a Swahili word that means development.

¹⁷ Upendo is a Swahili word meaning love.

¹⁸ Mirembe is a salutation (Luhya = how are you doing). Literally translated, it is a women's group that is concerned with “how one of them is doing”.

only extended to those who do the same for others, i.e. the “active” members. During such funeral meetings, participation and contributions from each member are properly documented for future reference. Yet, being “active” does not mean contributing more; it is the participation in group affairs that counts.

Also emerging in Nakuru town are NGOs, churches and local financial institutions that target small-scale business persons, farmers and the poor. They give a wide range of loans to their members with fewer formalities than banks. For example, this respondent is a member of one such financial institution:

“As a member of a local financial institution that targets women, I am entitled to a loan whenever I have a viable income-generating project to undertake. I joined this group in 2001 after being introduced to it by a friend of mine. After going through the laid-down procedures, I took my first loan of 15,000 shillings which I used to expand my business.¹⁹ The loans are later re-paid with an affordable interest, I can say.”

A good example of such a financial institution is the recently launched Ecumenical Church Loan Fund (ECLOF-Kenya).²⁰ ECLOF-Kenya, with one of its branch offices in Nakuru, supports the building of sustainable communities by providing fair credit services for human development in both rural and urban areas. One of its main objectives is “to increase accessibility to credit by the economically active and marginalized micro (small) business and farming people of Kenya”. Membership of ECLOF-Kenya is open provided that the individual members go through pre-designed registration procedures and requirements. To qualify for a loan, one must belong to a locally “registered” neighbourhood group, pay a non-refundable registration fee and thereafter attend weekly training sessions for a period of eight weeks. The training aims at counselling the members and giving the necessary business and saving skills. During this period, each member is required to save, in the group’s account, 20% of the money s/he has applied for.

Popular with many applicants in Nakuru is ECLOF-Kenya’s Ordinary Jiwezeshe Credit Scheme²¹ for registered groups with at least 10 but not more than 30 members.²² In this category, members can access loan amounts of between KSh. 5,000 and KSh. 150,000 each, depending on the loan cycle. However, it is very rare for members to apply for over KSh. 50,000 because of the one-year repay-

¹⁹ The amount of money given by these institutions depends on how much one has saved with them and on the member’s reliability in repayment. Upon joining the group, a member attends a mandatory introduction programme, part of which is making a weekly contribution.

²⁰ The discussion on ECLOF-Kenya and the example presented in Box 4.2 draws on Foeken *et al.* (2006).

²¹ *Jiwezeshe* is a Kiswahili word literally translated as “enable yourself”.

²² There are other loan schemes as well. For example, school fee loans (for all the members), small group loans (for four to five individuals with a credit or loan history and common-bond activities) and institutional loans (church, schools, etc).

ment period, at least for the first two loans. The aim of the loan is to expand or improve an existing income-generating activity. Box 4.2 presents a story of a single mother who has benefited from the ECLOF-Kenya loan scheme in terms of raising her household's income situation.

Box 4.2 Improving the household's income through the ECLOF-Kenya loan scheme

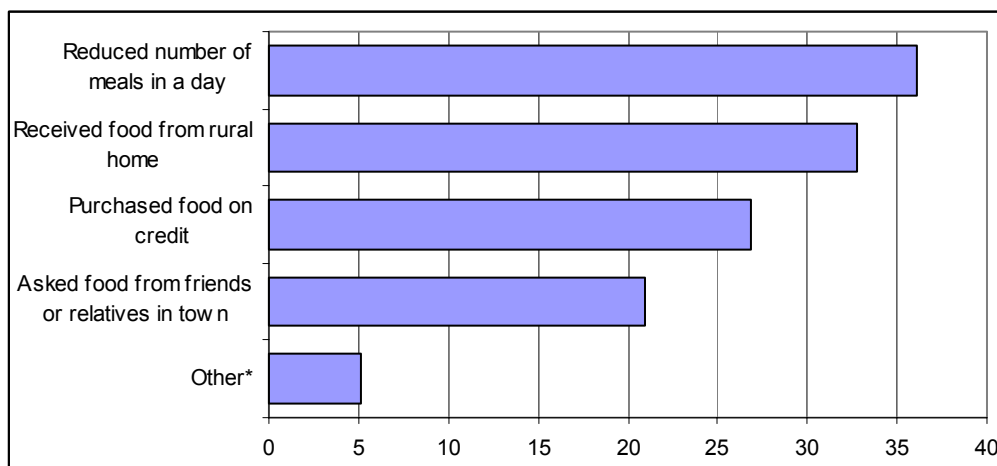
Grace Wanjiru was a female household head living with her children in the Free Area region of Nakuru town. As a source of livelihood for herself and her children, Grace started keeping *kienyeji* (local) chickens. In the meantime, she also joined an all-women "merry-go-round" group in the neighbourhood. The group members – mainly women of the same socio-economic status – contributed money on a weekly basis. The total weekly contribution was given to each member on a rotational basis. This was how Grace started and managed to sustain her small poultry-keeping venture. Grace heard about ECLOF-Kenya in 2002 from a friend and later shared the idea with the members of her merry-go-round group. Despite a lack of enthusiasm from some members, Grace and a few others managed to recruit some women outside their group and thereafter registered as a self-help group. They did not, however, disband their merry-go-round group, which is still active to date. Together, they attended ECLOF's training programme, which Grace described as "educational". Like many of her self-help group members, she was given the KSh. 20,000 she applied for, which she used "to buy layers". She actually used half of the amount to buy 200 layers. The other half was spent on chicken feed as well as to erect a wooden enclosure for them. She had meanwhile re-paid her loan, although with difficulties initially. In addition to the profit she got from the sale of eggs, the money she received from the merry-go-rounds assisted her a great deal in re-paying the loan. With the loan from ECLOF, Grace counted herself lucky as "a promising urban farmer who supplies eggs to various outlets in town". At the time of the interview, Grace collected an average of three crates of eggs per day, selling them at KSh. 150 per crate. Even though some of the layers died of disease, her monthly income had increased from less than KSh. 3,000 to about KSh. 10,000. Grace said that through the loan, she had been able to 1) increase her chicken stock from less than 20 (local) chickens to over 100 (improved) layers, 2) put up a structure for them, 3) comfortably purchase feed for the layers, 4) take care of her children, and 5) improve her household's food security and income.

Last but not least, when all other avenues seem to be blocked, households experiencing "food shortages"²³ resort to other means of putting food on the table, such as reducing the number of meals per day, reliance on food gifts, buying food items on credit, and reliance on external food aid (Figure 4.3). Other measures include borrowing money from friends, taking cooperative loans, prostitution, and indulgence in illegal income-generating activities to make ends meet. For example:

²³ This "condition" is used very loosely here to mean households that according to the respondent, "did not always have enough to eat" in 2000. In the general survey, all the households were asked if they had usually had enough to eat in 2000: 65% reported "yes, always", 26% "most of the time", 3% "half of the time" and 6% "now and then". Then there was a follow-up question: "If not always, how did you cope with this "food shortage"? The results are presented in Figure 4.3.

“When I do not have money to buy food, I seek help from my friends or relatives here in Nakuru. Sometimes I ask for a salary advance from my employer or I take a small loan from our savings and cooperative society. My children also help me once in a while when they are able to.”

Figure 4.3 Coping with food shortages (%)



Source: 2001 Survey (N=119; Total > 100% due to combined answers)

* “Relied on external food aid” and “sold livestock at the rural home to buy food”.

Income and expenditure

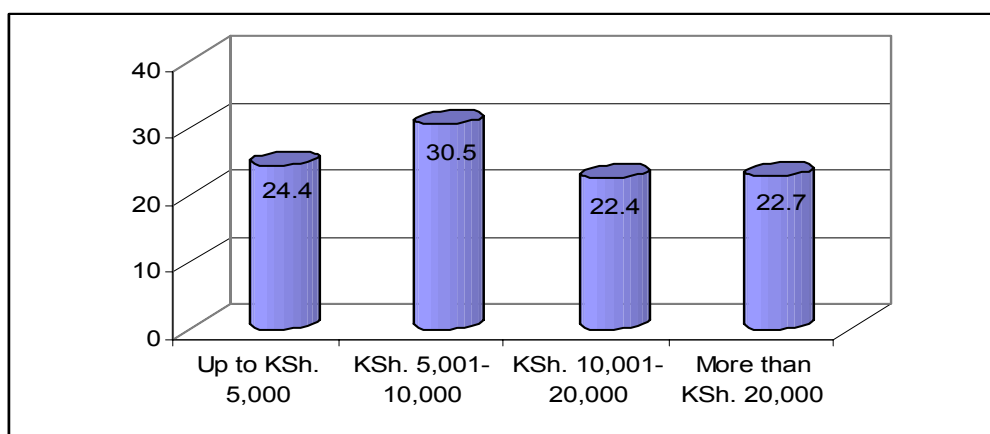
Questions related to incomes are normally sensitive in urban household surveys, not only because it is a common practice not to disclose one’s income to a stranger, but also the fear that it might be used for other purposes, e.g. taxation or even criminal intentions. Due to an unwillingness to disclose their monthly income in absolute terms, respondents were asked to indicate in which income category they fell, out of the four choices provided (Figure 4.4). As much as we tried to find out the household’s monthly total *cash* income, it was not easy to capture the *non-cash* income situation. During the pre-testing of the questionnaire, it became apparent that the respondents had difficulty in estimating their non-cash income sources in quantitative terms. It is for this reason that the income data from the general survey might not reflect some of the household’s “indirect sources of income” other than that from the regular gainful occupations of the household head and spouse. As would be expected, in situations where both the household head and spouse were in formal and regular employment, both incomes were easily taken to constitute the household’s monthly income.

Unfortunately, it was not possible to quantify how much other members of the household who were in gainful employment (working for pay) contributed to the

household's monthly income. The fluid nature of many urban households and the uncertainty as to what proportion of the incomes earned by household members is available for household expenditures, makes the calculation of total household income arbitrary (Rakodi 1995a). For example, some of the adult children who lived in the same house as their parents and who were in employment, indicated that they “normally help” in buying the household's basic necessities and food. However, contributions towards school fees, funeral expenses and other family obligations requiring large sums of money were made “together” when called upon. The scenario is slightly different for friends and distant relatives who live together in the same household. They “institutionalize” their sharing of bills and other household-related expenditures.

Given the above challenges, which are not specific to this survey, the figures presented in Figure 4.4 can be no more than only a rough indication of the households' average monthly income situation. On a positive note, the reported monthly incomes compare fairly well with the households' monthly expenditure patterns. The expenditure patterns across the four income categories suggest that the income classification is to some extent reliable. For example, the household's monthly expenditure (on all items) increases with an increase in the household's monthly income.

Figure 4.4 Household monthly income situation (% of category)



Source: 2001 Survey

Half of the households fell in the category of “low” to “very-low-income” households, i.e. those whose monthly income does not exceed KSh. 10,000. About a quarter could be said to belong to “very-low-income” households. The “medium” and “high-income” households were of the same proportion, each having a fifth of the households, respectively (Figure 4.4).

To gain some insight into the households' general expenditure patterns, the respondents were asked to estimate the average amount of money they had spent during the previous month on various items: food, cooking fuel, lighting, water, house rent, school-related expenditures,²⁴ transport to work, and other non-food household items. On average, the main household expenditures are on food, education and shelter (rent) (Table 4.3). With a total average monthly expenditure of about KSh. 9,000, an average very-low-income family in Nakuru town is thus barely surviving on a monthly income of less than KSh. 5,000.

Table 4.3 Estimated monthly average expenditure

Expenditure item	Expenditure (KSh.)	% of total average
Food	3,223	35
School expenses	2,667	29
Rent*	1,111	12
Transport to work	660	7
Cooking fuel	553	6
Other h'hold items	576	6
Lighting	322	3
Water**	214	2
Total average expenditure	9,321	100

Source: 2001 Survey. * In some households, rent was inclusive of water and lighting. ** The Municipal Council of Nakuru has been unable to collect the rates for the otherwise unreliable provision of tap water to its residents.

Table 4.4 presents the household's estimated monthly expenditure by selected household characteristics, i.e. household size, the age of the household head, if the wife lives at the rural home and the sex of the household head. In general, what one sees from this table is that the monthly expenditure (both on food and total) increases with an increase in household size, which is somewhat related to the age of the household head. The other observation is that multi-spatial households spend less on a monthly basis than the mono-spatial households and lastly, the expenditure of female-headed households is lower than that of male-headed households. However, since there is a relationship between household *income* and household expenditure,²⁵ the figures presented in Table 4.4 would have more meaning if the average income levels for each category are also taken into

²⁴ By the time of this survey, free primary education was not yet introduced in Kenya.

²⁵ The household's monthly expenditure on all items increases with an increase in the household's monthly income.

account; unfortunately, this is not possible because the data on income is categorical.

Table 4.4 Estimated monthly expenditure (in KSh.) by selected characteristics

		Average monthly expenditure		
		(N)	On food	Total
Household size	Small	77	2,074	6,086
	Medium-sized	171	2,993	8,163
	Large	96	4,557	13,977
Age of the h'hold head (in years)	Young	83	2,437	5,719
	Middle-aged	201	3,597	10,682
	Old	59	3,096	10,351
If wife is living at the rural home	Yes (multi-spatial household)	39	2,854	8,371
	No (mono-spatial household)	305	3,320	9,322
Sex of h'hold head	Male-headed household	279	3,315	9,645
	Female-headed household	65	2,832	7,930

Source: 2001 Survey

The remainder of this chapter presents three case studies which are, by and large, representative of what has been discussed above. They are examples of how Nakuru townspeople source their livelihoods.

Survival of the poorest: The case of Sofia Lela

Sofia (44) was born and brought up in Nakuru where her parents lived. Coming from a poor family, Sofia dropped out of school to look for work in Kerugoya town. Unable to get a job, she was forced to work as a prostitute to earn a living:

“I had high hopes of getting a better job but there was none coming my way. With time, my friend with whom I shared a house started to complain that I was a burden. To earn my own living she introduced me into the commercial sex trade in a few pubs in town.”

Sofia admits that despite the normal health risks and other problems, this was a lucrative job that gave her “something to eat everyday”. It was during her day-to-day operations in one of the bars in town that she met her undisclosed husband whom she “separated” from three years later after having two children.²⁶ Soon after her failed marriage Sofia came back to Nakuru in 1981 “to start life all over

²⁶ Sofia was not willing to give more information about her husband.

again”. Since the separation from her husband, she remained a single parent but gave birth to another seven children, by different men. Together with her two youngest daughters (11 and 8 years old) and a son aged four years old, Sofia is living in a one-room rental house in Abong’ Lo Weya estate – a house she “inherited” from her parents in 1988.

Sofia’s oldest daughter is married and living with her husband whereas the second daughter lives with her recently born baby with an aunt. Two of the sons, both unemployed, are living together in a neighbouring estate, while another son was recently lynched to death after being caught engaging in criminal activities as a way of earning a living. The fourth son is living at home in Turkana with Sofia’s mother where he attends school. Sofia explained this dispersal of the family as follows:

“Being single, things are nowadays difficult for me financially, especially when I have to take care not only of the three children I am living with, but also my mother at home and once in a while some of these other children who are independent but unemployed.”

Brewing and selling chang’aa as main occupation

With all these responsibilities, Sofia’s main source of income is selling an illicit local brew commonly known as *chang’aa* (see Box 4.3):

“My main occupation is brewing and selling *chang’aa*. I brew it here in the house and also sell it right here. There are a lot of customers in the neighbourhood. I began this work in 1988, picking it up from my parents who were already practicing it. Since I had no other job, and being a single parent, this was and still is the only way and option of earning my living. This is the job that covers my children’s school fees, clothing, food and rent, of course with some difficulties.”

Sofia acknowledges that her financial situation makes her vulnerable to some of her male customers because once in a while she is forced “to look upon a male friend” for help through discrete love affairs. For her, this is a way to occasionally buy milk and sugar for the children. Her electricity was disconnected long ago because of non-payments. She now uses paraffin for lighting and charcoal for cooking.

For security reasons, Sofia can only make small quantities of *chang’aa* at a time, which is then hidden underground in front of her house, ready for sale. The frequency of brewing depends on how long the previous stock lasts. Brewing and selling *chang’aa* is generally illegal in Kenya but Sofia explains how she deals with that:

“In this business of ours we know how to cope with the police. For every profit we make, we give them “something small” so that they will leave us alone. Actually it depends on your connections with the local police. We know how to talk to them even before they come.

Some of them are our customers. Sometimes we are taken to the police station but find our way out afterwards. Sometimes, if you are unlucky, you are taken to court and fined. I have never been taken to court.”

Box 4.3 *Chang’aa*: Illegal but affordable

Chang’aa is an alcohol that is traditionally brewed in many parts of Kenya. The home made brew, also known as *kumi kumi*²⁷ or “kill me quick”, can be made from a variety of grains, malted maize and malted millet being the most common. For many years now, *chang’aa* has been outlawed and therefore illegal. Ironically, the brewing, selling and drinking of *chang’aa* is widespread in Kenya and is almost a societal norm in the urban poor neighbourhoods. Vendors of *chang’aa* pay off local police and officials for protection although occasionally *chang’aa* dens are raided by the police. The brisk trade in *chang’aa* is a symptom of a society in decay, born of years of economic decline and unemployment. *Chang’aa* is a popular drink amongst the urban poor because of its affordability. Many urban poor can no longer afford bottled beer. For most *chang’aa* drinkers, it is cheaper to spend KSh. 20 and get “set” than waste money on one beer that is four times as expensive. In most cases the person selling the *chang’aa* is a woman who is usually also the person who brews the liquor. Some vendors lace it with methanol to give it a cheap but potentially lethal kick. In the recent past, several people have died or gone blind after taking *chang’aa* laced with poisonous methanol.

From this business, Sofia gets, on average, a monthly income of about KSh. 2,000. This is half of her monthly expenditure in terms of food, rent, school fees, etc. As a result, she survives the month through multiple sources of livelihood as illustrated in Figure 4.5.

Living from her sukuma wiki shamba in town

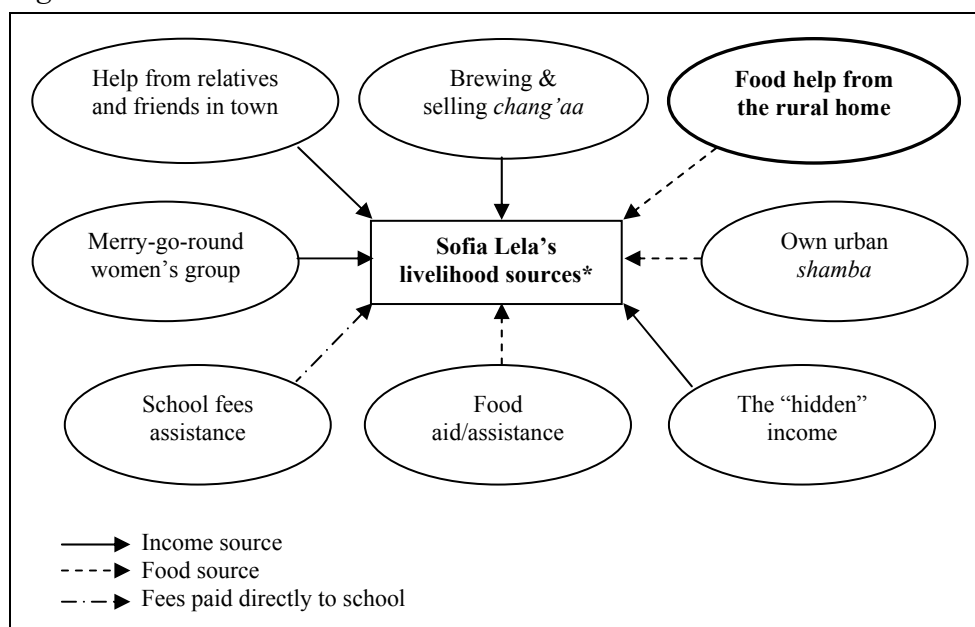
Like most of her neighbours in the estate, Sofia cultivates *sukuma wiki* in a small *shamba* outside her house. Although she uses the *sukuma wiki* as part of her daily menu, it becomes the main dish when she does not have money to buy food from the market. She cultivates *sukuma wiki* throughout the year, irrigating the *shamba* during dry periods. With the *shamba*, Sofia saves about KSh. 30 daily that she should otherwise have had to spend. From time to time, and when there is enough rainfall, Sofia also cultivates Irish potatoes and local vegetables: *saget* (spider plant) and *kunde* (peas). Sofia said that she started cultivating vegetables in her small *shamba* because she needed food for her family.

She has also once tried to keep chickens but stopped after they fed on other people’s *sukuma wiki* in the estate, resulting into daily conflicts with the owners involved. According to her, most *shambas* are nowadays fenced to keep the chickens (and people) from stealing the *sukuma wiki*. She presently keeps one or two chickens for food:

²⁷ *Kumi kumi* refers to the price of the brew. A glass of it goes for KSh. 10 (ten = *kumi* in Swahili).

“You can never say that you do not keep a chicken or two in town. Regardless of how many years one lives in town, it is natural for many of us to have a chicken or two that you can kill for food.”

Figure 4.5 Sofia Lela’s livelihood sources



* With a highlight on rural livelihood sources

External food aid and financial assistance

The local parish of the Catholic Church has a programme that assists poor and needy households in the neighbourhood. Apart from food, they also offer medication, advice, and assistance with school fees:

“Despite my struggling to make ends meet, we rarely sleep hungry in this house. In addition to this *shamba*, I get weekly food assistance from the Catholic Church. For the last three years²⁸ I have received rice, *ndengu*,²⁹ beans, *omena*³⁰ and *unga*³¹ from them on a weekly basis.”

Every Tuesday the “programme” households are given four kilograms of maize flour, two kilograms of beans, two kilograms of green grams, two kilograms of rice and one tin of *omena*. Through the same initiative, “some Ameri-

²⁸ This part of the interview was carried out in 2002.

²⁹ Green grams.

³⁰ A species of small (finger-size) fish.

³¹ Maize flour or maize meal used mainly for making *ugali* – the stiff (heavy) dough.

cans” are paying school fees and other related expenses for her 11-year-old daughter. Sofia had this to say about the Catholic Church and her small *shamba*:

“I do not actually know how I could have survived without the Catholic Church and this small *shamba* here.”

The programme was recently expanded to include Aids-affected households.³² For a household to qualify for this programme, a comprehensive evaluation is done to make sure that only deserving cases are included.

Social networks in town

Sofia is a member of a merry-go-round group made up of ten women with the aim of “saving” what they earn from their informal activities, but in a collective manner. The like-minded members each contribute KSh. 100 every week to one of them on a rotational basis. That is, each member gets a lump sum of KSh. 1,000 every ten weeks. How this money is used is left to the discretion of the receiving member with the expectation that she will do something beneficial with it. In a way, the members understand that it is not easy to “save” on their individual capacities “when you want to do something like revamping your business”. Related to networks, Sofia seeks help from her friends and sisters in Nakuru, mainly through borrowing money from them when she is desperate.

Food from “home”

Less frequently, Sofia gets some sorghum and local vegetables, *kunde* and *mrere*³³, from her mother in Turkana when there is enough rainfall and the harvest is good. Turkana District is a large semi-arid and arid district in the northwest of Kenya. Apparently, this is where Sofia considers her “rural home” because she cannot claim access to her husband’s rural home.³⁴ She is unfortunate that since separating from her husband, she could not claim access to her husband’s rural home because no dowry was paid and the marriage was not formalized or blessed in any way. Because of this, she could not be legally or culturally recognized in her husband’s rural home. According to Sofia:

“This is the land that I and my mother benefit from. My child and those of my sisters live at home because they can go to school cheaply. This land was given to our mother by her mother’s³⁵ clan after our father passed away. The land does not belong to a specific member of the family. It is therefore used communally.”

³² Sofia clarified that her case was purely a needy poor household and not in any way related to Aids.

³³ *Mrere* (*mrenda* or *terere*) is another type of locally grown green vegetable.

³⁴ Traditionally, a girl once married should inherit her husband’s land. Girls are culturally not supposed to inherit their father or mother’s land.

³⁵ Sofia’s grandmother.

The family also has some livestock at the rural home. Once in a while Sofia has benefited from the sale of goats, specifically to help with her children's school fees. The goats and sheep are also a source of income during the dry periods or when they have not cultivated the fields.

Living “beyond” full-time employment:

The case of Reuben & Rita

Reuben and his wife Rita live in Abong' Lo Weya estate, with their five children: four sons (ranging from six to 16 years of age) and a daughter (three years old). Reuben rents two separate one-room units. The four sons are Reuben's children by his first wife, Akinyi, who unfortunately passed away in the last quarter of 2003 while living at home in Siaya. The last-born child is Rita's daughter. The eldest son is in a day secondary school in Nakuru whereas the second and third born attend a nearby primary school. The youngest two children are yet to start school.

Reuben was born and brought up in Nakuru town where his late parents lived. After his secondary school education, he was lucky to get a full-time job as a cook in a tourist hotel in the municipality. In the same year he married Akinyi whom he lived with in Nakuru until 2000, when she went to live in her husband's rural home in Siaya, about 300 km from Nakuru town. This was two years after Reuben's second marriage to Rita. Reuben says that Akinyi going to live at the rural home was beneficial in three ways:

“Firstly, it is very expensive for me to start another household for Rita in Nakuru. Secondly, Akinyi is now in a position to help my ageing stepmother at home. And finally, she is able to utilize the rural plot, not only for her own livelihood but also supervise our farming activities at home.”

As she went to the rural home, Rita agreed to live with Akinyi's children in Nakuru, except for the youngest one who joined them later after his mother's (Akinyi) death. Despite the high costs of living and education in Nakuru, Reuben decided that all the children should live and go to school in Nakuru because he believed that “schools in town do offer better quality education than those at the rural home where facilities are lacking”. At the time of the interviews, Rita was a trainee nursery school teacher in a nearby private school. She “trained” half-days during the term and attended in-service teaching courses during the school holidays. It was her hope that after completing the course, she would be a full-time teacher and get permanent employment in the formal sector.

Back in Siaya, Reuben is his parents' only living son, having lost his two brothers. One of the brothers, Joe, who died at the rural home in 2003, left behind

his wife, Selina, and three children who occasionally looked upon Reuben for help. Unfortunately again, Selina passed away at the end of this study in 2004 leaving the burden of raising her children to Reuben. Selina's three children continue to live with their grandmother in Siaya where they all go to school. Reuben's three sisters are all married and living with their husbands, except for one who is divorced and living in Rongai (some 20 km from Nakuru town) as a farm labourer. According to Reuben's stepmother:

“Reuben is like our granary from where we get our daily needs. In the case of a poor harvest, we rely almost wholly on him for survival.”

Reuben's full-time employment

Since 1986 Reuben's full-time employment is the household's main source of income. His monthly salary has risen over the years to about KSh. 10,000 per month. Reuben argues that what he finally takes “home” is less because of the mandatory payroll deductions, cooperative loan deductions and taxes. Reuben argues that his salary is not enough to take care of his family of seven members in Nakuru, pay fees for his son who is in secondary school and at the same time support his stepmother and his late brother's three children at home in Siaya. As his family became larger and with other people to support at the rural home, Reuben & Rita looked for other ways of supplementing his monthly salary as illustrated in Figure 4.6. An overview of Reuben's regular monthly monetary expenses is presented in Table 4.5.

Growing sukuma wiki and kunde in town

To supplement her husband's income, Rita started to grow *sukuma wiki* and *kunde* in front of her house in 1999, primarily for consumption.³⁶ In front of Reuben & Rita's house is a well-tended *sukuma wiki* garden that now supplies her household with *sukuma wiki* throughout the year. The *sukuma wiki* is harvested for about four months before replanting. During the dry season, the crop is watered using tap water. By getting her *sukuma wiki* from this small plot, she saves about KSh. 25 daily from May to July when there is normally plenty of rainfall and twice the amount from January to April when it is dry and the vegetable is expensive. She also plants *kunde* that is consumed in the house, virtually throughout the year. Like *sukuma wiki*, *kunde* is harvested straight from the *shamba* when needed for consumption. This plot is a “blessing” to Rita because she is able to “feed her large family from the *shamba*” and therefore “spends less on food”.

³⁶ Rita took the *shamba* over from Akinyi who in turn took it over from Reuben's parents.

Table 4.5 Reuben's regular monthly monetary expenses

Expense	Examples	(KSh)
Monthly shopping	Sugar, cooking fat, salt, tea, soap, etc.	3,000
Food	Vegetables, meat, milk, bread, etc.	3,600
Cooking fuel	Charcoal and paraffin	340
Lighting	Electricity (monthly average)	120
Rent	Including water	880
Rural home	Money sent for their use	1,000
School fees	For son in secondary school and others in primary	3,000
Medical expenses	When the children are sick	800
Total*		12,740

Source: Based on in-depth interviews with Reuben & Rita. * The total excludes other expenses that the respondents could not immediately quantify in figures.

Part-time home-based hair plaiting business

Besides the *shamba* and since 2001, Rita plaits ladies' hair "for a small fee instead of just sitting in the house taking care of the children and relying wholly on her husband". She does this in her house or within the estate, mainly for her friends and neighbours and in her free time. Her charges are quite modest, ranging from KSh. 20 to KSh. 50 depending on the style. She concentrates on this activity during the weekends where she can get "one or two customers a day". For the rest of the time, her customers are mainly children whose parents need simple hairstyles and cannot afford the commercial rates charged in well-established salons. She uses the "little" money she gets from plaiting for her "own personal items".

Selling mboga and fish in the neighbourhood

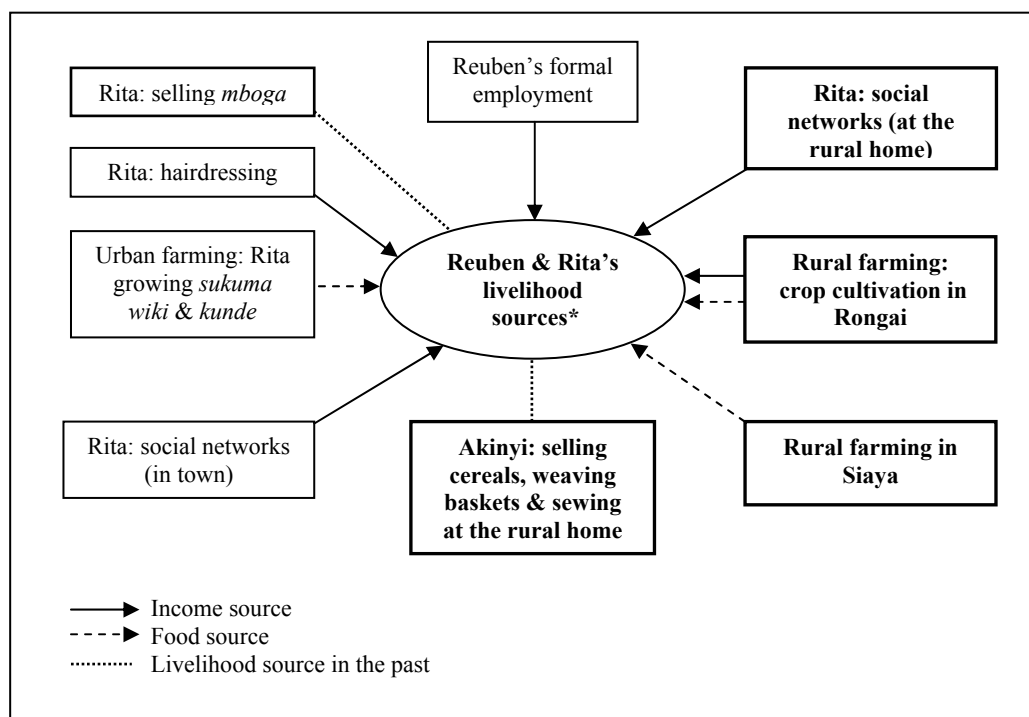
For about two years (1998-2000), Rita tried her hands at selling *mboga*³⁷ along the roadside near her house. Rita started the business of selling *sukuma wiki*, tomatoes, onions, ripe bananas and *omena*, primarily to supplement her husband's income but also "to be economically independent". She bought the vegetables from wholesalers and later sold them at a 50% profit. With a stock of vegetables worth KSh. 300, she made a profit of about KSh. 150 three times a week.³⁸ In addition, in 1999 she made some profit by selling fish as well. She brought the *omena* from the rural home area (near Lake Victoria) to sell in Nakuru. Between August and October *omena* is abundantly available in the local markets around Lake Victoria and at a very low price. Rita stopped this business of selling vegetables and fish in 2000 just before the birth of her first child. Rita

³⁷ *Mboga* is a general name for all types of vegetables.

³⁸ This averages out at about KSh. 2,000-KSh. 2,500 per month.

observed that towards the end of the month her customers were inclined to taking her vegetables on credit as most of them relied on their monthly wages or salaries.

Figure 4.6 Reuben & Rita's livelihood sources



* With a highlight on rural livelihood sources

Rural farming in Rongai and Siaya

Reuben & Rita have access to two rural plots, one at his rural home in Siaya, while the other is a yearly rented plot in Rongai, some 20 km from Nakuru town. Rita and her co-wife (the late Akinyi) had engaged in crop cultivation and livestock keeping at their rural home in one way or the other since they were married to Reuben. Reuben & Rita started cultivating their Rongai plot in 2001. While the plot in Siaya is largely a source of food for the *rural* part of the household and rural-based family members, the Rongai plot is a major source of food and income for the household members in Nakuru town.³⁹

Non-farming income-generating activities in Siaya

While at the rural home, Akinyi started a small business of selling maize, beans and sorghum to meet her day-to-day needs:

³⁹ See Chapter 6 for more information on the importance of rural crop cultivation for Reuben & Rita.

“This business is good because I get a little money that I can use for my day-to-day needs here at home. There is a ready market for cereals here at home especially when people run out of their harvest.”⁴⁰

She operated from a makeshift stall at the local market. She bought the maize, beans and sorghum from Busia or Ugunja and later sold them at the market, making a good profit on weekly market days. In the same year (2001) Reuben sent her a bag of maize from their Rongai plot to sell. In addition, she occasionally sold some of her sweet potatoes and *kunde* from the *shamba*. During her free time Akinyi also engaged in weaving baskets and, making use of her sewing machine, she also repaired clothes. Together with Reuben’s stepmother, she made about four to six baskets in a month. These were displayed in the market and later sold. The cost of one basket ranged between KSh. 20 to KSh. 30. Unfortunately, Akinyi stopped these activities in 2003 due to her deteriorating health, and was forced to rely on Reuben for most of her needs.

Social networks in town and in Siaya

Rita points out that in the estate (in Nakuru town) they have a merry-go-round group in which most of the women are members “for their own mutual benefit”. As one of the women living in the estate she never wanted to be left out. They are 15 women who each contribute KSh. 200 weekly. The total amount from participating members, i.e. KSh. 3,000, is given to them on a merry-go-round basis. Every four months one of them receives the total amount of KSh. 3,000. Rita talks about what she does with her money:

“The money I get from the merry-go-round has helped me buy myself and the children clothes and kitchen utensils. You can even see this 70-litre water dispenser. The other items I have purchased are at home in Siaya. When I do not have money to pay, I request the recipient to give me some time so that I can pay in the course of the week. When one of us has a serious problem that requires money, then she can be given priority instead of waiting for her turn.”

Like the late Akinyi and Selina, Rita is a member of their kinship group at the rural home. This is a group of married women from neighbouring villages who pool their resources to help one of their own during funerals, weddings or other social functions. More often than not the members contribute a given amount of maize and beans. Even though she does not attend most of these functions, Rita’s contribution is normally presented through her mother-in-law. Akinyi explained that such networks really help at funerals because the maize and beans are prepared for the mourners while the members volunteer to help in fetching water, firewood, and in lending out their utensils, chairs and tables for use.

⁴⁰ Akinyi mentioned this when we visited their rural home in April 2003, before her death.

Diversification as “life becomes expensive in town”: The case of Alfred & Alice

Alfred was born in Siaya District in 1971. After completing his primary school education in 1986, Alfred could not proceed to secondary school because his father had passed away a year earlier and there was no money to pay his school fees. However, a cousin of his who was living in Nakuru offered to train him in carpentry and joinery. In 1988 during the training, which lasted a year, Alfred was accommodated and supported by his cousin. After the training, Alfred had acquired the necessary skills that enabled him to get a job as a carpenter. Consequently, he was able to rent a one-room house in Rhonda estate.

Towards the end of 1989 Alfred married Alice (also from Siaya District) and started his own carpentry business in 1990.⁴¹ After having lived in two other low-income residential estates, Alfred & Alice moved in 1996 to their current house in Kaloleni. Alfred “inherited” this house from his uncle who was retiring to the rural home. Alfred & Alice had seven children, two of whom died before their first birthday. At the time of our visits, the family consisted of three daughters and two sons (aged between four and 14 years) and two children from relatives (16 and 10 years old). In November 2001, Alice and the children moved to Alfred’s rural home because, as Alice explained, “life in town had become harder and harder while Alfred’s business was not doing well”. In 2002, Alfred married a second wife (Awino) who joined Alice at the rural home.

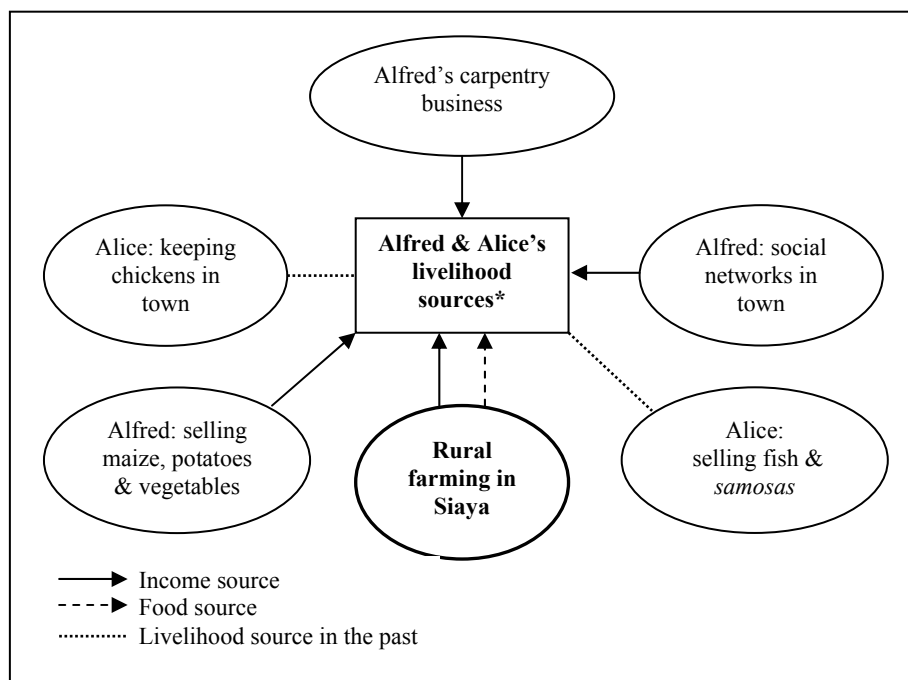
Alfred’s carpentry business

Alfred is the main breadwinner in this household. Since 1989, his carpentry business has been the household’s main regular source of income, but with time, the household had to diversify its sources of food and income as presented in Figure 4.7. Alfred’s carpentry business involves making furniture to sell and sometimes repairs. Although the workshop is in Freehold (a nearby neighbourhood), Alfred moves around a lot, not only looking for business but also working in his clients’ houses. In most cases Alfred uses a bicycle to save on transport costs. The best years in his business were between 1993 and 1999. These were the years when he had many clients and a steady flow of income, between KSh. 4,000 and KSh. 6,000 per month. However, Alfred complains that in the past few years the business has not been very encouraging as there is a lot of competition and at the same time it is becoming difficult to get clients. According to Alfred, the profit margin is nowadays much lower and characterized by great uncertainty compared to when he started the business:

⁴¹ Alice married Alfred “out of her own wish” immediately after her primary school education.

“The returns from my business have reduced considerably in the last three years. The situation is so bad that I do not keep records as I survive from hand to mouth. I rarely find good business to do. I cannot even estimate how much I earned from my business last month. Because of the lower profit margins, I was forced to drop the boy who worked for me in the workshop. I nowadays hire a person only when there is work to be done.”

Figure 4.7 Alfred & Alice’s livelihood sources



* With a highlight on rural livelihood sources

Selling fish and samosas in the neighbourhood

With many more mouths to feed,⁴² Alice started selling fried fish and *samosas* within the estate in 1996 to supplement her husband's income. She bought fresh fish from the market and later in the evening fried them at the roadside, ready for customers to buy. With the fresh fish, firewood, deep-frying pan, cooking oil, a bucket of water, a stool for her and another one to display the already fried fish, Alice left her house for her business every evening. On reaching her “business premises”, Alice made the traditional three-stone fire to start her work. She prepared the fresh fish and fried them in the already heated cooking oil. The business was strategically located along the roadside to attract passers-by, who usually came from work. The *samosas* were prepared earlier in the day in the house and sold together with the fish.

⁴² That is, two children and two relatives, besides Alfred & Alice.

With this business Alice said that she was able to support her family in various ways, particularly with buying food and other household necessities. The work became even more important when her husband's business "went down" due to a lack of clients and also later when three more children were born. She could make a profit of between KSh. 800 to KSh. 2,000 every month depending on sales. According to her, this activity was an additional household income source without which she would not have managed to survive in town. Alfred's opinion is quite clear:

"At times I could go for one or two weeks without a good job. During such periods Alice was able to buy food from the little money she got from her business."

Keeping chickens in town

Alice had a great desire to farm in town but due to a lack of access to urban land and capital to rent a plot, she has never done so. Despite that, she tried her hand at keeping chickens in the year 2000. Unfortunately, some died in the same year while others were stolen. This discouraged her from continuing with the activity. During this period, the chickens were a source of food and, in a few instances, a source of income.

Selling maize, potatoes and vegetables

To make ends meet, Alfred has lately started selling maize (both dry and green), potatoes and vegetables (cabbages and *sukuma wiki*) to local food kiosks in his neighbourhood. He buys the maize, potatoes and vegetables at a relatively low price from wholesalers and sells at a profit. According to Alfred "this business sustains me when my carpentry job is not providing enough."

Social networks in town

In Nakuru, Alfred is a member of a non-ethnic welfare association called Young Friends Association. The group started in 1990 and by the time of our interviews they were 16 members in total, all men with the same interests. Every Sunday each member saves with the association any amount of money he can afford. The money is then deposited in a Post Office savings account. Whenever a member has a problem he can be given half of his savings and even take a loan from other members' accounts and repay it later. At the end of the year, each member is given the whole amount of money that he had saved during that particular year. It was savings through this association that enabled Alfred to buy a cow and a bull. Alfred also admitted that he has on several instances taken a loan from this association or has fallen back on it during problems. He explained that his weekly savings have declined considerably to the extent that he sometimes has

nothing to save. As if to console himself, he says that there are many like him in the association.

Falling back to rural farming

Alfred & Alice have practiced crop cultivation at his rural home in Siaya since 1990. Even though Alfred has access to four acres of land, he only cultivates about half of it, the reason being that some portion of their land, located on the foot of Samia Hills and near a river, is prone to flooding whenever there is heavy rainfall in the highlands and they fear that the crops might be swept away. Alice is responsible for the rural farming activities, together with Alfred's mother and recently her co-wife Awino. Alfred simply facilitates the process in terms of financial assistance and, where necessary, supervision. They cultivate maize, beans, cassava, sorghum, *sukuma wiki*, cabbages, cowpeas and onions. For many years, these crops, according to Alfred, have been an additional source of food and income for the household. With all of Alfred's wives and children at home in Siaya, farming provides them with food while it also adds to Alfred's food requirements in Nakuru.⁴³

Managing the household to survive in town: Some observations

The case studies show that urban households engage in a wide range of income-generating activities and sourcing for livelihoods (besides their main occupation). This is most probably as a response to the increased cost of living in town, decreased incomes and their subsequent decreased purchasing power. For some, like *Reuben* and *Alfred*, it is a way of maintaining a certain standard of living, while for others, as is the case with *Sofia*, it is the only way they can survive in town. From the case studies (together with other survey results in the present chapter), it is possible to roughly distinguish a range of responses adopted by the Nakuru townspeople in "managing" the urban household. These are: entry into multiple informal-sector cash income-generating activities; urban agriculture; and social and economic urban-rural reciprocity, including rural farming by urban households. The aim of this section is not to discuss these responses, but to present some observations that emerge:

- 1) Urban households are no longer able to survive on a single source of cash income.
- 2) Women are less confined to the domestic arena and are contributing to their household's income and survival strategies.

⁴³ See Chapter 6 for more information on the importance of rural crop cultivation for Alfred & Alice.

- 3) Livelihoods are not only multiple, but also multi-local, with both urban and rural components.
- 4) Own food production, if managed well, is one sure way of putting food on the table.
- 5) Social networks are gradually taking on an economic role.
- 6) External assistance brings hope to some household's survival strategies.

First, *Reuben's* and *Alfred's* cases confirm that a household's monthly income from the *main* occupation is never enough to sustain its shelter, food, medical, clothing and other requirements. Unlike *Reuben* who is in formal-sector employment, *Alfred*, in the informal-sector, would be worse off without other sources of income. To subsidize their incomes, they resorted to multiple economic activities. *Reuben* (together with his wife) took an interest in growing maize for sale in Rongai while *Alfred* recently turned to selling of maize, potatoes and vegetables part-time. This was a way for *Alfred* to spread the risk of his nowadays unpredictable carpentry business. The same applies to *Sofia*, with selling *chang'aa* and her many other little activities here and there. Increased responsibilities may force poor single female parents to engage in riskier activities in order to obtain food and money for their families.

Second, as urban households become multi-active, the role of women, formerly thought of as homemakers, should not be underestimated. A good example in the present chapter is the entry by women into informal income-generating activities in the neighbourhood in order to cope with their household's declining purchasing power.⁴⁴ *Rita* (*Reuben's* wife) and *Alice* (*Alfred's* wife) engage in different informal food and income-generating activities to supplement their husbands' incomes. Such activities, though marginal, less enumerative and part-time in nature, supplement the household's income and food requirements and give the woman some degree of economic independence (as *Rita* put it).

These activities are largely restricted to income generation based on home-making skills, *Rita's* plaiting skills and *Alice's* baking and frying skills being examples. This confirms Frayne's (2004: 495) finding that the rise in hawking and street trading, primarily of food stuffs, has seemingly opened an avenue for women to participate in informal-sector income-generating activities. Compared to other activities, the capital needed is low and the business takes place within the neighbourhood. To juggle domestic activities and income-generation, *Rita*, *Alice* and *Sofia* have "localized" their informal income-generating activities in the house or in the neighbourhood (see also Owuor & Foeken 2006). As such, contrary to Chant's argument (1998: 8), adult women in urban areas are be-

⁴⁴ See Owuor & Foeken (2006) for a detailed account of surviving in the neighbourhoods of Nakuru town.

coming *less* “confined to the domestic arena”. In other words, women are actively contributing to their household’s income and survival strategies.

Third, as Figures 4.5, 4.6 and 4.7 show, urban households’ livelihood sources are not only multiple but are multi-local as well. Urban households straddle the town and the rural areas for their livelihoods. For example, *Reuben & Rita* employ a combination of urban and rural farming and non-farming food and income-generating activities. According to Frayne (2004: 489), urban-rural linkages are fundamental to the ability of poor urban households to survive. Good examples are multi-spatial households where the wife and children live at the rural home because the husband cannot afford them to live with him in town. We have noticed the return-migration of women and children from urban to rural areas because they could not afford to stay in town any more. For example, *Alfred’s* wife and children went to live at home in Siaya after 12 years in town. On the other hand, *Sofia’s* son is living and going to school at his grandmother’s rural home in Turkana.

Fourth, food is a basic household requirement. As such, a household’s food security is bound to be affected with the increased cost of living, decreased incomes and reduced purchasing power. Regardless of the (high) food prices, household size, employment status and monthly income situation, food has to be put on the table. Own food production, whether in town or at the rural home (e.g. *Alfred & Alice*), is one way in which households can manage this situation. With the vegetables (especially *sukuma wiki*) from their urban *shambas*, *Sofia* and *Rita* were able to feed their “large” families most of the year. Another notable development in Nakuru is the rich agricultural lands bordering the municipality boundaries being rented by the townspeople (e.g. *Reuben & Rita*) for cultivation purposes, for both food and income.

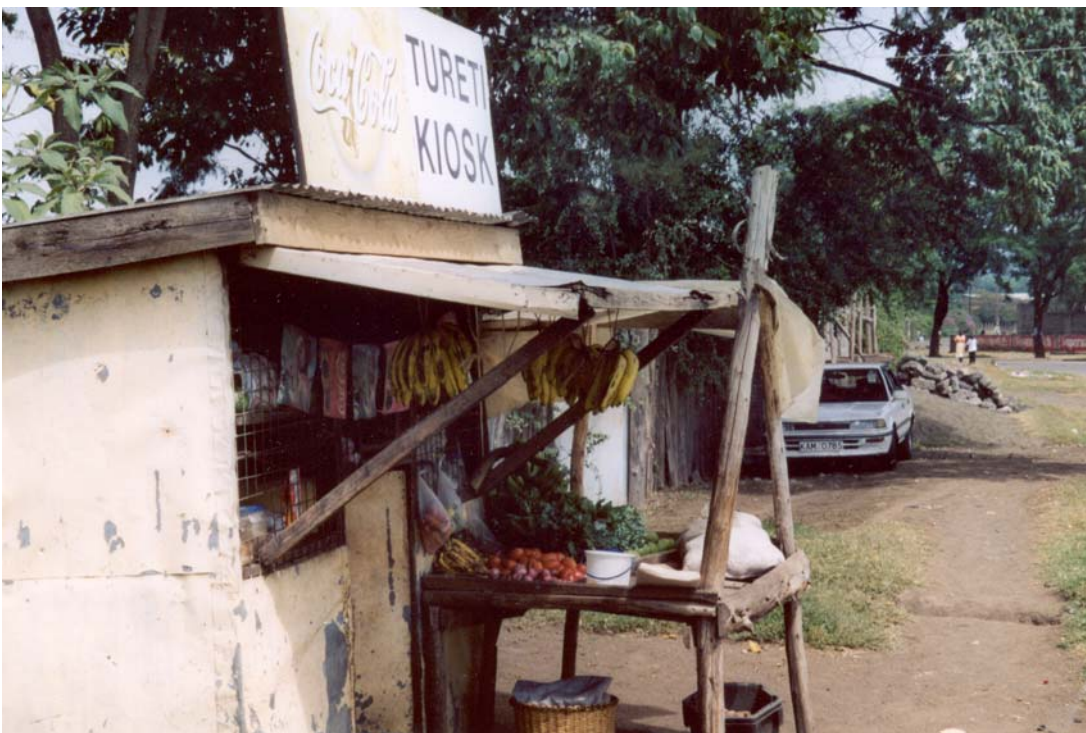
Fifth, social networks are equally important, largely as a kind of insurance and saving for a difficult time in life. Merry-go-rounds, especially among women, are taking deeper roots in town and shifting from being predominantly ethnic-based and social to a more economic orientation. This is an example of women mobilizing themselves in various forms “to fight poverty and economic hardships in town”. Such merry-go-rounds or networks have also been observed in Dar es Salaam (Tripp 1996) and Bamako (Vaa *et al.* 1989).

Lastly, through actors outside the household, food aid and other kinds of assistance are being extended to poor and needy households in Nakuru town. *Sofia* is a beneficiary of this kind of weekly external food assistance from a church mission, which is also paying for her daughter’s school fees and other related expenses. This, with other sources of food, means she is able to provide food for her family on a daily basis. We have also seen how ECLOF, a local financial institution, has transformed *Grace’s* livelihood and standard of living.

Photo 5 Rita in her *sukuma wiki* garden in Nakuru town



Photo 6 Income-generating activities in the neighbourhoods of Nakuru town



Rural farming by urban households: The practice

The aim of this chapter is to describe the practice of rural farming by urban households in Nakuru town: the persons involved, the use of labour and material inputs, the crops cultivated, crop yields, livestock kept, and animal products. As rural farming is only possible with access to a plot, the chapter will first discuss Nakuru households' access to rural plots and the plots' characteristics, namely their sizes, location, ownership and use.

Rural plots

Access and size

In this study, a rural plot is defined as any land outside Nakuru Municipality and, at the same time not within any other municipality in Kenya either. The plot may have been inherited and/or be ancestral land back in the rural home or can be purchased or rented land elsewhere. Almost all the respondents (95%) said they had access to a plot outside Nakuru Municipality (Table 5.1). A large proportion of these concerned the rural home of the household head, in this case the male head (see below). Specifically, two-thirds of the total of 491 plots that Nakuru town households had access to were at the same time the rural homes of the household heads. Almost two-thirds (63%) of the rural plots *not* considered as the rural home were located in Nakuru District.

The fact that many of the rural plots were at the same time the household heads' rural homes in a way confirms the socio-cultural importance attached to the rural home. As will be explained in more detail in Chapter 7, the rural home

is *normally* the ancestral land that is passed on from father to son. Daughters are expected to get married and make their (new) homes in their husband's family. In that case the husband is required to put up a house for her, in addition to being "allocated a *shamba* to cultivate to feed her family", i.e. her husband and children. Even then, there seems to be a tendency to acquire a plot outside the rural home as well, when the household income increases.

Table 5.1 Access to rural plots (%)

Access to rural plot (N=344 households)	Yes	95.1
	No	4.9
	<i>Total</i>	<i>100</i>
Number of plots per household (N=327 households)*	1	61.8
	2-3	35.8
	4-5	2.4
	<i>Total</i>	<i>100</i>
Size of plots (in acres) per household (N=321 households)**	Up to 2	34.3
	2.1-4.0	20.9
	4.1-8.0	20.2
	8+	24.6
	<i>Total</i>	<i>100</i>

Source: 2001 Survey. * Households with access to a rural plot. ** Six respondents declined to give the sizes of their plots.

In terms of the number of plots, about two-fifths (38%) of the households had access to more than one plot (Table 5.1). On average, urban households in Nakuru had access to 1.5 plots outside the municipality, with a median plot size of two acres and an average of 4.6 acres.¹ However, there was a wide range of sizes, varying from less than one acre to 100 acres. It was not possible during the general survey to determine exactly how much of the rural plot is used for crop cultivation, whether the land was still an ancestral holding, or what proportion of the ancestral land was *actually* accessible to the urban household.

Location of rural plots

To a large extent, the location of rural plots reflects the district of origin of the urban (male) migrants to Nakuru town and therefore the source district of migration. From a geographical perspective, a large proportion of these plots were concentrated in Nakuru town's parent Rift Valley Province and neighbouring Central and Nyanza Provinces (Table 5.2). One might have expected a relatively higher percentage of rural plots in Western, a province with a high propensity of

¹ For those who had access to a rural plot, which concerns 95% of the Nakuru households.

out-migration – but this was not the case. Whereas Western and Eastern Provinces were fairly represented, North Eastern was under-represented with only two plots. Coast Province was not represented at all.

Map 5.1 reveals that the further the district is from Nakuru Municipality – i.e. Mandera, Samburu, Narok, Wajir and Kajiado Districts – the fewer urban households have rural plots or homes there. This is, again, related to the fact that the geographical location of the rural plots corresponds with the district of origin of the (male) household head. As such, Nakuru District is bound to be over-represented in terms of the percentage of rural plots. Nakuru Municipality is located in Nakuru District and has a large number of the local Kikuyu who have their rural homes or plots in the district. Consequently, one third of the rural plots were located in Nakuru District followed by Nyandarua, Kakamega, Siaya and Nyeri (Table 5.2).²

Table 5.2 Location of rural plots by province and district (%)

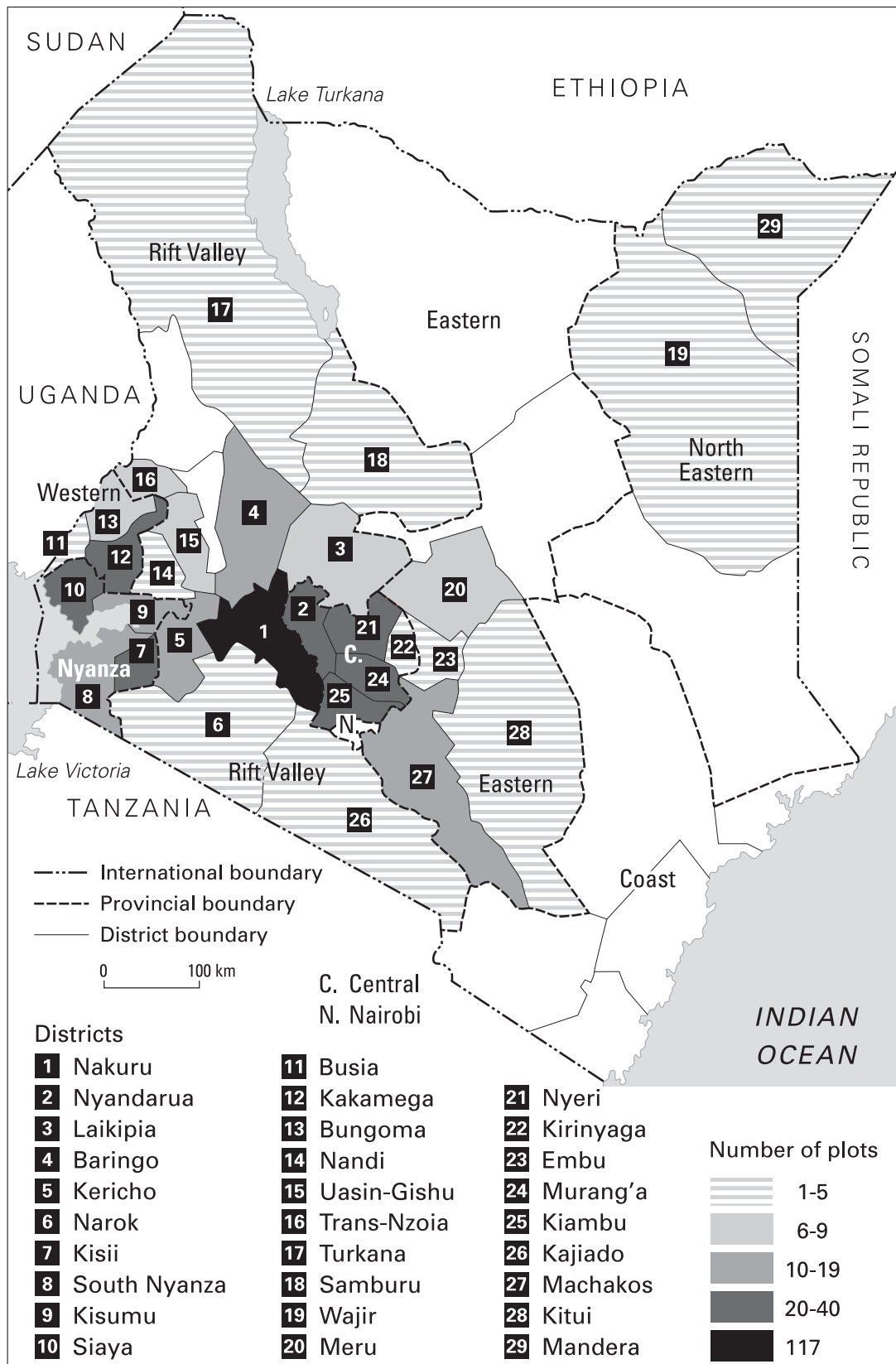
Location of rural plots by province	Rift Valley	47.0
	Central	22.9
	Nyanza	16.2
	Western	8.6
	Eastern	4.9
	North Eastern	0.4
	<i>Total</i>	<i>100</i>
Location of rural plots by district*	Nakuru	36.2
	Nyandarua	7.8
	Kakamega	5.7
	Siaya	5.3
	Nyeri	5.3

Source: 2001 Survey (N=489 and excludes two plots located in Tanzania). * Only districts with more than 5% of the total number of plots.

Notably, plot sizes increase as one moves away from Nakuru Municipality. About half (48%) of the smaller plots were located in Nakuru District compared to 40% in the outer-ring districts. The gap was much wider for the larger plots: 57% were located in the outer-ring districts compared to about a quarter (22%) in Nakuru District.

² In the recent past, there has been a sporadic large-scale sub-division of districts in Kenya. To avoid confusion, the old districts have been used here.

Map 5.1 Location of rural plots*



* Although during the past ten years many new districts have been created, the old districts are used in this map because many respondents referred to these.

Ownership and use of plot

The ownership structure of rural plots was basically of two types: the plots were either owned by household heads themselves, through inheritance or private purchase, or formed part of the family land in the rural area, through socio-cultural entitlement (Table 5.3). The high proportion of inherited plots is a clear indication of the transfer of land from father to son through the generations. The few rented plots (3%) were all located in Nakuru District, outside the municipal boundary. This is a new livelihood strategy for Nakuru townspeople, whereby the rich agricultural lands along the municipal boundaries are rented for cultivation purposes. It is common practice among land-owning communities outside the municipality to lease patches of arable land to individuals for one or multiple cropping seasons, as is the case in Rongai and Subukia.

Table 5.3 Ownership and use of rural plot (%)

Ownership of plot	Own land	52.1
	Family land	44.4
How plot was acquired	Inheritance	55.6
	Private purchase	36.0
Who uses the plot	Myself/spouse	39.7
	Other family	42.6
	Nobody	11.2
How the plot is used	Crop cultivation only	34.0
	Livestock keeping only	2.0
	Crops and livestock keeping	47.5
	Idle	12.6

Source: 2001 Survey (N=491 plots; For more details, see Appendix 3, Table A3.1)

On a general note and from my observations in the field, a number of people from Nakuru town rent plots in Rongai for crop cultivation. Very noticeable in Rongai are large tracts of land formerly owned by the white settlers but now under indigenous Kenyans. People rent smaller parcels, with rent being paid on an annual basis. The size of the plot rented depends on the individual's needs and ability to pay and is not necessarily the same plot or the same size of plot every year. On average, one acre of land at the time of the survey could be rented for between KSh. 2,000 and KSh. 3,000 per year, depending on the individual's ability to negotiate and the amount of land being rented.

Due to the complex nature of kinship ties and networks in Kenya, it is not easy to determine what constitutes a rural family or family land. Normally, a family is

defined as those members of one or more households who are related by blood, marriage or adoption. The extent of such a relationship depends on the socio-cultural use and meaning of the term, such that a worldwide classification may not be established (Otieno 2001). Consequently, ownership of a plot at the rural home does not necessarily mean detachment from the homestead. It simply means that the son has been formally allocated the piece of land, either by owning a title deed, or socio-culturally, through the father or clan elders. On the other hand, family land means that the allocation of land from father to son has not been formally carried out, but the son is still entitled to a piece of land for farming purposes and for putting up his house – and therefore access to family land³ “back home”.

For example, *Reuben* and *Alfred* (see Chapter 4) have access to their family land in the rural home:

Reuben's home in Siaya District is still family land. The *shamba* is being used by Reuben, his late brother (Joe), and their stepmother.⁴ The plot is still registered under their late father's name and has not been sub-divided between the sons. However, Reuben and his late brother had their respective “portions for their wives to cultivate”. These “portions” were allocated by their stepmother. Even then, their stepmother prefers them to cultivate the plot as a family because “at the end of the day they all benefit from it”. Cultivating the rural plot in Siaya is expected of both Reuben's wives, whether directly or indirectly because upon marriage they were “allocated” their portions of the *shamba* to cultivate.

On the other hand:

Alfred has access to a four-acre plot out of their seven-acre family land in Siaya. This is what they (Alfred and his first wife Alice) consider as their rural home because that is the only (rural) land they have access to. Alfred is the only son in his present family. The other three acres have been left for his mother and his (divorced) sister to use. The entire plot is still registered under his father's name. Both Alice and her co-wife (i.e. Alfred's second wife) have their portions to cultivate. However, at the time of these interviews, Alfred's second wife had not started cultivating her land, cultivating instead with Alfred's mother and Alice.

Apart from the plots left idle, rented out and those used as homestead only,⁵ all others were being used wholly or in part for rural farming purposes (crop cultivation and/or livestock keeping) by the urban household (Table 5.3). The main reason for leaving a plot idle is that nobody lived there. Regardless of a family's income category, about 90% of the idle plots had no one living on them.

³ The word “family” is sometimes used in this section (on rural plots) to refer to the grandparents, parents, brothers, etc of the male household head who occupy the ancestral rural home where the plot is located.

⁴ When we visited the rural home in 2003 we observed that the family homestead occupied about a quarter of an acre. Reuben and Selina (Joe's wife) had about one acre each under cultivation and the rest of the land was left idle.

⁵ 13% of the plots were left idle, 2% rented out and 1% used as homestead only.

Surprisingly, about two-thirds (68%) of the idle plots were located in Nakuru District. Most were own land (84%) and were relatively small in size, i.e. up to two acres (74%).

The unfolding scenario is that ownership was closely related to how the plot was acquired and who primarily uses it. Own land tends to be privately purchased and used by the owner, while family land is, in most cases, inherited and mainly used by rural-based family members (Table 5.4).

Table 5.4 Relationship between ownership of rural plot, how plot was acquired and person using it (%)

	N	How plot was acquired ^a		Who uses the plot ^b	
		Inherited	Purchased ^c	Myself ^d	Rural-based family
Own land	256	43.4	55.5	53.3	18.0
Family land	215	74.9	15.8	18.6	74.9

Source: 2001 Survey

^a Some plots were allocated to household heads.

^b Some plots were rented out, being used freely by somebody else or left idle.

^c Some households purchase “family land” beyond their ancestral rural home.

^d Includes the household head’s wife who is at the rural home.

An important factor at play here, especially for low-income households, is distance. The operationalized distance variable (see Chapter 3) was applied here to establish the relationship between distance to the rural plot and how the plot was acquired, on the one hand, and the person using it, on the other. It emerged that the closer the plot is located to Nakuru Municipality, the higher the chance it was purchased and is in use by the owner (Table 5.5).

Table 5.5 Effect of distance on how plot was acquired and person using it (%)

	N	How plot was acquired ^a		Who uses the plot ^b	
		Purchased	Inherited	Myself ^c	Rural-based family
Nakuru District	177	61.6	23.7	45.2	20.9
Inner-ring districts	83	30.1	61.4	41.0	51.8
Outer-ring districts	229	18.3	78.2	34.5	56.3

Source: 2001 Survey

^a Some plots were allocated or rented.

^b Some plots were rented out, being used freely by somebody else or left idle.

^c Includes the household head’s wife who is at the rural home.

Plots further away have mostly been inherited, with greater involvement by rural-based family members in their usage. This is not surprising because the frequency of visiting rural plots is likely to reduce as distance increases, so that rural-based family members are left with the responsibility of utilizing the plot. This finding may also explain why plots further away are relatively larger than those in Nakuru District. Generally, ancestral (inherited) plots are bound to be larger than purchased plots.

The percentage of female-headed households having access to a rural plot was as high as that for male-headed households: 96% and 92%, respectively. In addition, both male- and female-headed households were almost equally represented in each of the plot-size categories. Similarly, about half of the female-headed households had inherited their plots, but in this case from their husbands. None of this is surprising because when the husband dies the widow is culturally bound to continue to maintain links with her husband's rural home. Normally, she does not forfeit her access to the rural plot, but while employed in town (fending for her children through) the plot is mainly used by her husband's rural-based family members. For example:

Hester Njeri's husband passed away in 1997 (see Box 4.1). Her husband's family land in Nyeri had already been sub-divided between the sons in 1978 and each of them given a title deed. As a result, it was easy for Njeri and her children to inherit the plot. Although part of the plot has been left for the rural family members to use, Njeri has the title deed. In addition, she also inherited their one-acre plot in Rongai.

While this should be the practice, some widows are known to have been denied access to their husband's resources, land included. Like *Sofia's* plight (see Chapter 4), the situation is further complicated when a woman is divorced or separated from her husband, as is *Alfred's* sister.

Alfred's sister is divorced and therefore cannot claim access to her former husband's rural home. She now lives in a rented house at the local shopping centre near her parent's rural home (i.e. Alfred's rural home). As a source of food for her family, she has been allowed to cultivate part of her mother's *shamba*.

As concerns the age of the household head, younger heads are disadvantaged when it comes to the ownership of rural plots. More often than not, they still rely on the family land at the rural home.⁶ There are two possible reasons for this: the land has not yet been officially transferred from father to son, or the young heads are still not in a position to buy their own land.

⁶ 65% of the younger household heads (under 30 years old) stated that the rural plots they had access to were family land, compared to 25% of the older household heads (>50 years). On the other hand, 33% of the younger heads had their own land compared to 72% of the older ones.

Rural farming by urban households: Who are the rural farmers?

It was noted at the beginning of this chapter that rural farming is only possible with access to a rural plot. However, not all households with access to a rural plot engage in rural farming. In Nakuru town, 59% of the households who had access to a rural plot engaged in farming activities. Ninety per cent of those practiced crop cultivation, while about three-fifths engaged in livestock keeping (Table 5.6).

Table 5.6 Engagement in rural farming*

	(N)	(%)
Rural farmers	194	59.3
Of whom: Crop cultivation	173	89.2
Livestock keeping	111	57.2

Source: 2001 Survey. * % of households who had access to a rural plot (N=327).

In both farming activities, the large majority of them were male-headed households.⁷ However, this does not mean that more men in town participate in rural farming than women. As will be shown below, women in town play an active role in their household's rural farming activities, especially in crop cultivation. However, livestock, such as cattle, goats and sheep, are viewed as an asset and like other physical assets they are identified as the male household head's property. Furthermore, livestock keeping is essentially "a man's job" apart from keeping chickens, which is often left for the women.

Even so, urban households engage in rural farming, directly or indirectly, through the cooperation of *rural* household members, rural-based family members or through hired farmhands. In the absence of their urban counterparts, *rural* household and family members play an important role in all stages of agricultural production: directly through actual participation and indirectly through the supervision of activities and taking care of the crops and animals.⁸ Through regular contacts with their rural plots and rural-based family members, the mono-spatial household head (and his wife) are able to participate in all the agricultural activities, in one way or another. More often than not, the household head (and his wife) are engaged in supervisory roles.⁹ Once in a while, one of them, and

⁷ 87.3% of the rural crop-cultivating households were male-headed against 12.7% female-headed households. On the other hand, 91.9% of the rural livestock-keeping households were male-headed against 8.1% female-headed households.

⁸ See Appendix 3, Table A3.2 for a summary of involvement in rural crop cultivation.

⁹ The term supervision is quite broad and at the same time rather vague. The general survey did not capture the kind of supervision involved and therefore it becomes difficult to quantify, and by exten-

usually the wife, travels to the rural plot to oversee, and sometimes to participate, in land preparation, planting, weeding, harvesting or marketing or to take care of the animals. Generally, the wife is more involved in rural farming than the husband. While some male household heads claim to be responsible for rural farming, the women do much of the work.¹⁰

“I have all along been entirely in charge of both urban and rural crop cultivation because my husband does not have the time for these activities due to the nature of his job. However, I keep him informed and we make most of the decisions together.”

Such an arrangement might be out of choice or necessity and it differs from one household to the next. The same applies to households with a female head that engage more in supervisory roles and leave much of the work to rural-based family members. For multi-spatial households, rural farming is largely a full-time engagement, i.e. for the wife who lives at the rural home.¹¹ By living at the rural home, the wife is able to engage in all the farming activities, while the husband concentrates on his job in Nakuru, as was the case with *Alfred* whose wife went to live at the rural home in 2001:

“My wife is nowadays responsible for all the farming activities at home. She decides what to grow and what percentage of the land to cultivate. I just give or send money to help her in farming. Although I am busy with my business here in Nakuru, I supervise some activities when I am at home. She also takes the opportunity to share with me the problems she experiences and decisions she makes. By doing that, I am able to advise her here and there.”

Like *Alfred* and his wife, three-quarters of the multi-spatial households engaged in rural crop cultivation compared to about half of the mono-spatial (and married) households who did the same.¹² Even so, a much higher proportion of multi-spatial households kept livestock at the rural home than mono-spatial households.¹³ Generally, livestock keeping at the rural home requires daily physical supervision, which urban household members are not able to provide person-

sion, to define. It may range from just going to see what is happening on the farm, being responsible, being in charge or overseeing some of the activities, directly or indirectly. At the same time, it is not exclusive of other categories of participation (e.g. land preparation, planting, weeding, harvesting and marketing).

¹⁰ In the general survey, both crop cultivators and livestock keepers were asked who was responsible for the overall activity in 2000. The answers were as follows for the crop cultivators and livestock keepers, respectively: household head (39% vs. 35%), spouse (36% vs. 27%), rural-based family member (22% vs. 35%), hired labour (2% in both) and other urban household members (1% in both).

¹¹ See Appendix 3, Table A3.2.

¹² 30 (77%) of the 39 multi-spatial households engaged in rural crop cultivation against 143 (50%) of the 288 mono-spatial households.

¹³ 27 (69%) of the multi-spatial households engaged in rural livestock keeping compared to 84 (29%) of the mono-spatial households.

ally, except through *rural* household members, rural-based family members or hired labour.

Rural crop cultivation

As indicated above, half of Nakuru town households are engaged in rural crop cultivation (see Table 4.2). By and large, it is an annual practice and almost all the crop cultivators engaged in the activity every year. Lack of labour, a fear of crop theft, lack of capital, politically instigated tribal clashes and drought are some of the factors that prevented some households from cultivating every year.

Crops cultivated

Nakuru townspeople cultivated a wide range of crops on their rural plots in 2000, to a great extent reflecting the varied ecological conditions of the plots and their location. The most important crops in terms of the number of households cultivating them were maize (a staple crop) and beans, which are a popular substitute for animal protein (see Table 5.7). Beans are often inter-cropped with maize. Nine out of every ten crop cultivators cultivated maize while two-thirds cultivated beans. Other common *food* crops cultivated by at least 10% of cultivators were Irish potatoes, *sukuma wiki* (kale), cabbage, bananas, millet and green peas.¹⁴ Less common *food* crops include onions, tomatoes, sweet potatoes, cassava, groundnuts, cow peas, carrots, sorghum, spinach, green grams, arrow-roots, pumpkins and spider plants (locally known as *saget*). Vegetables¹⁵ tend to be grown on small plots near the house while in a few cases, and especially for plots located near Nakuru Municipality, they were grown on a larger scale for commercial purposes.

In addition to maize, some households also grow cassava, millet, sorghum, sweet potatoes and arrowroots, which are regarded as a staple food during hard times. These crops can withstand unfavourable weather conditions including low rainfall. Sorghum is particularly drought resistant. It is also resistant to common weeds and pests that plague local farms and it matures faster than the popular varieties of maize. Sorghum outperforms maize in poor saline soils. It requires low maintenance and is used for *ugali*, *uji* (porridge) and beer. It is good for babies and also as livestock feed. Millet has a shorter maturation period but is a lower yielding crop, while cassava is rich in calories, grows well in relatively poor soils, requires relatively little labour input and can be left in the ground for one-and-a-half to two years (Hoorweg *et al.* 1995: 17). It is ironic that in Kenya,

¹⁴ Appendix 3, Table A3.3 offers a full list of all the crops cultivated by Nakuru townspeople on rural plots in 2000.

¹⁵ For example: *sukuma wiki*, cabbage, onions, tomatoes and spinach.

sorghum, millet and cassava (including yams) are regarded as a poor man's food whereas if intensively cropped, they can offer an alternative diversity to the common staples, especially during the dry season.

The above discussion gives a general picture of the food crops grown in rural areas by urban households in Nakuru but the choice of which crops to grow in a given season or year often depends on the "typical crops that do well in the region". In addition to the agronomic conditions of the area, the choice of what to grow is determined by the household as explained below:

Whereas *Reuben & Rita* cultivate maize and beans in Rongai, at their rural home in Siaya they normally cultivate maize, beans, millet, sorghum, groundnuts, cowpeas, sweet potatoes, bananas and a local green vegetable called *mito*. Reuben's stepmother explained that these are traditionally the typical crops planted in the area but with relatively lower harvests nowadays.¹⁶ Maize, beans and sometimes sweet potatoes are planted twice a year. The government is now encouraging them to plant sorghum twice as well to increase their food security.

The scenario is the same for this respondent whose wife, living at home in Busia District, cultivated crops that normally do well in the area:

"My wife cultivates almost the same crops as my parents: sorghum, millet, maize, sweet potatoes, *simsim*, groundnuts and some cotton. These crops are popular in the community because they tend to do well in the area."

Like *Reuben & Rita*, the following respondent, who cultivated in Subukia, preferred to grow maize and beans because it is easier to "manage" the two crops (than for example *sukuma wiki*) when they are in Nakuru:

"I prefer growing maize and beans because they are not very demanding in terms of expenditure and you do not need to be in Subukia all the time to look after them. This is convenient for me since I have no house there."

Whereas *Hester Njeri* grew vegetables in Nakuru town for many years, in 2000 she preferred to cultivate maize and beans on her rented plots in Abong' Lo Weya and Rongai because

"Maize and beans are not perishable and have a long storage period, unlike vegetables that require a quick sale."

Tea and coffee are the two important cash crops grown by 15% and 10% of the rural cultivators, respectively. Other cash crops include sugarcane, pyrethrum, wheat, cotton and barley. For those who mentioned that they grow fruits,

¹⁶ Reuben's mother explained that, besides unreliable rainfall, the soils are not as fertile as before.

these are normally one or two types of fruit trees dotted around the homestead. The fruits are harvested when ripe for consumption. Some households sell the fruit at the local market. The fruit trees found on the rural plots in 2000 were oranges, mangoes, pawpaw, avocado, passion, lemon and plums.

The average number (i.e. variety) of crops cultivated per crop-cultivating household was 4.2. In seven cases, ten or more crops were cultivated whereas in another ten cases, only one crop was cultivated. The variety of crops grown per household is not dependent on the number of plots a household has but appears to be related to the size of the plot: the larger the plot, the more likely it will have a variety of crops on it.

In terms of food groups, a higher preference is given to cereals, legumes and nuts by the large majority of the crop cultivators (see Appendix 3, Table A3.4). This preference might be biased towards the common practice of inter-cropping maize and beans every season, as already indicated. Starchy roots and tubers, vegetables and cash crops were cultivated by between 35 to 45% of the cultivators and fruit by less than a quarter of them. A few households grew fodder for their animals. Apart from fodder, all these crop categories are represented amongst the ten most common crops cultivated on rural plots by Nakuru town households.

The crop cultivation cycle and the resultant crop yields differ from one region to the other and are determined by various factors. By far the most important is the weather, in particular the amount of rainfall and its distribution throughout the growing season(s). For example, based on separate interviews with *Alfred's* mother and *Reuben's* stepmother

Crop cultivation cycle in Siaya (mainly for maize and beans) starts in January with ploughing, followed by planting in February, the first weeding in March and second weeding in April. Harvesting takes place sometime from late June to mid-July depending on the rains and the planting time. When there is adequate and reliable rainfall, ploughing starts again at the end of July followed by planting a month later. The first and second weedings take place in September and October, respectively. The second crops in the field are usually ready for harvesting in December. Sorghum is planted only once a year.

And this respondent explained their farming activities in Kakamega:

“Ploughing of the plots starts in November or December. This continues to January when the second ploughing is done. Planting takes place from February to March and a month later weeding starts. Harvesting commences in July through August. We grow maize only once a year but normally a small portion of land is again put under maize cultivation soon after the August harvest. The second maize crop is eaten green, that is, to provide maize for roasting and boiling. Sorghum is also grown once in a year, usually intercropped with the maize, but harvested earlier. Sweet potatoes are planted in April, August and December, depending on the onset and availability of rainfall. They are planted in the fields where maize is not doing well or can as well be intercropped with maize. Sweet potatoes take three months to be ready

and another two to three months to be eaten. *Sukuma wiki* and onions are planted throughout the year, generally in the homesteads. Cowpea is planted for both the leaves (*kunde*) and grains and from time to time mixed with another wild local vegetable, *mrere*.”

The precise timing of these activities, however, depends on the ecological characteristics of the area concerned and on the kind of crops that are cultivated. At the time of these interviews, in a couple of plots most of the food crops – including maize, beans and Irish potatoes – had dried up prematurely owing to poor timing and failed rains. For example, this respondent planted late and because of that they were not sure whether they would harvest anything:

“This year we are not even sure that the crops will be ready by August or whether we will have a good harvest. We planted late because of the late rains.”

By and large, the decision for a second cropping and what crops to grow varies with the region and the household’s decision-making process. For instance, people prefer one particular crop in Rongai because the work is hired-labour oriented.

Labour and material inputs

The main cultivation activities are land preparation, planting, weeding (usually in two rounds) and harvesting. Most labour input is family labour, although women do most of the cultivation. Traditionally, women are given the responsibility of “producing food for the family”; hence their greater involvement in cultivating food crops compared to, for example, cash crops that are dominated by men. Although nowadays women join their husbands in town, according to one of the respondents, “she is still expected to grow food for the family by virtue of being allocated her place to cultivate at home”.

Although not revealed by the general survey data, a gender division of labour typically exists in which men and women perform their own tasks. For the rural-based family members, men assist in the heavier tasks like clearing or ploughing the field and take over as soon as a crop is ready for marketing if there is a large surplus to be sold. This does not mean that men do not assist in planting, weeding and harvesting. In situations where there are only women in the homestead, the question of gender does not arise, as experienced by the following respondent who lives at the rural home:

“We do all the *shamba* work in this home. We slash, plough, plant, weed and harvest. We are the women as well as the men in this home.”

According to Hoorweg *et al.* (1995: 10), the gender division of labour is breaking down rapidly and proving flexible at times of need. Like the case above,

women have to fill the labour gaps that inevitably occur because “all the men have gone to town to look for work”. Use of the available family labour at the rural home is common because many of the households cannot afford to hire labour. One of the cultivators complained that

“We do most of the work ourselves because we cannot afford to hire labour. The average cost of hiring a labourer here is 50 shillings per day. However, when Baba or Mama Don¹⁷ sends us money from Nakuru, we do hire one or two people to help.”

Sometimes older children are used to compensate for hired labour.

“My wife at home does not hire labour because the children help her in the *shamba*. Nonetheless, when there is money a few people can be hired to help in weeding and harvesting.”

For those who could afford it, hired labour was an essential component of their rural crop production process, especially during ploughing, planting, weeding and harvesting. For those renting plots outside the municipality, i.e. in Rongai and Subukia, the use of hired labour is inevitable because crop cultivation is done for commercial purposes and there is no member of the household or family living at the plot. According to *Reuben*:

“In Rongai, all the work, from ploughing to harvesting, is done using hired labour. We have to go there during land preparation, planting, weeding and harvesting to supervise the activities. The number of labourers fluctuates with how much we can afford and the amount of work involved.”

Although a high percentage (82%) of the households hired labour for crop cultivation in 2000, the extent to which hired labourers were employed during the growing season varied, largely according to affordability as illustrated by the two cases below:

Eric is a pensioner and landlord in Nakuru town while his wife runs a kiosk business in Ngei estate where they have lived for the last 30 years. Their monthly income is well over KSh. 20,000. Eric and his wife are able to employ a full-time worker for their three-acre tea plot in Kisii, which earns them about KSh. 10,000 per year after operational expenses have been deducted.

Alfred & Alice hire labourers only when necessary, i.e. during planting and weeding. Even then, due to financial constraints, the use of hired labour is limited to a few people for a few days. For example, in 2000, Alice hired three people for four days to help with ploughing, two people for two days to help with planting and three people for two days each to help during the first and second weedings.¹⁸ In total, she spent about KSh. 1,500 on hired labour

¹⁷ Baba and Mama Don live in Nakuru.

¹⁸ She also hired “a few labourers” during the second cropping of maize and beans when only a small portion of land was used.

and buying pesticide. The standard charge for hiring labour in the region is KSh. 50 per person per day. Alice is proud that the older children are able to help in the *shamba* once in a while when they are free. The rural family members and other relatives also assist in harvesting the crops “as is the practice at home”.

As could be expected, mono-spatial households tend to use hired labour more than multi-spatial households.¹⁹ The effect of lack of labour, whether family or hired, is that households are not able to put the entire plot under cultivation. Extra labour is needed to supplement the already vanishing family labour at the rural home as recounted by this respondent:

“We cannot cultivate our entire plot because the work is too much for us. There are only a few of us and at the same time we cannot afford to regularly pay for extra labour. We just have to rely on the family members you have seen around. This compels us to leave part of the *shamba* uncultivated.”

The situation is made worse if the rural family members are old, sick or have recently died. As for the latter, the case in Box 5.1 serves not only as an example but also illustrates the devastating effect of Aids in rural Kenya.

Like hiring labour, the use of material inputs depends on a farmer’s purchasing power. Material inputs include fertilizers (chemicals, manure and crop residues), chemical insecticides and pesticides, local or improved seed/seedlings, and irrigation. All the households used at least one type of input in 2000. However, besides the economic considerations, the degree (e.g. frequency and quantity) and reason of use differed from household to household. For example, this respondent explained that

“Although I come from a high agricultural potential area in Kenya, we use improved seedlings, chemical insecticides, pesticides and fertilizers to improve our yields. We also use the manure from our animals.”

For *Alfred & Alice*, the use of fertilizers and pesticides is minimal, as is hired labour. However, Alice uses “some pesticide to kill a certain worm that eats the cabbages”.²⁰ She buys the pesticide from the local centre for KSh. 60. In addition, she applies manure to the maize and beans depending on its availability from “a relative’s home”. She does not have to pay for the manure because “these are relatives who we also help”. For planting, Alice uses seeds from the previous harvest.

¹⁹ 85.3% of the mono-spatial households hired labour compared to 66.7% of the multi-spatial households.

²⁰ Alice does not know the name of the worm and the pesticide she uses.

Box 5.1 Loss of family labour through multiple deaths within 12 months

The years 2003 and 2004 were very difficult for *Reuben & Rita*. It all started in the first quarter of 2003 when Reuben's brother (Joe) suddenly died. Until his death, Joe was living at their rural home in Siaya together with their ageing stepmother, his wife and three children, and Reuben's first wife (Akinyi) and her child. Being the only adult male there, he was instrumental, in collaboration with the others, in all the farming activities, including Reuben & Rita's *shamba*. He helped plough the fields, weed and harvest the crops. He also fed and milked the cows. After Joe's death, Akinyi took over the supervision of cultivation at home while Rita concentrated on the Rongai plot. No sooner had Reuben recovered from his brother's death, than his first wife Akinyi became "seriously ill" at the rural home and "she could not walk". Like Joe, Akinyi had been sickly for a while but still continued with her day-to-day duties. She unfortunately succumbed to her sickness later in the year and passed away.²¹ As a result, all the farming activities fell on Joe's wife and her ageing mother-in-law. The children at the rural home were still young and therefore could not help much in the *shamba*. Before the family could come to terms with the two deaths, Joe's wife became sick and died in the first quarter of 2004. These three deaths meant that Reuben & Rita lost three close family members who had played an important role in their rural farming activities in Siaya.²² It also meant a loss of labour at home because Reuben's stepmother is now old and cannot do much on the farm. The family is currently unable to cultivate the entire *shamba*. This means that Reuben & Rita are forced to rely more on hired labour and to travel to their rural home frequently to supervise the farming activities. In addition, Reuben has the extra burden of taking care of his stepmother and his late brother's children. On the whole, the rural family members depend more on Reuben nowadays than before.

The common types of material inputs used by at least half of the rural crop cultivators are chemical fertilizers, improved seed/seedlings and organic fertilizers (manure and crop residues) (Figure 5.1). Chemical pesticides and insecticides are mainly used during outbreaks of disease, while local seeds/seedlings are mixed with often insufficient amounts of (improved) purchased ones. Rural crop cultivators rely on rain and irrigation is not widespread, practiced by only 18 cultivators. This means that crops depend on the amount of rainfall and its distribution during the growing season.

Chemical fertilizers, insecticides, pesticides and improved seedlings were mainly purchased from Nakuru town or at the local market/town where plots are located. According to the respondents during the in-depth interviews, some of these inputs are relatively cheaper at the main outlets located in towns than in rural centres. Crop residues, manure and local seedlings came largely from people's own farms. Even then, some households have developed their own coping mechanisms to resolve the problem of limited access to material inputs. According to *Reuben's* stepmother:

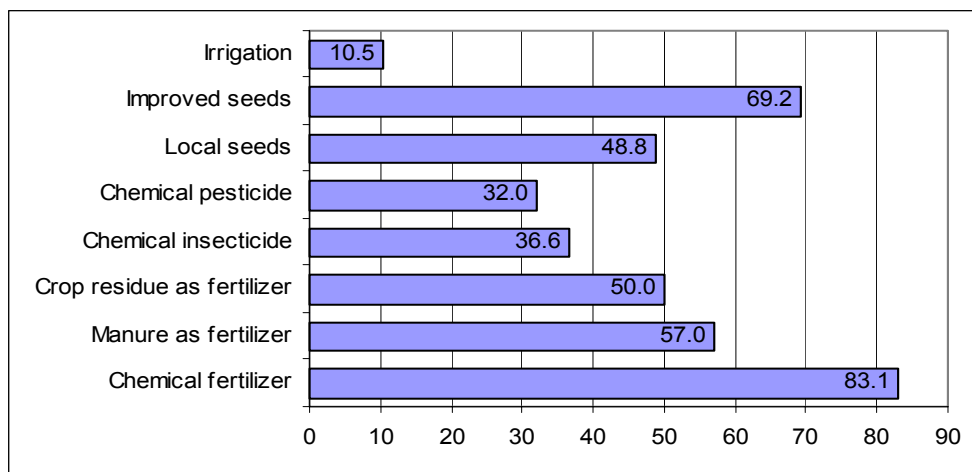
"The soil here is not very fertile and is becoming exhausted from continuous tilling. When possible, we now and again use the little manure from the livestock to add nutrients to the

²¹ It is unfortunate that Akinyi never lived to take part in our final interview in December 2003.

²² From their descriptions and timing, the three deaths might have been Aids-related but without medical reports it is not easy for the researcher to confirm this.

soil. We do not have money to buy fertilizers but instead leave some land fallow so that it can regain its fertility. When we do not have money to buy hybrid seed, we use local seedlings instead or plant using both local and hybrid maize.”

Figure 5.1 Use of inputs for crop production (%)



Source: 2001 Survey (N=172; Total > 100% due to combined answers)

Others, like *Sofia*, have never hired labour nor used fertilizer as her mother recounted:

“We have never hired labour or used fertilizers because it is not necessary for us and besides, we cannot afford it. Sorghum is a drought-resistant crop that can do without fertilizers while the local vegetables just grow wild after the rains.”

Crop yields

Rural crop cultivators were asked to indicate the harvests they realized in 2000 by crop type. During the survey, harvests were given in many different units. To make the figures comparable, all units have been translated into kilograms. As this method implies an element of speculation, the presented average harvests have to be seen as indications only. From the calculations presented in Appendix 3 (Table A3.5), rural crop cultivators produced about 195,000 kg of cereals, 37,000 kg of legumes and nuts, 89,000 kg of starchy roots and tubers, 88,000 kg of vegetables, 30,000 kg of fruits and 81,000 kg of cash crops, estimated in total to be worth KSh. 6.6 million. However, crop yields differed enormously between households and crop types. These harvest estimates were probably on the low side because 2000 was a relatively dry year throughout Kenya.

Table 5.7 presents the average amounts for the ten most commonly cultivated crops realized per crop-cultivating household and per crop type. For example, the

159 households cultivating maize harvested about 186,400 kg of maize in 2000, amounting to KSh. 2.8 million at farm-gate level.

Table 5.7 Major crops cultivated on rural plots

	(1)	(2)	(3)	(4)
Crop type	No of house- holds (N)	% cultivating (N=173)	Average harvest (Kg)*	Value of harvest (KSh. '000s)**
Maize	159	91.9	1,172	2,796
Beans	120	69.4	242	715
Irish potatoes	50	28.9	1,418	354
<i>Sukuma wiki</i>	37	21.3	786	145
Cabbage	33	19.1	716	119
Bananas	28	16.2	232	32
Tea	25	14.5	806	391
Millet	23	13.3	309	107
Green peas	22	12.7	181	60
Coffee	18	10.4	763	275

Source: 2001 Survey (For more details, see Appendix 3, Table A3.5). * Only households cultivating that crop (see column 1). ** The average prices of crops sold were used to determine the value of the crops.

The average harvest from all crops was 1,773 kg per plot (Table 5.8). Given an average plot size of 4.4 acres for the plots cultivated and harvested in 2000, the area productivity, i.e. the average amount harvested per acre, was about 400 kg. While this figure may look modest, there are notable differences between the various plot sizes. It is clear from Table 5.8 that productivity was higher when plots were smaller. For example, the productivity of plots of not more than two acres was twice that of the mean, while the productivity of plots of more than eight acres was about half that of the mean. These differences may be (partly) explained by the fact that about half of the smaller plots were located in Nakuru District, and therefore, they could be better tended than the plots further away and which were generally larger in size.²³ In addition, many of the smaller plots were “own land” and were mainly used by the household head and/or spouse “him/her/themselves”.²⁴

²³ 48% of the smaller plots, i.e. not more than two acres, were located in Nakuru District. On the other hand, 57% of the larger plots, i.e. more than eight acres, were concentrated in the outer-ring districts.

²⁴ 59% of the smaller plots were “own land” while 42% were used by the owners “themselves”.

Table 5.8 Mean harvest and value (all crops) by plot size

Plot size (acres)	N (plots)	Mean harvest (kg)	Mean value (KSh)	Mean plot size (acres)	Harvest per acre (kg)	Value per acre (KSh)
<i>All plots</i>	293	1,773	22,517	4.4	403	5,118
Up to 2 acres	143	913	12,828	1.1	830	11,662
2.1-4 acres	65	1,688	19,943	3.2	528	6,232
4.1-8 acres	51	2,829	35,107	5.8	488	6,053
8+ acres	33	4,087	50,801	18.9	216	2,688

Source: 2001 survey (For more details, see Appendix 3, Table A3.6)

Whereas the figures in Table 5.8 suggest that plot size is an important determinant of crop yield, other factors may come into play as well. For example, it was generally acknowledged during the in-depth interviews that the use of hired labour and material inputs increased a household's crop yields. However, it is not possible to verify this from the general survey data, for three reasons. Firstly, the available data do not reveal the frequency or amount of hired labour and material inputs, which are equally important. Secondly, hired labour and input data cannot decisively be disintegrated to plot level, used here for comparisons in productivity. Thirdly, even if a more general comparison were to be made between "users" and "non-users" of hired labour and inputs, the results would be skewed because eight out of every ten households hired labour in 2000 while all the households used at least one type of material input.

One can also hypothesize that certain household and plot characteristics might determine area productivity.²⁵ Except for a notable difference between multi-spatial and mono-spatial households, other factors seem not to have any influence, especially when plot size is taken into consideration as well (see Appendix 3, Table 3.6). Although they may be under-represented, plots cultivated by urban household's wives who lived at the rural home (multi-spatial households) enjoyed higher productivity than those of mono-spatial households. With a similar mean plot size of 4.4 acres in both cases, multi-spatial households had a productivity of 551 kg per acre compared to 376 kg per acre realized by mono-spatial households. This not only confirms the active role of women in farming but also the potential role of multi-spatial households (seasonally or otherwise) in producing "enough" food for the urban part of the household.

Not all produce from rural crop cultivation is consumed. It is sometimes sold when there is a surplus or a need for cash income. Besides that, there are cases

²⁵ These characteristics include household size, mono-spatial versus multi-spatial households, gender of household head, household's monthly income, age of household head, ownership of plot, who uses the plot and the distance of plot the from Nakuru town.

where some of the produce is given away or kept for seedlings. Moreover, the harvest is not exclusively consumed by the urban household members in Nakuru, but is also used by the *rural* household members or the rural-based family members who depend on the urban household (head). As such, the produce consumed, whether by the urban (part of the) household, the *rural* part of the household or the rural-based family members, is taken as benefiting the urban household practicing rural crop production, directly or indirectly. Without this, the (urban) household head would otherwise have to look for other means to “feed” his *rural* household or family members.

On average, about half of the total harvest was used for food (i.e. self-consumed), another two-fifths sold, and about 10% was given away.²⁶ Cash crops (e.g. tea and coffee) are almost wholly for income while perishable crops like *sukuma wiki*, banana and cabbages tend to be given away more often than other crops. The produce sold is an additional source of income for the urban household or, more often than not, for the *rural* household and family members. Due to kinship structure in most societies and for those cultivating family land, giving away, donating or helping others with part of your produce is a common occurrence and considered as socially “healthy”. Some produce is given away as a token of appreciation, especially to those who have helped in the cultivation process, some is given away as an obligation, i.e. to your mother, father or children, and others donate crops to help those in need. The following respondent explained the “culture of sharing your produce”:

“It is common to do that. I give away some maize, beans or potatoes to those who helped me in various activities and took care of my crops when I was away in Nakuru. By any standards, the amounts given away are usually very small quantities. But most important, I cannot see my mother-in-law or close relative sleeping hungry when I have food in the house or *shamba*. I allowed my mother-in-law to get vegetables from my *shamba* whenever she was in need.”

Constraints with rural crop cultivation

During the in-depth interviews, the respondents shared with the researcher various problems they encounter “as farmers”. Table 5.9 presents a summary of these constraints and their effects at household level. Like almost all (rural) farming households, they depend on rainfall. Because 2000 was a relatively “bad year”, the most recounted problem was “drought”, “low” or “unreliable” rainfall. This, the respondents said, decreased their yields at the *shamba* level, depending on how one “timed the rains”. Sometimes, the rains came earlier or later than expected.

²⁶ See also Appendix 3, Table A3.7.

In some regions, flooding was a major problem when there is too much rain. *Alfred's* rural home was in one of the villages slightly affected during the exceptional floods that occurred along the River Nzoia in 2003.²⁷ Part of the crop they had planted was swept away. During this period, Alfred's mother and *rural* household members benefited from flood relief food distributed by the government, the Lutheran Church and a local politician. The government periodically provided them with three *gorogoros*²⁸ of maize, one *gorogoro* of beans and a bottle (300 ml) of oil. Alfred's mother complained that "each affected home is supposed to be given the same ratio every five days, but it rarely happens because of corruption, or some food just disappears". The Lutheran Church donated one *gorogoro* of beans, maize seeds, 250 grams of cooking fat, blankets and mosquito nets, while the local politician gave each of the affected families two *gorogoros* of maize.

Table 5.9 Constraints on rural crop cultivation

Constraint	Effect
Climate-related (e.g. drought, unreliable or low rainfall, flooding)	<ul style="list-style-type: none"> ▪ Reduced harvest or food production ▪ Increased food prices ▪ Increased dependence on the household head for food or income
Lack of inputs, labour and/or capital	<ul style="list-style-type: none"> ▪ Continued reliance on local seedlings, family labour and "traditional" farming methods ▪ Part of the land left uncultivated
"Decreasing" yield	<ul style="list-style-type: none"> ▪ Harvest not as high as before ▪ Planting twice a year to increase food supply ▪ Leaving the land fallow or use of manure and fertilizers
Pests and diseases	<ul style="list-style-type: none"> ▪ Crop destruction/loss of crop
Insecurity (e.g. cattle raids in Turkana)	<ul style="list-style-type: none"> ▪ Little harvest or no cultivation at all

Source: Extracted from the in-depth interviews.

Besides affecting the *rural* part of the household and rural-based family members, climate-related problems can increase food prices if a wider region is affected. In addition, a lack of inputs, labour and, more importantly, capital,

²⁷ Floods were experienced in most parts of Nyanza and Western Provinces of Kenya in March and April, 2003.

²⁸ *Gorogoro* is a name used locally to refer to a standard 2-kg tin of used cooking oil or fat. In many local markets such tins are used for measuring cereals.

frequently featured in the respondents' list of problems. As a result, parts of the *shamba* are sometimes left uncultivated because ploughing presents the most challenging task in terms of labour requirements. Those who do not have money to hire labour or an ox-plough have to rely on family labour.

Generally, the farmers complained of decreasing yields. Like the respondent below, most of them view decreasing soil fertility, unreliable rainfall and high costs of labour and inputs as a recent phenomenon:

“Harvests used to be slightly higher because rainfall was reliable, soils were fertile and the cost of labour and inputs was lower. From this same one-acre plot, I harvested about 12 bags of maize and four bags of beans in the 1980s. Last year, I harvested eight bags of maize and three bags of beans but at a higher cost. I had to apply a lot of fertilizer.”

Other problems were pests and diseases and insecurity. All these problems can lead to seasonal food shortages in the affected rural households and therefore increasing dependence on the urban-based household head for food and income. Even so, those affected employ a wide range of measures to cope with such seasonal stress. For example, this household depends on drought-resistant crops:

“When other crops do not do well in the fields because of drought, food becomes expensive and people experience food shortages for some time. During such periods we count on sweet potatoes, which tend to do well every year regardless of rain. This is also the time you think of selling one of your hens to buy maize. Otherwise we get help from my husband in town.”

But this respondent provides a more practical approach:

“When the harvest is good, it is better to keep your produce than to sell and later complain about hunger because you have already used the money. As you saw, I keep my maize and beans. I never sell any. In that way, even if the rains do not come on time, I am able to eat during the next season when others complain of hunger.”

In Turkana, coupled with the arid and semi-arid conditions, the insecurity caused by inter-ethnic cattle raids has led to greater dependence on relief food almost every year. Relief food is distributed by the government, NGOs and the local Catholic Church working in Turkana. During the raids, the communities run for safety and abandon their fields. According to *Sofia* who comes from the region;

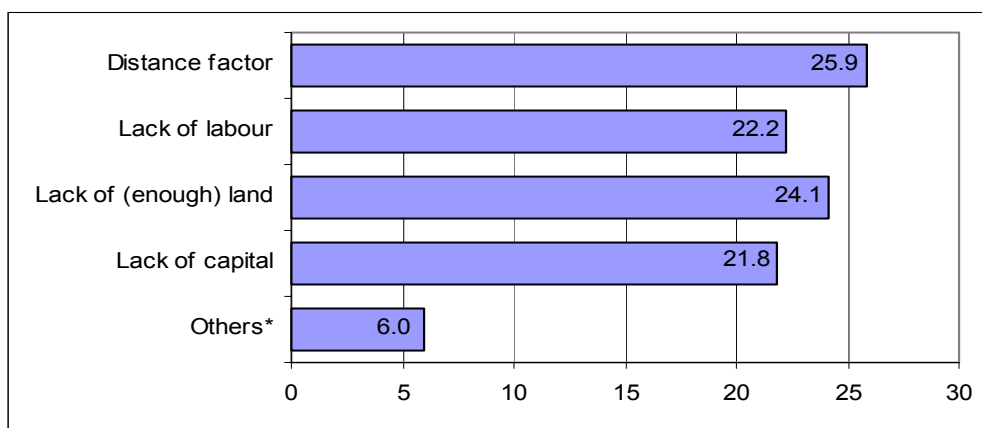
“We harvested very little in 2000 and 2001 because of cattle raids. My mother survived on food aid from the Catholic Church. They gave them maize and beans. This also means that we have to support our mother.”

Rural livestock keeping

Livestock ownership and purpose of rearing

Rural livestock keeping was not as widespread amongst the Nakuru town households as crop cultivation. Thirty-two per cent of households can be classified as rural livestock keepers, i.e. urban households engaged in livestock keeping in rural areas (see Table 4.2). Most of the livestock keepers (81%) were at the same time crop cultivators. Twenty-one households kept livestock without growing crops. As livestock keeping requires daily supervision and attention, the practice was common on rural plots where the *rural* part of the household or the rural-based family members played a role in “looking after the animals”.²⁹ This is one of the reasons that the majority of the households never practiced livestock keeping in the rural areas (Figure 5.2).

Figure 5.2 Non-livestock keepers: Main reason for *not* keeping livestock in the rural area (%)



Source: 2001 Survey. * Fear of livestock diseases (4.2%), tribal clashes (0.9%) and land rented out (0.9%).

The figure reveals that, besides a lack of (enough) land at the rural home and capital (to buy and maintain the livestock), the other major reasons that the non-livestock keepers mentioned for not keeping livestock in rural areas were undoubtedly related to taking care of the animals. For example, about half of the non-livestock-keeping households mentioned distance (to supervise the activity), a lack of labour (nobody to take care of the animals) and fear of livestock diseases all related to caring for livestock. As a result, the rural-based family

²⁹ As mentioned above, for 35% of the livestock-keeping households, rural-based family members were “responsible” for the activity, compared to 22% of the crop-cultivating households.

members and/or *rural* household members (i.e. wife and children) play an important role for urban households keeping animals at the rural home.

Contrary to what some observers think, livestock keeping in the rural areas is not a purely “cultural practice”, but is also undertaken for “food and income purposes” and social-security reasons, while in some communities it is also an indicator of wealth. A rural home without livestock is often viewed as being vulnerable in the case of an urgent financial obligation, especially for the poor. For example, parents with children in secondary schools are sometimes forced to sell one or two of their cows to raise money for school fees. In other words, livestock provides a household with reserve wealth (Van Vuuren 2003, see also Box 5.2).

Box 5.2 School accepts livestock, cereals as fees

Faced with increasing cases of parents who are unable to pay fees, the administration together with the Parents Teachers Association agreed to accept livestock and cereals from parents as cash. Parents can now walk into the bursar’s office tugging a cow, sheep or goat and it will be accepted as school fees as a move to address the high drop-out rate. However, the animals would be first assessed before they are accepted.

Source: East African Standard Online Edition, Wednesday 16 June 2004.

While small animals are prevalent with *urban* livestock keepers, *rural* livestock keepers commonly keep large animals.³⁰ In 1998, the percentage of *urban* livestock keepers with large animals in Nakuru Municipality did not exceed 5% (Foeken forthcoming; Foeken & Owuor 2000a). Yet, due to the cultural attachment to cattle, they were by far the most common type of livestock kept in the *rural* areas by Nakuru townspeople (Table 5.10). Other popular animals were chickens, goats and sheep. Very few households kept turkeys, pigs, ducks or rabbits. By the time of the survey in August 2001, the total numbers of animals kept in rural areas by livestock keepers were, as reported by the respondents, 477 cows, 980 goats and sheep and 864 chickens.

Following the general trend witnessed earlier, female-headed households were again at a disadvantage, with very few animals except for chickens, where the mean was comparable to male-headed households.³¹ Whereas multi-spatial households had a higher proportion of livestock keepers in the rural areas than mono-spatial households, the animals they kept were fewer in number. Regard-

³⁰ Large animals are cattle, sheep, goats and pigs, while small animals include chickens, ducks, rabbits and turkeys.

³¹ See Appendix 3, Table A3.9.

ing the age of the household head, the “middle generation” had more livestock than the other two age categories.

Table 5.10 Livestock kept on rural plots*

	N	%**	Number at the time of survey	Average number per h'hold
Cattle	86	77.5	477	6
Chickens	52	46.8	864	17
Goats	44	39.6	716	16
Sheep	38	34.2	264	7

Source: 2001 Survey (For more details, see Appendix 3, Table A3.8). * The figures in every column concern the households keeping that type of livestock. ** N=111; Total > 100% due to combined answers.

From an economic point of view, Nakuru townspeople have invested a great deal in rural livestock keeping. Three-quarters of all the animals on rural plots were owned by the household head and/or spouse. Ownership in this context is mainly through purchase by the urban household. The other quarter constituted family property (Table 5.11). However, it is not easy to distinguish between what is ‘own’ property, on the one hand, and ‘family’ property, on the other. As much as an animal is identified with the member of the family who bought it, the animal is still regarded as part of the family property because they are all reared together on rural plots regardless of the “owner”. Nonetheless, it is worth noting that when the wife lived at the rural home (multi-spatial households), almost all animals were “self-owned” (97% vs. 3% family property). This is an indication that urban household heads are more willing to invest in livestock at the rural home when somebody trustworthy, such as the wife, is there.

In addition to being a source of food, livestock are a source of cash-income for the household (Table 5.11) when an animal or its products (mainly milk and eggs) are sold. It is also common for a household to slaughter one or two animals for weddings and burial ceremonies. However, there are regional variations to this practice. Between January 2001 and the time of the survey in August the same year, more than 250 animals, worth about KSh. 250,000³² in total, had been slaughtered³³ for cultural purposes and ceremonies by livestock keepers, i.e. an average of about two animals per household. In the same period, rural livestock keepers had sold 145 animals worth about KSh. 0.5 million and bought another

³² Assuming the animals had all been sold.

³³ See Appendix 3, Table A3.8.

47 worth about KSh. 130,000, mainly chickens, cows, goats and sheep.³⁴ In some cases the cash income helped during a period of “financial crisis” (e.g. to pay school or hospital fees).

Table 5.11 Ownership and purpose of rearing livestock (%)

Ownership	%	Purpose of rearing	%
Myself	76.4	Mostly for own consumption	41.3
Family property	23.6	Both consumption and selling	43.2
<i>Total</i>	<i>100</i>	Mostly for selling	11.8
		Social security/custom/cultivation	3.4
		<i>Total</i>	<i>100</i>

Source: 2001 Survey (N=229, i.e. number of livestock kept by household and by type)

The extent of consumption, as well as that of selling, depends on the type of animal and differs from one household to another. For example, cattle and chickens are mainly kept for their produce (milk and eggs) as opposed to goats and sheep which are kept mainly for selling or slaughtering. Chickens are also kept for selling or are sometimes killed for consumption. Though not frequently mentioned, regardless of income, livestock is also kept for “social security purposes”, as a custom, and in one household specifically for ploughing purposes.

Regarding the rearing system, cows, sheep and goats are left or tied to graze within the homestead and on nearby open spaces or in fields. During the dry seasons, they are not herded very far from the homestead, i.e. along the road sides, mainly by the children or hired labour. For those who can manage, Napier grass from the *shamba* occasionally forms part of the animal feed. Those who do not plant Napier grass in their fields buy it from neighbours. Due to the traditional nature of livestock keeping, zero-grazing, in the strict sense of the term, was rarely practiced by rural livestock keepers. The chickens were left to roam about freely within and outside the compound.

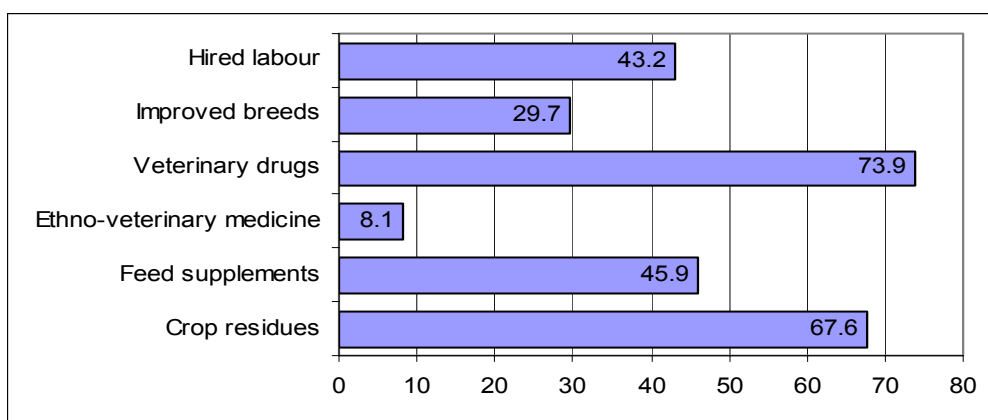
Labour inputs

By and large, the use of family labour is common with rural livestock keepers, as it is with crop cultivators. Nonetheless, livestock (especially cattle) require daily attention, be it from *rural* household members, rural-based family members or

³⁴ See Appendix 3, Table A3.8. The calculations are based on the average prices of the animals sold (as reported by the respondents): KSh. 80 for rabbits, KSh. 200 for chickens and ducks, KSh. 500 for pigs and turkeys, KSh. 2,000 for goats and sheep and KSh. 14,000 for a cow.

hired labour. Two-fifths of the livestock keepers hired labour in 2000 (Figure 5.3), essentially for milking, feeding and watering the animals. As expected, those keeping livestock a long way from Nakuru Municipality, i.e. in the outer-ring districts, tend to use hired labour more than those in the inner-ring and Nakuru districts. Half of the households who hired labour practiced livestock keeping in the outer-ring districts. This is two times higher than in Nakuru District.

Figure 5.3 Inputs for livestock keeping (%)³⁵



Source: 2001 Survey (Total > 100% due to combined answers)

Given that at least in practice, livestock have to be treated against various diseases, veterinary drugs are one of the inputs that are commonly used by rural livestock keepers (Figure 5.3). For example, this respondent was very particular about his livestock not contracting diseases:

“I make sure that every year the cows are vaccinated. We normally call a local veterinary doctor who charges us 150 shillings per cow. In addition to vaccinations, we spray the cows regularly against ticks. We buy the medicine ourselves. On the other hand, we also give the cows that produce milk a salt lick. When an animal is sick, we call the same doctor. Unlike the normal vaccination, the cost of treating an animal depends on the nature of the sickness. For example, sometimes in 2000 we paid 800 shillings to treat one of the cows.”

But due to financial constraints, cows are infrequently vaccinated or sprayed against disease:

“Spraying and vaccinating cows has become very expensive. Sometimes we do but not as regularly as required.”

³⁵ Although it might have been interesting to see the use of inputs by type of animal, this was unfortunately not possible from the general survey data.

Where available, crop residues were regularly used as supplementary feed for livestock (Figure 5.3). Improved breeds (artificial insemination) and purchased feed supplements were used by 25 to 50% of rural livestock keepers, indicating that these inputs are too costly for many others. Ethno-veterinary medicines were rarely used. Apart from the crop residues that were sourced from one's "own farm", all other inputs were purchased from Nakuru town, from other towns, at the local market centre where the plot was located, or from a neighbour.

Besides labour and inputs, chicken diseases are a major setback to the rearing of poultry. Even though some farmers enclose their chickens, an outbreak of disease can force a farmer to sell his/her entire stock, in case the disease spreads to his/her other livestock.

Animal products

Milk from cows and eggs from chicken are the most important animal products for rural livestock keepers. Meat constitutes a "product" only when an animal is slaughtered. Table 5.12 presents a summary of the production data for milk and eggs, as reported by the respondents. The total average amount of milk produced per day by the 83 milk producers was about 652 litres; an average of 7.8 litres per day per household with a median of four litres per day. The 51 egg producers realized an average of about 13.6 crates (trays)³⁶ of eggs per day, i.e. about eight eggs per day per household, with a similar median (of seven eggs).

However, the figures do not take into account household differences in the frequency of production as well as seasonal fluctuations and can only at best be indications of average daily production during production periods in the year 2000. Generally, milk production depends on the breeding cycle of the female cows, but, more importantly, on the availability of grass as well:

"Milk production from our cow fluctuates between three to six litres a day, for a period of eight months. For the first three months after giving birth, the cow produces six litres while for the rest of the period this is three litres. During drought and therefore shortages of Napier grass, the cow produces only two litres."

Assuming that all the milk and eggs were sold, production would be equivalent to about KSh. 80 of milk and KSh. 35 per day per producing household.³⁷ However, at least half of the milk and eggs is consumed "at home"; another third of the milk and one fifth of the eggs were sold, while the rest was given away (Table 5.12). In most cases, the *rural* part of the household and/or the rural-based family members are left to "freely" use the milk, i.e. either consume it, sell it, or both. For example:

³⁶ One crate or tray of eggs contains 30 eggs.

³⁷ By conservatively multiplying the median figures by KSh. 20 per litre for milk and KSh. 5 for an egg.

“My home is over 300 kilometres from Nakuru. I have one cow that produces about two to three litres in a day for an average period of seven months a year. However, because of the distance, all the milk is consumed by my wife and children who live at home.”

Table 5.12 Production figures for milk and eggs*

	Milk	Eggs
Number of households producing animal product	83	51
Total (average) production per day	652 litres/day	408 eggs/day
Mean production/day/household	7.8 litres/day	8 eggs/day
Median production/day/household	4 litres/day	7 eggs/day
% Self-consumed	51.7%	65.3%
% Sold	37.8%	22.7%
% Given away	5.7%	8.4%

Source: 2001 Survey. * The respondents were asked to state the average amount of milk and eggs produced per day. Because of the rough qualitative estimate used in the general survey (see Appendix 3, Table A3.10), the total amounts of milk and eggs consumed, sold and given away do not necessarily add up to 100%.

Those households whose plots are near Nakuru town are able to use the milk almost on a daily basis because it is easier to transport the milk to Nakuru. Urban household members use milk and eggs when they visit their rural homes and more often than not bring eggs back with them. At the rural home, milk and eggs are sold to neighbours or taken to sell at the local market.

Rural farming: Source of food and income

This chapter examines the importance of rural farming for the livelihood of households in Nakuru town, focusing on food security and the income situation. There are already indications from the previous chapters that rural crop cultivation and livestock keeping are additional sources of food and income for the urban households involved. By building on the already emerging indications, this chapter assesses the impact of rural farming on the food and income situation of urban households. To achieve this, different aspects are drawn from the general survey results and the case studies. While an attempt is made to distinguish between the various benefits of rural farming for the urban households concerned, it is inevitable that the issues at stake will overlap as a result of their interrelatedness. For example, improving the household's food and income situation is a central theme in all the discussions, but can be analyzed from different viewpoints. Moreover, the case studies presented in this chapter may cut across various aspects while illustrating and emphasizing a particular benefit.

The importance of rural farming as perceived by the respondents

The importance of rural farming to Nakuru townspeople can first of all be measured in a subjective way, namely by the relevance attached to the activity by the people involved. Rural crop cultivators and livestock keepers were asked why they practiced this type of activity. The results are presented in Table 6.1. The need for additional food and income is indeed an important motive for Nakuru town households engaging in rural farming. The large majority of both groups

mentioned they “needed food and income” as one of the reasons to engage in the activity. Even as a main reason, the combined food and income considerations were paramount.

Table 6.1 Reasons for practicing rural farming activities (%)

	Crop cultivation (N=173)		Livestock keeping (N=111)	
	As one of the reasons (>100%)	As the main reason (=100%)	As one of the reasons (>100%)	As the main reason (=100%)
Needed food	94.2	50.9	83.8	46.8
Needed income	60.1	40.5	55.0	36.0
Income diversification ^a	34.7	8.7	32.4	8.1
Hobby/custom	13.3	0.0	25.2	3.6
Other	1.2 ^b	0.0	5.4 ^c	5.4 ^c

Source: 2001 Survey (For more details, see Appendix 4, Tables A4.1 and A4.2)

^a Given that the bottom-line is (additional) income, there might be a very fine line between this category and “needed income”. Yet, 32 households mentioned “needed income” and “income diversification” as one of the reasons to practice crop cultivation. For livestock keeping, the number was 17.

^b Other = had no other job.

^c Other = social security and ploughing purposes.

There are no gender differences regarding the main reason for practicing rural crop cultivation,¹ yet, five of the nine female-headed households practicing rural *livestock* keeping did so because of the need for income. Since they are the family breadwinners, the immediate economic value of livestock is probably important for female-headed households to enable them to “cater for additional household expenditure”.

Several studies quoted in Chapter 1 have indicated that households may require additional food and income as a response to the (high) cost of living in town, which is in itself a manifestation of several factors, singly or in combination. These include – but are not limited to – losing a job, an increase in prices of food, education, provision of health and other services, a decline in real wages, reduced purchasing power and the general increase in urban poverty. Even though it is not easy to ascertain trends in this study, some of the case studies may explain why townspeople engage in rural farming. For example, despite the little food she gets from her (mother’s) rural home, *Sofia* started rural farming in 1992 after the birth of her sixth child and because life in town had become

¹ 50.3% of the male-headed households and 54.5% of the female-headed households gave “needed food” as the main reason to practice rural crop cultivation. The rest (49.7% and 45.5%, respectively) “needed income”.

difficult for her to feed her family satisfactorily. She narrates part of her struggle to survive the harsh socio-economic realities:

“With all the six children, life was becoming hard. Their fathers started deserting me by not helping and I was also afraid of having many male friends because of Aids. These male friends sometimes helped in buying sugar and milk for the young children. Even for them, life has become harder. Nowadays, men only part with something small. With these problems, I decided to join my mother in rural farming, so that I can get a little food from there.”

Despite having fewer children than *Sofia*, the following respondent has benefited from rural farming since she stopped working in town and even more so after her husband retired from his teaching job:

“From the time I stopped working in 1994, we have depended on this plot as an additional source of money and food to supplement what we get from our businesses and, most recently, the pension my husband receives. The income from this plot also helps me to offset the labourers’ wages, buy fertilizer and sometimes repay my loans. I never forget to save something small for any eventuality. In terms of food, I hardly buy maize, beans and potatoes in this house. We are almost self-reliant with our food requirements.”

The rural crop cultivators and livestock keepers were also asked to give an indication of the extent to which these activities contributed to their households’ food security and income situation in 2000. For a third of the cultivators, the activity constituted at least half of the food they consumed. For another half of them it added between “less than half” and “a small portion”.² Though the proportions may look modest to a casual observer, there is no doubt that “the *unga* from the maize added another *sufuria*³ of *ugali* to my household”, as one of the respondents explained when asked how two *gorogoros* of maize from the rural plot helped her urban household. Even then, rural farming was extremely important for some households. For example, this respondent explained the contribution of rural farming to the household’s food and income security in 2000 as follows:

“Our Subukia plot has been of great importance to us. The money we got when we sold our produce helped us to pay for our children’s school fees. We also got most of the maize, beans, potatoes and vegetables that we used in this house from the plot. Whenever we needed *sukuma wiki*, cabbages and onions, we just travelled to the *shamba*. This happens every year and through farming, we managed to save money and purchased another small plot in town.”

² See Appendix 4, Table A4.3.

³ Cooking pot.

The contribution of livestock keeping to urban household food security was not as high. As will be explained in the next section, livestock are kept mainly for security purposes and animals are rarely slaughtered solely to be used for food.

“Normally, we do not use the chickens as food but we kill one or two for visitors like you or on important occasions. Again, we rarely sell the eggs. There are sometimes too few and we leave them to hatch instead. Once in a while we fry the eggs for the children.”

For many households, the milk and eggs are more often than not used by the *rural* part of the household and/or the rural-based family members, one reason being the distance to Nakuru town. As a result, in two-fifth of the households, rural livestock keeping never contributed to the food they consumed in town, while for about half of them it supplemented between “less than half” and “a small portion” of their food requirements in 2000.⁴

In terms of household income, for over 70% of rural crop cultivators, crop sales contributed to the household’s income; and for 30% even half of the income or more. The contribution of rural livestock keeping to the household’s income was more modest, as half of them said they had made no money at all from it, while for the large majority of others it was “less than half”.⁵

Both crop cultivators and livestock keepers were also asked about the general importance of their respective activities. The results presented in Figure 6.1 show that for the large majority, rural farming is an additional food and income source, which is in line with the reasons for engaging in rural farming. Rural crop cultivation and livestock keeping constitute an additional source of food for about two-thirds of the urban households practicing it⁶ and (also) an additional income source to more than half of them.⁷

The importance of rural farming is stressed further by the fact that three-quarters (74.6%) of the crop cultivators indicated that they “could not survive without it”, with it being a “major food source” to a quarter (23.7%) of them. Livestock is an important source of food and income only in situations where need arises, and therefore acts as a form of social security as will be seen below. The following respondent, who has been practicing rural cultivation for many years, explained that she could not have survived without farming, especially after her husband’s death:

“The maize and beans in this house come from the *shamba* at home. With a good harvest, I rarely buy maize and beans in this house. I can therefore use that money for other things. The money from coffee is mainly used to pay school fees. I could not have survived without all

⁴ See Appendix 4, Table A4.4.

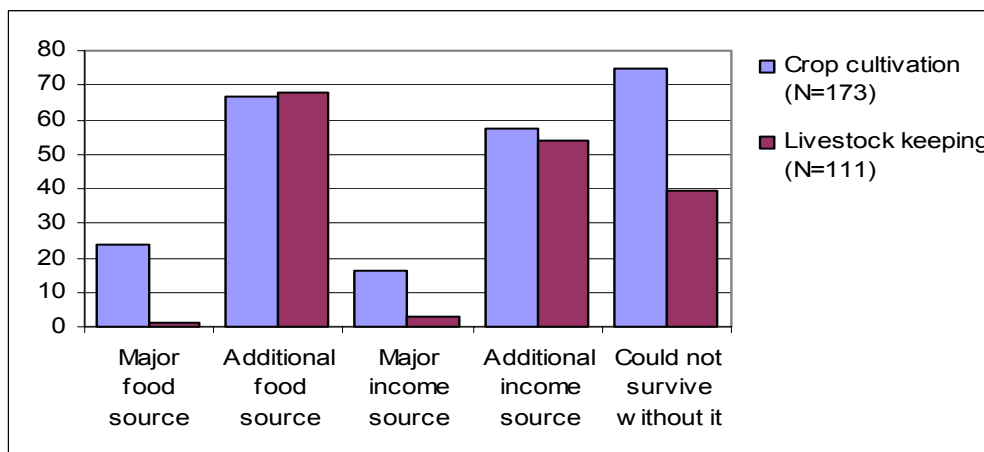
⁵ See Appendix 4, Tables A4.3 and A4.4.

⁶ 66.5% for crop cultivators and 67.6% for rural livestock keepers.

⁷ 57.2% for crop cultivators and 54.1% for rural livestock keepers.

this. Life has become so difficult. Actually this is what I want to do for the rest of my life. Now that I am about to retire, farming at home will be more important to me. I will have a reliable food and income source from the *shamba*.”

Figure 6.1 Importance of rural farming activities (%)



Source: 2001 Survey (Total > 100% due to combined answers)

The “fungible income” earner

By spending less on purchased food, urban households practicing rural farming are able to save what would otherwise have been spent on food. For instance, by producing their own food on their rural plot, this household now spends less on purchasing other food items in town:

“On average, we used to spend about 150 shillings on food, almost on a daily basis. Since we started cultivating our own food, the food budget has been reduced to about half that amount. In addition, we get a little money when some of the produce is sold.”

Urban households spend such a large portion of their income on food and housing that other necessities (e.g. education and health) are seriously affected.⁸ By spending less on purchased food, households are able to at least cover for other expenses.

“My salary is less than 5,000 shillings a month. I use 615 shillings on rent; 200 shillings to pay for electricity; 300 shillings for cooking fuel; 1,000 shillings for household shopping; and another 1,500 for my daily food requirements. This would have been even higher if you include *unga* and other foods I get from home. I am now able to do other things.”

⁸ See Chapter 4 for the estimated monthly average expenditure of Nakuru town households.

The same argument holds when viewed from the *rural* part of the household's perspective, especially in cases where the wife and children live at the rural home. Through farming, the *rural* part of the household is able to feed itself instead of relying on the husband, as probably would be the case in town. With his "small" and sometimes "irregular" salary, *Baba Karo* (see Chapter 3) is never worried whenever he is not able to send money to his wife and children living at his rural home in Busia:

"Farming is a source of food and sometimes money for my wife and children who live at home. With the *shamba*, they are assured of food even if I do not send them money regularly. The crops are largely used for food and there is hardly any left to sell. My wife sells the little cotton she plants and uses all the money. In summary, the cow gives them milk, they have maize for *unga*, groundnuts are delicious, there is millet for *uji* or *ugali*⁹, and sweet potatoes for breakfast, *simsim*, [pausing and shouts] what else! Sometimes I believe that they live better than me here."

Even with declining or low yields, crop cultivation is the main source of food for the *rural* part of the household, as is the case for this household:

"Since I came back home, I have cultivated my own food. I hardly rely on my husband for a few months after the harvesting. Although the harvest is small, we do not purchase the same for some time. Even if the harvest is small, it is more important for me to cultivate my small *shamba* than depend on purchased food. When I want to buy sugar, salt, *omena* or soap, I sell some of my sweet potatoes or *kunde*. I do not need to wait for my husband to send money."

On the other hand, some *rural* household members depend on the sale of crops and animal products to raise money for their day-to-day expenditure and cannot wait for money from their husbands in Nakuru town. Whether it is by arrangement or not, it saves the husband money he should have sent to sustain his family at the rural home. The case below illustrates this point:

Nakhumicha's husband lives in Nakuru while she is at their rural home in Kakamega with some of their children and grandchildren. Distance notwithstanding, her husband travels to see his family about four times a year. Though not in permanent employment, he sends his wife money whenever he is in a position to do so. Besides depending on crop cultivation for food, Nakhumicha is happy that she has a source of income at home: she sells the milk "from our cow to buy other things that we use in the house everyday". The cow produces, on average, three bottles of milk a day, two in the morning and one in the evening. She sells two bottles and consumes the rest. Her income from milk fluctuates depending on the months of lactation and "when there is enough grass". For about eight months, she is able to sell two bottles of milk on a daily basis, giving her a monthly income of KSh. 1,200.¹⁰ During the same period, the family would still have a bottle or so for their own use. Then milk produc-

⁹ Like maize, millet flour can also be used for *uji* and *ugali*.

¹⁰ The milk is normally sold at KSh. 20 a bottle. There are two neighbours who take milk from her on a daily basis.

tion declines. Because of that she can only sell one bottle a day and consume whatever remains.

Livestock as “reserve wealth” for the household

Besides the immediate importance of livestock, e.g. production of milk and eggs, livestock acts as “reserve wealth” or “security” for the household. It is clear from the previous discussion that people keep livestock in the rural areas as a way of accumulating wealth to be used when the household needs it most; that is, when all other ways of getting money have been exhausted. A cow is normally sold, for example, to raise school fees for the children, when a family member is sick and needs medical attention, or when the household is experiencing financial problems. That is exactly what happens in this household:

“When I have a financial problem, I sell one or two of my cows at home. For example, I have sold a number of my cows to pay our children’s school fees. To me, having cows at home is an asset and a form of security because you can sell one whenever you are in trouble.”

Although paying school fees is the major reason for “selling” one’s wealth, livestock can also be sold for other worthy causes. For example, when *Nakhumicha’s* husband, John, lost his job with a printing press in Nakuru town in 1993, he was forced to sell one of his cows to pay the lawyer who represented him when he took his employer to court for “wrongful dismissal” and to fight for his “redundancy benefits”. *John* bitterly explained to the researcher:

“Yes, I wanted my redundancy benefits. I could not just be dismissed like that, and we had a contract with my employer. I went to court to fight for my dues. In addition to other sources of funds, I sold one of my cows to pay the lawyer who represented me. I am now working on a part-time basis with small printing firms in town.”

As “reserve wealth”, livestock, and especially cattle, offer one a dignified status in society. Moreover, ownership is usually through a process of accumulation. Although he may not be respected in Nakuru Municipality, this almost-retired wage-earner is highly regarded at his rural home because of his “property” – cows:

“Through my savings, I was able to buy my first cow because when you work in town and have cows at home, you become respected in the community. It is unimaginable for me not to have a cow or two that I can call my own.”

Besides the dignity and wealth mentioned above, in some Kenyan communities, livestock become important at times of funerals. One of the respondents

admitted that for all the funerals he has so far experienced within his immediate family, he was compelled to slaughter a bull to cater for those who came for the function. This, he says, is a tradition that is almost like a ritual during “our” burial ceremonies. The same respondent further admitted that funerals can be very expensive when one does not have a cow and a few chickens to slaughter for the visitors. In desperate cases, a cow is sold to offset some of the funeral expenses.

On a happier note, another respondent used some of his cows to pay the dowry for his son. The chickens are not only killed during burial ceremonies, marriage negotiations and weddings, they are also a valuable dish prepared for important visitors (see Box 6.1).

Box 6.1 From a researcher to a visitor

It was late in the evening when I, together with my research assistant, arrived at *John's* rural home in Kakamega. Since his *rural* household and rural-based family members were expecting us, we decided to pass by the home to inform them of our presence before looking for a place to sleep at the nearest shopping centre. By the time we could humbly excuse ourselves, tea had been served. We later realized that the milk came from John's cow. The tea, in a big kettle, was served together with *githeri* (maize mixed with beans). Then came the most difficult part. John's brother, a pastor at the local church, insisted that since it was already dark, we had to eat and spend the night in the home “instead of going to waste money on a hotel when you can sleep in one of our sons' houses”. Being visitors they expected, we did not want to disappoint the pastor. We decided to respect his decision and continue with the research informally. For dinner, a chicken was killed for us and we also had a delicious dish of *tsisindu* (*aluru*)¹¹ before being served tea again. We finally had the much-needed rest in the pastor's elder son's house before starting our work the following day.

Multi and mono-spatial livelihoods: Two livelihood profiles compared

Multi-spatial livelihoods refer to households with a livelihood foothold in both urban and rural areas without necessarily implying a residential split of the household. In this study, *multi-spatial livelihoods* refer to the cases whereby the rural plot was a source of food and/or income for the urban household.¹² On the other hand, *mono-spatial livelihoods* refer to those households who did *not* have access to a rural plot or for whom the rural plot was *not* a food and/or income source. Despite the fact that two-thirds of the households with mono-spatial

¹¹ *Tsisindu* (in Luhya) or *aluru* (in Luo) is a species of very small birds that, during their migratory season, can be trapped and used as a delicious meal at home or sold for income.

¹² During the general survey, all households with access to a rural plot were asked whether the plot(s) is/are a source of food and/or income for them.

livelihoods had access to a rural plot (Table 6.2), these plots were *neither* a food *nor* an income source for them. All those who stated that the rural plot was a food source or an income source or both are defined as households with a multi-spatial livelihood.

Table 6.2 Multi and mono-spatial livelihoods: Urban-rural links (%)

		Multi-spatial livelihood (N=292)	Mono-spatial livelihood (N=52)
Access to a rural plot	Yes	100	67.3
	No	0.0	32.7
If practiced rural farming in 2000	Yes (rural farmer)	65.1	0.0
	No (non-farmer)	34.9	100
If wife is living at the rural home	Yes (multi-spatial household)	13.4	0.0
	No (mono-spatial household)	86.6	100

Source: 2001 Survey

The large majority (85%) of Nakuru town households can be considered as having a multi-spatial livelihood. Of these, about two-thirds practiced rural farming themselves while the other third benefited from the farming activities carried out by their relatives “back home”. Only 13% of the households with a multi-spatial livelihood were multi-spatial *households* as well (Table 6.2), confirming that a multi-spatial livelihood does not necessarily imply the residential split of the household, on the contrary.¹³

This section is an attempt to assess whether households with multi-spatial livelihoods are able to reach a higher level of urban food security than those with mono-spatial livelihoods. First, however, some selected characteristics of Nakuru town households with multi-spatial livelihoods will be discussed by comparing them with households having mono-spatial livelihoods.

Household characteristics

A summary of the characteristics of households in Nakuru town with multi-spatial livelihoods, on the one hand, and mono-spatial livelihoods, on the other, is presented in Table 6.3. There are no major differences between the two groups in terms of their monthly income situation. A high percentage of households with multi-spatial livelihoods are small to medium households in their sizes. That is,

¹³ See Figure 3.1 which tries to visualize the relationship between “household” and “livelihood”.

there are more large households with six or more members in households with a mono-spatial livelihood than in households with a multi-spatial livelihood.

Table 6.3 Multi and mono-spatial livelihoods: Summary of selected household characteristics (%)

		Multi-spatial livelihood (N=292)	Mono-spatial livelihood (N=52)
Household income situation (KSh/month) ¹	Very low	22.9	32.7
	Low	30.8	28.8
	Medium	23.3	17.3
	High	22.9	21.2
	<i>Total</i>	<i>100</i>	<i>100</i>
Household size ²	Small	23.6	15.4
	Medium	51.4	40.4
	Large	25.0	44.2
	<i>Total</i>	<i>100</i>	<i>100</i>

Source: 2001 Survey

¹ Chi-square: 2.54; not significant

² Chi-square: 8.26; p=0.016

As expected, male-headed households are over-represented in both livelihood profiles (Table 6.4). However, if the proportions of female-headed households in each group are compared, then it is relatively higher amongst households with mono-spatial livelihoods. This may partly be explained by the fact that in most ethnic groups in Kenya, women do not have the right to inherit ancestral land – and, therefore, “lack access” to a rural plot. Even when widowed, the likelihood of them using the rural land is reduced, as some of them may prefer to concentrate more on *urban* livelihood sources, while maintaining links with both the husband’s and the parent’s rural homes. Although there seem to be no major differences between the two groups in terms of the three age categories, the median age of household heads with multi-spatial livelihoods was below (35 years) that of heads of households with mono-spatial livelihoods (41 years). This may be an indication that younger household heads are more inclined to source rural livelihoods than older ones.

The majority of household heads in both groups were married, most of them monogamously (Table 6.4). However, there were three times as many divorced, widowed and separated heads in households with mono-spatial livelihoods than in multi-spatial livelihood households, explaining the relatively higher proportion of female heads in households with a multi-spatial livelihood. There were no

marked differences between the two groups regarding other characteristics of the household heads.¹⁴

Table 6.4 Multi and mono-spatial livelihoods: Summary of household head characteristics (%)

		Multi-spatial livelihood (N=292)	Mono-spatial livelihood (N=52)
Sex ¹	Male	82.9	71.2
	Female	17.1	28.8
	<i>Total</i>	<i>100</i>	<i>100</i>
Age (in years) ²	Less than 30	25.7	15.7
	30-49	57.6	64.7
	50+	16.8	19.6
	<i>Total</i>	<i>100</i>	<i>100</i>
Marital status ³	Never married	16.4	9.6
	Married*	74.7	67.3
	Divorced/widowed/separated	8.9	23.1
	<i>Total</i>	<i>100</i>	<i>100</i>

Source: 2001 Survey. (For more details, see Appendix 4, Table A4.5). * Includes two couples staying together without being married.

¹ Chi-square: 3.96; p=0.047

² Chi-square: 2.38; not significant

³ Chi-square: 9.68; 0.008

Household food security

To get an indication of whether households with multi-spatial livelihoods were able to reach a higher level of urban food security than those with mono-spatial livelihoods, four questions relating to households' general food security issues were analyzed. It is important to note here that purchased food is part and parcel of most urban households' food budgets. This is because purchased food includes other food items not necessarily sourced from the farm, but which are essential to a household's "food-basket and budget", such as milk, bread, butter, sugar, maize meal, wheat flour, cooking fat, salt, rice, meat, vegetables, and fruit, etc. Own food production is one way of reducing the household's dependence on purchased food items.

Data from the general survey reveal that the percentage of households with a mono-spatial livelihood that *normally* purchase all their food requirements is higher than that of households with a multi-spatial livelihood (Table 6.5). This

¹⁴ See Appendix 4, Table A4.5.

could be interpreted to mean that households with a mono-spatial livelihood spend more on buying their food requirements, corresponding to their slightly higher average monthly expenditure, both total and on food. However, there are no significant differences between the two livelihood profiles in terms of the per capita total expenditure and the per capita expenditure on food.

Table 6.5 Multi and mono-spatial livelihoods: Summary of general food security (%)

		Multi-spatial livelihood (N=292)	Mono-spatial livelihood (N=52)
Do you buy all your food requirements? ¹	Yes	28.4	53.8
	No	71.6	46.2
	<i>Total</i>	<i>100</i>	<i>100</i>
Source of non-purchased food*	Rural food production	60.0	0.0
	Rural and urban production	24.4	0.0
	Urban production	15.3	91.7
	Food donations**	0.0	8.4
	<i>Total</i>	<i>100</i>	<i>100</i>
Did you usually have enough to eat in 2000? ²	Yes, always	67.1	55.8
	Most of the time	25.0	28.8
	Half of the time	2.7	5.8
	Now and then	5.1	9.6
	<i>Total</i>	<i>100</i>	<i>100</i>
Average monthly expenditure (KSh) ³	Total	8,983	10,434
	<i>(Standard deviation =)</i>	<i>(7,554)</i>	<i>(10,333)</i>
	Per capita total ⁴	2,480	2,384
	<i>(Standard deviation =)</i>	<i>(2,113)</i>	<i>(2,309)</i>
	On food	3,107	3,457
	<i>(Standard deviation =)</i>	<i>(2,104)</i>	<i>(2,885)</i>
Per capita on food ⁵	892	873	
	<i>(Standard deviation =)</i>	<i>(684)</i>	<i>(851)</i>

Source: 2001 Survey. * For those who did not purchase all their food requirements (N=209 for multi-spatial livelihoods and 24 for mono-spatial livelihoods). ** From elsewhere other than rural and/or urban production.

¹ Chi-square: 13.05; p=0.00

² Chi-square: 3.89; not significant

³ Topping has been done for the extreme expenditure values. Total expenditure (values > 45,000 = 45,000, n=3); expenditure on food (values > 12,000 = 12,000, n=4); Per capita total (values > 12,700 = 12,700, n=3); Per capita food (values > 4,000 = 4,000, n=2).

⁴ T-test; not significant

⁵ T-test; not significant

Those who did *not* purchase *all* their food requirements depended largely on rural and/or urban farming for their non-purchased food. The large majority (85%) of households with a multi-spatial livelihood benefited from *rural* production as their (main) source of (non-purchased) food in 2000, either solely or in combination with urban production. Households with a mono-spatial livelihood depend almost entirely on urban farming for their non-purchased food. For two households with a mono-spatial livelihood, donations and gifts were the most important food source in 2000.

As concerns the question “Did your household usually have enough to eat in 2000?”, the large majority in both groups had enough to eat “always” and “most of the time”. Looked at it differently, households with mono-spatial livelihoods had to spend more on purchased food to attain this level of food security. Even then, there are indications that there were comparatively more households with mono-spatial livelihoods who experienced “food problems”. For example, 15% of the households with mono-spatial livelihoods lacked enough to eat about “half the time” or even less often in 2000 compared to 8% of the households with multi-spatial livelihoods.

These results imply that sourcing for food from own *rural* (crop) production, solely or in combination with *urban* production, is one way to reduce the *urban* household’s dependence on purchased food. By spending less of their income on food, households who depend on their *rural* production are in a more favourable food situation compared to households with no foothold in the rural areas. The figures on monthly average expenditures indicate that households with multi-spatial livelihoods are not, on average, wealthier than households with mono-spatial livelihoods, but because of their rural farming activities, they are able to attain a higher level of food security.

Three examples

Alfred & Alice – From a multi-spatial livelihood to a multi-spatial household: Growing importance of rural farming

Alfred & Alice started cultivating their rural plot in Siaya (about 300 km from Nakuru town) in 1990 because, according to Alice, “the urban household at that time consisting of four persons¹⁵ needed an additional source of food and money to supplement the income generated by Alfred’s carpentry business.” Besides being a family man, Alfred took care of his mother and sisters at the rural home. Alice argues that “it defeats the purpose when a woman does not cultivate her rural plot and cries from hunger in town.”

¹⁵ These were Alfred, Alice, their daughter and a relative.

Since then, Alice has “never looked back” – she makes sure that they cultivate every year a variety of food crops that include maize, beans, sorghum, millet, cassava, *sukuma wiki*, cabbages, cowpeas, tomatoes and onions. Table 6.6 gives an indication of this household’s annual rural production. The crops cultivated are mainly for consumption. However, due to the need for money to purchase other things, part of the harvest is sold from time to time at the rural local market, as Alfred’s mother explained:

“Sometimes we sell a little of our produce to buy soap and sugar. If we had another source of money to buy these things, we would not sell our produce.”

Table 6.6 Alfred & Alice’s “average” yearly harvests from rural crop cultivation in Siaya and its use, by crop type

Crop cultivated	Harvest (bags)*	Amount consumed		Amount sold**
		In Nakuru	At rural home	
Maize	3.5	1.75	0.75	1
Beans	2	0.5	0.5	1
Sorghum	2	0.5	1	0.5
Cassava	1	0.25	0.75	None

Source: In-depth interviews with Alfred & d Alice. * The vegetables and fruits are harvested at various intervals directly from the *shamba* as need demands. ** The produce is not sold all at once. They are bought in smaller quantities (*gorogoros*) when taken to the market. Sometimes people come to the homestead to buy.

As Alfred & Alice’s urban household became bigger, produce from rural farming became more important to them. At the time of the interviews, with all of Alfred’s wives and children living at the rural home, the land provided them with all their food, while it also added to Alfred’s food requirements in town. Alice and Alfred separately explained how crop cultivation is beneficial to them. According to Alice;

“In all this period that we have cultivated our rural plot, we have benefited a lot in terms of having an additional source of food not only when I was in Nakuru with Alfred and the children but also now that I am at home. Some of the food that we relied on in Nakuru came from this rural plot. Maize and sorghum have been particularly helpful in terms of *unga* for *ugali* and *uji*.”

Alfred supported his wife’s sentiments:

“The plot at home is very important to me because it has been a source of food for my family. It has also been an additional source of income when we sell the produce. Now that my family is living there, they are able to fend for themselves from the *shamba*. I just have

to send them a little money for their daily use, but less than what I would have spent if they were here with me.”

Although the cabbages, onions, fruits and *sukuma wiki* were used almost immediately, the maize and beans, and to a lesser extent cassava and sorghum, “kept us going with food in the house for some time”. Alice is happy that with the food from the rural home they were able to survive throughout the year without much difficulty. Alice argues that once she has the basic food requirements – maize (for *unga* and *githeri*) and beans – it is very difficult to “sleep hungry”. It is true that maize (flour) takes up a large share of her household food budget, since it is consumed twice a day. She easily purchased the other accompaniments (*mboga*) using money saved from not having to buy *unga*. Moreover, the same savings can be used to buy such food stuffs later when the “stock” from the rural home is finished, thus being able to feed her family throughout the year.¹⁶

When the harvest is good, Alice sells part of the produce to get some additional income. She does this nowadays and in the past, especially when Alfred’s business is not doing well. The income she gets from this is used to pay school fees and hired labour, buy pesticides for the cabbages, or buy household necessities such as sugar, salt and soap. Now and again, Alfred’s mother was allowed to sell maize or beans in times of urgent financial need at the rural home while Alice was in Nakuru.

Since the children started school, Alfred & Alice have benefited more from rural crop cultivation at the beginning of the year when school fees and other related items have to be paid, i.e. using the money to buy school uniforms, shoes and books. When Alice went to live in Siaya towards the end of 2001, their two daughters and a relative had to join a new school at the rural home the following year. Alfred & Alice were required to pay KSh. 650 per child for “new admission fees”. In addition, they were expected to buy new school uniforms (costing about KSh. 2,000, including shoes) and part with another KSh. 600 for books and pens.

Alfred was at the same time undergoing a difficult period with his business. He could not immediately raise the money needed. Furthermore, he had already used some money to finishing his new house. To raise the money, they sold 1.5 bags of maize (KSh. 1,800), a bag of beans (KSh. 1,500), some cassava (KSh. 350) and a bag of sorghum (KSh. 700) from their previous year’s (2001) harvest. With this, they were able to offset the expenses needed to transfer their children to a new school. In 2002, after Alice’s seventh child and her co-wife’s first child died in their infancies, Alfred was able to “feed the mourners” thanks to the

¹⁶ In addition, once or twice a year when Alfred’s mother visited them in Nakuru she brought small quantities of food from the *shamba*. Likewise, Alfred came back with something small from the *shamba* when he occasionally visited his rural home.

sorghum they had harvested from the rural plot. Alice explained that rural crop cultivation is more important to them now than in the past because;

“First, part of the plot we cultivate is now a home – I am living there with my children. Second, we get most of our food requirements directly from the *shamba*. Alfred does not have to think about providing food for us from his daily budget. Third, Alfred is now in a position to support us financially without much strain unlike when we were all in Nakuru. He is nowadays able to cope with the ups and downs of his *jua kali* business. Fourth, we have even embarked on building our own house on the rural plot.¹⁷ This, we could not do when the children and I were living in Nakuru. And lastly, if my husband’s business gets worse, he has a home to come back to.”

Alice feels that if things do not change for the better with her husband’s business, he will soon join them at the rural home.

In addition to crop cultivation, Alfred has a bull, a cow, a heifer, four sheep and four goats, which are taken care of by a brother-in-law, in Siaya.¹⁸ Alfred took his livestock to the brother-in-law’s home for fear of theft. Moreover, according to Alfred, the task is too much for his mother and wives at the rural home. The brother-in-law takes care of Alfred’s livestock, together with his own. He is not paid but instead uses the milk from the cow. He also delivers about a litre of milk to Alfred’s mother from time to time when it is plentiful. Alfred explains why he bought the animals:

“Livestock is an asset that I do not intend to sell unless there is an emergency. For now, I just need them to be there and to reproduce first. A man must have some animals he calls his own. I will retrieve them from my brother-in-law as soon as I retire to my rural home because I then be able to take care of them. With the cows, I will not buy milk while I can sell the sheep and goats for money.”

Alfred’s wives and mother keep a few chickens at the rural home, not necessarily for sale, but as tradition. The eggs are not sold but left to hatch so they have more chicks. As expected, the chickens are a source of meat whenever they have an important guest.

Reuben & Rita – A household with a multi-spatial livelihood: Rural farming as an important source of household food and income

In 2001, Reuben & Rita rented a four-acre plot in Rongai on which they planted maize and beans. Rongai is about 20 km from Nakuru town. From the four acres, they harvested 40 bags of maize and three bags of beans. Most of the maize (33

¹⁷ This part of the interview was done before Alfred completed building his house.

¹⁸ The cow Alfred bought in 1998 gave birth in 2001, the same year he bought a bull. The goat and sheep he bought in 1994 have multiplied to their present number, a few of which have been slaughtered.

bags) was sold while the rest was consumed, mainly in Nakuru town (five bags) and a small amount in Siaya (one bag). Another bag was sent to Reuben's first wife at the rural home to sell at her cereals stall at the local market. As much as they would like to send more maize to the rural home, Reuben & Rita find the high transport costs prohibitive.¹⁹ Of the three bags of beans harvested, half of it (1.5 bags) was sold, another half a bag sent to the rural home while the rest (one bag) was consumed in Nakuru town.²⁰

Reuben & Rita began cultivating maize and beans in Rongai because, according to Reuben, "life was becoming harder and harder". Even with his regular monthly income, Reuben was straining to make ends meet. He argues that the cost of living had increased, yet he never had any significant salary increment. At the same time, he had "many" children to look after and school fees to pay. To make things worse, he had to cope with the "increased prices of almost everything". His household had already increased to six²¹ and his first wife, Akinyi,²² who lived at the rural home with other family members, depended on him as well. Coupled with the fact that their first-born son had to go to secondary school the following year, it became necessary for Reuben & Rita to look for other ways to survive and this is how the idea of the Rongai plot came about.²³

Apart from using the produce as food, Reuben & Rita are able to make a *net* profit of about KSh. 20,000 from the maize and beans they cultivate in Rongai.²⁴ Rita confesses that when they first rented the plot in 2001, they were not really sure about the success of the "project". However, when the maize and beans did quite well and there was a good harvest, they became more determined to continue to cultivate in Rongai. According to Rita;

"The plot in Rongai is quite important to us. For three years now, the plot has been the main source of maize and beans that we consume in this house. It is also a source of income for Reuben."

As a result, they no longer use "a lot of money" to buy maize (or *unga*) and beans.²⁵ They have been able to "comfortably feed their large family" and even take some of the produce from Rongai to their rural home in Siaya (see Figure

¹⁹ The cost of transporting maize to Siaya can be as high as KSh. 300 and as low as KSh. 50 per bag depending on "how you talk to the conductors".

²⁰ A small amount of the maize and beans taken to Nakuru town is preserved as seed for the next planting.

²¹ The six are Reuben, Rita and the children.

²² This interview was held before Akinyi passed away.

²³ Reuben & Rita came to know about renting plots in Rongai through Reuben's sister who lives there and works as a farm labourer on some of the rented plots.

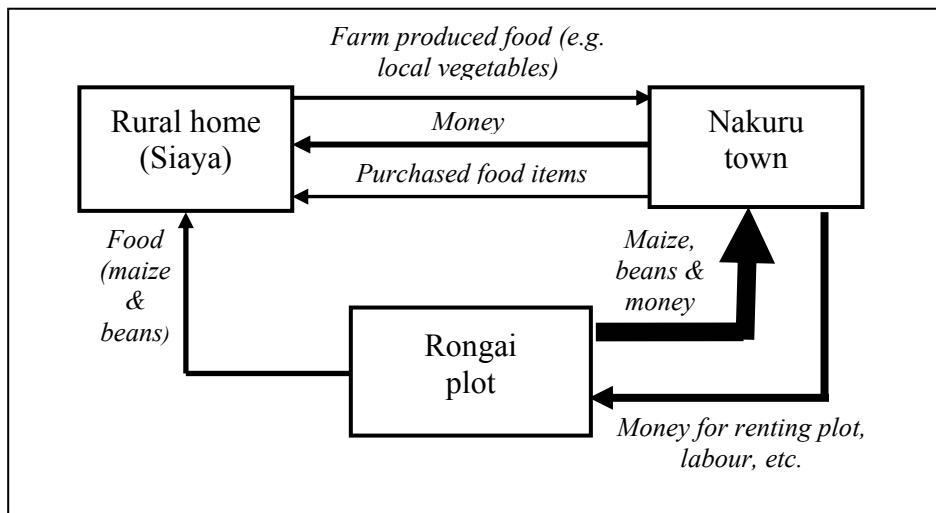
²⁴ Appendix 4, Table A4.6 gives an indication of Reuben & Rita's expenditures and income from crop cultivation in Rongai in 2001.

²⁵ At the time of the survey, the price of a kg of maize meal (*unga*) was between KSh. 25 and KSh. 30 (depending on the brand), and a kg of beans was about KSh. 30 in Nakuru.

6.2). As long as they cultivate the Rongai plot, Rita is never worried about buying maize and beans for her household in Nakuru and is therefore, in a way saving on their expenditure on food. In 2001, the five bags of maize and the one bag of beans brought to Nakuru were used throughout the rest of year and were even enough to take them through into 2002 when they cultivated only two acres.²⁶ Rita explains how they are nowadays able to cope “with the expensive life in town”:

“Life was not as easy before we rented the Rongai plot. We purchased most of our food from the market and had to survive on what Reuben earns for our daily needs. But right now we hardly buy any *unga* or beans and we have some extra income that can help us cope with the expensive life in town.”

Figure 6.2 Reuben & Rita: Importance of rural farming



Through the sale of their produce, this household earns additional income that supplements Reuben’s monthly salary. According to Reuben, income earned from the sale of maize and beans contributes by covering a number of household expenses, i.e. purchase of other food items (sugar, cooking fat, milk, bread, etc), buying clothes for the children and paying fees for their son who is at secondary school. Reuben is pleased that;

“Crop cultivation in Rongai is particularly important to us now because of the big family I have and the fact that I have to take care of my family members at home as well. I am now able to accomplish many more things than before.”

²⁶ They keep the maize and beans in their other house in town that is used as a “kitchen”.

After selling maize and beans from the Rongai plot in 2001, Reuben & Rita were able to buy another cow at their rural home. They were also able to buy their son some shoes, a school bag, books and other things he would need at school the following year. Although maize and beans from Siaya are nowadays rarely brought to Nakuru, small quantities of sweet potatoes, *kunde*, *mito*, bananas, sorghum, millet and groundnuts are now and then sent to Nakuru (see Figure 6.2). Reuben's stepmother confirms that before he rented the Rongai plot, Reuben & Rita took about one *debe*²⁷ of maize, three *gorogoros* of beans, one basket of sweet potatoes and some vegetables from the rural home in Siaya to Nakuru. This came from the "small harvest" they realized. According to Rita, they used the food from the rural home for about three weeks, although not every day since they varied what they cooked. Some of the produce is occasionally sold when the *rural* part of the household or rural-based family members need money for, for instance, salt or sugar and by doing that, they do not have to wait for Reuben to send them money.

Reuben bought his first cow a few years after getting a job. He travelled to his rural home on a market day to purchase it and had high hopes that the animal would provide milk for family members at the rural home. But more importantly, he anticipated that the cow would give birth and eventually have many calves. This was his envisaged way of accumulating wealth. However, due to a lack of pasture, he maintained no more than four animals, mainly through selling the others. By the end of 2001, he had two bulls and two cows.²⁸

When we visited Reuben's rural home in November 2003, there was only one calf left at the homestead. The "wealth" had apparently been put to use. Reuben had sold one bull in 2002 to pay his son's school fees. The boy, who had successfully completed primary school, was to go to a new school for his secondary education. As a new student, there were heavy financial implications in terms of school fees, other numerous charges, uniform, shoes, etc. Being unable to raise the total cost, Reuben had to fall back to selling his bull to raise the amount needed. The second bull was slaughtered in January 2003 for his late brother's funeral. The bull, worth about KSh. 5,000 at the market (according to Reuben) provided meat for the mourners. In addition, Reuben sold another cow to offset his brother's funeral and burial expenses. Fortunately, he was able to buy a calf with some of the money:

"There was no "otherwise". I was the only son remaining at home and people expected me to shoulder the responsibility. Moreover, my brother had no cows. I just had to use mine instead of buying one. My son is in secondary school and there is no way I could afford all

²⁷ A *debe* is a measurement comparable with a bucket. About eight *gorogoros* of grains is equivalent to one *debe*, while about five *debes* can fill a 90-kg bag.

²⁸ This is when the general survey took place.

these things from my own pocket. I decided to sell the cow, buy a calf and use the rest of the money for the funeral.”

The remaining cow, as fate would have it, was slaughtered for Reuben’s first wife’s (Akinyi) funeral, leaving only the calf bought earlier in the year. Even so, Reuben & Rita are not bitter about that. They continue to keep livestock at the rural home:

“Though we did not take milk to Nakuru, livestock keeping is a very important activity to us. Just as you have witnessed, we can slaughter one when we have a funeral at home or sell one to get money for an urgent financial need. If there are any problems, we have something of our own that we can sell.”

Similarly, Rita says that keeping chickens is part of life at the rural home and there is nothing extraordinary about it:

“Having chickens is a tradition. You can kill one when you go home. You can use the eggs for food, you can use them as food during special ceremonies, and lastly, they help a great deal at funerals. Besides, I carry one chicken with me when going back to Nakuru.”

While living at the rural home, Reuben’s first wife occasionally sold one of her hens or some eggs to purchase sugar, salt or soap. In addition, eggs were a good source of protein for her son.

Baba & Mama Shiko – A multi-spatial household: Rural farming as their economic focal point

Baba & Mama Shiko have access to two plots in Nyandarua District, about 100 km from Nakuru town. The first, where Mama Shiko lives, is a seven-acre plot Baba Shiko inherited from his father in 1984. They normally practice crop cultivation on four or five acres and livestock keeping on one acre, including planting Napier grass. The second plot is another inherited two acres of land where they cultivate wheat. On the first plot, Baba & Mama Shiko cultivate a variety of crops: maize, beans, peas, *sukuma wiki*, cabbages, sweet potatoes, Irish potatoes, groundnuts, oranges and bananas. By living at the rural home, Mama Shiko is the one responsible for all the rural farming activities on the two plots. Mama Shiko went to live at the rural home in 1991 when her husband retired from the civil service. Baba Shiko, a self-employed mechanic, lives in Nakuru with their daughter who attends college.

In 2001, Mama Shiko put five of their seven-acre plot under crops. The other two-acre plot was already under wheat as usual. Except for beans, groundnuts, sweet potatoes and fruit, Mama Shiko harvested at least six bags each of the

other food crops.²⁹ On average, over three-quarters of the produce is normally sold to generate income for the household. The rest is used as food, at the rural home and in Nakuru town. No produce is given away. Potatoes, *sukuma wiki*, cabbages, green peas and groundnuts are sometimes “harvested” from the *shamba* if and when required.

Besides crop cultivation, Baba & Mama Shiko have maintained a large herd of eight cows, 14 goats,³⁰ five sheep³¹ and about 30 chickens. The animals are kept primarily for income purposes. Mama Shiko is helped by a full-time worker who is paid on a monthly basis to graze, water, milk and take care of the animals. The cows produce between 10 and 20 litres of milk per day, most of which is sold at KSh. 20 per litre. The amount used at the rural home depends on their daily needs. Occasionally, one or two litres of milk are taken to Nakuru town on family visits.

The daily production of eggs varies depending on the number of layers. At the time of the interview, they had 20 layers and 10 broilers. The layers produce one egg per day per layer, for most of the year. About half of the eggs are sold at KSh. 5 per egg. On the other hand, when broilers are mature, they are sold for between KSh. 100 and KSh. 150 per bird. These prices, according to Baba Shiko, vary according to supply and demand. A tray of eggs is sent to Nakuru town every time the previous one is exhausted. Some of the chickens are killed for special occasions at the rural home.

An assessment of this household’s expenditure and income from rural farming in Nyandarua reveals that Baba & Mama Shiko made a *net* profit of about KSh. 147,000 in 2001: about KSh. 37,000 from crop cultivation and KSh. 110,000 from livestock keeping.³² As a *jua-kali* mechanic in Nakuru town, Baba Shiko’s earning fluctuates depending on the number of customers he has and the amount of work he is able to get. On average, this ranges from between KSh. 3,000 and KSh. 10,000 per month. This is indeed a multi-spatial household with a very strong economic footing in rural farming.

²⁹ A summary of this household’s harvest by crop, including the amounts consumed and sold, is given in Appendix 4, Table A4.7.

³⁰ In 2001, one goat was slaughtered for Christmas.

³¹ They started keeping sheep in 2001.

³² See Appendix 4, Table A4.8 for an assessment of Baba & Mama Shiko’s expenditure and income from farming in Nyandarua.

Photo 7 Crop cultivation (maize & bananas) in one of the rural homes



Photo 8 Nakhumicha with “their” cows



Urban-rural linkages: Nature, extent and direction

One of the outcomes of the previous chapter is that urban households are dependent on food and income from the rural areas for their livelihoods or to supplement their urban food and/or income budgets. Transfer of food (and probably more recently money too) from the rural areas to town is embedded in the interaction and reciprocity that is evident between urban and rural-based family members or relatives. Moreover, from the previous chapters there is already evidence of strong social and economic links between Nakuru townspeople and their rural homes. The fact that a large majority of the Nakuru townspeople have access to a rural plot or home is, in itself, a platform for linkages between the two geographic and social spaces.

Though related to the previous one, this chapter focuses on the flows and exchanges between the urban and rural areas, inasmuch as they are important to the livelihood of the urban household. The present chapter, therefore, examines the nature, extent and direction of urban-rural linkages, and the changes over time under three broad themes: 1) social reciprocity between urban and rural areas; 2) flows of money and goods between urban and rural areas; and 3) return migration from urban to rural areas. After a general discussion and presentation of quantitative survey data, three case examples will be used to illustrate these linkages. First, however, the ambivalence of urban migrants who have one foot in the transient urban destination and the other in the rural area that they identify as “home” is highlighted. This is followed by a respondent’s perspective on and experience of urban-rural linkages and their changing nature.

The “urban house” and the “rural home”

It is common for urban Kenyans to identify themselves with an “urban house” and a “rural home”, which partly explains why the majority are never permanent migrants in towns. As mentioned in Chapter 5, a rural home is *normally* the ancestral land that is passed on from father to son. Traditionally, the daughter does not qualify to inherit her father’s ancestral land because she is expected to get married and make her “home” with her husband’s family.¹

The urban migrant who identifies himself with a rural home is a well-established phenomenon of African migration (Oucho 1996; Francis 2002). In Kenya, as elsewhere in sub-Saharan Africa, the urban bias of development, to which migrants respond accordingly, is symbiotic with their rural bias toward home – a place to visit periodically, to which they will retire and where eventually they will be buried (Owuor 2004). For example, despite being born and living in Nakuru town for almost 40 years, this respondent has high regard for his rural home:

“Having a rural home together with a house you call your own is very important, especially for us Luos.² The rural home is important to me because I can be laid off from work at any time. That is the place I will go back to. I cannot afford to stay in Nakuru. When I retire, that is the place I will go back to. If anything happens to me or my wife or my children, then we have a home where we can be buried instead of being thrown [buried] in the public cemetery here in Nakuru. Yes, whatever the case, we must be buried at home. That is our home and never will we stay in Nakuru forever because these are just but rental houses. Those who do not have a home and a house [at home] are simply lost in town.”

Attachment to a rural home is not only the preserve of the Luo. As illustrated in Box 7.1, it is common amongst other communities as well, for both males and females regardless of income level or status in society. For example, in 2004, a prominent politician had this to say while responding to calls from his colleagues that he should be sacked as a Cabinet Minister:

“Why should I be sacked? Do I eat at their homes? If am sacked, I have a home to go to [or fall back on].”³

The large majority of urban dwellers in Kenya have a rural home, regardless of the circumstances that pushed or pulled them to the urban centres. For example:

¹ Inheritance laws are gradually changing and in some cases girls can inherit their father’s properties in towns.

² Luo is one of the ethnic communities in Kenya.

³ As quoted in the *East African Standard* online edition, Monday 21 June 2004.

Despite the enthusiasm *Alfred* had when he came to Nakuru to look for a job and fend for his family, he does not intend to stay in town for the rest of his life. He indicates that he will “soon” migrate back to his rural home in Siaya because he is just in town for a short period looking for money.

Box 7.1 Attachment to the rural home

- Male (46), Luhya - Kakamega, very low-income: “It provides a home for my wives and children. I could not have survived without this plot.”
- Female (22), Kikuyu – Murang’a, very low-income: “It is a place to fall back on in times of hardship and you are assured of food and shelter.”
- Male (50), Kikuyu - Nyeri, low-income: “The place will serve as a home during my retirement and it provides a means of livelihood for my wife, children and other family members who live there. This is where I will be buried when I die.”
- Female (27), Luhya - Kakamega, low-income: “In case of anything such as the current retrenchment programme or death, at least I will have somewhere to fall back on or to rest in peace [be buried].”
- Male (44), Kisii - Kisii, medium-income: “Being ancestral land, I will be buried there. If I am jobless, I will turn to my home for food.”
- Female (31), Luo - Kisumu, medium-income: “One cannot ignore one’s ancestral land, especially when it has some inheritance value. Furthermore, my sons will inherit it in the future.”
- Male (50), Kikuyu – Murang’a, high-income: “If anything happens, my children have a home to inherit. It also acts as security when asking for bank loans.”
- Female (41), Kikuyu - Kiambu, high-income: “It is important for settlement in future. It gives us a sense of belonging since that is our own home where we can never be harassed by anybody.”

Even in circumstances where a person has bought a plot away from his ancestral home, in case of death, the importance of the rural home manifests itself in the disputes regarding where the remains should actually be laid. More often than not, this is done at ancestral homes unless some special reason dictates otherwise. Those who (temporarily) cut off their ties with the rural homes or maintain them at a low level, appear to do so primarily because of economic necessity rather than out of social choice. Generally, a rural home is such an integral part of Kenyan culture that many are taken aback when a man dies without one (Owuor 2004). Although they do not say so, it is normally a migrant’s wish to be buried at his/her rural home. For example:

Even though *Hester Njeri* identifies herself with Nakuru town and their Rongai plot, it is her wish to be buried at their rural home in Nyeri, where her late husband is laid to rest. According to her, the rural plot in Nyeri will be beneficial to their sons in the future.

The rural home is, therefore, perceived in socio-cultural terms, not primarily as a piece of land you have access to. For example, among the Luo, establishing a home (Luo = *dala* or *pacho*) is a ritual that involves at the very minimum the man who is to be the head of the home, his eldest son, his wife and his own father – it is not a personal matter (see Box 7.2).

Box 7.2 The *dala*

Of the seven-acre family land in *Alfred's* rural home, the homestead occupies about three-quarters of an acre. The homestead is distinguishable from a few scattered trees that surround it. Although during our visits we entered the homestead from the small rear gate, the main gate of the homestead overlooks the Samia Hills. Near the rear gate, but facing the main gate, is Alfred's father's two-room *mabati* house with a small grass-thatched kitchen to the right.⁴ To the left, immediately after the main gate, is his second wife's newly built (mud-walled) grass-thatched hut, shadowing his former hut. Next to it is another newly built, but slightly larger two-room (mud-walled) *mabati* house for Alice, his first wife. The layout of these houses accurately conforms to Alfred's tradition whereby the father's house faces the main gate and the elder son's house is to the left of the main gate.⁵ Since Alfred is polygamous, the younger wife's house is accordingly the first one on the left of the main gate, followed by the elder wife's house. Being the only son, Alfred is entitled to continue to live in the homestead as opposed to *goyo dala*⁶ if they were many sons. Alfred's former hut is now used as a store and a kitchen. It also briefly housed his second wife before her hut was completed in 2003. Alfred's former grass-thatched hut is, by all accounts, a *simba* (a traditional Luo hut).⁷ A few fruit trees (mangoes, oranges, pawpaw and avocado) are scattered around the homestead and to the right of the main gate is a small *shamba* with maize and beans. The cultivated fields are outside the *dala*.

No matter how much one “feels at home” in a given house (Luo = *ot*) one cannot just declare it *dala* without the appropriate ritual, which is reducible to such essentials as may be prescribed by the consulted elders (Oucho 1996). Any “home” in town is therefore regarded as temporary, even if it is self-owned (Owuor 2004). For that reason, it is very rare to find the ancestral land being sold

⁴ The mother had a grass-thatched house before. Alfred built this house for her.

⁵ This is the same as saying to the right of the father's house.

⁶ This is the process whereby a son moves out of his father's homestead to start his own (homestead). According to Alfred, the first son is culturally expected to move out of his father's homestead to “open it up” for the rest who might want to do so (in future). The father's homestead is normally “left” for the younger son in the family.

⁷ In accordance with their tradition, Alfred was required to build a *simba* before “putting up his house”. This is because as boys grow older, they are required to “graduate” from sleeping in their father's house and therefore need to put up a *simba*. The logic behind it is that the boys are now mature enough to start socializing with girls, a thing one cannot do while still living in his father's house.

off to other individuals. This is because the land is, socio-culturally, supposed to be transferred from father to son through the generations. Furthermore, no buyer who understands the cultural practices will be willing to put a “home” on somebody else’s “home”. However, exceptions do occur when the plot is located around the urban fringes and it is necessary to sell part of it for urban development.

Once married, the wife changes her status to become a member of her husband’s rural home. The husband is then required to build her a house and to “show” her where to cultivate, as determined and advised by his father or elders. For those in polygamous marriages, each of the wives has her own house, more often than not within the homestead, and a place to cultivate on the family land. The wife is assigned a place to cultivate on the assumption that she will then cater for her household’s food requirements. Like *Alfred*, migrants invest in houses at their rural homes with a view to returning there upon retirement or earlier.

Urban-rural linkages: A respondent’s perspective and experience

William, a pensioner, is categorical that those living in towns maintain continuous and close links with their rural homes for various reasons:

“First, most people in Kenya are still identified with where they come from. Second, upon death, the family member is naturally transported to his or her rural home for burial. Third, unlike today, most of us were born and brought up at home where our parents and other relations continue to live. Fourth, many Kenyans, me included, cannot afford to buy a house in town and because of that I am planning to go home soon. I cannot live on my pension in town.”

It is for these reasons that William and his wife maintain close links with their rural home in Kisii (about 200 km from Nakuru town), albeit this has been to varying degrees over the course of their married life. Before his retirement, William worked for 35 years with the Municipal Council of Nakuru as an *askari*⁸ and later as a clerk. William argues that the benefits one gets from the rural home are socially and economically entrenched in the linkages:

“Naturally one has to go home to visit his or her parents and other relatives. I mean, only a lost person will refuse to go and see his parents or relatives at home. It is natural that when we go home from town, we leave our parents or relatives some money for their use. After all, why do you work in town? Sometimes we buy them things like sugar, cooking fat, tea leaves or salt. In appreciation, they give us maize, beans, bananas or millet to bring to town for their grandchildren.”

⁸ These are local authority by-law enforcement officers.

He says that even before their ancestral land was sub-divided amongst the sons in 1985, his mother was fond of giving him maize, beans, millet and bananas to bring to Nakuru town, any time he went to the rural home. For his part, he sent his parents about KSh. 250 on a monthly basis “despite them having a good source of income from planting tea”. However, he admits that the food he got from the rural home became more important as his household’s size increased from three in the late 1960s to nine in the mid-1980s. But “it took a shorter period to use the food from home in the mid-1980s than it did in the 1960s.” William further explained the changing nature of urban-rural linkages:

“I think things are now changing. The food we get from home is becoming more and more important to us. It is beyond just taking food from my parents to their grandchildren in town. It is no longer a normal thing. It is for survival. And because of that, we cultivate our own *shamba* at home as a source of food.”

It is with this realization that William’s wife started to cultivate her own *shamba* at home in Kisii in 1985 to supplement their food sources as they had more children and as life in town became expensive for them. In 1992, “as life became difficult for us in town”, William’s wife finally went to live at the rural home with some of the children.

Social reciprocity between urban and rural areas

Social reciprocity (or interactions) between urban and rural areas can be analyzed within the context of regular visits that occur between the urban-based and rural-based members. The data presented in this section were collected for each rural *plot* and not only for the *rural home*; hence (in this context) the use of “plots” (or “areas”).⁹ In the last quarter of 2001, during the general survey, all respondents were asked if the household head and/or spouse had visited their rural plot or plots; 80% had done so. Table 7.1 presents a summary of the characteristics regarding the visits to the rural plots by Nakuru town households.

Purpose of visiting rural areas

There were various reasons for visiting the rural plots. Typical of kinship and family ties, urban dwellers are obliged to now and then visit their family members and relatives who live in the rural areas. Essentially, these visits are meant to maintain and foster kinship and family relations. It is for these reasons that almost three-quarters of the plots were visited by the Nakuru town households “to see or visit” the rural household or family members and relatives (Table 7.1).

⁹ Even then, as pointed out in Chapters 3 and 5, a large proportion of the rural plots were located at the rural homes of the (male) household heads.

However, we have to bear in mind that while “seeing” their rural family members and relatives, urban households accomplish a lot of other things as well. For both migrants and non-migrants, and especially the urban poor, this is not only part of their social identity but also an important safety net during periods of economic and social insecurity in town.

Table 7.1 Visits to the rural plot in the last quarter of 2001 (%)

Purpose of visit*	To see/visit rural-based family or relatives	71.1
	Attend to rural farming activities	55.9
	Attend to cultural ceremonies	29.5
	“Holiday” from town life	24.9
Number of visits	Less than 5 visits	54.7
	5 to 9 visits	16.0
	10+ visits	29.2
	<i>Total</i>	<i>100</i>
Frequency of visit	More often than monthly	17.5
	Monthly	21.2
	Every two to four months	37.8
	Once/twice a year	23.5
	<i>Total</i>	<i>100</i>

Source: 2001 Survey (N=349 plots; For more details, see Appendix 5, Table A5.1). * Total > 100% due to combined answers.

So strong is the bond that urban households continue to visit the rural areas regardless of the distance from Nakuru town (see Box 7.3) and in spite of high transport cost. Frayne (2004: 500) maintains that “without these visits, and without the social cohesion provided by the regular interaction, the strength of rural-urban links would be weakened, as migrants lose touch with their rural situations.” He argues that strong ties between urban and rural households are imperative for a similarly strong reciprocity. For more than half of the plots, one of the reasons for visiting was farming-related, that is, to attend to (rural) farming activities. From time to time the household head and/or spouse visited the rural plot to supervise or participate in on-going farming activities, as discussed in Chapter 5.

The third reason for visiting rural areas is to attend family functions and events such as weddings and funerals. Absence at a relative’s funeral is never regarded lightly by kin. Close relatives are expected to join the bereaved in mourning and to finally lay “one of them” in his or her final resting place – at the rural home. It is believed that by doing so, “you will also be buried by others” as one respondent explained. Such occasions also provide an opportunity for the town dwellers to pass through their own rural homes or to meet their relatives

attending the same function. Lastly, it is a practice for some townspeople to visit the rural areas for their annual leave, school holidays, or at long weekends and on public holidays just to get out of the town environment.

Box 7.3 The long journey to Alfred's rural home and the *boda boda* experience

The journey to Alfred's rural home in Siaya took me and my research assistant more than a whole day by public transport. By 9am in the morning we were at the Nakuru bus terminus to wait for the buses from Nairobi that pass through Nakuru on their way to various destinations in Western Kenya. Although there are numerous Nissan *matatus* (commuter taxis) that ply the same routes from Nakuru, people prefer to use the buses because they are safe and the fare is more affordable. In most cases, the buses commence their journey from Nairobi and as a result commuters in Nakuru wait with uncertainty about getting a seat. However, for seasoned travellers like Alfred, there is always hope of getting a bus because "there are so many buses that go to Western Kenya". The terminus is vibrant with activity most of the time: *matatu* touts calling for passengers, hawkers selling their wares, music blaring from all corners and passengers jostling for every bus that arrives. Luckily, we get one of the Kenya Bus Service "Stage Coach" buses going in the direction of Alfred's rural home at around 11am. The approximately 300 km journey starts by taking us through Kericho, Kisumu and to our first stop in Ugunja, a small urban centre near Busia town on the Kenya-Uganda border. Although we could have easily reached Alfred's rural home, another 70 km from Ugunja, I decided that we would spend the night in Ugunja because it was already late to make our visit. The following morning we started a long tiring stretch of a muddy road to Alfred's nearest market centre, using the dilapidated and often overcrowded local *matatus*. From the market centre, we relied on *boda bodas* (bicycle taxis) to take us to Alfred's village, another 5 km off the road. Amazingly, one of the *boda boda* operators knew Alfred very well, an indication of his frequency and linkages at the rural home. It is usual for Alfred and his wife to walk to their village from the market centre, taking a *boda boda* only when they have heavy luggage. To avoid reaching very late like we did, Alfred prefers travelling overnight by bus from Nakuru to Ugunja, from where they conveniently continue their journey early in the morning.

Conversely, visits to rented plots¹⁰ were made with a specific intention because they are not regarded as rural homes. For example, plots in Rongai and Subukia were rented solely for cultivation. In that case, visits to these plots were mainly to supervise the farming activities taking place there. Since the plots are near Nakuru town, supervision took no more than a day. But with adequate arrangements and relations, one could spend more days there. For example, although most of the work is left for his sister to supervise, *Reuben & Rita* frequently go to the plot they rent in Rongai to check on how the crops are doing. Reuben's sister had this to say:

"Both Reuben & Rita come here every other time depending on how free they are. During the agricultural season, they can come three times a month to see how the work is progress-

¹⁰ As discussed earlier, as a livelihood strategy, some Nakuru town dwellers rent the rich agricultural lands bordering the municipality boundaries, for cultivation purposes.

ing. During harvesting, they come every weekend because there is a lot of work and decisions to be made about what to do with the harvest. I also visit them frequently, taking them small amounts of maize and beans because transporting them in bulk can be difficult. Sometimes they send their son to come for maize as you have witnessed.”¹¹

Frequency of visits

The frequency of urban households’ visits to the rural areas differs from household to household and is likely to be influenced by factors such as the distance to the rural area, the purpose of the visit and the relationship of the household head to the rural-based household and family members (see below). On average, we can say that in the last quarter of 2001, half of the plots had been visited fewer than five times while another quarter experienced at least 10 regular visits (Table 7.1). About two-fifths of the plots were visited on a monthly basis or more, another two-fifths every two to four months, while the rest were visited only once or twice a year.

Table 7.2 shows that the frequency of visiting rural plots is influenced by the distance of the plot from Nakuru town. The simple relationship between distance and frequency of visits is that the nearer the rural plot is, the higher the interaction. For example, *Baba Shiko* is able to travel to his rural home in Nyandarua (about 100 km from Nakuru town on tarmac roads) every two weeks. Likewise, his wife is a regular visitor to Nakuru town.

Table 7.2 Frequency of visiting rural plots by selected characteristics

		Frequency of visit (%)			
		(N) Plots	Monthly or more	Once in 2-4 months	Once or twice a year
Distance of rural plot from Nakuru town	Nakuru District	131	53.5	34.4	12.2
	Inner-ring districts	56	48.3	23.2	28.6
	Outer-ring districts	160	23.7	45.0	31.3
If wife is living at the rural home	Yes (multi-spatial household)	42	64.3	21.4	14.3
	No (mono-spatial household)	307	35.1	40.1	24.8
If practiced rural farming in 2000	Yes (rural farmer)	236	48.3	38.1	13.6
	No (non-farmer)	113	18.6	37.2	44.2

Source: 2001 Survey

¹¹ During this particular visit, Reuben’s son accompanied the researcher to Rongai. He brought with him an empty bag so that he could carry some maize back to Nakuru.

The frequency of visiting rural plots is also higher when the wife is living at the rural home (or at the plot) (Table 7.2). This is logical because the family bond between the urban and the *rural* part of the household is maintained through such frequent visits. Like *John* (*Nakhumicha*'s husband, see Chapter 6), *Alfred* maintains that

“Since my wife and children went to live at home, I visit them anytime I get an opportunity and there is no question about it. I cannot live in Nakuru town for more than two or three months without seeing them. They are my family and I have a house at home where they are living. Why should I not visit them frequently?”

Those who farm in the rural area also visit the rural plots more frequently than those who do not (Table 7.2). It is clear from Chapter 5 that urban households practicing rural farming are likely to frequent their rural plots to oversee and sometimes participate in the farming activities. Besides visiting his family at the rural home, *Alfred* is at the same time able to accomplish other things. He explained that depending on the time he has at the rural area, he is able to

“Attend to our farming activities, visit other relatives in nearby homes, catch up with the local village politics, pay my last respects [if any] at the graves of those relatives whose funerals I was not able to attend, do so many other little things here and there in the home-
stead and then come back to Nakuru with some food.”

Even though Nakuru townspeople wish to visit their rural areas as often as possible, they are limited by the high travel costs, especially for those whose rural plots are far from Nakuru town. For example, due to financial constraints the lower-income households were not able to visit their rural plots as regularly as those from high-income households. The number of days spent in the rural areas per visit varied from one to seven days and in a couple of cases, a month.¹² Due to “commitments in town”, the preferred length of stay in the rural areas for any given visit was between one and seven days. Even then, many of them spent only one or two days, preferably at weekends and on public holidays. Longer visits are made during annual leave, school holidays or at Christmas and the New Year break. The Christmas holidays are traditionally the time when people living in town return to the rural home to “celebrate with their relatives”. This middle-aged male respondent maintains his parents’ tradition of going to the rural home in December:

“I have maintained links with my home since I was young. Even though my father lived and worked in Nakuru town, it was tradition for us to go home in Siaya once a year in December. My parents liked celebrating Christmas at home. It is the preferred month for visiting home

¹² See Appendix 5, Table A5.1.

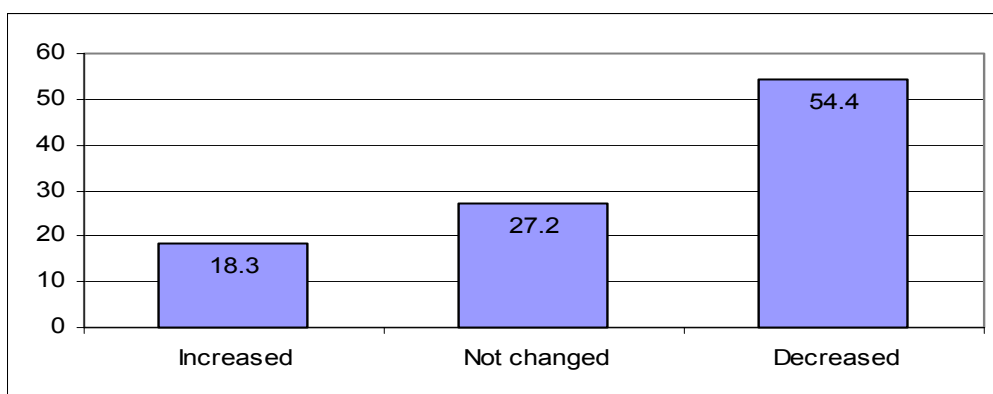
and re-uniting with most of your relatives after a long time. The children get to know and play with their cousins. I do the same even now. I prefer going home with my family in December. I make sure that my annual leave coincides with this.”

That does not, however, prevent his wife from going to their rural home more than once in a year. During this interview in October 2002, she had already travelled there twice and intended to go back again towards the end of the year:

“I go home more often than my husband. I prefer going home in April, August and obviously in December, all during school holidays. In that case, I do not have to worry about who will prepare the children for school in my absence. In many instances, my husband sends me to supervise and help in farming and to find out how they are doing. I do not have a definite number of days I stay at home. It can be one day or two weeks, depending on what has taken me there.”

For half of the households, the frequency of visiting rural areas – as perceived by the respondent – has decreased with time: that is, the household head and/or spouse visit the rural areas less frequently now than before. For about a quarter there has been no change, while for another sixth the frequency has increased (Figure 7.1). During the in-depth interviews, some respondents attributed the decrease in visits to the rural areas to the “increased bus fares”. As such, the variable with a clear and explainable relationship to the decrease is household income. In other words, the frequency of visiting rural plots appears not to be a function of other household characteristics.¹³ People can no longer afford to make as many trips to their rural plots as they comfortably did before.

Figure 7.1 Changes in visiting rural plots (%)



Source: 2001 Survey

¹³ See Appendix 5, Table A5.2.

However, it is still common for both the husband and/or wife to attend a close relative's funeral. This is sometimes made possible by a bus hired by the ethnic-based association and/or the employer taking on the responsibility of transporting one of their own (who is deceased) to his or her rural home for burial. For the not-so-close relatives, the "funeral" can be attended later, like *Alfred* does sometimes.

To reduce transport costs, some households no longer travel to the rural home with the entire family, except for once in every one or two years. For some, the husband and wife travel interchangeably but regularly. Others, like *Baba Karo*, are simply unable to frequently afford the high transport costs to their rural home. Despite that, *Baba Karo* continues to maintain links with his wife whenever an opportunity arises:

"Until the 1990s, I visited my family at home regularly, three or four times a year. Moreover, I never missed going home for my annual leave. I can no longer afford that because transport costs have become unbearable and life is more expensive nowadays than it was. As much as I would have liked to go home more often than I do now, I am restrained by the high transport costs to my home in Busia. I need at least 1,000 shillings for transport to and from my home. That is excluding other expenses that I may incur at home. If I include that, we are now talking of about 2,000 shillings for a trip. However, I rely on relatives who often go home while my wife relies on relatives who come to Nakuru or who are coming back to Nakuru from home. Through that, she is able to send me some maize, sweet potatoes, groundnuts, simsim or millet. I am also able to send her some money here and there. As a result of my unreliable salary, I do not have a regular schedule for sending money to my family nowadays. When a relative is going home and I have some money with me, then I can give him or her about 500 shillings to take to my wife. Sometimes I am forced to borrow money from friends. Last year, when one of my neighbours who hails from the same area as mine was going home, I gave him 600 shillings to take to *mama watoto nyumbani*¹⁴. When coming back, he was given maize and millet to bring to me."

The same applies to *Sofia*. As much as she is willing to visit her mother and son every now and then, she is unable to do so because of the high transport costs. She needs over KSh. 500 for a return trip to her mother's home in Kapedo (Turkana District). According to her, there are no public service vehicles to Kapedo except for lorries and trucks.

The comparison between transport costs now and in the past is described in more detail by this widow whose rural home is in Nyeri:

"The bus fare was very low by then. We paid about 10 shillings in the 1960s, 50 in the 1970s, 80 in the 1980s and 120 in the early 1990s. Passengers were rarely charged for extra luggage. The fare is now not less than 350 shillings and one is charged uncaringly for any extra luggage by those rowdy and rude *matatu* touts. Travelling home is even more expensive if one has to use more than one vehicle."

¹⁴ Literally: mother (*mama*) of the children (*watoto*) at home (*nyumbani*).

In addition to what has been discussed above, there are circumstances when visiting the rural plot can increase for a certain period of time during the year. It can be because of the illness of a family member or a close relative at the rural home. For instance, when his first wife was sick, *Reuben* made several trips to his rural home in Siaya to find out how she was doing, besides taking medication for her:

“When my first wife was sick, I used to travel home every two weeks to see her and to take her drugs, which I bought in Nakuru. My brother’s wife was very helpful because she looked after her and our last-born son during this time. Sometimes, I had to rush home when they called me that she had not slept well.”

In different circumstances, *Alfred* made several trips to his rural home when his new house was under construction. During that period, he went home every two weeks to make sure everything was in order. He brought money with him for building materials and for paying the *fundi* (person building the house).

Apparently, having a house in the rural area may influence the frequency and number of days the migrant spends in the rural area. In some communities, men are not allowed to sleep in their father’s house and this may deter them from going to their rural home frequently before building their own house. After completing his house at the rural home, *Reuben* is nowadays much more comfortable to visit there regularly:

“I am now able to go home more times than before, and be with my family. I am no longer worried about where to spend the night. I can confidently go home at any time and spend one or two days.”

His mother is more than happy because

“These days my son can come home at any time even when we least expect him. This is their home and nothing should prevent them from coming here. He does not need a reason to come home. They come home at any time, whether to see us or not.”

“Rural-to-town” visits

The flow of visits is not only from Nakuru town to the rural plots but also the other way round. Eighty-six per cent of respondents confirmed that their rural-based family members¹⁵ or relatives do visit them in Nakuru town now and then and for various reasons. The reasons for the reverse flow are quite similar to why urban households visit the rural areas. Again, the main reason is the normal “to-see-them” visits between close relatives. Besides that, rural family members and relatives may come to Nakuru town to get medical attention, to collect farm

¹⁵ For the multi-spatial households, this includes the *rural* part of the household.

inputs, for family ceremonies, or “when in a problem” that needs the urban household’s attention. Some bring money from the sale of farm produce while others come for money for purposes such as farming activities or school fees. Generally, by so doing, they bring food from the farm with them and in return they go back with purchased (food) items from Nakuru town.

Even then, the rural-to-urban visits are nowadays not common because urban households can no longer afford to accommodate relatives in town for a long time:

“These days we do not just entertain unplanned visits from any relative like long ago. We cannot afford to accommodate them for long even if they should come. Life in town is expensive and one has to budget for every single cent he or she earns. I do not even see how they can afford the high transport costs to Nakuru. We prefer planned visits with a specific purpose. In that case, we can send them money for transport to come, and plan for their short stay.”

This is, however, not the case with multi-spatial households where the wife and children live at the rural home. In such cases, rural-to-urban visits are quite similar in nature to the urban-to-rural visits described above. The *rural* part of the household, i.e. wife and children, are bound to visit the urban household, i.e. the husband/father, on a regular basis, as is told by *Alfred’s* wife:

“I come to Nakuru frequently to see my husband. I can stay for a week or even a month. There are many reasons for me to visit him. For example, I can come to pick up school fees for the children; I can come to see my friends in Nakuru; I can bring them food from home ... but the most important thing is that I come to see my husband, the same way he comes home.”

Economic interactions:

Flows of goods and money between urban and rural areas

Urban-to-rural flows

Generally, the flow of goods between urban and rural areas was not easy to capture because of its complexity, as it involves a wide range of goods and varied quantities in space and time.¹⁶ What came out generally from the survey results is that when urban household members visit their rural homes or plots they bring purchased food items, non-food items or money with them. Similarly, when the *rural* household members or rural-based relatives visit Nakuru townspeople, they go back with similar items. Besides the flow under normal circumstances, some goods find their way to the rural areas for specific purposes; for example,

¹⁶ For example, it could have been a tedious task, within the scope of the present study, to determine the flow of goods by type, quantity, frequency and the changes in time the same way an attempt was made for visits and flows of money.

presents (e.g. clothes), building materials, farm inputs, or items for funerals. For the last three funerals (see Box 5.1), *Reuben & Rita* made most of their purchases in Nakuru town. According to *Reuben*,

“We made sure that we did enough shopping here in Nakuru. The basic things like sugar, cooking fat, salt, tea leaves and soap were purchased cheaply from the supermarket.”

On the other hand, during her normal visits to their rural home in Siaya, *Rita* likes to take cabbages, carrots, Irish potatoes and onions for consumption, in addition to non-food items. These items, according to her, are generally cheaper in Nakuru than at *Reuben’s* rural home. The quantities she carries depend on affordability and convenience on the journey.

Even though what has been presented above is a general description of the flow of goods, further questions were asked about the urban-to-rural flow of money. The results presented in Table 7.3 reveal that about three-quarters of Nakuru town households contributed financially to their *rural* household or family members. This is in line with the well-established tradition that migrants in town remit money “back home”. The frequency of sending money and the amount vary. For example, the frequency is likely to be higher for multi-spatial households, for rural farmers and amongst male-headed households.¹⁷ In addition, although town dwellers send money to the rural areas regardless of their income categories, a larger proportion of the high-income households did so and somewhat more frequently than the low and very-low-income households. Exchange of money also occurs when urban household members visit their rural plots: 77% of respondents reported that they *normally* give money to their *rural* household members, parents or other close relatives on most of their visits to the rural areas.

The reasons for sending money to the rural areas were basically for general up-keep, i.e. to support the family at the rural home or, as most of the respondents said, “money to buy sugar”. Money is also sent for farming purposes or for paying school fees (Table 7.3). On specific requests, money may be sent for a festivity, a funeral or for medical purposes.

Given the tension between rising need and falling wages, it is not surprising that over half of the households in Nakuru send money back home less frequently now than before. A quarter has not experienced any change, while for a fifth the frequency has somehow increased (Table 7.3). Though they still continue to send money back home, the decline in remitting money to the rural areas is being felt slightly more by low and very-low-income households. As for the other “basic

¹⁷ This is in comparison with mono-spatial households, non-farming households and female-headed households (see Appendix 5, Table A5.4).

variables”, there are no differences between the change in the frequency of sending money to the rural areas and the distance of the plot, if the wife lives at the rural home, if the household is farming the rural plot, and the sex and age of the household head.¹⁸

Table 7.3 Urban-to-rural flow of money (%)

Remitting money to rural areas (N=327 households)	Yes	73.1
	No	26.9
	<i>Total</i>	<i>100</i>
Frequency of sending money (N=239 households)	More often than monthly	5.0
	Monthly	35.1
	Every two to four months	41.4
	Once or twice a year	18.4
	<i>Total</i>	<i>100</i>
Reasons for sending money (N=239 households)*	General up-keep	90.4
	Farming purposes	57.3
	Payment of school fees	23.8
Change in frequency of sending money (N=239 households)	Decreased	54.8
	Increased	19.7
	No significant change	25.5
	<i>Total</i>	<i>100</i>

Source: 2001 Survey (For more details, see Appendix 5, Table A5.3). * Total > 100% due to combined answers.

Nonetheless, as part of the household, the husband in town will always endeavour to support the *rural* household members. This was confirmed by a grandmother we found in one of the rural homes who argued that the exchange of money and goods between parents at home and their children in town and/or between a husband in town and his wife at home is mutual. For that matter, according to her, nothing is changing:

“My son has always been very good to us. Although life is expensive in town, he can still manage to send us something small through the post office or through our many relatives living in Nakuru. He sends us whatever God has put in his hands. I never complain when he cannot afford to. We appreciate whatever small amount we get from him.”

Rural-to-urban flows

Besides the urban-to-rural flow of money and goods, both food and non-food items flow from rural to urban areas as well, through the urban household members, *rural* household members or other relatives. Notably, two of these

¹⁸ See Appendix 5, Table A5.5.

reverse flows (i.e. from rural to urban) are emerging. First, even though urban households send *money* back home or to the rural plots, there are indications that the *reverse* is also true, albeit sporadically. In other words, some urban households also receive money from the rural plots: 5% of the household heads (and/or spouses) who visited the rural plots brought money back with them, while 3% of the rural-based household members who visited their urban households brought some money with them from the rural home or plot.

Second, although one may argue that rural-to-urban food transfers at the household level have always existed, it has not been systematically documented. As part of the complex socio-economic ties, it is common to observe exchanges of food items occurring between urban and the *rural* part of the household or rural-based family members. More often than not, when urban household members visit their rural counterparts, they take with them purchased items such as salt, sugar, milk, bread, tea leaves, cooking fat, etc. In return, they are given food from the *shamba* to bring back to town for consumption. The most common are green maize, local vegetables, sweet potatoes, cassava, maize or millet flour,¹⁹ groundnuts, fruit and chickens. These items are ideally regarded as not being commonly available to the town dweller. Exchange is common between parents living at the rural home and children who have migrated to towns, as told by this respondent:

“My mother was very active in farming. Whenever we visited her at home she gave us some maize flour, sweet potatoes, groundnuts and bananas to bring back to Nakuru. We in turn took sugar, salt and cooking fat to her.”

As is the case with the earlier-mentioned *William*, the following female respondent confirms that the exchange occurs naturally because reciprocity, however small, is embedded in African culture:

“Naturally, and because I take them some sugar and salt, they reciprocate by giving me a bunch of bananas, two to three handfuls of local vegetables and some millet flour to take to their son and grandchildren in Nakuru.”

Similarly, when the rural-based members visited the urban household, they brought food from the *shamba* with them and went back with purchased food and non-food items from town. However, to increase their food security in town, a large majority of households nowadays rely on their own rural production (see Chapters 5 and 6). Food from own rural production reaches the urban household through rural-urban linkages. Urban households are progressively more involved

¹⁹ Some people still prefer locally ground maize flour instead of purchased, sifted maize meal or flour. Millet flour is preferred for porridge.

in rural farming as a source of food rather than relying on food gifts that emanate from and are intertwined within the social reciprocity between the migrant and his/her relatives at the rural home. Though reciprocity still exists and in various forms, this particular kind is shifting from merely receiving food gifts to producing own food from the rural areas.

In addition, there are signs that people are buying food items cheaply from the rural markets for consumption in town or sometimes even for business. For example:

In the course of selling vegetables and fish by the roadside in Nakuru town, *Rita* brought *omena* from the home area to sell in Nakuru at a profit. Between August and October *omena* is abundantly available in the local markets around Lake Victoria and at a very low price. At that particular time, one *gorogoro* (tin) of *omena* at home is about half the price of the same amount in Nakuru town. She occasionally did the same when mangoes are plentiful at home.

Return migration

In addition to the reciprocity and economic flows presented above, there is emerging evidence of new forms of urban-rural linkages, namely where part of the urban household – especially the wife of the male head and/or children – is sent to the rural areas. Data from the general survey reveals that in about one-third of the married households, the wife and children had *ever* stayed for some period of time in the rural areas. Moreover, at the time of the survey, 39 households could be considered as multi-spatial, i.e. where the wives of the male heads were *actually* living at the rural home, mostly together with their children. Some had lived at the rural home from almost immediately after their marriage while others went to live at their rural homes at various stages of their marriage.

The primary reason for sending some of the urban household members to the rural areas is economic (Table 7.4). Some of the urban household members were sent to the rural area because there was not enough money to support them in town and because education for the children was cheaper in the rural area. By so doing, the wife could concentrate on rural farming as a way of producing food for the family.

After 12 years of town life, *Alfred's* wife was forced to go and live at home in Siaya in 2001 because life in town had become harder and harder:

“My husband does not have enough income to support us in town. His carpentry business has not been doing well for the past few years. This has been his main income source since 1989 when he married me. Since we had access to the rural plot and given that life is relatively cheaper at home, we decided to go and live there. My husband is now living in Nakuru alone.”

Table 7.4 Reasons for sending wife and children to live at the rural home (%)*

	Wife (N=89)	Children (N=73)
Not enough money in town	29.2	38.4
To concentrate on farming	73.0	---
Problems of housing	15.7	15.1
Education is cheaper at the rural home	---	43.8

Source: 2001 Survey. * Only for those whose wife or children had ever lived at the rural home. The reasons in each case reflect combined answers.

In addition to economic considerations, *Reuben's* first wife went to live at the rural home because she could not share the same house with her co-wife:

“It does not matter whether I could afford to take care of them in Nakuru or not. Yes, it is expensive. But again, the two wives could not share the same house. One of them had to live at home and obviously it was the first wife.”

For *Mama Shiko*, when her husband retired from the civil service, it was the loss of a regular source of income that induced her to move to the rural home. Instead of living in town during her husband's retirement, she decided to go and live at their rural home in Nyandarua in 1991 and to concentrate on farming. According to her, *Baba Shiko's jua-kali* business was not very reliable, i.e. his income was not as regular as before and as a new venture there were other risks involved.

For the same economic reasons, *Baba Karo*, who earns a monthly income of KSh. 4,500, was unable to take care of his wife and five children in Nakuru, let alone fit everyone in his one-room house:

“A few years after our marriage, I suggested that my wife live at home because my salary was, and still is, too small to live with them here. I had a house at home and there was land for her to cultivate. She normally visits me at least once a year and I also visit them whenever I can. Without her agreement about living at home, I could not have survived with all of them in Nakuru. She gets most of their food requirements from the *shamba*. I am therefore left to concentrate on looking for school fees and once in a while sending them something small for sugar and salt.”

In a few cases, the reasons were basically socio-cultural: to build a homestead, to get to know the rural home and the parents-in-law, to take care of sick parents or to fulfil other traditional rites.²⁰ Even when the children are not accompanied by their mother, it is common for them to be sent to the rural area to stay with

²⁰ One respondent informed me that her community required her to stay at the rural home after the birth of her first birth.

their grandparents when the household experiences economic stress and limited food availability. Being unable to provide for their unemployed son, the following respondent decided to send him to the rural area, albeit temporarily:

“At the moment, our youngest son is living at home with his grandmother. He recently did a course in Nakuru but was not lucky enough to get a job. Being unemployed, there is not enough money to take care of him here in Nakuru. He is better off at home helping there with farming for the time being, as we look for something for him to do here in Nakuru.”

Through this split-migration practice, ties between urban and rural areas are enhanced, while at the same time reducing the food demand of urban households. The burden of providing the daily food requirements for a large household where few are in gainful employment is immense. This strategy of *ruralizing* the urban household therefore helps to minimize the measures of meeting the household’s food shortages.

The last section in this chapter presents three case examples, which are, by and large, representative of the changing nature of urban-rural linkages in terms of flows and exchanges.

Three examples

Rural-to-urban food flows: The case of Alfred & Alice

Through their own rural food production in Siaya, Alfred & Alice were able to survive in Nakuru “throughout the year without much strain” (see Chapter 6). While she lived in Nakuru with Alfred, Alice made regular visits to their rural home in Siaya “to see her mother-in-law and to see how the crops were doing”. After the harvest, she normally brought to Nakuru about 1.5 bags of maize for *unga* and *githeri*,²¹ half a bag of beans, a quarter of a bag of cassava, half a bag of sorghum for *uji*, a few cabbages, onions, fruit and *sukuma wiki*.

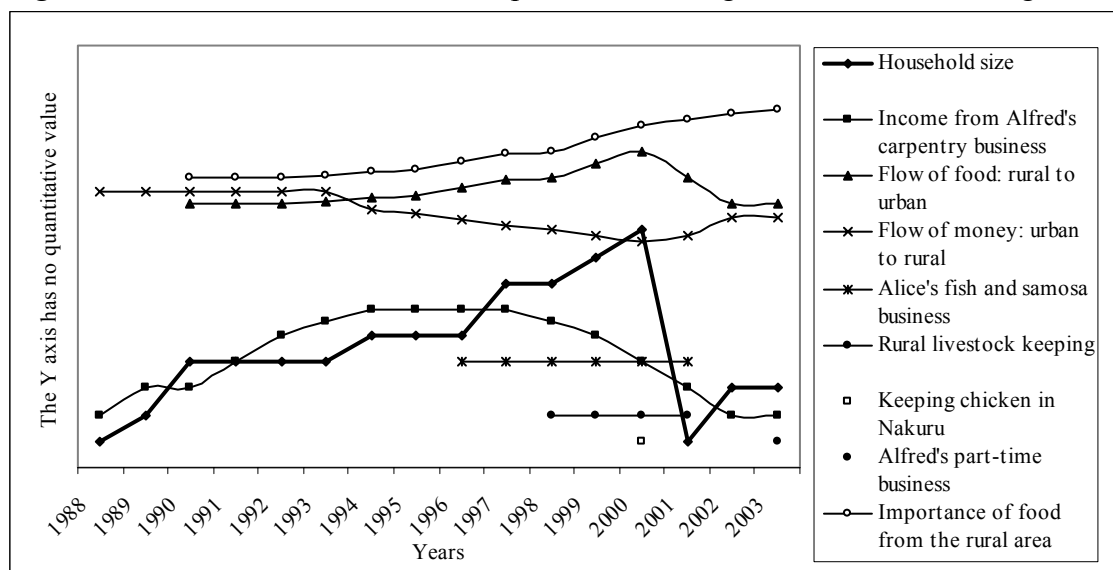
In addition, when Alfred’s mother visited them in Nakuru, she brought with her small quantities of produce from the *shamba*. Once or twice in a year she brought some vegetables, cassava, maize, beans and fruit which “kept them for some few days”. Likewise, when Alfred & Alice visited their rural home, they occasionally came back with some food for the family, “but not as much as they did a few years before Alice went to live there”, i.e. when life became expensive and they had to rely more on food from their rural *shamba*.

During the first five years of their marriage, Alfred & Alice maintained regular links with their rural home in Siaya, not only through visits but also by sending money. Similarly, Alfred’s mother used to visit them in Nakuru quite

²¹ A meal of maize and beans cooked together.

often. This was possible because “the bus fare was generally affordable”.²² In addition, Alfred’s job was doing relatively well and they had only two young children and a relative to look after. However, after 1996 the household had more children to feed, including two relatives who lived with them. Moreover, some of the children were already in school and Alfred’s business had started doing badly (see Figure 7.2).

Figure 7.2 Alfred & Alice: A visual impression of changes in rural-urban linkages²³



The result after 1996 was a change in the way Alfred & Alice organized their rural visits while at the same time maintaining strong ties with the rural home. Instead of visiting the rural home together and with their children, they went in turn every three months. More often than not, the responsibility fell on Alice who, by then, had increased her dependence on rural crop cultivation to feed the family, which had already increased from three members in 1990 to five in 1995 and to nine in 2000. She visited the rural home not just “to see” them as before but also to supervise farming activities and to bring back some of the harvest to Nakuru. In other words, they travelled to their rural home when it was absolutely necessary, i.e. like the visits Alice made in December and for funerals of close relatives. At the same time, Alfred no longer sent his mother money with the same regularity as before, but “at any time and whatever little he could afford”.

²² For about KSh. 250 one could comfortably travel to Alfred’s home in Siaya, in comparison with the more than KSh. 500 currently being charged.

²³ That is, in relation to household size and other livelihood sources.

As a tradition, when Alice or Alfred visited their rural home, they took with them purchased items like sugar, salt, tea, and other commodities, which they felt were necessary for the family members living there. Although they continued with the practice, they took less variety and smaller quantities, mainly for Alfred's mother. Moreover, it all depended on their capability at that particular time. For example, as told by Alice,

“We could afford to buy Alfred's mother two kilograms of sugar, two bars of soap, one kilogram of Blue Band [margarine], one kilogram of *kimbo* [cooking fat], one kilogram of salt, one large packet of tea, two loaves of bread, a two-kilogram packet of wheat flour and other small things here and there. But before I came home, we could no longer afford to do that. We brought her one kilogram of sugar, 500 grams of *kimbo*, a small packet of salt and a small packet of tea leaves. No more bread, Blue Band, soap or wheat flour.”

Since Alice and her co-wife have been at the rural home, Alfred's visits to the rural area have increased.²⁴ He now visits his family every two or three months. With his family at the rural home, Alfred gets most of his food requirements in Nakuru from there. As a result, he is able to send them “a little money depending on the profit he makes”. On the other hand, his wives also visit him in Nakuru about four times in a year. During these visits, they make sure that they have brought “enough” maize, beans and sorghum for Alfred.

Alfred later confirmed that as the number of their children increased, they found themselves relying more on the rural plot for some of their basic food requirements. At the moment, his family relies mostly on food from their *shamba*.

The following observations can be drawn from Figure 7.2. First, rural-urban flows of food have increased with household size, on the one hand, and a decrease in regular sources of income, on the other. Even with the wife and children living at the rural home and the subsequent decrease in rural-to-urban food flows, the rural plot is more important to them now than in the past. Secondly, the urban-rural flow of money from Alfred to his mother at the rural home declined with an increase in household size and a decrease in Alfred's income. However, the general flow of money from urban to rural increased again in 2001 when Alice and the children went to live at the rural home.

Two-way flows: The case of Baba Fred

Baba Fred was born in Kakamega District in 1946. After his primary-school education he joined the National Youth Service in Nairobi where he followed a course in road construction and maintenance. After the course in 1967, he was employed by the Ministry of Public Works and worked in various places in

²⁴ According to Alice, Alfred visits home to “see” his family.

Kenya. After two years in his new job, he went to the rural area to look for a wife:

“It was very common during our time that after getting employment in town the next thing one thought about was to go back home and marry. I did exactly that and we have a house at home, built in 1972.”

However, for unexplained reasons, Baba Fred was sacked from the ministry in 1981. With a wife and three children to look after, he went back to his rural home because he could no longer afford to live in town without a job. For the next three years, he lived at the rural home together with his wife and children, “surviving from their *shamba*”. In 1984, he decided to go to Nakuru, about 250 km away, “to look for work” and was quickly employed by Nakuru Municipal Council as a road repairer, a job he still does. With his job, he was assigned a house in Abong’ Lo Weya where he lives alone. His wife (Mama Fred) and their children have all stayed at the rural home because

“First, the nature of my first job was not favourable for her to live with me in town. While working for the government, I got transferred from one place to another and it was not easy moving with my family. Second, and as you can see, this house is too low for all of us. Third, the salary I earn is too little to have the whole family in Nakuru. Life and education is relatively cheaper at home than it is in town.”

At the time of these interviews, Mama Fred was living at the rural home with their youngest son and four grandchildren. They have three other children: two married sons who live and work in Nakuru and a daughter who is also married somewhere. The wives and children of their two sons are also living at the rural home in Kakamega.²⁵ Baba Fred’s monthly salary of less than KSh. 5,000 is the main source of income, not only for himself in Nakuru but also for his family in Kakamega.

Baba and Mama Fred cultivate their three-acre *shamba* in Kakamega. Mama Fred grows maize and beans with her two daughters-in-law.²⁶ *Sukuma wiki* and other local vegetables are grown in the homestead where the houses are. Mama Fred and her daughters-in-law have each a place where they cultivate their own vegetables. Baba Fred sends money through the Post Office or takes money to them to purchase inputs and other farming-related activities. At the time of the interviews, Baba Fred had two milking cows and a bull.

Baba Fred said that just like before, he regularly visits his family at the rural home, on average, about four or five times a year:

²⁵ Fred married in 1993 and has three children, while Steve married in 1999 and has one child.

²⁶ Even though they cultivate the *shamba* together, Mama Fred and her daughters-in-law are separate “households” in one homestead, i.e. they have separate housekeeping arrangements.

“I have visited home four times this year and I plan to travel again in December for Christmas. From time to time I go home to see my family and while there I attend to other things as well.”

He stays at the rural home longer on his annual leave but only between two to four days for other visits. After these visits he comes back to Nakuru with about four *gorogoros* of beans and half a *debe* of maize:

“Together with what my wife or children bring when they visit me in Nakuru, and what is sent to me through relatives travelling home, I hardly purchase *unga* and beans here. I just have to budget for my daily *mboga*.”

From time to time, he also bought sweet potatoes and bananas from the local market in the rural area, a practice he has not yet stopped. This is because, according to him, sweet potatoes and bananas are relatively cheaper at the rural home than in Nakuru. He buys them specifically for consumption and not in large quantities.

To support his family at the rural home, Baba Fred sends them money on a regular basis for their day-to-day needs. On average, he sends about KSh. 500 every month for domestic use, i.e. to buy sugar, salt, cooking fat, soap, etc. Between March and May²⁷ and/or when there is a poor harvest, he doubles the amount to about KSh. 1,000 to enable Mama Fred to purchase additional food. For specific purposes, for example school fees, money for inputs or for emergencies, Baba Fred sends the exact amount needed. Apart from his normal visits, Baba Fred explained that he travels to his rural home every other time to bury departed relatives: “I rarely miss my close relatives’ funerals.” He agreed that most of the deaths are Aids related but was quick to add: “We just hear rumours that so-and-so succumbed to the disease. At the funeral they do not disclose the cause of death.”

On the other hand, Mama Fred routinely visits Baba Fred in town. On such visits she can stay for up to seven days. She brings with her about half a *debe* of maize and three to four *gorogoros* of beans. When going back to the rural home she buys sugar, salt, cooking fat, etc. from the supermarket (to take with her). In addition to her routine visits, she is sometimes forced to visit Nakuru when her husband is sick or when their children, who live in Nakuru, have a problem or “when she has an important thing to discuss or solve together with me”.

Baba Fred commented that he travelled to his rural home more frequently twenty years ago than he does nowadays. With the then affordable transport costs he travelled to his rural home on a monthly basis. During the school holidays in August, the children came to Nakuru to see their father. He complains that “all

²⁷ Baba Fred says that March to May is the period of food scarcity at home.

this is impossible now because of numerous financial obligations with little money at hand.” Moreover, the transport cost to his rural home has increased five-fold, from less than KSh. 100 then to over KSh. 500 at the time of the interviews.

Reversal in urban-rural linkages: The case of Rose Adhiambo

Rose (39) lives in Kaloleni estate with her five children. She got married in 1985 but unfortunately her husband (Baba Lisa) died in 1991. At the time of his death, Baba Lisa, a tomato vendor, was the family breadwinner. Although she took over the business, Rose complains that running it initially was not easy because she lacked the skills and charisma her husband had. Even though the business has improved, she still complains of low profits in relation to her expenses.²⁸ Her profits vary between KSh. 1,500 and KSh. 3,000 per month, sometimes even less. This, she says, is not enough to take care of her family.

Before Baba Lisa’s death, his family and relatives at home in Siaya depended on him for most of their needs. He frequently sent money to his mother. To reduce their dependency, he rented a two-acre plot near his rural home in 1985 so that the family members could “get additional food and income from it”. She explained that

“Baba Lisa rented a plot to feed his family and relatives at home. Their family land was too small for all of them. By doing so, he was relieved of the burden of sending them money every now and then. We also benefited from the plot. They sent us some maize, beans and sorghum that normally kept us going for about a month.”

Inevitably, this arrangement changed soon after Baba Lisa’s death. First, Rose could no longer support her in-laws, and second, she “repossessed” one acre of her husband’s rented plot in Siaya.²⁹ She rented this plot until 2001 when “the owner stopped renting it to me”. Between 1986 and 2001, Rose depended on the plot for food, i.e. maize and beans, and sometimes income. She frequently travelled to the rural home to be involved, with the hired labour, in ploughing, planting, weeding and harvesting. She sums up the benefits of farming at home:

“That was the only place I could turn to. I did not need to worry about buying maize and beans for some time after harvesting. I also sold some maize and beans to help offset other expenses. During that period, I fed my family without any difficulty. We hardly slept hungry as happens now.”

²⁸ The expenses she is talking about are school fees (about KSh. 500 per term per child), food (about KSh. 2,000 per month), rent (KSh. 560, including water) and electricity (KSh. 200 per month), cooking fuel (KSh. 500 per month) and other household goods (KSh. 500 per month).

²⁹ Rose could only afford to pay for one acre.

After 2001, i.e. with her rental plot in Siaya gone, Rose was forced to rely solely on her dwindling business. Life became unbearable because she had to purchase all her food from the small profit she made. They occasionally ate only one meal a day to make ends meet. As a result, Rose became a receiver from her own mother, also in Siaya:

“As a result of my suffering, my mother agreed to give me half an acre plot at our (parents’) home that I could use for crop cultivation and get something to feed my family in Nakuru.”

Rose regularly travels to her mother’s rural home to “bring food” for her children. She is able to get maize, beans, sorghum and cassava from her “small” *shamba*.

Emerging trends or changing nature?

The case examples presented in this chapter are by and large “poor” households. Were they to rely on their formal wages (e.g. *Alfred* and *Baba Fred*) or earnings from their dwindling informal-sector businesses (e.g. *Rose*), they would not be able to survive. The impossibility of staying alive on typical urban wages in Africa has been dubbed the “wages puzzle” by Jamal and Weeks (1993). That people do survive is testimony to their ingenuity, determination and sheer hard work. A host of coping strategies have developed. One of these is falling back on rural livelihood sources. Although the types of interaction examined here, as well as their effects, should not be overly generalized, a pattern can be discerned which may be used to gain an understanding of the emerging relationship between urban households and their rural homes (areas or plots).

First, the case of *Alfred & Alice* (like many others) illustrates how food transfers from rural areas to urban households have increased with urban poverty while the transfer of money and goods from town to the rural areas has decreased in real value. Placing a monetary value on food transfers from the rural areas to urban households is difficult, not least due to seasonal variances. However, it is noteworthy that a large percentage of rural crop cultivators use maize from their rural homes, at least going by the percentage (70%) that cultivated the crop in 2000. Given that maize is a staple dish eaten (as *ugali*) almost on a daily basis, for lunch and for dinner, we can roughly estimate that a household of four persons³⁰ spends over KSh. 500 per month if they rely on purchased maize meal,

³⁰ The “average household” in this study and in Nakuru town as a whole consisted of four persons.

i.e. if they buy sifted maize meal from the shop.³¹ This figure compares favourably to the amount of money remitted to rural households every few months.

However, the amount of money “an average household” in Nakuru “saves” every month by using flour from maize from the rural home, including other food crops, may be higher than is initially apparent:

“I save a lot of money when I use *unga* from home for *ugali*. The *unga* from the shops is very light and we tend to finish it much faster. *Ugali* made out of *unga* from home is heavy. You feel satisfied from a small portion and as such it lasts longer.³² Even if I were to purchase a *gorogoro* of maize from home and grind it, it is still much cheaper than the *unga* we buy from the shops.”³³

Second, and based on the above analysis, the economic balance of the two flows appears to have moved in favour of urban households. For example, the flow of food from *Alfred's* rural home to his household in Nakuru, i.e. before *Alice* went home, increased with the household size, on the one hand, and a decrease of the household's regular source of income, on the other. As the rural-to-urban flow of food increased, there was a decrease in the urban-to-rural flow of money and goods. The flow of food resources from rural to urban areas is therefore contrary to the common assumption that rural areas (or kin) act only as recipients of goods and services originating from town.

Third, *Baba Fred's* case is an example of a multi-spatial household, with a clear two-way flow, mainly of money to, and food from, the rural home. It also illustrates a case in which the urban household has temporarily migrated to the rural area due to a loss of employment. On the other hand, *Rose's* case is an example of a household with a reversal in urban-rural linkages. From “helping” her husband's rural family, the household became a “receiver” from *Rose's* mother in Siaya, after her husband's death and the loss of their one-acre plot in 2001.

Fourth, like in other households, *William's* wife moving to their rural home seemed to be a survival strategy, which had two benefits: it made living in town less expensive, and more food could be obtained from the rural home. While between 1967³⁴ and 1992, it was an urban household with a multi-spatial *livelihood*, it was largely a multi-spatial *household* from 1992 to 2003. This is an indication of the complexity and dynamic nature of the urban household and, by

³¹ If we conservatively assume that the household eats *ugali* only for dinner, four persons may use a two-kilogram packet of purchased, sifted maize meal over three nights and therefore will need 10 packets a month. The cost of a two-kilogram packet of sifted maize meal is KSh. 55.

³² The purchased maize meal is light because it has been sifted.

³³ A *gorogoro* of maize at this respondent's home costs KSh. 40.

³⁴ This is the year that William got married.

extension, brings a new dimension to the concept of “household”, especially where the household members straddle town and the rural home.

Lastly, rising transport costs in recent years have reduced the frequency of rural home visits for many people, particularly when long distances are involved. In addition, the quantities of remittances and goods (or gifts) have declined in the past decade, as the cost of living in urban centres soared. However, this does not necessarily imply weakening bonds. For many people who move to the city, the countryside and their native village still remain a reference point, both culturally and in terms of family life. Social links are as strong as ever and in recent times “falling back on” rural sources for a livelihood has become more the norm than an exception.

Comparing “the poor” and “the non-poor”

This chapter presents a comparison of two income groups – “the poor” and “the non-poor” – on a number of issues that have been discussed in the previous chapters. For this purpose, a practical definition of “the poor” is used here, namely households with a monthly cash income of KSh. 5,000 or less. The comparison group consists of households with a monthly cash income of at least KSh. 10,000, i.e. the medium-to-high-income category. In this chapter, the two income groups are denoted as *poor* and *non-poor* respectively. Yet, as explained in Chapter 4, no detailed calculation of household income has been made during the study, so it is obvious that this can be no more than a rough indication of the differences between the two groups in Nakuru town. Based on the above definition, a quarter (24%) of the Nakuru town households can be considered poor. The non-poor are about twice as many as the poor, comprising 45% of Nakuru households.

Generally, poor households cannot raise the income required to meet a given level of basic needs, usually over a period of one month. The examples in the previous chapters, of *Sofia Lela*, *Baba Karo*, *Alfred & Alice* and *Rose Adhiambo*, provides a basis to the argument that a household with a monthly cash income of about KSh. 5,000 is not able to meet its food, shelter and other basic requirements to the recommended standards.

In Kenya, the absolute poverty line, which indicates a household inability to meet its entire basic requirement (food and non-food), is estimated at KSh. 2,648 per month per adult in urban areas and KSh. 1,239 in the rural areas. The food poverty line, i.e. the cost of consuming the recommended 2,250 calories per day

per adult, is estimated at KSh. 1,254 in urban areas and KSh. 927 in the rural areas (SID 2004; Kimalu *et al.* 2002; Nyoro 2002; Kenya 2001). Internationally, a monthly cash income of KSh. 5,000 translates to less than the often-used definition of poverty of US\$ 1 per person per day.¹ In other words, an average household (of four persons) in Nakuru town with an income of less than KSh. 5,000 per month is not only unable to meet its basic needs, but can barely put food on the table on a daily basis (see also Table 8.4).

In relation to the four monthly income categories operationalized in Chapter 3, the poor in this chapter denotes households with a very-low income. The comparison group – the non-poor – is a combination of medium and high-income households. As the aim of this chapter is to compare the poor and the non-poor, the results presented in this chapter concerns only the two groups. The “third” group – the low-income households² – has been excluded from the discussions that follow.

By way of introduction to a comparison of the poor and non-poor, the next two sections present an overview of the characteristics of the household heads, some selected household characteristics, and the household conditions and amenities of the two groups.

Some basic characteristics

Household heads

A summary of a number of the characteristics of the household heads in the two groups is presented in Table 8.1.³ In both groups, the majority of the heads are male, middle-aged and married. However, in line with theoretical expectations, the proportion of female-headed households in Nakuru town was much higher among the poor than among the non-poor. Over half (55%) of the heads of these poor female-headed households were divorced, widowed or separated. Like *Sofia* and *Rose*, some are struggling to provide for their families. *Sofia*, who separated from her husband more than twenty years ago, is engaged in making and selling *chang'aa*, an illicit brew, for a living. She also engages in other sources of livelihood because what she gets from selling *chang'aa* is not enough to pay her rent,

¹ With an exchange rate of about KSh. 78 to US\$ 1 at the end of 2000, this equals almost US\$ 78 per month. With an estimated household size of about four for the whole study population, this comes to about US\$ 20 per person per month, i.e. less than the often-used definition of US\$ 1 per person per day. For comparison purposes, assume that 1 kg of maize is equivalent to 3,500 calories and an adult needs 2,250 calories per day. This translates to about 0.6 kg/day/person. Given that 1 kg of maize was (at the time of survey) about KSh. 27.50, an average household of four persons in Nakuru will need KSh. 66/day (0.85US\$) for maize flour (*unga*) only. Looking at Table 8.4, this is already higher than what the poor households spend on food in total.

² N=105

³ For more details, see Appendix 6, Table A6.1.

buy food and fend for her two daughters and a son that she is living with. *Rose's* husband died in 1991 and left her with five children to look after. Since then she has been struggling with the family business of selling tomatoes. The profits from this business are low and unpredictable and once in a while the family was forced to eat only one meal a day before she started cultivating her own food at her mother's rural home in Siaya.

Table 8.1 Poor and non-poor: Characteristics of household heads (%)

		Poor (N=84)	Non-poor (N=155)
Sex	Female	36.9	12.3
Age	Young	34.5	12.3
Marital status	Divorced, widowed & separated	20.2	7.7
Educational level	Primary school certificate or none	67.8	14.9
Occupational status	Regular formal employment	23.8	56.1
	Informal sector/self-employment*	72.6	43.8

Source: 2001 Survey (For more details, see Appendix 6, Table A6.1). * Including temporary and casual employment.

Another notable difference between the poor and the non-poor concerns the level of education of the household head. Two-thirds of poor household heads have only a primary-school certificate or none at all. On the contrary, 85% of the non-poor had a secondary-school certificate or higher. A lack of a sound educational background and skills may affect a household head's opportunity of getting a secure and well-paying job. This may be why the large majority (73%) of the poor household heads depended on the informal sector for their main occupation, while a majority (56%) of the non-poor heads were regularly employed in the formal sector.⁴

This does not mean, however, that all those working in the informal sector are poor; nor do all those working in the formal sector manage to avoid poverty. As the figures in Table 8.1 show, one quarter of the poor heads were in formal employment, while 44% of the non-poor heads relied on informal-sector work. Furthermore, regardless of income category, household heads as well as their

⁴ The percentage of household heads employed in the formal sector in Nakuru town increases four-fold from 11% for those without a school certificate to 44% for those with at least a secondary-school certificate.

spouses and some of their children engage in various informal income-generating activities in addition to their main job.

Household characteristics

Three important household characteristics for the poor and the non-poor are given in Table 8.2. Contrary to the thinking that poor households have larger families than the non-poor, the results show that there are no differences between the two groups as concerns the household size, although the mean household size for the poor was slightly lower (4.1 members) than in non-poor households (4.8 members).

Table 8.2 Poor and non-poor: Household characteristics (%)

		Poor (N=84)	Non-poor (N=155)
Household size	Small (1-2 members)	28.6	16.8
	Medium (3-5 members)	50.0	45.2
	Large (6+ members)	21.4	38.1
	<i>Total</i>	<i>100</i>	<i>100</i>
If wife is living at the rural home	Yes (multi-spatial household)	7.1	13.5
	No (mono-spatial household)	92.9	86.5
	<i>Total</i>	<i>100</i>	<i>100</i>
If rural plot is a source of food/income	Yes (multi-spatial livelihood)	79.8	87.1
	No (mono-spatial livelihood)	20.2	12.9
	<i>Total</i>	<i>100</i>	<i>100</i>

Source: 2001 Survey

For both the poor and the non-poor, over-three quarters were mono-spatial households and households with a multi-spatial livelihood. However, the likelihood of a non-poor household head sending his wife to live at the rural area was relatively higher than for a poor household head, while the likelihood of a poor household having only one spatial livelihood base was relatively higher.

Household conditions and amenities

One would expect some disparity between the poor and the non-poor in terms of housing conditions and amenities. For the Nakuru townspeople, this is confirmed by the results presented in Appendix 6, Table A6.2. Although the majority of Nakuru townspeople rent their houses, the poor as would be expected, are far more disadvantaged when it comes to house ownership. Only five of the poor households lived in their own houses compared to a fifth of the non-poor house-

holds. In addition, many of the poor households lived in poor quality conditions. For instance, almost three-quarters of the poor's houses consisted of only one room. Other features were the semi-permanent nature of their houses (wood, mud, iron sheets, etc) and the type of human waste disposal system they had.⁵

Baba Karo was one of the poor households living in a one-room house. The room is not only used for sleeping, but also serves as a living room and kitchen, thanks to the creativeness they employ. The same room, as is the case with *Alfred & Alice*, is shared with the children at night. While *Baba Karo* and *Alfred* are lucky to be in subsidized Nakuru Municipal Council houses, the majority of the people in Kwa Rhonda, Mwariki and Kaptembwa are living in semi-permanent structures with no basic infrastructure. Lastly, all the poor households relied mainly on paraffin, charcoal and/or firewood for cooking. This means that none of them is able to afford the cost of electricity or gas for cooking. For more than half of them, electricity was necessary for lighting and where this was not possible, they resorted to paraffin lamps, like *Baba Karo* and *Sofia*, whose electricity had long since been disconnected due to the non-payment of bills.

Economic activities and expenditures

Engagement in farming and non-farming activities

Both the poor and the non-poor engaged in farming and non-farming activities in Nakuru town and/or at the rural areas. To start with farming activities, the results presented in Table 8.3 show that there are more urban farmers and rural farmers in non-poor households than there are in poor ones: 54% of the non-poor households grew crops and/or kept livestock *in town* compared to 36% of the poor, while 67% of the non-poor practiced farming in the *rural area* compared to 45% of the poor households. The same observation can be made regarding the type of farming, i.e. crop cultivation and livestock keeping. For example, there were 1.5 times as many *urban* and *rural* crop cultivators and livestock keepers amongst the non-poor households as there were among the poor. This is not surprising because the non-poor are more likely to have access to their own land for crop cultivation and are likely to have sufficient resources to engage in livestock keeping.

Whereas both the poor and the non-poor engaged in urban non-farming income-generating activities, the former did not do so in the rural areas. Most *rural* non-farming economic activities were part-time undertakings for the urban households involved. The poor are normally confronted with a lack of capital to

⁵ The conspicuous proportion (23%) of the non-poor who used pit latrines occurred in newly up-and-coming high-to-medium income residential areas of Nakuru town that are not yet served by the main sewer (e.g. Naka).

start income-generating economic activities. Indeed, when asked why they did not engage in rural non-farming economic activities, four-fifths (81%) of the poor households mentioned a “lack of capital” as one of the reasons. The same reason may have contributed to the lower number (31%) of poor households who engaged in non-farming income-generating activities in Nakuru town compared to over 50% of the non-poor.

Table 8.3 Poor and non-poor: Engagement in farming and non-farming activities (%)

	Poor (N=84)		Non-poor (N=155)	
	Urban	Rural	Urban	Rural
Farming activities	35.7	45.2	53.5	66.5
Crop cultivation	32.1	38.1	42.6	61.9
Livestock keeping	21.4	22.6	33.5	38.7
Non-farming income-generating activities	31.0	0.0	57.4	15.4

Source: 2001 Survey

Household expenditures

It is common knowledge that as household income is higher, household expenditure on such items as food, cooking fuel, rent, lighting, water, transport, etc. is higher as well. This is confirmed by the comparison between the poor and the non-poor in Table 8.4. Moreover, whether poor or non-poor, the main household expenditures concern food, education and shelter (rent).

Similar to Rakodi’s (1995b: 460) findings, food typically accounts for a larger share of the household budget when the household income is lower, the amount available depending partly on income, partly on the amount of food that is self-produced and partly on what is left after other vital expenses have been paid. About two-thirds of poor household’s income goes towards the purchase of food, cooking fuel and paying for housing (rent). The implication is that poor households – such as those of *Sofia*, *Baba Karo* and *Rose* – with a monthly income less than overall average expenditure (i.e. KSh. 4,700) have difficulties fending for their families.

To survive on their monthly incomes, poor households rent affordable houses; buy second-hand clothes and items which are relatively cheaper; use charcoal and paraffin for cooking; and walk or cycle to work. As a last resort, some households are forced to live on one meal a day or go without enough food for a few days at a time. For example, this very low-income female household head is barely surviving with her five children:

“We go without food in this house once in a while and especially when schools open. During such periods, we survive on porridge or just one meal a day. The children are often sent home from school because we have not paid the fees. I have to go and plead with the headmaster every now and then. The profit I get from my business is not able to sustain my family throughout the month. I depend on borrowing money every now and then.”

Table 8.4 Poor and non-poor: Estimated monthly average expenditure by item

	Poor (N=84)		Non-poor (N=155)	
	KSh.	%*	KSh.	%*
Food**	1,884	40	4,201	31
School expenses	1,062	23	4,478	33
Rent***	720	15	1,467	11
Transport to work	135	3	1,185	9
Cooking fuel	373	8	735	5
Other h'hold items	306	7	731	5
Lighting	157	3	497	4
Water	68	1	356	3
Total average expenditure	4,704	100	13,637	100

Source: 2001 Survey. * % of total average in each category. ** For the poor, the average expenditure on food (i.e. KSh. 1,884) is enough for calories requirement for 1.5 persons. *** In some households, rent included water and lighting.

Rural plots

As noted in Chapter 5, 95% of the household heads in Nakuru town have access to a plot in the rural area. In this, the poor and the non-poor are alike: in both groups nine out of every ten households had access to a plot outside Nakuru Municipality. However, there seems to be a tendency to acquire a plot outside the ancestral land as household income increases. Whereas both the poor and the non-poor had access to their ancestral land at the rural home, the non-poor were more likely to acquire an additional plot, mainly through purchase. For example, the proportion of the non-poor households with more than one plot was three times as high as among the poor (Table 8.5).

Apart from having access to only one rural plot, which in most cases is the rural home or part of the ancestral land, the poor are also somewhat disadvantaged in terms of the size of the plot or plots they have access to (Table 8.5). Although the smaller plots of not more than two acres and the larger plots of more than eight acres could be found in both groups, half of the poor households had access to not more than two acres of land, compared to one quarter of the

non-poor households. Even so, the proportion of non-poor households with more than eight acres of land was twice that of poor households.

However, the size of the plot may not say much about how much land is in fact put under cultivation. For example, *Alfred* has access to four acres of land at his rural home in Siaya, but he cultivates only half of it because of the fear that the crops might be swept away if a nearby river floods. He explained that he did not have money to hire people “to dig trenches to control the flow of water”, as is common in some neighbouring homes. In some cases poor households were unable to put the entire plot under cultivation because they could not afford to pay for the extra labour required.

Table 8.5 Poor and non-poor: Plot characteristics (%)*

		Poor	Non-poor
<i>(1) By household</i>		<i>(N=78)</i>	<i>(N=149)</i>
Number of plots	1 plot	82.1	46.3
	2-5 plots	17.9	53.7
Total plot size	Up to 2 acres	50.6	25.9
	8+ acres	15.6	33.3
<i>(2) By plot</i>		<i>(N=98**)</i>	<i>(N=258)</i>
Ownership of plot	Own plot	37.2	61.6
	Family land	58.5	35.3
How plot was acquired	Inherited	66.0	47.7
	Purchased	23.4	45.3
Who uses the plot	Myself***	27.7	45.3
	Rural-based family	61.7	32.6

Source: 2001 Survey (For more details, see Appendix 6, Tables A6.3 & A6.4). * For those households with access to a rural plot. ** This number confirms that almost all the poor households had access to one plot each. *** Includes the household head’s wife who lives at the rural home.

Partly a result of the higher likelihood of them acquiring another plot in addition to the ancestral land, the proportion of non-poor households owning the rural plot(s) was much higher (62%) than among the poor (37%) (Table 8.5). In other words, the poor have to rely much more on family land to have access to rural land.

In chapter 5, it was observed that ownership of a rural plot was closely related to how the plot was acquired and who mainly used it. Own land was in most cases privately purchased and used by the owner, while family land was inherited

and mainly used by rural-based family members.⁶ Related to plot ownership, the majority of the poor households acquired their rural plots through inheritance, and the plots were in most cases used by rural-based family members (Table 8.5). Among the non-poor, purchasing plots was relatively more common, while the same applied to using the plots themselves.

Similar to what was observed in Chapter 5 for all households, the distance of the rural plot from Nakuru town, especially for poor households, is also related to who uses the plot. Two-thirds (64%) of poor households' plots were located in the outer-ring districts and were, therefore, more likely to be used by rural-based family members because of the distance involved. Lastly, there were no differences between the two groups concerning how the plot was used. In both groups the plot was being used wholly or partly for either cultivating crops and/or for keeping animals.⁷

Rural farming: Practices

Crop cultivation

About two-fifths of the poor and three-fifths of the non-poor households engaged in rural crop cultivation in 2000 (Table 8.3). In both groups, cereals (maize) and legumes (beans) were the preferred crops. As expected, the growing of cash crops was favoured by the non-poor households.

Looking at all the households, it was found that 82% hired labour for crop cultivation in 2000 and that all the households used at least one type of material input (see Chapter 5). What is not clear is the frequency, quantity and intensity with which hired labour and inputs were used and, because of that, it is not easy to analyze any differences between the poor and the non-poor. Nonetheless, it is clear from the cases presented in Chapter 5 that the use of hired labour and material inputs depended on whether the farmer could afford them or not. In a more general comparison, almost all (93%) of the non-poor households hired labour for crop cultivation compared to less than half (44%) of the poor. And as for the use of material inputs, all types of inputs, except local seedlings were more commonly used by the non-poor households.⁸

Nevertheless, despite the financial constraints, the poor are as much aware of the advantages of using inputs as the non-poor. For example, *Baba Fred* favours, whenever he can afford it, the use of "modern" methods of farming to increase his harvest. By modern methods *Baba Fred* means, for example, the use of good-quality seedlings, the application of fertilizers, pesticides and herbicides and the

⁶ See Table 5.4.

⁷ See Appendix 6, Table A6.4.

⁸ See Appendix 6, Table A6.5.

use of manure. The manure from his cows and crop residues are applied in the *shamba* to help the soil regain its fertility:

In 2001, Baba and Mama Fred used 50 kilograms of chemical fertilizers for maize and 20 kilograms of pesticides for beans. They also used 20 kilograms of improved maize seedlings and 10 kilograms of bean seedlings.⁹ When mixed with the local ones, hybrid seedlings can be used for two or three plantings. More often than not, they do not use fertilizers or pesticides during the second planting because only a small portion of the *shamba* is cultivated.

Areal productivity, i.e. mean harvest (in kg) per acre, was about the same for the two groups: 394 kg for the poor and 405 kg for the non-poor.¹⁰ This is about the same as the overall productivity for *all* the rural crop cultivators in Nakuru town (i.e. 403 kg). At first sight, this may look surprising, given for instance the higher frequency of the use of material inputs among the non-poor. However, when taking plot size into account, the story is different. The average plot size differed between the two groups: 3 and 5 acres for the poor and non-poor, respectively. Given the relationship between plot size and areal productivity, as shown in Table 5.8, the concomitant productivity for the poor and non-poor would be about 550 and 500 kg for the poor and non-poor, respectively. In other words, the poor do perform rather poorly. The importance of sufficient acres is also outlined by this respondent:

“At home I have access to four acres of land which is not enough for me and my two wives, including two of my sons and their wives. This is what I inherited from my father. We shared the ancestral land with my brothers. From these four acres, I have put up two houses for my wives. Two of my older sons have also recently put up their own houses. I have no money to purchase extra land even if I wanted to. Luckily we plough two acres as a family and my wives and their daughters-in-law understand this. Because of that, everything we manage to harvest is used for consumption.”

Livestock keeping

About a quarter of the poor households and two-fifths of the non-poor kept livestock in the rural area (Table 8.3). The overall number of animals as well as the mean for each type of animal is much higher in the non-poor group than among the poor. This applies particularly to cattle, sheep, goats and chicken (Table 8.6). The poor normally keep “one or two cows for milk at home”, as one of them said, while the non-poor may also practice livestock keeping for commercial purposes.

⁹ Baba and Mama Fred used KSh. 1,050 to purchase fertilizer, KSh. 500 for pesticides, KSh. 760 for maize seedlings, and KSh. 400 for bean seedlings.

¹⁰ See Appendix 6, Table A6.6.

There were no clear differences between the poor and the non-poor as far as ownership and the purpose of keeping livestock were concerned.¹¹ Regardless of income, the large majority were “owners” of their livestock in the rural area, as opposed to the animals being family property. In both groups, livestock was kept not only for consumption but also for selling, although the non-poor tend to sell their livestock or livestock products more often than the poor. In other words, the poor are more inclined to consume a larger proportion of their livestock products.¹²

Table 8.6 The poor and non-poor: Number of animals kept in rural area, by type

		Poor (N=19)	Non-poor (N=60)
Cattle	Number (N)	31	352
	Mean	1.6	5.9
Sheep	Number (N)	22	189
	Mean	1.2	3.2
Goats	Number (N)	65	601
	Mean	3.4	10.0
Chickens	Number (N)	59	568
	Mean	3.1	9.5

Source: 2001 Survey

As with rural crop cultivation, the practice of hiring labour for livestock keeping was common amongst the non-poor: three-fifths hired labour compared to about a sixth of poor households.¹³ The poor are more dependent on the labour provided by the rural-based family members because they cannot afford to pay for hired labour. For example:

Alfred's cow, heifer, bull, four sheep and four goats are not at his rural home, but are taken care of by his brother-in-law, also in Siaya. This is because there is “nobody” in Alfred's home who can take care of the animals and at the same time ensure their security. He took them to his brother-in-law's home because “the work is too much for my wife and mother and I cannot afford to use hired labour”.

¹¹ See Appendix 6, Table A6.7.

¹² For example, 73% and 50% of the poor households reared cattle and kept chickens, respectively, “mostly for own consumption”, i.e. using the milk, eggs and chickens for food. On the other hand, 35% of non-poor households reared cattle “mostly for consumption”, while the percentage of chickens kept for consumption was even higher (62%).

¹³ Of the 60 non-poor households keeping livestock in the rural area, 38 (63%) of them used hired labour in 2000. On the other hand, only 3 (16%) of the 19 poor households could afford to do so.

While Alfred was lucky to be able to take his cows, sheep and goats to his brother-in-law's rural home, *Nakhumicha*, who lives at the rural home in Kakamega, does all the work of looking after their cows:

“We cannot afford to hire somebody to look after the cows. I have to do it myself. I normally tie them up around the homestead where there is grass. I do the milking in the morning and in the evening. In the afternoon I give them some water to drink. It is a demanding job but I have to do it because they are our cows and we get milk from one of them.”

The use of inputs among both the poor and non-poor was quite common. However, a closer look at the figures (Appendix 6, Table A6.8) reveals that the more expensive inputs such as improved breeds and (purchased) feed supplement was much more frequently used by the non-poor.

With the likelihood of keeping relatively many dairy animals and probably quality breeds and better practices, the non-poor households achieved a comparatively higher daily average milk production than the poor households, at least going by the very rough indication presented in Appendix 6, Table A6.9.¹⁴ The mean production of milk per day per household for the non-poor was about four times higher than that of the poor households: 10.8 and 2.9 litres, respectively. The same trend applies to the production of eggs: the average number of eggs laid per day among the non-poor households was about twice as high as among the poor households, namely 9.9 and 4.4 eggs respectively.

Rural farming: Source of food and income

Importance of rural farming as perceived by the respondents

Among the poor as well as the non-poor, the percentages mentioning the need for food as *one* of the reasons to practice rural crop cultivation and livestock keeping were very high (Table 8.7). However, when asked the *main* reason to engage in rural crop cultivation, more than two-thirds of the poor households mentioned the need for food, against about half of the non-poor households. For rural livestock keepers, the figures were about half in both groups. This implies that whereas non-poor households practice crop cultivation as an additional source of both food and income, the need for food only is more important amongst poor households.

This partly confirms the earlier contention that for the poor, increasing their food security is usually the main motivation for practicing rural farming because of, among other factors, rising food prices and the cost of living in town. As for rural livestock, poor households generally keep animals “just in case”, as it was

¹⁴ It can be no more than a very rough indication because the figures do not take into account the number of animals in each category.

stated by one of the respondents, rather than for immediate economic (or food) gain.

Table 8.7 Poor and non-poor: Reasons for practicing rural farming by type (%)*

	As one of the reasons		As the <i>main</i> reason	
	Poor	Non-poor	Poor	Non-poor
<i>(1) Rural crop cultivation (N=)</i>	<i>(32)</i>	<i>(96)</i>	<i>(32)</i>	<i>(96)</i>
Needed food	100	92.7	68.8	47.9
Needed income	56.3	83.3	31.3	52.1
<i>(2) Rural livestock keeping (N=)</i>	<i>(19)</i>	<i>(60)</i>	<i>(19)</i>	<i>(60)</i>
Needed food	89.5	83.3	52.6	45.0
Needed income	57.9	80.0	26.3	50.0

Source: 2001 Survey. * Food and income were the only main reasons given for rural crop cultivation. For livestock keeping, other main reasons were “custom”, “social security” and “for ploughing purposes”. The category “needed income” also includes income diversification.

Related to these observations, for both groups, crop cultivation in rural areas contributed much more to the household food security in 2000 than livestock keeping did.¹⁵ This is also reflected in the answers to the question concerning the importance of rural crop cultivation and livestock keeping to the Nakuru townspeople engaged in these activities. Table 8.8 indicates that whether poor or non-poor, crop cultivation in the rural area constituted an additional or even major source of food for the households involved. Moreover, for more than half of the households in the two groups, it was an additional or major source of income.

Table 8.8 Poor and non-poor: Importance of rural farming activities (%)

	Crop cultivation		Livestock keeping	
	Poor (N=32)	Non-poor (N=96)	Poor (N=19)	Non-poor (N=60)
Could not survive without it	78.1	74.0	47.4	43.3
Major income source	9.4	17.7	5.3	1.7
Additional income source	56.3	59.4	42.1	63.3
Major food source	21.9	20.8	0.0	0.0
Additional food source	65.6	69.8	68.4	70.0

Source: 2001 Survey (Total > 100% due to combined answers)

¹⁵ See Appendix 6, Tables A6.10 and A6.11.

Three-quarters of the respondents even stated that they “could not survive without” rural crop cultivation. Surprisingly, this applied to both the poor and the non-poor. Table 8.8 also confirms that rural livestock keeping is for both groups a food as well as an income source, although the income aspect is somewhat more important for the non-poor.

Household food security

In Chapter 6, it was found that households with multi-spatial livelihoods were able to reach a higher level of (urban) food security than those with mono-spatial livelihoods. This section attempts to assess if there were any differences between the poor and non-poor in that aspect, i.e. regardless of their livelihood profile. The fact that the large majority of the poor and the non-poor households are households with a multi-spatial livelihood (Table 8.2) suggests that there is no correlation between household income and livelihood profile.

It is clear that purchased food is part and parcel of the Nakuru townspeople’s sources of food. Some households depend wholly on purchased food while some combine purchased food with their own production, be it in town or from the rural areas. Related to the fact that the poor are underrepresented in both urban and rural farming, it is not surprising that the proportion of poor households that purchased *all* their food requirements was twice that of non-poor households. Only one fifth of the non-poor households purchased all the food they needed (Table 8.9).

Table 8.8 Poor and non-poor: Summary of general food security in 2000 (%)

		Poor (N=84)	Non-poor (N=155)
Buy <i>all</i> food requirements	Yes	44.0	21.9
Source of non-purchased food*	Rural production	72.3	76.0
	Urban production	40.4	52.1
Enough to eat in 2000	Yes, always	45.2	73.5
	Most of the time	33.3	24.5

Source: 2001 Survey (For more details, see Appendix 6, Table A6.12). * For those who did *not* purchase all their food requirements (N=48 for the poor and 121 for the non-poor).

Even then, there was no difference between the poor and non-poor in terms of sources of non-purchased food (Table 8.9). For those who did *not* purchase *all* their household’s food requirements, rural and urban production was their major source of non-purchased food. However, the proportion depending on rural

production was comparatively higher. In both groups, about three-quarters of these households depended on food from the rural areas and about half on urban-produced food. But apparently, for over half of the poor and about a quarter of the non-poor, these sources of food could not prevent that the household had *not* “always enough to eat in 2000”. In other words, the poor tend to suffer more from food shortages than the non-poor. This becomes even more outspoken when looking at the percentages of households that had “half of the time” or just “now and then” enough to eat in 2000. Twenty-one per cent of poor households thus experienced serious food shortages compared to 2% of the non-poor.¹⁶

These findings imply that without rural and/or urban farming, the percentage of poor households that experienced food shortages could have been higher. An example is given below.

Importance of rural farming to a poor urban household

Mary Wanja lives in Nakuru town with three of her younger children aged 10 to 15 at the time of the interviews. Her other two older children are married and living elsewhere with their spouses. Her job of cleaning the streets of Nakuru town has been the household’s source of income since her husband’s death in 1992. Before that, she earned some money as a home worker.

“Although I do not earn a lot of money like you do [referring to the researcher], I am lucky that I got this job in the same year my husband died.”

Despite working for all these years, Wanja still earns a very modest monthly salary of about KSh. 4,000. To supplement her income, Wanja has since 2001 been engaged in selling basic household goods in front of her house: sugar, soap, cooking fat, matches, salt, tea, etc. She does this business in the afternoon after “cleaning the streets in the morning.” At her temporary shop-like structure, Wanja makes her profit by unpacking most of her goods and then sells them in small quantities for the sake of the poor households. She decided to start this business because

“It is not an easy task to rely on the pay we get. Life is becoming harder and harder and there is need to do something extra to earn you something small on top of the little salaries we get. Life has become expensive, but our pay has never been increased and therefore we keep on suffering. To make it worse, we are never paid on time. Our salaries are frequently delayed. We can stay for months without pay. We are helpless to change the situation. We only hope that things will be good one day. This business is also a blessing for people like myself who cannot afford to buy the normal quantities of sugar, cooking fat and others things that you see here. For example, I can sell to you whatever quantity of cooking fat you want and also according to how much you have.”

¹⁶ See Appendix 6, Table A6.12.

Besides, Wanja has practiced crop cultivation in town since 1974. Until 1993 she rented plots in various localities of the municipality where she cultivated maize, beans and vegetables, largely for consumption. She now cultivates vegetables outside her house because she can no longer afford to rent a plot.

Back in her husband's rural home in Nyeri, Wanja has access to a 3.5-acre plot she inherited after his death. On this plot, Wanja practices both crop cultivation and livestock keeping. She cultivates coffee, maize and beans.¹⁷ According to her, the plot has helped as an additional source of food and income to the household:

“The coffee has helped me a lot in bringing up the children and paying for their school fees. During our usual salary delays, more often than not, I depend on the sales from coffee. When I sense that we shall not have something to eat in the house for some days, I send one of the children to bring some food from home. My parents-in-law are very helpful because they supervise the boy who helps me at home.”

Wanja is happy that most of the maize and beans they use in the house comes from Nyeri. The yearly proceeds from coffee are in principal used for paying school fees. She harvests, on average, four bags of maize and two bags of beans. In 2002 Wanja sold two bags of maize at the local market to take her daughter to the hospital. Through her regular visits to Nyeri, about half of the maize and beans is brought to Nakuru town.

“Honestly, we have never lacked food in this house. There is always something to be made. We have the maize and beans from home here. This is enough for *githeri*, *ugali* or *uji*. I could not have survived without all this. Life has become so difficult.”

At the time of the interviews, Wanja explained that they had three cows and five sheep in Nyeri. The animals, according to her, are part of their family property and therefore the milk is mainly used by her parents-in-law. She however revealed that the sheep are “hers” because she wanted to “start her own stock of animals”. Wanja explained that she sells the sheep in a case of a financial need. Even with all the problems she narrated, Wanja remained cheerful that she has “a rural home to fall back on”.

Urban-rural links

Social and economic interaction occurs between urban and rural areas regardless of income category, the only differences being in its frequency and intensity.¹⁸ In

¹⁷ 2.5 acres is under maize and beans while the rest is used for coffee.

¹⁸ The quantitative data presented in this section are based on the summary of the survey results presented in Appendix 6, Table A6.13.

both groups, more than half of the household heads and/or their wives had visited the rural plot or home during the last quarter of 2001. However due to financial constraints, the poor were not able to visit their rural plots as regularly as the non-poor. For example, almost all (91%) the household heads and/or spouses in the non-poor group had visited at least one of their rural plots compared, to two-thirds of the poor category. Moreover, the frequency of visits to the rural plot or home was much higher among the non-poor.

There is also some difference between the poor and the non-poor in terms of the purpose of visits. Farming related visits are comparatively more important for the non-poor, while meeting the rural relatives is somewhat more often the reason to undertake the trip among the poor. It is through such “just-to-see-them” visits that the poor are able to maintain strong links with the rural areas and kin, and therefore, a place to fall back on “in case of anything in town”.

The same trend can be seen with remittances. Although town dwellers send money back home regardless of income, a larger proportion of the non-poor did so and also somewhat more frequently than the poor. Even then, the poor and non-poor showed no clear differences as far as the change in sending money to the rural home were concerned. Around 60% in both groups held the opinion that the frequency of sending money had decreased over time. The same holds for the perceived decrease in frequency of visits to the rural home or plot. However, due to the complex nature of these interactions, it is not easy to draw conclusions about the changes that may be taking place between “town” and “home”. For example, it may very well be that it is not the frequency of sending money that matters, but how much is sent.¹⁹

Finally, there is some difference between the two income groups as to whether the wife had ever lived in the rural home. For the poor, this was the case with 50% of the households, against 31% of the non-poor. The poor households, for example *Baba Karo*, *Alfred & Alice*, and *Baba Fred*, do so as a coping strategy, i.e. because of lack of income to support them in town.

¹⁹ Due to its complexity, the study did not determine how much is sent to the rural area on every occasion.

Photo 9 Maize ready to be harvested from one of the rural plots



Photo 10 Source of income: Women taking tea to a buying center



Summary, conclusions and recommendations

Introduction

As far as rural-urban linkages in sub-Saharan Africa are concerned, the focus has so far predominantly been on the urban dwellers contributing to the livelihood of those in the rural areas, usually through remittances from family members living in the city. Though acknowledged in the last two decades, the reverse flow, i.e. the extent to which urban households realize part of their livelihood from rural sources, remains poorly understood. This study was, therefore, an attempt to fill this gap by using Nakuru town in Kenya as a case study. The study argues that *rural* livelihood sources have become an important element in the livelihood of *urban* households.

One of the consequences of both economic crisis and economic reform under structural adjustment is that urban economies in sub-Saharan Africa have declined markedly during the last two decades and urban poverty appears to have increased in much of the continent. Life in urban areas has become more expensive while employment in the formal sector has gone down and real wages have not kept up with price increases or have even declined in absolute terms. The standard of living has deteriorated, while unemployment and underemployment have increased. Moreover, increases in food prices and service charges, and cuts in public expenditure on health, education and infrastructure have been felt more severely in the cities than in the rural areas, and particularly by the urban poor.

As a result, urban households are now seeking to mobilize resources and opportunities and to combine these into a livelihood strategy. They have adopted

a number of livelihood strategies in their attempts to manage – in particular but not necessarily restricted to – the changes in their economic environment and circumstances. Engaging in multiple activities or diversifying food and income sources is now part and parcel of the urban economy. Urban households are undertaking a wide range of different activities in town and in the rural area to raise or maintain their incomes, maintain a certain standard of living or just to survive. In addition, rural links have become vital safety valves and welfare options for urban people who are vulnerable to economic fluctuations.

The two broad objectives of this study were: 1) to investigate the extent to which urban households depend on rural sources for their livelihoods; and 2) to determine how urban-rural linkages have changed due to increased urban poverty since 1980. The specific objectives that emanated from these objectives include: (a) identifying the livelihood strategies of urban households; (b) describing the practice of rural farming and non-farming activities by urban households; (c) determining the importance of rural farming and non-farming activities for the livelihood of urban households in terms of food security and income; and (d) establishing the changes in the nature, extent and direction of urban-rural linkages in terms of resource and person flows.

Summary of findings and conclusions

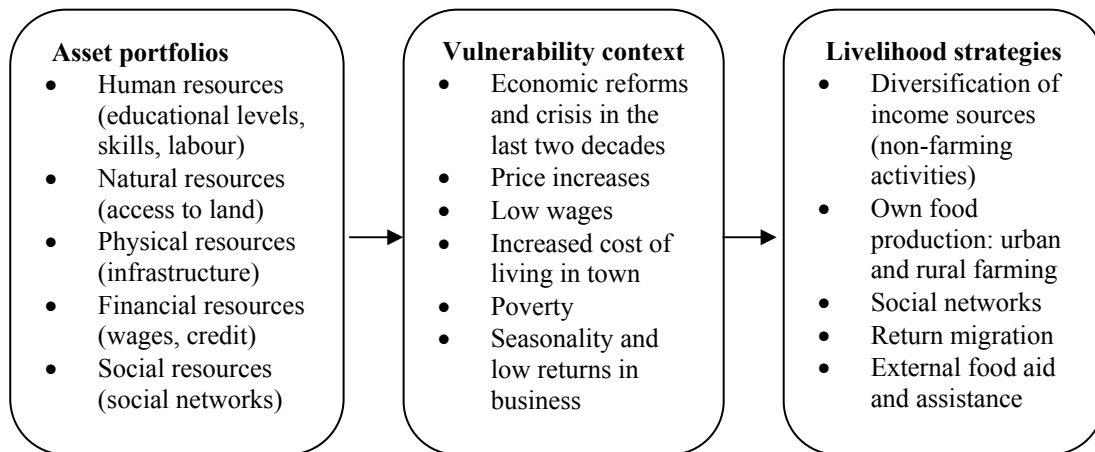
Livelihood strategies

It is evident from Chapter 1 that for the majority of urban households in sub-Saharan Africa, the economic crisis resulted in adaptive patterns whereby people have diversified their sources of livelihood, either as a survival strategy or for accumulation. The results of the present study reveal that Nakuru town is no exception. Households in Nakuru town engage in a wide range of income-generating activities and use many different livelihood sources, not only in town but also in the rural area. Figure 9.1 presents a summary of the asset portfolios, vulnerability context and livelihood strategies of Nakuru town households. The asset portfolio includes human, natural, physical, financial and social resources. Many households in Nakuru town rely on both the urban-based and rural-based resources or assets they have access to and will use them to resist, cope with or recover from the negative effects of the changing (urban) economic environment.

In line with what Potts described earlier (1997), the general picture that arises from the case studies presented in this book suggests that urban households have adopted multiple livelihood strategies in their attempts to cope with adverse economic circumstances. For example, a number of respondents mentioned declining incomes, rises in prices of consumer goods and food, the increased cost of living with mismatched wages, poverty, unemployment and reduced profits

from informal-sector businesses as the driving force to engage in multiple sources of livelihood either in town or in the rural area. These livelihood sources have been broadly categorized in this study into farming and non-farming economic activities, including social networks, return migration and external food aid and assistance.

Figure 9.1 Asset portfolios, vulnerability context and livelihood strategies of Nakuru town households



Despite the growing phenomenon of urban farming in recent years, the importance of rural farming by urban households should not be underestimated. For example, over half of the households in Nakuru town practiced rural farming compared to two-fifths who were engaged in urban farming in Nakuru town. Whereas many urban households engaged in rural farming, involvement in rural non-farming economic activities was not as common. As expected, many people prefer to engage in other income-generating activities nearer to where they live and work. As such, engagement in non-farming economic activities by urban households is much more prevalent in town than in the rural area.

In addition, selling food (vegetables, fish) and ‘exploiting’ social networks (merry-go-round groups) at the neighbourhood level seem to be gaining popularity in Nakuru town, particularly among women. This is a livelihood strategy that is gradually developing into a norm. Members of a group organize themselves in various ways, forms and for varied reasons. Common to most of them and especially for the poor, their aim is to encourage savings, help one another in their economic activities and have something to fall back on when faced with a lack of money or food in the house. Together with their involvement in farming activities, this is an indication that the urban poor in sub-Saharan Africa have become increasingly dependent on livelihood sources practiced by women.

Similar trends have, for example, been experienced in Windhoek (Frayne 2004), in Kampala (Bantebya-Kyomuhendo 1999) and in Bamako (Vaa *et al.* 1989) – contrary to Chant's (1998) argument that urban women are normally confined to the domestic arena. For those who are able and qualify to do so, a new avenue is emerging in Nakuru town: NGOs, churches and locally based financial institutions are involved in 'poverty eradication' programmes by advancing loans to small-scale business persons or farmers. Another livelihood strategy is sending some members of the urban household to live at the rural home, giving rise to multi-spatial households.

In line with a number of studies quoted in Chapter 1 (e.g. Dietz & Zaal 2002; Tacoli 2002; Bryceson 2001; Potts 1997), the Nakuru study confirms that urban households, besides the *main* occupation of the household head, engage in multiple sources of livelihood, arguably as a response to the increased cost of living in town, decreased incomes in absolute terms or reduced purchasing power. For the non-poor, this is a way of accumulation or maintaining a certain standard of living while for the poor it is often the only way they can survive in town. Most urban households are no longer able to support themselves exclusively from a single source of income and therefore are seeking additional livelihood sources. The straddling of the urban workforce between wage work and other activities such as temporary work in the informal and agricultural sectors is an important feature of the urban socio-economies in sub-Saharan Africa. The strategy a household can adopt depends upon, among other factors, access to productive resources such as land, capital, skills and education.

This study agrees with observations by Kaag *et al.* (2004) and by De Haan & Zoomers (2003) that livelihoods are not only multiple, but also multi-spatial (or multi-local); in the case of Nakuru with both an *urban* and a *rural* component. In other words, urban households, poor or non-poor, pursue both multi-functional and multi-spatial livelihoods. While most studies mentioned in Chapter 1 have recognized the importance of rural livelihood sources in passing, this study provides an empirical basis to confirm that recognition, particularly where rural farming by urban households (i.e. rural-to-urban food flows) is concerned. The study contributes to the knowledge on urban-rural linkages, their dynamics, and their current or potential contribution to improving urban food security, especially for poor households. The attention given to rural farming by urban households provides a new dimension to the studies of urban-rural linkages, on the one hand, and urban food security, on the other.

Access to a rural plot

Rural farming by urban households is only possible if there is access to a rural plot. The plot may be inherited or not-yet divided ancestral land back in the rural home or it may be purchased or rented land elsewhere. In Nakuru, almost all households appeared to have access to a rural plot, more often than not in the district of origin of the male household head. More than a decade before, only half of the urban households in Kenya claimed to have access to a rural plot (Lee-Smith *et al.* 1987). The high percentage of Nakuru households claiming access to rural land is contrary to the thinking that the more migrants become integrated in the city the more they lose their rural base. Urban dwellers are still strongly linked with their areas of origin (the rural home), regardless of how long they have lived in town or whether they were born in town or not. This disputes Nelson's (2001) reasoning that as urban populations become "mature" in terms of being second- and third-generation urban dwellers, their links with the countryside radically decrease. For those who can manage it, purchasing another plot in the rural area or renting a plot outside the municipality but within accessible distance of town is becoming the norm rather than an exception. It is common to find households in town doing this as an income-generating activity, with maize, beans or vegetables there being cultivated mainly for commercial purposes.

The practices of rural farming

As was found in Kano and Kaduna (Andræ 1992), in Harare (Potts & Mutambirwa 1990; Drakakis-Smith 1992) and in the slums of Nairobi (Mwangi 1995), not all urban households in Nakuru with access to a rural plot engage in rural farming activities themselves. Even then, the percentage of urban households benefiting from rural farming activities increases considerably when those who do not cultivate themselves share in the produce cultivated by their rural-based relatives. In short, urban households engage in rural farming, directly or indirectly, either by themselves or in cooperation with rural household members, rural-based family members or hired farmhands. In most cases, the wife plays a more important role in rural farming activities than the husband, who is usually left to concentrate on his job and/or other income-generating activities in town.

Urban households cultivate a wide range of food and cash crops in the rural areas, depending on ecological conditions of the plot and its location. As is general practice in Kenya, maize, beans and other vegetables are the most common food crops, while tea and coffee are the main cash crops. Some households also grow cassava, millet, sorghum and potatoes to supplement or substitute maize as a staple crop. Rural livestock keeping by urban households is not as widespread as crop cultivation because livestock require more attention and

supervision, which can be difficult to provide from a distance. Keeping cows, goats, sheep and chickens in the rural area is not only a cultural practice but also undertaken for social-security purposes and for food and income. Milk from the cows and eggs from the chickens provide the rural family members with food, and when sold, an income too. And in some communities, the animals are useful during burial ceremonies.

Rural crop cultivation and livestock keeping are largely for subsistence and are traditional in nature. Crops depend on the amount of rainfall and its distribution during the growing season. Animals are left to graze freely in the homestead and little use is made of modern ways of livestock keeping, such as zero-grazing. The productive use of inputs and hired labour depends on the household's ability to afford them. Most labour input is family labour, which is sometimes not enough to allow the entire plot to be put under cultivation or to rear many animals. As such, and coupled with differing plot sizes, crop yields vary enormously between regions, households and crop types. The same is true for livestock keeping.

Although urban households have always practiced rural farming (see e.g. Gugler 1971, 1991), the difference today is that far more households are involved and that the role of the food produced is much more critical to household survival. For example, rural farming used to be more common amongst the Nakuru townspeople than farming within the municipality. Studies by Krüger (1998), Tripp (1996) and Mwangi (1995) suggest that rural farming has now become more important for the food security (and income) situation of urban households. However, the importance of rural farming to the urban household depends on access to such resources as land, labour and other support systems based on family relationship. As concerns labour, the case presented in Box 5.1 highlights the impact HIV/AIDS is having on the supply of family and rural labour – an important resource (asset) for urban households practicing rural farming. With the continued spread of HIV/AIDS, this is a concern that calls for further research.

The importance of rural farming

As indicated above, the growth of *rural* farming by *urban* households may be understood as a response to escalating poverty and to increased food prices and reduced purchasing power. Rural farming provides urban households with both income, through the sale of produce, and food for their domestic consumption. Rural farming can also help stabilize livelihoods and provide families with a safety net during economic downturns. Households in Nakuru town engaged in rural farming as a way of sourcing additional food or income or both. For the large majority of “rural farmers” in Nakuru town, the activity was an additional

source of food and for many also a source of income. As for rural crop cultivation, the need for food was by far the most important reason for them to engage in this activity. The contribution of rural livestock keeping to urban household food security was not as high as that of rural crop cultivation. Livestock are kept mainly for social-security purposes, except for their products (milk and eggs), which are more often than not used by the rural household or family members. The importance of rural farming is further emphasized as some households claimed that they could not have survived without the crops they planted or the animals they kept in the rural area.

In summary, from the study results, it is evident that rural farming is an important livelihood source for Nakuru townspeople. As such, the large majority (85%) of Nakuru households can be said to have multi-spatial livelihoods, with both an urban and a rural foothold. In addition to their income-generating activities in the urban economy of Nakuru town, they also have a rural livelihood base, either in the form of cultivating one or more rural plots and/or keeping some animals themselves or by sharing in the produce from plots cultivated and/or animals kept by relatives.

Urban households' dependence on purchased food is greatly reduced if they engage in rural farming, solely or in combination with urban farming. By depending more on purchased food, a household with a mono-spatial livelihood is likely to spend more on purchasing its food requirements than a household with a multi-spatial livelihood. Although the differences may not be significant, the findings strengthen observations in Nairobi by Foeken & Mwangi's (1998) who found that by having access to land for agricultural purposes and thus spending less of their income on purchasing food, households with multi-spatial livelihoods were in a more favourable food situation compared to households without a foothold in rural areas.

The findings also support Frayne's (2004) proposition that rural-to-urban food transfers are important in understanding, at least in part, urban household's food security dynamics and the ability of poor urban households to survive. By invoking their rural entitlements, urban households are able to increase their food security through rural farming. For example, for a third of the cultivators, the activity constituted at least half of the food they consumed. Even if the proportion of the total household food supply coming from own rural production is small, it is still important in the sense that a household can access this food at critical times, such as when income is insufficient for food purchases.

Nature, extent and direction of urban-rural linkages

Urban and rural areas have complex linkages and interconnections, which not only make them dependent on each other, but also affect their development. Urban dwellers continue to maintain links with rural areas through frequent visits and the exchange of goods, money and food. However, besides the well-established tradition of a one-sided urban-to-rural flow of goods and especially money, new forms of urban-rural linkages have emerged or become more important. First, money does not only flow from urban to rural areas: the reverse flow whereby urban households receive money from rural areas is also taking place, albeit sporadically. Second, besides the conventional (social) exchange of food between the urban and rural areas, urban households now rely on their own rural food production to increase their food security in town. Although food gifts from the rural area to town are still part of social reciprocity (see e.g. Frayne 2004; Muzvidziwa 2001), own food production is becoming more important to the urban household. While the majority of visits to rural areas are for family reasons, another important reason is farming-related. From time to time, the household head and/or spouse travel to the rural area to participate in planting and harvesting.

Other emerging evidence of new forms of urban-rural linkages concerns return migration, with members of the urban household going to live at the rural home as a cost-cutting measure. Besides making living in town less expensive, more food is obtained from the rural area for both urban and rural household members. Children are taken to live and go to school in the rural area because it is cheaper. It is also convenient for these multi-spatial households as a form of mobilizing rural and urban resources.

On the other hand, there are indications that urban dwellers are visiting the rural areas or their rural homes less frequently now than in the past. Also declining in real value is the amount of money sent back home. Urban dwellers can no longer afford to make as many trips to the rural areas as they comfortably did before. Nor can they afford to send large sums of money or goods on a regular basis to their rural family members. They are also not able to accommodate their relatives from the rural areas for long in town. However, this should not be construed to mean weakening urban-rural links, as Bryceson & Mbara (2003) and Nelson (2001) may suggest, but should be seen as a response to the high costs of living in town.

Even with the changes that are taking place, urban-rural interactions in the form of movements of people, goods, money and food are still important for both urban and rural households. However, the economic balance of the urban-rural linkages appears to have shifted in favour of the urban households. Although it is difficult to ascertain trends because of the complex nature of the interactions,

there are indications that urban-rural ties, which have always been a vital part of the African migration process, have become more important for urban households. Urban residents are looking to rural areas as a subsistence fallback. Maintaining both an urban and a rural socio-economic base provides a safety net, especially for the urban poor in times of economic hardships or unemployment.

For many people who move to town, the rural home remains a reference point culturally and in terms of family life. In other words, rural areas (or kin) are not only recipients of goods and services originating from town but also play an important role in the livelihoods of urban households. The linkages that persist between urban and rural households are central to the ability of urban households to survive. This study confirms what has been mentioned in other studies as well, notably that urban-rural linkages have changed in nature, form and direction.

Multi-spatial households: The “household concept” revisited

The fact that many households in Nakuru appeared to be split into an urban and a rural part calls for a re-definition of the ‘household concept’. As echoed by Kaag *et al.* (2004), De Haan & Zoomers (2003) and Beall *et al.* (1999), defining the urban household has become increasingly problematic. When a member of a household, e.g. the wife, lives at the rural home, a problem arises with defining the household. Definitions of households have conventionally emphasized co-residence, sharing the same meals, cooking from one pot and undertaking joint or coordinated decision-making. However, households remain fluid in size, composition and location. As such, it is more useful to see households as being multi-spatial rather than strictly “rural” or “urban”. Moreover, over three-quarters of the households in Nakuru town engaged in farming activities in town and/or in the rural area, which in itself demands a re-definition of an urban centre, which is more often than not associated with non-agricultural activities. From a livelihood perspective, one can distinguish between households with mono-spatial livelihoods and those with multi-spatial livelihoods. According to Dietz & Mulder (2005), this is another way of overcoming the conventional definition of a household that does not consider households with more than one spatial economic base, and without necessarily implying a residential split.

Rural livelihood sources: Poor versus non-poor

As noted in Chapter 3, several variables were subjected to further analysis during the data analysis and writing of this book – the most important being the household’s monthly cash income. As such this section presents a summary of the poor and non-poor in terms of constructing their livelihoods. Poor urban households are more vulnerable to economic stress and shocks than the non-poor. They often lack a good educational background that would allow them access to better-paid

jobs and so find themselves in the casualized, informal labour market, with low and unpredictable returns, high vulnerability and little scope for accumulation. Even where opportunities arise, the poor are normally faced with a lack of capital to start viable income-generating activities. As such, diversification for them may be essential for survival rather than as a panacea to poverty reduction. This strengthens Tacoli's (2002) argument that among poor households, diversification is often a survival strategy for risk minimization and income stabilization. For them, multi-activity at the household or individual level helps decrease vulnerability to shocks and stresses and stabilizes incomes which may otherwise vary widely on a seasonal basis. Among the non-poor, by contrast, diversification is often an accumulation strategy aiming at maximizing profits by investing across sectors.

Although in Nakuru there were no differences between the poor and non-poor concerning access to a rural plot and engagement in rural farming activities and urban-rural linkages as such, poor households are disadvantaged in certain respects. Their rural plots are usually smaller and they cannot afford to use enough inputs and hired labour. However, even with low productivity, the need for food is an important reason for them to engage in rural crop cultivation. Finally, there is no correlation between household income and livelihood profile. The large majority of the poor and non-poor households are households with a multi-spatial livelihood. This implies that both groups depend on rural sources for their livelihoods, the only difference being that rural livelihood sources are more important for the survival of poor households.

Recommendations

For policy makers

The following recommendations could be of use to policy makers. First, national data tend to underestimate the importance of diversification, as they usually record only people's primary activity. This neglects the fact that individuals are more likely to engage in multiple income-generating activities than to rely on only one, and that there will often be variations over time. As diversification is increasing in importance, there is a need for national governments to integrate such data into their national statistics. Whereas many policy documents recognize that diversification of income sources exists, this is not enough and does not help much for planning purposes, especially where concrete up-to-date statistics are required.

Second, policy will be more effective if it begins with an understanding of household level strategies. The two-way flow of resources and reciprocal relationships between urban and rural areas highlights the significance of urban-rural

linkages in understanding these strategies. Attaining self-sufficiency and food security at a national level does not automatically imply that household food security has been achieved as well. Other factors such as food prices and household income become more important. Equally significant is the household's ability to grow its own food and generate other forms of income.

Third, many development theorists and practitioners have, until recently, viewed rural and urban areas as two mutually exclusive entities with their own unique populations, activities, problems and concerns. However, this does not reflect the reality of multi-spatial livelihoods, which include both urban and rural elements. Interactions between urban and rural areas play an important role in processes of rural and urban change. According to Satterthwaite & Tacoli (2002), it is essential that policies and programmes reflect the importance of the "urban" part of *rural* development and the "rural" part of *urban* development. In other words, urban development strategies must take into account the rural links and context. The answer to urban poverty cannot be found in the urban areas alone. Policies ignoring this may increase poverty and vulnerability for those groups for whom 'straddling the urban-rural divide' is an important part of their survival strategy.

Fourth, the findings of this study concur with those of Rakodi (1995a): the implications of an improved understanding of the changing nature and extent of urban poverty are that a number of policy approaches are needed. These include safety nets for the most vulnerable; opportunities for households to increase their assets; assistance to enable people to take advantage of income-earning opportunities; provision of basic utilities and services; and the creation of a policy framework as well as a legal and physical context favourable to the activities of the urban poor. For example, small and micro enterprises and informal and home-based activities should be promoted, as a lack of support in this area will threaten the livelihoods of many urban residents. In reality, the economic crisis of the last two decades has favoured the "informalization" of the urban economy.

Fifth, there is a big difference between the *actual* wages being paid in Kenya and the *living* wage concept. The living wage concept, i.e. the wage commensurate to the standard of living (in the prevailing economic conditions), is not being taken into account in Kenya. A living wage should accord a worker and his/her family a basic standard of living as measured by access to a minimum nutritional requirement, clothing, housing, health care, education, water, childcare, transportation, energy, entertainment and some possible savings.

Lastly, although the above recommendations focus more on multi-spatial livelihoods, households with a mono-spatial livelihood should not be neglected when designing urban food security policies. They are part and parcel of the urban environment. In Nakuru town, 15% of the households had a mono-spatial

livelihood. This group, i.e. those without access to a rural plot, is likely to become bigger as the urban population increases and rural land becomes scarcer. Moreover, it is the urban poor who will be increasingly faced with no access to rural land because they will lack the means to buy a plot outside Nakuru town. For them, urban farming may become increasingly important. According to Foeken & Owuor (2000a), the fact that urban farming is an important source of food, income and employment to Nakuru's townspeople is something that cannot be ignored by policy makers.

For future researchers

As new dimensions of urban-rural linkages continue to interest many researchers in sub-Saharan Africa, the findings of this study could provoke a number of important research directions. By building on this study, future research in sub-Saharan Africa could generate more information on the following areas:

- a) A more detailed account of the amount, type, regularity and key players in rural food production and transfers from rural to urban areas, including cost-benefit analysis from an economic point of view.
- b) The impact of rural food production and rural-to-urban food transfers on the rural population.
- c) The impact of rural food production on urban food markets, especially for small-scale producers.
- d) Bottlenecks that prevent positive urban-rural interactions and sourcing of livelihoods from the rural areas.
- e) The impact of HIV/AIDS on urban-rural linkages and urban food security dynamics.
- f) The potential of urban-rural linkages in achieving the Millennium Development Goals of reducing not only urban poverty but also rural impoverishment.
- g) Regional variations in the practice and importance of rural farming by urban households. Are the findings of this study common to most cities in sub-Saharan Africa?

There is little doubt that this topic is of interest to many, that it has potential for further study, and that rural livelihood sources contribute to the food security and income of poor urban households. This study agrees with Tacoli (2002) that as a result of increased vulnerability or as a consequence of new opportunities – and more likely the combination of both – the increasing spatial and occupational complexity of African livelihoods needs to be recognized.

As much as this study has attempted a typology of sources of livelihood by urban households (i.e. farming versus non-farming, urban versus rural), the

mixture of these activities is complex and may not be universal to all households in space and time. Every household has its own combination of activities, and generates money or food with the resources (human, natural, physical, financial and social) to which it has access. In times of crisis, only households with sufficient resources at their disposal and those able to use them well will be able to achieve food security. Furthermore, townspeople respond differently to an increase in the cost of living and declining incomes. In reality, since the urban poor are very diverse in their difficulties, needs and capabilities, they employ various survival strategies that are household specific, but again similar in nature but not in mixture. Lastly, as Rakodi (2002a) pointed out, if the poor households' livelihood strategies are to be positive, there should be a rise of their incomes, an increase in their well-being, reduced vulnerability, improved food security and more sustainable use of natural resources.

Photo 11 A *matatu* in Siaya town: An important means of transport in the rural areas



Photo 12 William visits his wife and children at their rural home



Appendices

Contents

1. Tables with Chapter 3	229
2. Tables with Chapter 4	233
3. Tables with Chapter 5	236
4. Tables with Chapter 6	243
5. Tables with Chapter 7	248
6. Tables with Chapter 8	251

Appendix 1: Tables with Chapter 3

Table A1.1 Characteristics of households selected for in-depth interviews

2001 case id	Age of h'hold head	Year came to Nakuru	H'hold income category	Location of rural plot(s) & ownership	Wife staying at rural home	Urban h'hold size	Sex of h'hold head	Type of rural farming
27	50	1976	Very low	Busia (inherited)	Yes	2	Male	Crops & livestock
37	52	1983	Very low	Kakamega (inherited)	Yes	1	Male	Crops & livestock
43	40	Born	Very low	Turkana (family)	----*	4	Female	Livestock
93	35	Born	Low	Siaya (inherited) Rongai (rented)	Yes	6	Male	Crops & livestock
100	45	1971	Very low	Nyeri (inherited)	----*	6	Female	Crops
248	54	1965	Medium	Kisii (inherited)	No	4	Male	Crops
250	50	1970	Medium	2 plots in Nyandarua (purchased)	Yes	3	Male	Crops & livestock
258	37	1980	Low	Nakuru (purchased)	No	7	Male	Crops
264	55	1962	Very low	2 plots in Nakuru (rented/inherited) Nyeri (inherited)	----*	6	Female	Crops
265	52	1965	Low	Kakamega (inherited)	Yes	2	Male	Livestock
268	30	1985	Low	Siaya (inherited)	No	7	Male	Crops & livestock
271	70	1960	Very low	Nakuru (rented) Nyandarua (inherited)	No	7	Male	Crops
272	35	1980	Low	Nakuru (inherited)	No	5	Male	Crops & livestock
279	55	1966	Very low	Kisii (inherited)	Yes	5	Male	Crops & livestock
317	32	1985	Very low	Siaya (family)	----*	6	Female	Crops
336	56	1954	Medium	Nakuru (purchased) Machakos (inherited)	No	4	Male	Crops

Source: 2001 Survey. * Female-headed households.

Table A1.2 Characteristics of the household heads

		N	%
Sex	Male	279	81.1
	Female	65	18.9
	<i>Total</i>	<i>344</i>	<i>100</i>
Age (in years)	Less than 20	3	0.9
	20-29	80	23.3
	30-39	123	35.9
	40-49	78	22.7
	50-59	46	13.4
	60+	13	3.8
	<i>Total</i>	<i>343</i>	<i>100</i>
Marital status	Never married	53	15.4
	Married monogamously	240	69.8
	Married polygamously	11	3.2
	Divorced	2	0.6
	Widowed	22	6.4
	Separated	14	4.1
	Staying together	2	0.6
<i>Total</i>	<i>344</i>	<i>100</i>	
Educational level	None	11	3.2
	Primary uncompleted	32	9.3
	Primary completed	44	12.8
	Secondary uncompleted	34	9.9
	Secondary completed	149	43.4
	Above secondary	73	21.3
<i>Total</i>	<i>343</i>	<i>100</i>	

Source: 2001 Survey

Table A1.3 Ethnic background of the household heads

	N	%		N	%
Kikuyu	176	51.2	Nubian	2	0.6
Luo	55	16.0	Somali	2	0.6
Luhya	34	9.9	Goan	1	0.3
Kalenjin	22	6.4	Kuria	1	0.3
Kisii	21	6.1	Samburu	1	0.3
Kamba	12	3.5	Swahili	1	0.3
Meru	6	1.7	Teso	1	0.3
Turkana	6	1.7	Tanzanian	1	0.3
Embu	2	0.6	<i>Total</i>	<i>344</i>	<i>100</i>

Source: 2001 Survey

Table A1.4 Province and district of origin (migrant household heads only)

<i>(1) Province of origin</i>		<i>N</i>	<i>%</i>			<i>N</i>	<i>%</i>
Central		95	34.8	Eastern		20	7.3
Rift Valley		67	24.5	Nairobi		4	1.5
Nyanza		51	18.7	Coast		3	1.1
Western		32	11.7	Outside Kenya		1	0.4
<i>(2) District of origin</i>		<i>N</i>	<i>%</i>			<i>N</i>	<i>%</i>
Nyeri		27	9.9	Uasin Gishu		6	2.2
Nakuru		26	9.5	Busia		4	1.5
Muranga		22	8.1	Nairobi		4	1.5
Nyandarua		22	8.1	Kirinyaga		3	1.1
Kakamega		21	7.7	Trans Nzoia		3	1.1
Kiambu		21	7.7	Nandi		3	1.1
Kisii		18	6.6	Turkana		3	1.1
Kericho		15	5.5	Embu		2	0.7
Siaya		14	5.1	Kitui		2	0.7
Kisumu		12	4.4	Samburu		2	0.7
Machakos		9	3.3	Mombasa		2	0.7
Baringo		8	2.9	Laikipia		1	0.4
Bungoma		7	2.6	Kilifi		1	0.4
South Nyanza		7	2.6	Isiolo		1	0.4
Meru		6	2.2	Tanzania		1	0.4

Source: 2001 Survey (N=273; %=100)

Table A1.5 Year of coming to Nakuru town (migrant household heads only)

	<i>N</i>	<i>%</i>
Before 1970	28	10.4
1970-1979	38	14.1
1980-1989	80	29.7
1990-1999	104	38.7
2000-2001	19	7.1
Total	269*	100

Source: 2001 Survey. * Four respondents declined to indicate when they came to Nakuru town.

Table A1.6 Reasons for coming to Nakuru town (migrant household heads only)

	Mentioned as a reason		Mentioned as main reason	
	<i>% (>100)</i>	<i>N</i>	<i>N</i>	<i>%</i>
Lack of land in area of origin	1.5	3	3	1.1
Lack of work in area of origin	16.1	4	4	1.5
To look for work	50.5	122	122	44.7
To work/job transfer	30.8	81	81	29.7
Had relatives in Nakuru	21.2	19	19	7.0
Followed spouse	4.0	12	12	4.4
Came with parents	8.4	23	23	8.4
Displaced/ethnic clashes	1.8	5	5	1.8
Schooling	1.8	4	4	1.5
Total		273	273	100

Source: 2001 Survey

Table A1.7 Tenure status, housing conditions and amenities in Nakuru town

		N	%
Tenure status	Rented (local authority)	116	33.7
	Rented (individual)	170	49.4
	Provided (parent/relative)	9	2.6
	Provided (parastatal/church)	4	1.2
	Owner occupier (constructed)	42	12.2
	Owner occupier (purchased)	2	0.6
	Owner occupier (inherited)	1	0.3
	<i>Total</i>	<i>344</i>	<i>100</i>
Type of roofing material	Corrugated iron sheet	282	82.0
	Tiles	26	7.6
	Asbestos	36	10.5
	<i>Total</i>	<i>344</i>	<i>100</i>
Type of wall	Stone	235	68.3
	Brick	4	1.2
	Cement	6	1.7
	Wood	16	4.7
	Iron sheets	1	0.3
	Mud only	8	2.3
	Mud and cement	74	21.5
	<i>Total</i>	<i>344</i>	<i>100</i>
Type of floor	Cement	322	93.6
	Wood	2	0.6
	Earth	15	4.4
	Other	5	1.5
	<i>Total</i>	<i>344</i>	<i>100</i>
Main source of water	Well/borehole	9	2.7
	Piped water	314	91.3
	Private vendors	18	5.2
	Other	3	0.9
	<i>Total</i>	<i>344</i>	<i>100</i>
Main human waste disposal	Main sewer	192	55.8
	Septic	26	7.6
	Pit latrine	126	36.6
	<i>Total</i>	<i>344</i>	<i>100</i>
Main type of cooking fuel	Electricity	8	2.3
	Paraffin	117	34.0
	Gas	33	9.6
	Firewood	16	4.7
	Charcoal	170	49.4
	<i>Total</i>	<i>344</i>	<i>100</i>
Main type of lighting	Electricity	244	70.9
	Paraffin	100	29.1
	<i>Total</i>	<i>344</i>	<i>100</i>

Source: 2001 Survey

Appendix 2: Tables with Chapter 4

Table A2.1 Characteristics of households with farming as their regular occupation or activity

Case id	Household characteristics	Type of farming	Importance of farming to the household	Food situation
6	20 yrs male & 3 other members; Low-income	Mixed urban farming (off-plot); Mixed rural farming in Nakuru District	(Could not survive without it) <i>Urban:</i> Additional food & income source <i>Rural:</i> Major income & additional food source	Always had enough to eat
142	2 parents; Very-low-income; Hh head = 65yrs	Urban crop cultivation & livestock keeping (on-plot); Rural plot is idle	(Could not survive without it) Major food source	Had enough to eat most of the time
212	2 Parents & son; High-income; Hh head = 45yrs	Urban livestock keeping (on-plot); Rural plot used by rural-based family members	Major income source	Always had enough to eat
215	55 yrs male pensioner & daughter; High-income; Wife at the rural home	Rural crop cultivation in Nakuru & Murang'a; Has other rental plots in Nairobi	Major income source	Always had enough to eat
244	2 parents & 2 children; Medium-income; Hh head = 74yrs	Rural crop cultivation & livestock keeping in Nakuru & Nyeri	(Could not survive without) Major income & food source	Always had enough to eat
264	62 yrs single mother, niece & grand-children; Very-low-income	Rural crop cultivation in Nakuru & Nyeri	(Could not survive without) Major income & food source	Always had enough to eat
292	2 parents & 3 children; Very-low-income; Hh head = 45yrs	Urban crop cultivation (off-plot); Rural crop cultivation in Kisii	(Could not survive without) <i>Urban:</i> Major income & additional food source <i>Rural:</i> Major food & additional income source	Always had enough to eat
301	60 yrs male; High-income; Wife at the rural home	Rural crop cultivation & livestock keeping in Nakuru	Major income & food source	Always had enough to eat

Table A2.1 Cont...

Table A2.1 Cont.

Case id	Household characteristics	Type of farming	Importance of farming to the household	Food situation
334	34 yrs single female & friend; Very-low-income	Mixed urban farming (on-plot); Mixed rural farming in Kericho	(Could not survive without) <i>Urban</i> : Major income & food source <i>Rural</i> : Major income & additional food source	Always had enough to eat
336	2 parents, daughter & relative Medium-income; Hh head = 56yrs pensioner	Mixed urban farming (on-plot); Rural crop cultivation in Nakuru & Machakos	<i>Urban</i> : Major income & food source <i>Rural</i> : Additional income & food source	Always had enough to eat
339	2 parents & 2 sons Low-income Hh head = 72yrs	Urban crop cultivation & livestock keeping (on-plot); Rural plot in Kakamega used by second wife	(Could not survive without) Major income & food source	Always had enough to eat
340	2 parents & son Very-low-income Hh head = 47yrs	Urban crop cultivation & livestock keeping (on-plot)	Major food source	Had enough to eat half of the time

Source: Information extracted from 2001 Survey questionnaires

Table A2.2 Nakuru townspeople's urban non-farming income-generating activities*

• Selling second hand clothes & shoes (<i>mitumba</i>) (20)	• Mechanic (3)	• Cashier (1)
• Selling vegetables (14)	• Selling fruits (3)	• Church pastor (1)
• Businessman/lady (11)	• Volunteer work (3)	• Cleaner (1)
• Casual and part-time employment (11)	• Brewing and selling traditional & illegal liquor (<i>chang'aa</i>) (2)	• Construction sites (1)
• Hair dressing/plaiting or salonist (11)	• Broker (selling cars) (2)	• Correspondent (1)
• Salesman/lady (10)	• Cafeteria/hotel (2)	• <i>Dhobi</i> (washing and ironing clothes) (1)
• Home-based teacher (9)	• Carpenter (2)	• Engineer (1)
• Selling cooked foods on the road side (eggs, chips, fish, <i>githeri</i> , etc) (8)	• Driver (2)	• Grocery shop (1)
• Tailoring/tailor (8)	• Giving private tuition (2)	• Home-based nurse (1)
• Casual labour (7)	• Photographer/video (2)	• <i>Manamba</i> (tout) (1)
• Landlord/lady (7)	• Selling milk (2)	• Mason (1)
• Selling charcoal (5)	• Sells cereals (2)	• <i>Matatu</i> business (1)
• Kiosk business (4)	• Sewing table clothes (2)	• Photo-copier shop (1)
• Shop-keeping (4)	• Transporter (2)	• Plumber (1)
• Maize roaster/seller (3)	• Artist (1)	• Selling cartons (1)
• Market vendor (3)	• Audit firm (1)	• Selling tobacco (1)
	• Bar business (1)	• Sells kitchen wares (1)
	• Barber (1)	• Sign writer (1)
	• Building contractor (1)	• Singing (1)
	• Candy shop (1)	• Technician (1)

Source: 2001 Survey. * Besides the *main* occupation and as described by the respondents. The numbers in brackets provide the frequency of occurrence.

Table A2.3 Nakuru townspeople's rural non-farming income-generating activities*

• Rural land renting (17)	• Selling charcoal (1)	• Bar business (1)
• Landlord (3)	• Selling of trees for charcoal (1)	• Butchery (1)
• Running unspecified business activities (3)	• Selling bananas (1)	• Tailor (1)
• Posho-mill business (2)	• Selling clothes (1)	• Mason (1)
• Running a shop (2)	• Selling mangoes (1)	• Barber shop (1)
	• Cereals shop (1)	• Running a salon (1)
	• Herbalist (1)	

Source: 2001 Survey. * As described by the respondents. The numbers in brackets provide the frequency of occurrence.

Appendix 3: Tables with Chapter 5

Table A3.1 Characteristics of the rural plots

		N	%
Ownership of plot	Own land	256	52.1
	Family/relative's land	218	44.4
	Landlord	16	3.3
	Non-relative's land	1	0.2
	<i>Total</i>	<i>491</i>	<i>100</i>
How plot was acquired	Inheritance	273	55.6
	Private purchase	177	36.0
	Allocation	26	5.3
	Rented	15	3.1
	<i>Total</i>	<i>491</i>	<i>100</i>
Who uses the plot	Myself/spouse	195	39.7
	Other family	209	42.6
	Rented out	20	4.1
	Somebody (freely)	12	2.4
	Nobody there	55	11.2
	<i>Total</i>	<i>491</i>	<i>100</i>
How the plot is used	Crop cultivation only	167	34.0
	Livestock keeping only	10	2.0
	Crops and livestock keeping	233	47.5
	Idle	62	12.6
	Rented out	12	2.4
	Homestead only/other	7	1.4
	<i>Total</i>	<i>491</i>	<i>100</i>
If plot is a source of food	Food source	156	31.8
	Income source	38	7.7
	Both food and income source	183	37.3
	No food or income source	114	23.2
	<i>Total</i>	<i>491</i>	<i>100</i>

Source: 2001 Survey

Table A3.2 Involvement in rural crop cultivation by relation to household head (%)*

	Household head		Spouse**		Other rural relatives (N=127)
	Male (N=116)	Female (N=17)	Urban (N=95)	Rural (N=21)	
Supervisory	90.5	94.1 (16)	72.6	47.6 (10)	51.2
Land preparation	23.3	23.5 (04)	52.6	95.2 (20)	70.9
Planting	22.4	23.5 (04)	64.2	95.2 (20)	76.4
Weeding	16.4	23.5 (04)	53.7	95.2 (20)	74.8
Harvesting	29.3	23.5 (04)	66.3	95.2 (20)	76.4
Marketing	50.9	41.2 (07)	46.3	47.6 (10)	29.1
Full-time involved	3.4	5.9 (01)	13.7	90.5 (19)	50.4

Source: 2001 Survey. * Where N in the category is small, the number of households has been given in parenthesis. Total > 100% due to combined answers. ** A distinction has been made between spouses living in Nakuru municipality and those living in the rural areas.

Table A3.3 Crops cultivated on the rural plots

Crop cultivated	No of h'holds (N)	% h'holds cultivating (N=173)	Crop cultivated	No of h'holds (N)	% h'holds cultivating (N=173)
Maize	159	91.9	Pawpaw	6	3.5
Beans	120	69.4	Avocado	6	3.5
Irish potatoes	50	28.9	Napier grass	5	2.9
Kale (<i>sukuma wiki</i>)	37	21.3	Passion fruit	4	2.3
Cabbage	33	19.1	Green gram	4	2.3
Bananas	28	16.2	Lemon	3	1.7
Tea	25	14.5	Arrow root	3	1.7
Millet	23	13.3	Pumpkins	2	1.2
Green peas	22	12.7	Citrus fruit	2	1.2
Coffee	18	10.4	Cotton	2	1.2
Onions	17	9.8	Plums	2	1.2
Tomatoes	17	9.8	<i>Saget</i> (spider plant)	1	0.6
Sweet potatoes	17	9.8	Barley	1	0.6
Cassava	15	8.7	<i>Managu</i> (black night shade)	1	0.6
Groundnuts	13	7.5	Cucumber	1	0.6
Sugarcane	11	6.4	<i>Mbiringanya</i> (egg plant)	1	0.6
Cow peas	10	5.8	Loquats	1	0.6
Carrots	9	5.2	Pineapple	1	0.6
Pyrethrum	9	5.2	Garlic	1	0.6
Spinach	8	4.6	<i>Miraa</i> (khat)	1	0.6
Oranges	8	4.6	Rice	1	0.6
Wheat	8	4.6	Sunflower	1	0.6
Mango	7	4.0	Yams	1	0.6
Sorghum	7	4.0			

Source: 2001 Survey

Table A3.4 Crops cultivated by category

Crop category	No of h'holds	% h'holds cultivating
Cereals	160	92.5
Legumes and nuts	134	77.5
Starchy roots and tubers	74	42.8
Vegetables	60	34.7
Fruits	42	24.3
Fodder	5	2.9
Cash crop	59	34.1

Source: 2001 Survey (N=173; Total > 100% due to combined answers)

- 1) Cereals: Maize, sorghum & millet.
- 2) Legumes and nuts: Beans, cow peas, green peas, green grams & groundnuts.
- 3) Starchy roots and tubers: Irish potatoes, sweet potatoes, arrow roots, cassava & yams.
- 4) Vegetables: Cabbage, kale, spinach, *saget*, *managu*, tomatoes, onions, carrots, pumpkins, cucumber, *mbiringanya* & garlic.
- 5) Fruits: Pawpaw, banana, citrus, oranges, pineapple, avocado, mango, passion fruit, lemon, plums & loquats.
- 6) Fodder: Napier grass.
- 7) Cash crops: Wheat, barley, tea, coffee, rice, sugarcane, pyrethrum, cotton, khat & sunflower.

Table A3.5 Harvests by crop type and category

	(N)	Total (kg)	Average (kg)*	Value (KSh.)**
Maize	159	186,399	1,172	2,795,985
Millet	23	7,113	309	106,695
Sorghum	7	1,530	219	22,950
<i>Sub-total cereals</i>		<i>195,042</i>		<i>2,925,630</i>
Beans	120	29,014	242	714,550
Green peas	22	3,992	181	59,880
Groundnuts	13	2,325	179	69,750
Cow peas	10	1,480	148	22,200
Green gram	4	252	63	5,040
<i>Sub-total legumes and nuts</i>		<i>37,063</i>		<i>871,420</i>
Irish potatoes	50	70,890	1,418	354,450
Sweet potatoes	17	5,190	305	51,900
Cassava	15	10,660	711	85,280
Arrow root	3	1,810	603	18,100
Yams	1	360	360	3,600
<i>Sub-total starchy roots and tubers</i>		<i>88,910</i>		<i>513,330</i>

Table A3.5 Cont...

Table A3.5 Cont.

	(N)	Total (kg)	Average (kg)*	Value (KSh.)**
Kale	37	29,095	786	145,475
Cabbage	33	23,640	716	118,500
Onions	17	3,670	216	18,350
Tomatoes	17	16,670	981	166,700
Carrots	9	8,940	993	134,100
Spinach	8	5,250	656	26,250
Pumpkins	2	140	70	1,400
Saget (spider plant)	1	120	120	2,400
Managu (black night shade)	1	60	60	1,200
Cucumber	1	160	160	8,000
Mbiringanya (egg plant)	1	120	120	6,000
Garlic	1	80	80	4,000
<i>Sub-total vegetables</i>		<i>87,945</i>		<i>632,375</i>
Bananas	28	6,489	232	32,445
Oranges	8	1,360	170	13,600
Mango	7	8,260	1,180	82,600
Pawpaw	6	3,840	640	38,400
Avocado	6	6,000	1,000	30,000
Passion fruit	4	2,640	660	9,600
Lemon	3	670	223	6,700
Citrus fruit	2	360	180	3,600
Plums	2	20	10	600
Loquats	1	270	270	1,350
Pineapple	1	25	25	375
<i>Sub-total fruits</i>		<i>29,934</i>		<i>219,270</i>
Tea	25	20,160	806	391,200
Coffee	18	13,740	763	274,800
Sugarcane	11	30,300	2,755	151,500
Pyrethrum	9	2,327	259	232,700
Wheat	8	9,840	1,230	196,800
Cotton	2	380	190	9,500
Miraa (khat)	1	3,500	3,500	175,000
Rice	1	270	270	4,050
<i>Sub-total cash crops</i>		<i>80,517</i>		<i>1,435,550</i>
Total (all crops)		519,411	3,002	6,597,575

Source: 2001 Survey. * Only households cultivating that crop. ** The average prices of crops sold were used to determine the value of the crops.

Table A3.6 Total harvest (all crops) by selected household and plot characteristics

Household and plot characteristic	N (plots)	Total harvest (kg)	Mean harvest (kg)	Total value (KSh)	Mean value (KSh)	Mean plot size (acres)	Harvest per acre (kg)
<i>Overall average</i>	293	519,411	1,773	6,597,575	22,517	4.4	403
<i>Plot sizes (acres)</i>							
Up to 2 acres	143	130,563	913	1,834,395	12,828	1.1	830
2.1-4	65	109,702	1,688	1,296,280	19,943	3.2	528
4.1-8	51	144,268	2,829	1,790,470	35,107	5.8	488
8+	33	134,878	4,087	1,676,430	50,801	18.9	216
<i>Household size</i>							
1 member	30	62,576	2,086	613,590	20,453	6.3	331
2-4 members	125	204,536	1,636	2,694,120	21,553	3.9	419
5-7 members	107	198,223	1,852	2,702,195	25,254	4.5	412
8+ members	31	54,076	1,744	587,670	18,957	4.3	406
<i>If wife is at home</i>							
Mono-spatial	248	410,152	1,654	5,208,660	21,003	4.4	376
Multi-spatial	45	109,159	2,426	1,388,415	30,854	4.4	551
<i>Household head</i>							
Male-headed	259	464,766	1,794	5,913,300	22,831	4.6	390
Female-headed	34	54,645	1,607	684,275	20,126	3.2	502
<i>Age of hh head</i>							
Young	50	86,491	1,730	1,071,075	21,422	5.3	326
Middle	170	294,112	1,730	3,864,530	22,733	3.6	481
Old	73	138,808	1,901	1,661,970	22,767	5.6	339
<i>Plot ownership</i>							
Own land	186	373,568	2,008	4,809,810	25,859	4.0	502
Family land	89	130,678	1,468	1,585,850	17,816	5.9	249
Landlord	16	6,795	425	95,715	5,982	1.3	327
<i>Who uses plot</i>							
Head/spouse	174	392,220	2,254	5,031,245	28,915	4.1	550
Rural family	80	118,821	1,485	1,460,130	18,252	6.1	243
<i>Location of plot</i>							
Nakuru district	117	165,080	1,411	2,174,420	18,585	2.9	487
Inner ring	54	105,160	1,947	1,101,190	20,392	7.3	267
Outer ring	120	240,801	2,007	3,215,765	26,798	4.6	436

Source: 2001 Survey

Table A3.9 The number of animals kept in rural areas by type and by selected household characteristics

		Cattle		Sheep		Goats		Chicken	
		N	Mean	N	Mean	N	Mean	N	Mean
Sex of hh head	Male	471	5.7	258	7.6	701	17.3	830	17.3
	Female	6	2.0	6	2.0	15	3.8	34	17.0
If wife is at rural home	Mono-spatial	376	6.0	185	6.6	598	16.6	548	16.1
	Multi-spatial	101	4.4	79	8.8	118	14.8	316	19.8
Age of hh head	Young	53	2.4	60	6.0	69	5.8	243	14.3
	Middle	320	7.4	143	6.8	610	22.6	435	18.1
	Old	104	5.0	61	10.2	37	7.4	186	20.7

Source: 2001 Survey

Table A3.10 Milk and eggs consumed, sold and given away

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	All	Most	About half	Less than half	Small portion	None	Total	Calculated (%)*
Amount consumed**								
Milk	31	3	13	3	23	10	83	51.7
Eggs	24	4	10	1	10	2	51	65.3
Amount sold								
Milk	4	25	16	1	3	34	83	37.8
Eggs	0	8	10	1	3	29	51	22.7
Amount given away								
Milk	2	1	2	1	7	70	83	5.7
Eggs	2	2	0	0	8	39	51	8.4

Source: 2001 Survey. * The percentages consumed (last column) were calculated by translating the qualitative values of the amounts consumed (columns 2 to 7) into percentages as follows:

All: 100%

Most: 75%

About half: 50%

Less than half: 30%

Small portion: 10%

None: 0%

** The totals of amount consumed, sold and given away for each row may not add up to 100% because of the rough (qualitative) estimations used in the general survey.

Appendix 4: Tables with Chapter 6

Table A4.1 Reasons for practicing rural crop cultivation

	Mentioned as a reason (>100%)		Mentioned as main reason	
	N*	%**	N	%
Needed food	163	94.2	88	50.9
Needed income	104	60.1	70	40.5
Income diversification	60	34.7	15	8.7
Custom/hobby	23	13.3	0	0.0
Had no other job	2	1.2	0	0.0
Total			173	100

Source: 2001 Survey. * Number of households mentioning the reason. ** Percentage of the number of households practicing rural crop cultivation.

Table A4.2 Reasons for practicing rural livestock keeping

	Mentioned as a reason (>100%)		Mentioned as main reason	
	N*	%**	N	%
Needed food	93	83.8	52	46.8
Needed income	61	55.0	40	36.0
Income diversification	36	32.4	9	8.1
Custom/hobby	28	25.2	4	3.6
Social security	6	5.4	5	4.5
Ploughing purposes	1	0.9	1	0.9
Total			111	100

Source: 2001 Survey. * Number of households mentioning the reason. ** Percentage of the number of households practicing rural livestock keeping.

Table A4.3 Contribution of rural crop cultivation to the household's food security and income situation in 2000

	Contribution to food consumed		Contribution to household income	
	N	%	N	%
All of it	0	0	0	0
Most of it	17	9.8	8	4.6
About half	44	25.4	45	26.0
Less than half	54	31.2	53	30.6
Only a small portion	36	20.8	17	9.8
None at all	22	12.7	50	28.9
Total	173	100	173	100

Source: 2001 Survey (N=173 cultivators)

Table A4.4 Contribution of rural livestock keeping to the household's food security and income situation in 2000

	Contribution to food consumed		Contribution to household income	
	N	%	N	%
All of it	0	0	0	0
Most of it	0	0	2	1.8
About half	3	2.7	4	3.6
Less than half	13	11.7	17	15.3
Only a small portion	48	43.2	33	29.7
None at all	47	42.3	55	49.5
Total	111	100	111	100

Source: 2001 Survey (N=111 livestock keepers)

Table A4.5 Multi-spatial and mono-spatial livelihoods: Characteristics of household heads

		Multi-spatial livelihood (N=292)		Mono-spatial livelihood (N=52)	
		N	%	N	%
Sex	Female	50	17.1	15	28.8
	Male	242	82.9	37	71.2
	<i>Total</i>	292	100	52	100
Age (in years)	Less than 20	3	1.0	0	0.0
	20-29	72	24.7	8	15.7
	30-39	112	38.4	11	21.6
	40-49	56	19.2	22	43.1
	50-59	39	13.4	7	13.7
	60+	10	3.4	3	5.9
	<i>Total</i>	292	100	51	100
Marital status	Never married	48	16.4	5	9.6
	Married monogamously	206	70.5	34	65.4
	Married polygamously	11	3.8	0	0.0
	Divorced	2	0.7	0	0.0
	Widowed	16	5.5	6	11.5
	Separated	8	2.7	6	11.5
	Staying together	1	0.3	1	1.9
	<i>Total</i>	292	100	52	100
Education level	None	7	2.4	4	7.7
	Primary incomplete	24	8.2	8	15.4
	Primary complete	40	13.7	4	7.7
	Secondary incomplete	29	9.9	5	9.6
	Secondary complete	134	45.9	15	28.8
	Above secondary	57	19.5	16	30.8
	<i>Total</i>	291	100	52	100
Occupational status	Regular (formal) employment	129	44.2	20	38.5
	Temporary (formal) employment	12	4.1	4	7.7
	Self employment/informal sector	124	42.5	16	30.8
	Casual labour	26	8.9	8	15.4
	Unemployed	1	0.3	0	0.0
	Home maker/retired	0	0.0	4	7.7
	<i>Total</i>	292	100	52	100

Source: 2001 Survey

Table A4.6 Reuben & Rita's expenditure and income from crop cultivation in Rongai in 2001

Expenditure	KSh.	Income	KSh.
Hire of plot (KSh. 2,500/acre/year)	10,000	Sale of maize (KSh. 1,250 * 33 bags)	41,250
Hire of tractor for ploughing (KSh. 1,000/acre * 4 acres)	4,000	Sale of beans (KSh. 2,000 * 1.5 bags)	3,000
Purchase of hybrid maize ^a	800		
4 labourers for planting (KSh. 70/day/person * 2 days)	560		
6 labourers for weeding (KSh. 70/day/person * 4 days) ^b	1,680		
6 labourers for harvesting maize (KSh. 100/day/person * 3 days) ^c	1,800		
4 labourers for harvesting beans (KSh. 50/day/person * 2 days)	400		
Hire of tractor to transport maize	1,200		
Shelling of the maize	2,000		
Total ^d	22,440	Total	44,250

Source: In-depth interviews with Reuben & Rita. ^a The hybrid maize is mixed with local seedlings.

^b According to Reuben, weeding by a tractor is much more expensive. ^c Reuben explained that harvesting requires about 8 people per day per acre. ^d The figure excludes other costs such as travel from Nakuru to Rongai.

Table A4.7 Baba and Mama Shiko's rural crop cultivation in Nyandarua

Crop cultivated	Harvest (in bags)	Amounts consumed (in bags)		Amount sold (bags)	Price per bag (KSh.)
		In Nakuru	At rural home		
Maize	10	0.5	3.5	6	1,250
Beans	3	0.5	0.5	2	1,500
Irish potatoes*	12	0.5	1.5	10	800
<i>Sukuma wiki</i> *	13	Used small quantities now and then from the <i>shamba</i>		All	800
Cabbages*	6	Used small quantities now and then from the <i>shamba</i>		All	800
Green peas*	8	1 bag + small quantities now and then from the <i>shamba</i>		7	1,000
Groundnuts*	1	Used small quantities now and then from the <i>shamba</i>		All	2,200
Sweet potatoes*	1	Used small quantities now and then from the <i>shamba</i>		All	700

Source: In-depth interviews with Baba Shiko. * Amount harvested does not include the small quantities harvested now and then directly from the *shamba*.

Table A4.8 Baba and Mama Shiko's expenditure and income from farming in Nyandarua

Expenditure	KSh.	Income	KSh.
<i>(1) Crop cultivation</i>			
Purchase of improved seedlings	500	Sale of maize	7,500
Purchase of fertilizers	1,800	Sale of beans	3,000
Purchase of pesticides	1,200	Sale of Irish potatoes	8,000
Hire of tractor for ploughing (KSh. 1,200/acre * 5 acres)	6,000	Sale of <i>sukuma wiki</i>	10,400
Hire of 5 labourers for planting (KSh. 100/person/day * 3 days)	1,500	Sale of cabbages	4,800
Hire of 5 labourers for weeding (KSh. 100/person/day * 5 days)	2,500	Sale of green peas	7,000
Hire of 8 labourers for harvesting (KSh. 80/person/day * 4 days)	2,560	Sale of groundnuts	2,200
Transport of produce to local centre	1,000	Sale of sweet potatoes	700
		Profit from wheat**	10,000
Sub-total	17,060	Sub-total	53,600
<i>(2) Livestock keeping</i>			
Vaccinations/Spraying of cows	2,800	Sale of milk (approx. 15 litres/day * KSh. 20 * 365)	109,500
Feed supplements	3,000	Sale of eggs (approx. 10 eggs/day * KSh. 5 * 365)	18,250
Artificial Insemination (AI)	1,000	Sale of chicken	
Hire of labour (KSh. 800/month * 12 months)	9,600	(approx. 10 * KSh. 100)	1,000
Sub-total	16,400	Sub-total	128,750

Source: In-depth interviews with Baba Shiko. ** Profit from wheat after deducting all the expenses.

Appendix 5: Tables with Chapter 7

Table A5.1 Visits to the rural plot in the last quarter of 2001

		N	%
Purpose of visit*	Attend to rural farming activities	195	55.9
	Attend to cultural ceremonies	103	29.5
	“Holiday” from town life	87	24.9
	Just to “see/visit” them	248	71.1
	Attend to other issues	33	9.5
Number of visits	Less than 5	191	54.7
	5-9 visits	56	16.0
	10-14 visits	51	14.6
	15+ visits	51	14.6
	<i>Total</i>	<i>349</i>	<i>100</i>
Frequency of visit	Weekly to every two weeks	61	17.4
	Monthly	74	21.2
	Every two to three months	92	26.4
	Every four months	40	11.5
	Once or twice a year	82	23.5
	<i>Total</i>	<i>349</i>	<i>100</i>
Average number of days spent per visit	1-2 days	189	54.2
	3-7 days	124	35.5
	8-14 days	19	5.4
	15-21 days	4	1.1
	22+ days	13	3.7
	<i>Total</i>	<i>349</i>	<i>100</i>

Source: 2001 Survey (N=349 plots). * % > 100 due to combined answers.

Table A5.2 Changes in frequency of visiting rural plots by selected characteristics

		(N)*	Change in frequency of visit (%)		
			Decreased	Increased	No change
Distance of rural plot from Nakuru town	Nakuru District	90	53.3	18.9	27.8
	Inner-ring districts	61	50.8	18.0	31.1
	Outer-ring districts	176	56.3	18.2	26.5
If wife is living at the rural home	Mono-spatial household	288	55.9	18.1	26.0
	Multi-spatial household	39	43.6	20.5	35.9
If practiced rural farming in 2000	Non-farmer	133	60.2	16.5	23.3
	Rural farmer	194	50.5	19.6	29.9
Sex of household head	Male	267	52.1	19.1	28.8
	Female	60	65.0	15.0	20.0
Age of household head	Young	83	50.6	21.7	27.7
	Middle	189	57.1	18.5	24.3
	Old	54	50.0	13.0	37.0

Source: 2001 Survey (N=327 households)

Table A5.3 Financial flows between urban and rural areas

		N	%
Remitting money to rural areas (N=327 households)	Yes	239	73.1
	No	88	26.9
	<i>Total</i>	327	100
Frequency of sending money (N=239 households)	Weekly to every two weeks	12	5.0
	Monthly	84	35.1
	Every two to three months	71	29.7
	Every four months	28	11.7
	Once or twice a year	44	18.4
	<i>Total</i>	239	100
Reasons for sending money (N=239 households)*	General up-keep	216	90.4
	Payment of school fees	57	23.8
	Farming purposes	137	57.3
Change in frequency of sending money (N=239 households)	Decreased	131	54.8
	Increased	47	19.7
	No significant change	61	25.5
	<i>Total</i>	239	100

Source: 2001 Survey. * % > 100 due to combined answers

Table A5.4 Frequency of sending money to the rural area by selected characteristics

		(N)	Frequency of sending money (%)		
			Monthly or more	Two to four months	Once or twice a year
Distance of rural plot from Nakuru town	Nakuru District	59	39.0	42.4	18.6
	Inner-ring districts	47	48.9	34.0	17.0
	Outer-ring districts	133	37.6	43.6	18.8
If wife is living at rural home	Mono-spatial household	204	34.3	45.1	20.6
	Multi-spatial household	35	74.2	20.0	5.7
If practiced rural farming in 2000	Non-farmer	78	21.8	55.1	23.1
	Rural-farmer	161	49.0	34.8	16.1
Sex of household head	Male	203	42.3	39.4	18.2
	Female	36	27.8	52.8	19.4
Age of household head	Young	65	30.8	52.3	16.9
	Middle	134	43.3	35.8	20.9
	Old	39	46.2	43.6	10.3

Source: 2001 Survey (N=239 households)

Table A5.5 Changes in the urban-to-rural flow of money by selected characteristics

		(N)	Change in frequency of visit (%)		
			Decreased	Increased	No change
Distance of rural plot from Nakuru town	Nakuru District	59	54.2	23.7	22.0
	Inner-ring districts	47	48.9	19.1	31.9
	Outer-ring districts	133	57.1	18.0	24.8
If wife is living at the rural home	Mono-spatial household	204	56.4	20.6	23.0
	Multi-spatial household	35	45.7	14.3	40.0
If practiced rural farming in 2000	Non-farmer	78	64.1	19.2	16.7
	Rural farmer	161	50.3	19.9	29.8
Sex of household head	Male	203	52.2	20.7	27.1
	Female	36	69.4	13.9	16.7
Age of household head	Young	65	47.7	32.3	20.0
	Middle	134	61.2	16.4	22.4
	Old	39	43.6	10.3	46.2

Source: 2001 Survey (N=239 households)

Appendix 6: Tables with Chapter 8

Table A6.1 Poor and non-poor: Characteristics of household heads (%)

		Poor (N=84)	Non-poor (N=155)
Sex	Male	63.1	87.7
	Female	36.9	12.3
	<i>Total</i>	<i>100</i>	<i>100</i>
Age (in years)	Young	34.5	12.3
	Middle aged	46.4	69.5
	Old	19.0	18.2
	<i>Total</i>	<i>100</i>	<i>100</i>
Marital status	Never married	22.6	11.0
	Married	57.1	81.3
	Divorced, widowed & separated	20.2	7.7
	<i>Total</i>	<i>100</i>	<i>100</i>
Educational level	None/no school certificate	35.7	2.6
	Primary school certificate	32.1	12.3
	Secondary school certificate	31.0	44.5
	Post secondary school	1.2	40.6
	<i>Total</i>	<i>100</i>	<i>100</i>
Occupational status	Regular formal employment	23.8	56.1
	Informal sector/self-employment	45.2	37.4
	Temporary/casual employment	27.4	6.4
	Unemployed	3.6	0.0
	<i>Total</i>	<i>100</i>	<i>100</i>

Source: 2001 Survey

Table A6.2 Poor and non-poor: Housing conditions and amenities (%)

		Poor (N=84)	Non-poor (N=155)
Tenure status	Owner-occupier	6.0	21.9
	Rented	89.3	76.8
Number of habitable rooms	1 room only	71.4	26.5
	2-3 rooms	23.8	34.9
	Over 3 rooms	4.8	38.7
	<i>Total</i>	<i>100</i>	<i>100</i>
Type of roofing material	Corrugated iron sheet	90.5	77.4
	Tiles and asbestos	9.5	22.5
	<i>Total</i>	<i>100</i>	<i>100</i>
Type of wall	Stone/brick/cement/block	56.0	83.8
	Wood/iron sheet/mud/mud & cement	44.1	16.2
	<i>Total</i>	<i>100</i>	<i>100</i>
Type of floor	Cement	92.9	93.5
Main source of water	Piped water	88.1	94.8
Main human waste disposal	Main sewer/septic tank	51.2	76.8
	Pit latrine	48.8	23.2
	<i>Total</i>	<i>100</i>	<i>100</i>
Main type of cooking fuel	Electricity/gas	0.0	23.9
	Paraffin	38.1	28.4
	Firewood/charcoal	61.9	47.7
	<i>Total</i>	<i>100</i>	<i>100</i>
Main type of lighting	Electricity	56.0	80.6
	Paraffin	44.0	19.4
	<i>Total</i>	<i>100</i>	<i>100</i>

Source: 2001 Survey

Table A6.3 Poor and non-poor: Plot characteristics by household (%)*

		Poor (N=78)	Non-poor (N=149)
Number of plots	1 plot	82.1	46.3
	2-3 plots	17.9	49.7
	4-5 plots	0.0	4.0
	<i>Total</i>	<i>100</i>	<i>100</i>
Total plot size(s)	Up to 2 acres	50.6	25.9
	2.1 to 4 acres	18.2	17.7
	4.1 to 8 acres	15.6	23.1
	8+ acres	15.6	33.3
	<i>Total</i>	<i>100</i>	<i>100</i>

Source: 2001 Survey. * For those households having access to a rural plot.

Table A6.4 Poor and non-poor: Plot characteristics by plot (%)

		Poor (N=94)	Non-poor (N=258)
Ownership of plot	Own plot	37.2	61.6
	Family land	58.5	35.3
	Relative's land	0.0	0.8
	Landlord's	4.3	2.3
	<i>Total</i>	<i>100</i>	<i>100</i>
How plot was acquired	Inherited	66.0	47.7
	Purchased	23.4	45.3
	Allocated	6.4	4.7
	Rented	4.3	2.3
	<i>Total</i>	<i>100</i>	<i>100</i>
Who mainly uses the plot	Myself/spouse	27.7	45.3
	Rural-based family member	61.7	32.6
	Rented out	0.0	5.4
	Somebody (freely)	1.1	4.3
	Nobody there	9.6	12.4
	<i>Total</i>	<i>100</i>	<i>100</i>
How the plot is used	Crop cultivation only	34.0	36.4
	Livestock keeping only	4.3	1.6
	Both crops and livestock keeping	48.9	43.0
	Plot is idle	11.7	14.0
	Plot is rented out	0.0	3.1
	Plot used as homestead only	1.1	1.6
	Plot used for other purposes	0.0	0.4
	<i>Total</i>	<i>100</i>	<i>100</i>

Source: 2001 Survey

Table A6.5 Poor and non-poor: Use of material input for crop cultivation by type (%)

	Poor (N=31)	Non-poor (N=96)
Chemical fertilizer	71.0	87.5
Manure	54.8	58.3
Crop residue	41.9	57.3
Chemical insecticide	22.6	44.8
Chemical pesticide	12.9	37.5
Local seedlings	67.7	47.9
Improved seedlings	61.3	72.9
Irrigation	3.2	13.5

Source: 2001 Survey

Table A6.6 Poor and non-poor: Total harvest and areal productivity (all crops)

	Poor	Non-poor
Number of plots	42	181
Total harvest (kg)	51,247	374,058
Mean harvest (kg)	1,220	2,067
Mean plot size	3.1	5.1
Productivity (harvest per acre)	394	405

Source: 2001 Survey

Table A6.7 Poor and non-poor: Ownership and purpose of keeping livestock (%)

		Poor (N=31)*	Non-poor (N=135)*
Ownership of livestock	Own	83.9	78.5
	Family property	16.1	21.5
	<i>Total</i>	<i>100</i>	<i>100</i>
Reason for keeping animals	Largely for consumption	48.4	43.0
	For both consumption and selling	41.9	41.5
	Largely for selling	9.7	12.6
	Security/cultivation purposes	0.0	3.0
	<i>Total</i>	<i>100</i>	<i>100</i>

Source: 2001 Survey. * N = the number of livestock kept by household and by type.

Table A6.8 Poor and non-poor: Use of input for livestock keeping by type (%)

	Poor (N=15)	Non-poor (N=55)
Improved breeds (Artificial Insemination)	6.7	38.2
Veterinary drugs	66.7	85.5
Feed supplements	26.7	69.1
Crop residues	60.0	78.2
Ethno-veterinary medicine	6.7	9.7

Source: 2001 Survey

Table A6.9 Poor and non-poor: Average daily production of milk and eggs (%)

		Poor	Non-poor
Number of households producing milk		15	46
Average milk production/day	Up to 4 litres	80.0	45.7
	5-9 litres	13.3	23.9
	Over 10 litres	6.7	30.4
	<i>Total</i>	<i>100</i>	<i>100</i>
Number of households producing eggs		7	30
Average eggs production/day	Up to 7 eggs	85.7	36.7
	8-14 eggs	14.3	40.0
	Over 15 eggs	0.0	23.3
	<i>Total</i>	<i>100</i>	<i>100</i>

Source: 2001 Survey

Table A6.10 Poor and non-poor: Contribution of rural crop cultivation to the household's food security and income situation in 2000 (%)

	Contribution to food consumed		Contribution to household income	
	Poor (N=32)	Non-poor (N=96)	Poor (N=32)	Non-poor (N=96)
All of it	0.0	0.0	0.0	0.0
Most of it	12.5	8.3	3.1	4.2
About half	15.6	27.1	15.6	30.2
Less than half	40.6	29.2	25.0	33.3
Only a small portion	21.9	20.8	15.6	10.4
None at all	9.4	14.6	40.6	21.9
<i>Total</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>

Source: 2001 Survey

Table A6.11 Poor and non-poor: Contribution of rural livestock keeping to the household's food security and income situation in 2000 (%)

	Contribution to food consumed		Contribution to household income	
	Poor (N=19)	Non-poor (N=60)	Poor (N=19)	Non-poor (N=60)
All of it	0.0	0.0	0.0	0.0
Most of it	0.0	0.0	5.3	1.7
About half	0.0	1.7	5.3	3.3
Less than half	0.0	18.3	0.0	21.7
Only a small portion	36.8	43.3	26.3	31.7
None at all	63.2	36.7	63.2	41.7
<i>Total</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>

Source: 2001 Survey

Table A6.12 Poor and non-poor: Summary of general food security (%)

		Poor (N=84)	Non-poor (N=155)
Do you buy <i>all</i> your food requirements?	Yes	44.0	21.9
	No	56.0	78.1
	<i>Total</i>	<i>100</i>	<i>100</i>
Source of non- purchased food*	Rural production	57.4	47.9
	Both urban and rural production	14.9	28.1
	Urban production	25.5	24.0
	Food donations**	2.1	0.0
	<i>Total</i>	<i>100</i>	<i>100</i>
Did you usually have enough to eat in 2000?	Yes, always	45.2	73.5
	Most of the time	33.3	24.5
	Half of the time	10.7	0.0
	Now and then	10.7	1.9
	<i>Total</i>	<i>100</i>	<i>100</i>
Experienced food shortages***		21.4	1.9

Source: 2001 Survey. * For those who did *not* purchase all their food requirements (N=48 for the poor and 121 for the non-poor). ** From elsewhere, other than rural and/or urban production. *** Those who had enough to eat “half of the time” and “now and then”.

Table A6.13 Poor and non-poor: Summary of urban-rural linkages (%)

		Poor	Non-poor
<i>(1) By households (N=)</i>		<i>(78)</i>	<i>(149)</i>
If visited rural plot	Yes	65.4	91.3
Change in frequency of visiting rural plots	Decreased	65.4	52.3
	Increased	12.8	18.1
	No significant change	21.8	29.5
Did you send money home	Yes	60.3	77.2
Frequency of sending money	Every two months or less	44.7	66.1
Change in frequency of sending money	Decreased	66.0	53.0
	Increased	14.9	14.8
	No significant change	19.1	32.2
<i>(2) By plots (N=)</i>		<i>(55)</i>	<i>(139)</i>
Number of visits to the plots	More than 5 visits	16.4	57.9
Frequency of visiting rural plots	Monthly or more	14.6	49.2
Purpose of visiting plot	Farming related	45.5	61.3
	To see rural family members	78.2	63.9

Source: 2001 Survey

References

- AGWANDA, A.O., P. BOCQUIER, A. KHASAKHALA & S.O. OWUOR (forthcoming), *Biography of three generations of Nairobi residents: Thirty years of African social urban history*. Nairobi.
- ALI, M. (2002), Infrastructure and environmental health services. In: C. Rakodi & T. Lloyd-Jones, eds., *Urban livelihoods: A people-centred approach to reducing poverty*, pp. 180-187. London: Earthscan Publications Ltd.
- AMIS, P. (1990), Key themes in contemporary African urbanization. In: P. Amis & P. Lloyd, eds., *Housing Africa's urban poor*, pp 1-31. New York: Manchester University Press.
- AMIS, P. (1995), Making sense of urban poverty. *Environment & Urbanization* 7(1): 145-158.
- ANDRÆ, G. (1992), Urban workers as farmers: Agro-links of Nigerian textile workers in the crisis of the 1980s. In: J. Baker & P.O. Pedersen, eds., *The rural-urban interface in Africa: Expansion and adaptation*, pp. 200-222. Uppsala: Scandinavian Institute of African Studies.
- ARMAR-KLEMESU, M. & D. MAXWELL (2000), Accra: Urban agriculture as an asset strategy, supplementing income and diets. In: N. Bakker *et al.*, eds., *Growing cities, growing food. Urban agriculture on the policy agenda*, pp. 183-208. Feldafing (Germany): Deutsche Stiftung für internationale Entwicklung (DSE).
- BAH, M., S. CISSE, B. DIYAMETT, G. DIALLO, F. LERISE, D. OKALI, E. OKPARA, J. OLAWOYE & C. TACOLI (2003), Changing rural-urban linkages in Mali, Niger and Tanzania. *Environment & Urbanization* 15(1): 13-23.
- BAKER, J., ed., (1990), *Small town Africa: Studies in rural-urban interaction*. Uppsala: Scandinavian Institute of African Studies.
- BAKER, J. (1996), Rural-urban links and economic differentiation in northwest Tanzania. *African Rural and Urban Studies* 3(1): 25-48.
- BAKER, J., ed., (1997a), *Rural-urban dynamics in francophone Africa*. Uppsala: Scandinavian Institute of African Studies.
- BAKER, J. (1997b), Introduction. In: J. Baker, ed., *Rural-urban dynamics in francophone Africa*, pp. 11-25. Uppsala: Scandinavian Institute of African Studies.
- BAKER, J. & N. SCHULER (2004), *Analyzing urban poverty: A summary of methods and approaches*. Washington DC: World Bank Policy Research Working Paper # 3399.
- BAKER, J. & P.O. PEDERSEN, eds., (1992), *The rural-urban interface in Africa: Expansion and adaptation*. Uppsala: Scandinavian Institute of African Studies.
- BAKER, J. & T.A. AIDA, eds., (1995), *The migration experience in Africa*. Uppsala: Scandinavian Institute of African Studies.
- BANTEBYA-KYOMUHENDO, G. (1999), Decision-making in poor households: The case of Kampala, Uganda. In: S. Jones & N. Nelson, eds., *Urban poverty in Africa: From understanding to alleviation*, pp 113-125. London: Intermediate Technology Publications.
- BEALL, J. (2002), Living in the present, investing in the future – Household security among the urban poor. In: C. Rakodi & T. Lloyd-Jones, eds., *Urban livelihoods: A people-centred approach to reducing poverty*, pp. 71-87. London: Earthscan Publications Ltd.
- BEALL, J. & N. KANJI (1999), *Households, livelihoods and urban poverty*. Birmingham: International Development Department, School of Public Policy, University of Birmingham, Urban Governance, Partnership and Poverty Working Paper 3.
- BEALL, J., N. KANJI & C. TACOLI (1999), African urban livelihoods: straddling the rural-urban divide. In: S. Jones & N. Nelson, eds., *Urban poverty in Africa: From understanding to alleviation*, pp 160-168. London: Intermediate Technology Publications.
- BEAUCHEMIN, C. & P. BOCQUIER (2003), *Migration and urbanization in francophone West Africa: A review of the recent empirical evidence*. Paris: DIAL, Document de Travail, DT/2003/09.
- BIGSTEN, A. (1996), The circular migration of smallholders in Kenya. *Journal of African Economies* 5(1): 1-20.
- BIGSTEN, A. & S. KAYIZZI-MUGERWA (1992), Adaption and distress in the urban economy: A study of Kampala households. *World Development* 20(10): 1423-1441.
- BLAIKIE, P., T. CANNON, I. DAVIS & B. WISNER (1994), *At risk. Natural hazards, people's vulnerability and disasters*. London: Routledge.

- BRYCESON, D.F. (1996), De-agrarianisation and rural employment in sub-Saharan Africa: A sectoral perspective. *World Development* 24(1): 97-111.
- BRYCESON, D.F. (1999), *Sub-Saharan Africa betwixt and between: Rural livelihood practices and policies*. Leiden: African Studies Centre, ASC Working Paper 43.
- BRYCESON, D.F. (2001), Countryside and city: Balancing or blurring differences. In: J.D. Schmidt *et al.*, eds., *Urban development in a transnational context*. Aalborg: Aalborg University Development Research Series, Occasional Paper 2.
- BRYCESON, D.F. (2002a), The scramble in Africa: Reorienting rural livelihoods. *World Development* 30(5): 725-739.
- BRYCESON, D.F. (2002b), Multiplex livelihoods in rural Africa: Recasting the terms and conditions of gainful employment. *Journal of Modern African Studies* 40(1): 1-28.
- BRYCESON, D.F. & T. MBARA (2003), Petrol pumps and economic slumps: Rural-urban linkages in Zimbabwe's globalization process. *TESG Journal of Economic and Social Geography* 94(3): 335-349.
- BRYCESON, D.F., T.C. MBARA & D. MAUNDER (2003), Livelihoods, daily mobility and poverty in sub-Saharan Africa. *Transport Reviews* 23(2): 177-196.
- BRYCESON, D.F. & V. JAMAL (1997), *Farwell to farms: De-agrarianisation and employment in Africa*. Aldershot: Ashgate.
- BYERLEY, A. (1996), *Urban agriculture in Botswana: A preliminary investigation of extent, issues and potential (a minor field study)*. Uppsala: Swedish University of Agricultural Sciences.
- CARNEY, D. (1999), *Social capital. Key sheets for sustainable livelihoods. Policy planning and implementation* London: DfID/ODI.
- CFPI (2000), *Cities feeding people initiative: Phase 2 prospectus 2000-2004*. Ottawa: IDRC.
- CHAMBERS, R. (1995), *Poverty and livelihoods: Whose reality counts?* Brighton: University of Sussex, Institute for Development Studies.
- CHAMBERS, R. & G. CONWAY (1992), *Sustainable rural livelihoods: Practical concepts for the 21st century*. Brighton: University of Sussex, Institute for Development Studies, Discussion Paper 296.
- CHANT, S. (1998), Households, gender and rural-urban migration: Reflections on linkages and considerations for policy. *Environment & Urbanization* 10(1): 5-21.
- COHEN, B. (2004), Urban growth in developing countries: A review of current trends and a caution regarding existing forecasts. *World Development* 32(1): 23-51.
- CORBETT, J. (1988), Famine and household coping strategies. *World Development* 16(9): 1099-1112.
- CPRC (2004), *The chronic poverty report 2004-05*. Manchester: Chronic Poverty Research Centre.
- DAILY NATION ONLINE EDITION (www.nationmedia.com)
- DE BRUIJN, M. & H. VAN DIJK (2001), Moving people: Pathways in the Hayre-Seeno area, Central Mali. A paper presented at the Impact of Climate Change on Drylands (ICCD) Workshop, Wageningen, April 26-27, 2001.
- DE HAAN, L. (2000), Globalization, localization and sustainable livelihood. *Sociologia Ruralis* 40(3): 339-365.
- DE HAAN, L. & A. ZOOMERS (2003), Development geography at the crossroads of livelihood and globalization. *TESG Journal of Economic and Social Geography* 94(3): 350-362.
- DE HAAN, L. & P. QUARLES VAN UFFORD (2002), About trade and trust: The question of livelihood and social capital in rural-urban interactions. In: I.S.A. Baud & J. Post, eds, *Realigning actors in an urbanizing world: Governance and institutions from a development perspective*, pp. 243-264. Aldershot: Ashgate.
- DE MEULDER, B. (1998), Nakuru, a patchwork: From colonial outpost to East African town. In: B. de Meulder *et al.*, *Nakuru: An African town*, pp. 13-34. Leuven: City of Leuven/Catholic University.
- DEVAS, N. (2002), Urban livelihoods – Issues for urban governance and management. In: C. Rakodi & T. Lloyd-Jones, eds., *Urban livelihoods: A people-centred approach to reducing poverty*, pp. 205-221. London: Earthscan Publications Ltd.
- DfID (2002), *Sustainable livelihoods guidance sheets*. London: DfID (www.livelihoods.org).
- DIETZ, T. & C. MULDER (2005), Household fluidity and family networks: Methodological challenges. A paper presented at the "AMIDSt Lecture Series", University of Amsterdam, March 8, 2005.
- DIETZ, T. & F. ZAAL (2002), The provisioning of African cities, with Ouagadougou as a case study. In: I.S.A. Baud & J. Post, eds, *Realigning actors in an urbanizing world: Governance and institutions from a development perspective*, pp. 265-286. Aldershot: Ashgate.
- DIETZ, T., P. DRUIJVEN & D. FOEKEN (1992), Coping mechanisms and livelihood strategies – A summary of concepts. In: H. Reitsma, T. Dietz & L. de Haan, eds, *Coping with semiaridity: How the rural poor*

- survive in dry-season environments*, pp. 37-43. Amsterdam: University of Amsterdam, Netherlands Geographical Studies (146).
- DIYAMETT, B., M. DIYAMETT, J. JAMES & R. MABALA (2001), *Rural-urban interactions and livelihood strategies: The case of Himo and its region, Northern Tanzania*. London: International Institute for Environment and Development (IIED), Working Paper 1 on Rural-Urban Interactions and Livelihood Strategies.
- DRAKAKIS-SMITH, D. (1992), Strategies for meeting basic food needs in Harare. In: J. Baker & P.O. Pedersen, eds., *The rural-urban interface in Africa: Expansion and adaptation*, pp. 258-283. Uppsala: The Scandinavian Institute of African Studies.
- EAST AFRICAN STANDARD ONLINE EDITION (www.eastandard.net)
- EGZIABHER, A.G. (1994), Urban farming, cooperatives, and the urban poor in Addis Ababa. In: A.G. Egziabher *et al.*, *Cities feeding people: An examination of urban agriculture in East Africa*, pp. 85-104. Nairobi/Ottawa: International Development Research Centre.
- ELLIS, F. (1998), Household strategies and rural livelihood diversification. *Journal of Development Studies* 35(1): 1-38.
- ELLIS, F. (2000), *Rural livelihoods and diversity in developing countries*. Oxford: Oxford University Press.
- EVANS, H.M. & P. NGAU (1991), Rural-urban relations, household income diversification and agricultural productivity. *Development and Change* 22: 519-545.
- FALL, A.S. (1998), Migrants' long-distance relationships and social networks in Dakar. *Environment & Urbanization* 10(1): 135-145.
- FOEKEN, D. (1998), Coping with urban poverty in sub-Saharan Africa, with special emphasis on urban farming. A paper presented at the international symposium on "The Development Perspective of Africa Toward the 21st Century", Beijing, October 21-23, 1998.
- FOEKEN, D. (2006), *"To subsidize my income": Urban farming in an East-African town*. Leiden: Brill.
- FOEKEN, D. & A.M. MWANGI (1998), Does access to land have a positive impact on the food situation of the urban poor? A case study in Nairobi. *East African Social Science Research Review* 14(1): 19-32.
- FOEKEN, D., M. SOFER & M. MLOZI (2004), *Urban agriculture in Tanzania: Issues of sustainability*. Leiden: African Studies Centre, ASC Research Report 75/2004.
- FOEKEN, D. & S.O. OWUOR (2000a), *Urban farmers in an East African town: The case of Nakuru, Kenya*. Leiden/Nairobi: African Studies Centre/Centre for Urban Research, ASC Working Paper 45 (also on website www.cityfarmer.org/nakuru.html).
- FOEKEN, D. & S.O. OWUOR (2000b), Livestock in a middle-sized town: Nakuru. *Urban Agriculture Magazine* 1(2): 20-22.
- FOEKEN, D. & S.O. OWUOR (2001), Multi-spatial livelihoods in sub-Saharan Africa: Rural farming by urban households – The case of Nakuru, Town, Kenya. In: M. de Bruijn, R. van Dijk & D. Foeken, eds., *Mobile Africa: Changing patterns of movement in Africa and beyond*, pp. 125-140. Leiden: Brill.
- FOEKEN, D., S.O. OWUOR & P.W. KING'ORI (2006), The support. In: D. Foeken, *"To subsidize my income": Urban farming in an East-African town*. Leiden: Brill.
- FOEKEN, D., S.O. OWUOR & W. KLAVER (2002), *Crop cultivation in Nakuru town, Kenya: Practice and potential*. Leiden: African Studies Centre, ASC Working Paper 50/2002.
- FRANCIS, E. (2000), *Making a living: Changing livelihoods in rural Africa*. London: Routledge.
- FRAYNE, B. (2004), Migration and urban survival strategies in Windhoek, Namibia. *Geoforum* 35 (2004): 489-505.
- GBADEGESIN, A.S. (1991), Farming in the urban environment of a developing nation: A case study from Ibadan metropolis in Nigeria. *The Environmentalist* 11: 105-111.
- GEFU, J.O. (1992), Part-time farming as an urban survival strategy: A Nigerian case. In: J. Baker & P.O. Pedersen, eds., *The rural-urban interface in Africa: Expansion and adaptation*, pp. 295-302. Uppsala: The Scandinavian Institute of African Studies.
- GILBERT, A. (1994), Third World cities: Poverty, employment, gender roles and the environment during a time of restructuring. *Urban Studies* 31: 605-633.
- GRIEP, S. (2001), Masters over the field? Coping strategies of the Riimaybe in Debere. A paper presented at the "Impact of Climate Change on Drylands (ICCD)" Workshop, Wageningen, April 26-27, 2001.
- GUGLER, J. (1971), Life in a dual system: Eastern Nigerians in town, 1961. *Cahiers d'Etudes Africaines* 11(43): 400-421.
- GUGLER, J. (1991), Life in a dual system revisited: Urban-rural ties in Enugu, Nigeria, 1961-87. *World Development* 19(5): 399-409.

- HANSEN, K.T. (2004), Who rules the streets? The politics of vending space in Lusaka. In: K.T. Hansen & M. Vaa, eds., *Reconsidering informality: Perspectives from urban Africa*, pp. 62-80. Uppsala: The Nordic Africa Institute.
- HANSEN, K.T. & M. VAA, eds., (2004), *Reconsidering informality: Perspectives from urban Africa*. Uppsala: The Nordic Africa Institute.
- HARPHAM, T. & E. GRANT (2002), Health, health services and environmental health. In: C. Rakodi & T. Lloyd-Jones, eds., *Urban livelihoods: A people-centred approach to reducing poverty*, pp. 165-179. London: Earthscan Publications Ltd.
- HOSEGOOD, V. & I.M. TIMAEUS (ca 2002), Household composition and dynamics in KwaZulu Natal, South Africa: Mirroring social reality in longitudinal data collection. (www.pop.upenn/africahh/Hosegood_Timaeus.pdf).
- HOORWEG, J., D. FOEKEN & W. KLAVER (1995), *Seasons and nutrition at the Kenyan Coast*. Leiden: African Studies Centre, ASC Research Report 7/1995.
- ILO/JASPA (1992), *African employment report*. Addis Ababa: International Labour Office.
- IPAR (1996), *Proceedings of a seminar on "Adjustment policy, employment and labour institutions in Kenya"*. Nairobi: IPAR.
- JAMAL, V. & J. WEEKS (1988), The vanishing rural-urban gap in sub-Saharan Africa. *International Labour Review* 127(3): 271-292.
- JAMAL, V. & J. WEEKS (1993), *Africa misunderstood: Or whatever happened to the rural-urban gap?* London: Macmillan.
- JONES, S. (2002), Issues in designing new projects and programmes. In: C. Rakodi & T. Lloyd-Jones, eds., *Urban livelihoods: A people-centred approach to reducing poverty*, pp. 273-287. London: Earthscan Publications Ltd.
- JONES, S. & MATRIX DEVELOPMENT CONSULTANTS (1995), *Urban poverty in Kenya: Situation analysis and options for ODA assistance*. Nairobi: Matrix Development Consultants, A Report.
- KAAG, M., R. VAN BERKEL, J. BRONS, M. DE BRUIJN, H. VAN DIJK, L. DE HAAN, G. NOOTEBOOM & A. ZOOMERS (2004), Ways forward in livelihood research. In: D. Kalb, W. Pansters & H. Siebers, eds., *Globalization and development: Themes and concepts in current research*, pp. 49-74. Dordrecht: Kluwer Academic Publishers.
- KAMETE, A. Y. (1998), Interlocking livelihoods: Farm and small town in Zimbabwe. *Environment & Urbanization* 10(1): 23-34.
- KAMETE, A. Y. (2002), *Governing the poor in Harare, Zimbabwe: Shifting perceptions and changing responses*. Uppsala: The Nordic Africa Institute, Research Report 122.
- KANJI, N. (1995), Gender, poverty and structural adjustment in Harare, Zimbabwe. *Environment & Urbanization* 7(1): 37-55.
- KANJI, N. (1996), *Review of urbanization issues affecting children and women in the Eastern and Southern African region*. New York: UNICEF.
- KAZIMBAYA-SENKWE, B.M. (2004), Home based enterprises in a period of economic restructuring in Zambia. In: K.T. Hansen & M. Vaa, eds., *Reconsidering informality: Perspectives from urban Africa*, pp. 99-119. Uppsala: The Nordic Africa Institute.
- KENYA, REPUBLIC OF (1970), *Kenya population census 1969, Vol. 1*. Nairobi: Government Printer.
- KENYA, REPUBLIC OF (1997), *Nakuru District development plan 1997-2001*. Nairobi: Government Printer.
- KENYA, REPUBLIC OF (2000), *Economic survey 2000*. Nairobi: Government Printer.
- KENYA, REPUBLIC OF (2001), *Poverty reduction strategy paper for the period 2001-2004*. Nairobi: Ministry of Finance and Planning.
- KENYA, REPUBLIC OF (2002a), *Report of 1998/99 labour force survey*. Nairobi: Central Bureau of Statistics, Ministry of Finance and Planning.
- KENYA, REPUBLIC OF (2002b), *Kenya 1999 population and housing census analytical report on housing conditions and household amenities (Volume X)*. Nairobi: Central Bureau of Statistics, Ministry of Finance and Planning.
- KENYA, REPUBLIC OF (2003a), *Economic recovery strategy for wealth and employment creation, 2003-2007*. Nairobi: Ministry of Planning and National Development.
- KENYA, REPUBLIC OF (2003b), *Millennium development goals: Progress report for Kenya - 2003*. Nairobi: Ministry of Planning and National Development/United Nations Development Programme.
- KIMALU, P., N. NAFULA, D.K. MANDA, G. MWABU, M.S. KIMENYI (2002), *A situational analysis of poverty in Kenya*. Nairobi: KIPPRA, Working Paper 6/2002.

- KINYUA, J (2004), Towards achieving food security in Kenya. A summary note presented at the conference on “Assuring food and nutrition security in Africa by 2020: Prioritizing action, strengthening actors, and facilitating partnerships”, Kampala, April 1-3, 2004.
- KODA, B. (2002), Food security and regional food self sufficiency: The case of Tanzania. A paper presented at the symposium on “The Great Lake Region”, Kampala, April 8-10, 2002.
- KROKFORS, C. (1995), Poverty, environmental stress and culture as factors in African migrations. In J. Baker & T.A. Aida, eds., *The Migration experience in Africa*, pp. 54-64. Uppsala: Scandinavian Institute of African Studies.
- KRÜGER, F. (1998), Taking advantage of rural assets as a coping strategy for the urban poor: The case of rural-urban interrelations in Botswana. *Environment & Urbanization* 10(1): 119-134.
- LEE-SMITH, D., M. MANUNDU, D. LAMBA & P. K. GATHURU (1987), *Urban food production and the cooking fuel situation in urban Kenya: National report*. Nairobi: Mazingira Institute.
- LEE-SMITH, D. & P.A. MEMON (1994), Urban agriculture in Kenya. In: A.G. Egziabher *et al.*, *Cities feeding people: An examination of urban agriculture in East Africa*, pp. 67-84. Nairobi/Ottawa: International Development Research Centre.
- LERISE, F., A. KIBADU, E. MBUTOLWE & N. MUSHI (2001), *Rural-urban interactions and livelihood strategies: The case of Lindi and its region, Southern Tanzania*. London: International Institute for Environment and Development (IIED), Working Paper 2 on Rural-Urban Interactions and Livelihood Strategies.
- LOURENÇO-LINDELL, I. (1996), How do the urban stay alive? Food production in a squatter settlement of Bissau. *African Urban Quarterly* 11(2-5): 163-168.
- MACHARIA, K. (1994), *The informal economy in Nairobi, Kenya and Harare, Zimbabwe*. Nairobi: IFRA, IFRA Working Paper 20/1994.
- MAJALE, M. & M. ALBU (2001), *Livelihoods among roofing construction sub sector in Nakuru, Kenya: Tools for understanding sustainable livelihoods involving micro and small-scale enterprise*. Nakuru: Intermediate Technology Development Group (ITDG).
- MAKWALA, M.M. (1972), *Le réseau urbain du Bas-Zaïre. Contribution à l'étude des relations ville-campagne*. Brussels: Free University, Unpublished PhD Thesis (3 volumes).
- MAXWELL, D. (1995), Alternative food security strategy: A household analysis of urban agriculture in Kampala. *World Development* 23(10): 1669-1681.
- MAXWELL, D. (1999), The political economy of urban food security in sub-Saharan Africa. *World Development* 27(11): 1939-1959.
- MAXWELL, D., C. AHIADEKE, C. LEVIN, M. ARMA-KLEMESU, S. ZAKARIAH & G.M. LAMPTEY (1999), Alternative food-security indicators: revisiting the frequency and severity of “coping strategies”. *Food Policy* 24(11): 411-429.
- MBAYE, A. & P. MOUSTIER (2000), Market-oriented urban agriculture production in Dakar. In: N. Bakker *et al.*, eds., *Growing cities, growing food. Urban agriculture on the policy agenda*, pp. 235-256. Feldafing (Germany): Deutsche Stiftung für internationale Entwicklung (DSE).
- MBIBA, B. (2000), Urban agriculture in Harare: Between suspicion and repression. In: N. Bakker *et al.*, eds., *Growing cities, growing food. Urban agriculture on the policy agenda*, pp. 285-301. Feldafing (Germany): Deutsche Stiftung für internationale Entwicklung (DSE).
- MCN (1999), *Strategic Nakuru structure plan: Action plan for sustainable urban development of Nakuru town and its environs*. Nakuru: Municipal Council of Nakuru.
- MEIKLE, S. (2002), The urban context and poor people. In: C. Rakodi & T. Lloyd-Jones, eds., *Urban livelihoods: A people-centred approach to reducing poverty*, pp. 37-51. London: Earthscan Publications Ltd.
- MITLIN, D. (2003), Addressing urban poverty through strengthening assets. *Habitat International* 27(2003): 393-406.
- MLOZI, M.R.S. (1996), Urban agriculture in Dar es Salaam: Its contribution to solving the economic crisis and the damage to its environment. *Development Southern Africa*. 13(1): 47-65.
- MLOZI, M.R.S., I.J. LUPANGA & Z.S.K. MVENA (1992), Urban agriculture as a survival strategy in Tanzania. In: J. Baker & P.O. Pedersen, eds., *The rural-urban interface in Africa: Expansion and adaptation*, pp. 284-294. Uppsala: The Scandinavian Institute of African Studies.
- MOSER, C.O.N. (1998), The asset vulnerability framework: Reassessing urban poverty reduction strategies. *World Development* 26(1): 1-19.
- MOSER, C.O.N., A.J. HERBERT & R.E. MAKONNEN (1993), *Urban poverty in the context of structural adjustment: Recent evidence and policy responses*. Washington DC: World Bank, Urban Development Division, TWU Discussion Paper DP #4.

- MOUGEOT, L.J.A. (1994a), African city farming from a world perspective. In: A.G. Egziabher *et al.*, *Cities feeding people: An examination of urban agriculture in East Africa*, pp. 1-24. Nairobi/Ottawa: International Development Research Centre.
- MOUGEOT, L.J.A. (1994b), *Urban food production: Evolution, official support and significance*. Nairobi/Ottawa: International Development Research Centre, Cities Feeding People Series, Report 8.
- MOUGEOT, L.J.A. (1998), Farming inside and around cities. *Urban Age* 5(3): 18-21.
- MUGENDA, O.M. & A.G. MUGENDA (1999), *Research methods: Quantitative and qualitative approaches*. Nairobi: ACTS Press.
- MULINGE, M. & T.S. JAYNE (1994), Urban maize meal consumption patterns: Strategies for improving food access for vulnerable urban households in Kenya. A paper presented at the symposium on "Agricultural policies and food security in Eastern Africa", May 19-20, 1994.
- MURRAY, C. (2001), *Livelihoods research: Some conceptual and methodological issues*. Manchester: University of Manchester, Chronic Poverty Research Centre Background Paper 5.
- MUZVIDZIWA, V.N. (2001), Keeping a foot in the village: Masvingo urban women. *Journal of Social Development in Africa* 16(1): 85-99.
- MWANGI, A.M. (1995), *The role of urban agriculture for food security in low income areas in Nairobi*. Nairobi/Leiden: Ministry of Planning and National Development/African Studies Centre, Food and Nutrition Studies Programme, Report No. 54.
- MWANGI, A.M. & D. FOEKEN (1996), Urban agriculture, food security and nutrition in low income areas in Nairobi. *African Urban Quarterly* 11(2/3): 170-179.
- MWANGI, S.W. (2002), *Challenges of urban environmental governance: Participation and partnerships in Nakuru Municipality, Kenya*. Amsterdam: AGIDS.
- NELSON, N. (1999), Urban poverty in Africa: An historical perspective. In: S. Jones & N. Nelson, eds., *Urban poverty in Africa: From understanding to alleviation*, pp 1-8. London: Intermediate Technology Publications.
- NELSON, N. (2001), Gikuyu families in Nairobi at the end of the millennium: The impacts of changing livelihoods and residential patterns on parenting, sibling responsibility and the care of ageing parents. A paper presented at the workshop on "African urban economies", Leiden, African Studies Centre, November 9-11, 2001.
- NICOLAI, H. (1989), Le citadien et son village: Un aspect de la relation ville-campagne au Zaïre. In: Singaravelou, ed., *Pauvreté et développement dans les pays tropicaux*, pp. 499-507. Bordeaux: University of Bordeaux III.
- NIEHOF, A. (2004) The significance of diversification for rural livelihood systems. *Food Policy* 29(2004): 321-338.
- NUGENT, R. (2000), Urban and peri-urban agriculture, household food security and nutrition. A discussion paper for FAO-ETC/RUAF electronic conference "Urban and peri-urban Agriculture on the policy agenda", August 2 – September 30, 2000. (www.fao.org/urbanag/paper1-e.htm)
- NYORO, J.K. (2002), Kenya's competitiveness in domestic maize production: Implications for food security. A paper presented at the "African Studies Centre Seminar Series", Leiden, November 7, 2002.
- OBOSU-MENSAH, K. (1999), *Food production in urban areas. A study of urban agriculture in Accra, Ghana*. Aldershot: Ashgate.
- OBUDHO, R.A. (1999), Urbanization and sub-urbanization process over space and time. In: R.A. Obudho, ed., *Environment and development in Kenya*, pp 1-48. Nairobi: Kenya National Academy of Sciences.
- OBUDHO, R.A. & D. FOEKEN (1999), *Urban agriculture in Africa: A bibliographical survey*. Leiden/Nairobi: African Studies Centre/Centre for Urban Research, ASC Research Report 58.
- OBUDHO, R.A. & S.O. OWUOR (1991), Urbanization and regional planning of metropolitan Nairobi, Kenya. A paper presented at the international conference on "Big cities of Africa and Latin America: Urban facilities and cultural practices", Toulouse, November 27-29, 1994.
- OBUDHO, R.A. & S.O. OWUOR (1994), Urbanization and crime in Kenya. In: I.O. Albert, J. Adisa, T. Agbola & G. Herault, eds., *Urban management and violence in Africa (Vol. I)*, pp 41-51. Ibadan: IFRA.
- OBUDHO, R.A. & S.O. OWUOR (1997), Pre-colonial and early colonial urbanization in the East Coast of Africa: The African – Asian connection. In: M. Chatterji & Y. Karzhong, eds., *Regional science in developing countries*, pp 284-290. London: Macmillan Press Ltd.
- OBUDHO, R.A. & S.O. OWUOR (2001), Urbanization and environmental pollution in Kenya. In: A.B.C. Ochola-Ayayo *et al.*, eds., *Population, health and development in Africa: Anthropological perspectives*, pp 267-280. Nairobi: PSRI.

- O'CONNOR, A. (1991), *Poverty in Africa: A geographical approach*. London: Belhaven Press.
- ODHIAMBO, W. & D.K. MANDA (2003), Urban poverty and labour force participation in Kenya. A paper presented at the "World Bank Urban Research Symposium", Washington D.C., December 15-17, 2003.
- OECD (2001), *The DAC guidelines on poverty reduction*. Paris: OECD.
- OGBU, O. & G. IKIARA (1995), The crisis of urbanization in sub-Saharan Africa. *The Courier* 149: 52-56.
- OKALI, D., E. OKPARA & J. OLAWOYE (2001), *Rural-urban interactions and livelihood strategies: The case of Abba and its region, Southern Nigeria*. London: International Institute for Environment and Development (IIED), Working Paper 4 on Rural-Urban Interactions and Livelihood Strategies.
- OTIENO, A.T.A. (2001), *Harmonization of household and family variables in 1999 and 1989 Kenyan censuses*. A Report for the University of Minnesota/Population Studies and Research Institute IPUMUS International Project.
- OUCHO, J. (1996), *Urban migrants and rural development in Kenya*. Nairobi: Nairobi University Press.
- OWUOR, S.O. (1995), *The role of small and intermediate urban centres in regional and national development: A case study of Municipality of Bungoma, Kenya*. Nairobi: Department of Geography, University of Nairobi, M.A. Thesis.
- OWUOR, S.O. (2003), *Rural livelihood sources for urban households: A study of Nakuru town, Kenya*. Leiden: African Studies Centre, ASC Working Paper 51/2003.
- OWUOR, S.O. (2004), Urban households ruralizing their livelihoods: The changing nature of urban-rural linkages in an East African town. A paper presented at the "African Studies Centre Seminar Series", Leiden, December 16, 2004.
- OWUOR, S.O. (2005), Coping with urban poverty: A case study of rural farming by urban households in Nakuru, Kenya. *Hekima – Journal of Humanities and Social Sciences* 3 (1): 84-101.
- OWUOR, S.O. & D. FOEKEN (2006), Surviving in the neighbourhoods of Nakuru town, Kenya. In: In P. Konings & D. Foeken, eds., *Crisis and creativity: Exploring the wealth of the African neighbourhood*, pp. 22-45. Leiden: Brill.
- OWUOR, S.O. & I.A. NYANDEGA (2003), Security, urban dynamics and privatization of space in sub-Saharan African cities: Perspectives from Nairobi, Kenya. A paper presented at the workshop on "Security, urban dynamics and privatization of space in sub-Saharan African cities", Johannesburg, April 23-25, 2003.
- PAINTER, T.M. (1996), Space, time, and rural-urban linkages in Africa. *African Rural and Urban Studies* 3(1): 79-98.
- PAYNE, G. (2002), Tenure and shelter in urban livelihoods. In: C. Rakodi & T. Lloyd-Jones, eds., *Urban livelihoods: A people-centred approach to reducing poverty*, pp. 151-164. London: Earthscan Publications Ltd.
- PLATT, B.S. (1962), *Tables of representative values of foods commonly eaten in tropical countries*. London: Her Majesty's Stationary, Medical Research Council Special Report Series no. 302.
- POTTS, D. (1997), Urban lives: Adopting new strategies and adapting rural links. In: C. Rakodi, ed., *The Urban challenge in Africa: Growth and management of the large cities*, pp. 447-494. Tokyo/New York: United Nations University Press.
- POTTS, D. & C. MUTAMBIRWA (1990), Rural-urban linkages in contemporary Harare: Why migrants need their land. *Journal of Southern African Studies* 16(4): 677-698.
- READ, M. (1942), Migrant labour in Africa and its effects on tribal life. *International Labour Review* 45(6): 605-631.
- RAKODI, C. (1995a), Poverty lines or household strategies: A review of conceptual issues in the study of urban poverty. *Habitat International* 19(4): 407-426.
- RAKODI, C. (1995b), The household strategies of the urban poor: Coping with poverty and recession in Gweru, Zimbabwe. *Habitat International* 19(4): 447-471.
- RAKODI, C. (1997), Global forces, urban change, and urban management in Africa. In: C. Rakodi, ed., *The urban challenge in Africa: Growth and management of the large cities*, pp. 17-73. Tokyo/New York: United Nations University Press.
- RAKODI, C. (2002a), A livelihoods approach – conceptual issues and definitions. In: C. Rakodi & T. Lloyd-Jones, eds., *Urban livelihoods: A people-centred approach to reducing poverty*, pp. 3-22. London: Earthscan Publications Ltd.
- RAKODI, C. (2002b), Economic development, urbanization and poverty. In: C. Rakodi & T. Lloyd-Jones, eds., *Urban livelihoods: A people-centred approach to reducing poverty*, pp. 23-34. London: Earthscan Publications Ltd.

- RAKODI, C. & T. LLOYDS-JONES, eds., (2002), *Urban livelihoods: A people-centred approach to reducing poverty*. London: Earthscan Publications Ltd.
- ROBERTSON, C.C. (2002), The informal sector in Nairobi: A crime? A paper presented at a regional conference on "Crime in Eastern Africa: Past and present perspectives", Naivasha, July 8-11, 2002.
- ROGERSON, C.M. (1994), Urban agriculture in South Africa: Scope, issues and potential. *GeoJournal* 30: 21-28.
- ROGERSON, C.M. (1997), Globalization or informalization? African urban economies in the 1990s. In: C. Rakodi, ed., *The urban challenge in Africa: Growth and management of the large cities*, pp. 337-370. Tokyo/New York: United Nations University Press.
- RUTHERFORD, S., M. HARPER & J. GRIERSON (2002), Support for livelihood strategies. In: C. Rakodi & T. Lloyd-Jones, eds., *Urban livelihoods: A people-centred approach to reducing poverty*, pp. 112-132. London: Earthscan Publications Ltd.
- SANYAL, B. (1985), Urban agriculture: Who cultivates and why? A case study of Lusaka, Zambia. *Food and Nutrition Bulletin* 7(3): 15-24.
- SATTERTHWAITE, D. (2001), Reducing urban poverty: Constraints on the effectiveness of aid agencies and development banks and some suggestions for change. *Environment & Urbanization* 13(1): 137-157.
- SATTERTHWAITE, D. & C. TACOLI (2002), Seeking an understanding of poverty that recognizes rural-urban differences and rural-urban linkages. In: C. Rakodi & T. Lloyd-Jones, eds., *Urban livelihoods: A people-centred approach to reducing poverty*, pp. 52-70. London: Earthscan Publications Ltd.
- SHELDON, K. (1991), *Farming in the city: Urban women in agricultural work in Mozambique*. Los Angeles: University of California.
- SID (2004), *Pulling apart: Facts and figures on inequality in Kenya*. Nairobi: Society for International Development.
- SIMON, D. (1997), Urbanization, globalization and economic crisis in Africa. In: C. Rakodi, ed., *The urban challenge in Africa: Growth and management of the large cities*, pp. 74-108. Tokyo/New York: United Nations University Press.
- SMIT, W. (1998), The rural linkages of urban households in Durban, South Africa. *Environment & Urbanization* 10(1): 77-87.
- STREN, R. (1992), African urban research since the late 1980s: Responses to poverty and urban growth. *Urban Studies* 29: 533-555.
- STREN, R.E. & R.R. WHITE, eds., (1989), *African cities in crisis: Managing rapid urban growth*. Boulder, Colorado: Westview Press.
- TACOLI, C. (1997), The changing scale and nature of rural-urban interactions: Recent developments and new agendas. In: UNCHS (Habitat), *Regional development planning and management of urbanization: Experiences from developing countries*, pp. 150-161. Nairobi: UNCHS (Habitat).
- TACOLI, C. (1998), Rural-urban interactions: A guide to the literature. *Environment & Urbanization* 10(1): 147-166.
- TACOLI, C. (2002), *Changing rural-urban interactions in sub-Saharan Africa and their impact on livelihoods: A summary*. London: International Institute for Environment and Development (IIED), Working Paper 7 on Rural-Urban Interactions and Livelihood Strategies.
- TELLEGEN, N. (1993), *Rural employment in sub-Saharan Africa: A bibliography*. Leiden: African Studies Centre, ASC Working Paper 18.
- TELLEGEN, N. (1997), *Rural enterprises in Malawi: Necessity or opportunity?* Aldershot: Ashgate.
- TRIPP, A.M. (1996), Urban farming and changing rural-urban interactions in Tanzania. In: M.L. Swantz & A.M. Tripp, eds., *What went right in Tanzania: People's response to directed development*, pp. 98-116. Dar es Salaam: Dar es Salaam University Press.
- UNCHS (1996), *An urbanizing world: Global report on human settlements*. London/Nairobi: Oxford University Press/United Nations Centre for Human Settlements (Habitat).
- UNDP (2002), *Kenya human development report 2001: Addressing social & economic disparities*. Nairobi: United Nations Development Programme.
- UNITED NATIONS (1995), *World urbanization prospects: The 1994 revision - Estimates, and projections of urban and rural populations and of urban agglomerations*. New York: United Nations.
- UNITED NATIONS (2003), *World urbanization prospectus: The 2001 revision*. New York: United Nations.
- VAA, M., S.E. FINDLEY & A. DIALLO (1989), The gift economy: A study of women migrants' survival strategies in a low-income Bamako neighbourhood. *Labour, Capital and Society* 22(4): 234-260.
- VAN DER GEEST, K. (2004), *"We are managing!" Climate change and livelihood vulnerability in Northwest Ghana*. Leiden: African Studies Centre, ASC Research Report 74/2004.

- VAN DER GEEST, K. & T. DIETZ (2004), A literature survey about risk and vulnerability in Drylands, with a focus on the Sahel. In: A.J. Dietz, R. Ruben & A. Verhagen, eds., *The impact of climatic change on drylands, with a focus on West Africa*, pp. 117-146. Dordrecht: Kluwer Academic Publishers.
- VAN STEENBRUGGEN, J. (2001), Movements in a new world: Fulbe mobility and survival in Southern Mali. A paper presented at the "Impact of climate change on drylands (ICCD)" workshop, Wageningen, April 26-27, 2001.
- VAN VUUREN, A. (2003), *Women striving for self-reliance: The diversity of female-headed households in Tanzania and the livelihood strategies they employ*. Leiden: African Studies Centre, ASC Research Report 67/2003.
- VENNETIER, P. (1989), Evolution des espaces peri-urbains a Brazzaville (Congo) et Cotonou (Benin). In: P. Vennetier, ed., *La peri-urbanisation dans les pays tropicaux*. Bordeaux: Universitaire de Bordeaux, Centre d'Etudes de Geographie Tropicale.
- VERSLEIJEN, N. (2002), *Sukuma! A social analysis of urban agriculture: Case studies from Nakuru Town, Kenya*. Wageningen: Wageningen University and Research Centre, MSc Thesis.
- WARAH, R. (1999), Divided loyalties: The African identity crisis. *UNCHS (Habitat) Debate* 5(1): 20-21.
- WEKWETE, K.H. (1994), Urban poverty in southern and eastern Africa: An overview. A paper presented at the workshop on "Urban poverty and governance", Nairobi, March, 1994.
- WORLD BANK (1996), *Social assistance and poverty targeted programs*. Washington D.C.: World Bank.
- WORLD BANK (2000), *Attacking poverty: World development report 2000/2001*. Oxford: Oxford University Press.
- WORLD BANK (2001), *African poverty at the millennium: Causes, complexities and challenges*. Washington D.C.: World Bank.
- WRATTEN, W. (1995), Conceptualizing urban poverty. *Environment & Urbanization* 7(1): 11-36.

Summary

This book deals with multi-spatial livelihoods, with a focus on rural livelihood sources for urban households. It contributes to the knowledge on urban-rural linkages, their dynamics and their potential for improving urban food security, especially for poor households. Moreover, attention given to rural farming by urban households provides a new dimension to the study of urban-rural linkages, on the one hand, and urban food security, on the other. It can be deduced from the theoretical chapter that, in response to the negative effects of global recession and economic crisis during the last two decades, urban households are seeking to mobilize resources and opportunities and to combine them to raise or maintain their incomes, maintain a certain standard of living or to survive.

Although acknowledged in the last two decades, the extent to which urban households realize part of their livelihood from rural sources remains poorly understood. The aim then is to understand how far urban households depend on rural sources for their livelihoods and the extent to which urban-rural linkages have changed. The findings suggest that rural livelihood sources are important in the livelihood of urban households and that rural links have become vital safety valves and welfare options for urban people vulnerable to economic fluctuations.

The findings presented in this book are based on a study of Nakuru townspeople in Kenya that was carried out in three phases between 2001 and 2003. The first phase was a general survey of 344 households, using a standardized pre-coded questionnaire. The second phase consisted of in-depth interviews with 16 households purposely drawn from the initial sample. Of these 16 households, five were further selected for the third phase, rural visits. These were basically a continuation of the in-depth interviews, but at the respondent's rural home. The quantitative and qualitative methods of data collection used in the study provided a wealth of information on the problem under investigation. Furthermore, the unique strategy adopted during the in-depth interviews brings together the urban and the rural components of an urban household.

To cope with the adverse economic effects of declining incomes, rises in prices of consumer goods and food, the increased cost of living, reduced purchasing power and increased poverty, households in Nakuru town engage in a wide range of income-generating activities and use many different livelihood sources, not only in town but also in the rural areas. Like many urban dwellers in sub-Saharan Africa who are no longer able to support themselves and their families exclusively from a single source of income, seeking additional liveli-

hood sources is no longer an exception in Nakuru town. To achieve this, the poor and the non-poor alike rely on urban-based and rural-based resources or assets.

These livelihood sources have been broadly categorized in this study into farming and non-farming economic activities. And because of the focus of the study a further distinction was made between the location of the activity; that is, either urban or rural. In addition to these activities, many households exploited their social networks (e.g. merry-go-rounds) when faced with a lack of money or food in the house. Another livelihood strategy witnessed in Nakuru town is sending some of the urban household members to live at the rural home. However, the combination of these activities is complex and may not be universal to all households in space and time. Livelihoods are not only multiple but also multi-spatial (or multi-local) with both an urban and a rural component. From a livelihood perspective, one can distinguish between households with mono-spatial livelihoods and those with multi-spatial livelihoods. In fact, this is one way of overcoming the conventional definition of a household that does not consider households with more than one spatial economic base, and without necessarily implying a residential split (i.e. mono- or multi-local households).

Regardless of its livelihood profile, the strategy an individual or a household can adopt depends upon, among other factors, its access to human, natural, physical, financial and social resources. For example, rural farming by urban households, either by themselves or in cooperation with rural household members, rural-based family members or hired labour is only possible with access to a rural plot. In Nakuru town, almost all households had access to a rural plot, more often than not the ancestral land back at the rural home or a purchased or rented plot elsewhere. The rural plots varied in size, as did ownership, how the plot was acquired, whom mainly used the plot and it was used.

Even then, not all households with access to a rural plot benefited from rural farming activities. For some (15%), the rural plot was neither a source of food nor a source of income for the household. This implies that the remaining 85% of households in Nakuru town had a multi-spatial livelihood, with both an urban and a rural foothold, two-thirds of whom were actually engaged in rural farming. Rural farming benefits urban households with both income – through the sale of produce – and food for domestic consumption. In Nakuru town, the activity was an additional source of food for the households concerned and for many also a source of income. Moreover, some households stressed that they could not have survived without the crops they cultivated or the animals they kept in the rural area. The contribution of rural livestock keeping to the urban household's food security was not as high as that of rural crop cultivation because livestock are kept mainly for social-security purposes. Generally, rural livestock keeping by urban households was not as widespread as crop cultivation.

Although the difference may not be significant, those who engage in rural farming (multi-spatial livelihoods) and therefore have access to their own food and spend less of their income on purchasing food, are likely to be in a more favourable food situation compared to households without a foothold in the rural areas (mono-spatial livelihoods). For example, for a third of the cultivators, the activity constituted at least half of the food they consumed. For another half of them it added between less than half and a small percentage. Whereas many studies have focused on urban farming, rural-to-urban food transfers are important in understanding, at least in part, urban households' food security dynamics and the ability of poor urban households to survive.

Besides rural-to-urban food transfers, Nakuru townspeople continue to maintain links with the rural areas through frequent visits and the exchange of goods and money. In addition to the well-established conventional flows of goods and money, new forms of urban-rural linkages were observed in this study. The reverse flow of money, where urban households receive money from the rural areas, is also taking place. As previously mentioned, own food production (rural farming), is becoming more important to the urban household. Return migration, whereby some members of the urban household go to live at the rural home, is (re-)emerging but as a cost-cutting measure in town. Furthermore, there are indications that urban dwellers visit their rural homes less frequently now than before. Also declining in real value is the amount of money sent back home. In short, rural areas (or kin) are not only the recipients of goods and services originating from town but they also play an important role in the livelihood of urban households. The economic balance of urban-rural linkages appears to have shifted in favour of urban households.

The linkages that persist between urban and rural households are, therefore, central to an urban household's ability to survive, especially for poor urban households that are more vulnerable to economic stress and shocks than the non-poor. Whereas both the poor and non-poor depend on rural sources for their livelihoods, rural livelihood sources are more important for the survival of poor households. For them, multi-activity at household or individual level helps decrease vulnerability to economic shocks and stresses and stabilizes incomes which might otherwise vary widely on a seasonal basis.

In conclusion, the findings of this study raise a number of issues that are relevant to policy makers. As households become multi-active, there is a need for national governments to integrate such data into their national statistics. For example, the available national employment and income statistics rarely reflect the fact that individuals or households are more likely to engage in multiple income-generating activities rather than rely on only one, and that variations often occur over time. Policies will be more effective if they begin with an

understanding of strategies at household level. As such, the realities of multi-spatial livelihoods – including both urban and rural elements – have to be taken into consideration when formulating not only urban food security policies, but also in developing sustainable urban and rural development policies in general. Such policies should provide greater opportunities for individuals and households, whether in mono- or multi-spatial livelihoods, to increase their assets or resource base and reduce their vulnerability.

Samenvatting

Dit boek gaat over ‘multi-lokale bestaansverwerving’ (‘multi-spatial livelihood’), dat wil zeggen over huishoudens die op verschillende plekken een (deel van hun) bestaan verwerven. Daarbij ligt de nadruk op rurale bestaansbronnen voor stedelijke huishoudens. Het boek levert een bijdrage aan de kennis over stad-plattelandrelaties, de dynamiek daarvan, evenals het potentieel ervan voor een verbetering van de stedelijke voedselzekerheid, in het bijzonder voor de arme huishoudens. Bovendien geeft de aandacht voor rurale landbouw door stedelijke huishoudens een nieuwe dimensie aan de studie van stad-plattelandrelaties enerzijds en stedelijke voedselzekerheid anderzijds. Uit het theoretische hoofdstuk kan worden afgeleid dat, als reactie op de negatieve gevolgen van de economische recessie van de laatste paar decennia, stedelijke huishoudens meerdere inkomensbronnen trachten te mobiliseren en deze combineren teneinde een bepaald levenspeil te handhaven of te verbeteren of om zelfs maar te kunnen overleven.

Hoewel het belang van rurale bestaansbronnen voor urbane huishoudens steeds meer is erkend gedurende de afgelopen decennia, is het relatieve belang van die rurale bestaansbronnen nog zeer onduidelijk. Het doel van deze studie is daarom te begrijpen in hoeverre stedelijke huishoudens afhankelijk zijn van rurale bestaansbronnen en in welke mate stad-plattelandrelaties zijn veranderd. De resultaten suggereren dat rurale bestaansbronnen vitale veiligheidskleppen en welvaartsopties zijn geworden voor stadsbewoners, vooral voor diegenen die gevoelig zijn voor economische fluctuaties.

De resultaten die in dit boek gepresenteerd worden zijn gebaseerd op een studie onder inwoners van de stad Nakuru in Kenya. De studie heeft plaatsgevonden in drie fasen in de periode 2001-2003. De eerste fase betrof een algemene survey onder 344 huishoudens, waarbij gebruik werd gemaakt van een gestandaardiseerde en geprecodeerde vragenlijst. De tweede fase bestond uit diepte-interviews met zestien huishoudens die doelgericht waren geselecteerd uit de oorspronkelijke onderzoekspopulatie. Van deze zestien zijn er vervolgens vijf geselecteerd voor de derde fase, de rurale bezoeken. Dit waren in essentie vervol ginterviews, maar dan in het rurale ‘thuis’ van de respondent in de stad. De combinatie van kwantitatieve en kwalitatieve methoden van dataverzameling leverden een rijkdom aan informatie op met betrekking tot het onderzochte probleem. Bovendien bracht de unieke onderzoeksstrategie gedurende de diepte-interviews de urbane en rurale componenten van de stedelijke huishoudens samen.

Teneinde de ongunstige economische omstandigheden van dalende inkomens, stijgende prijzen van consumptiegoederen en voedsel, toegenomen kosten van levensonderhoud, gedaalde koopkracht en toegenomen armoede het hoofd te kunnen bieden, houden de huishoudens in Nakuru zich bezig met een breed scala aan inkomensgenererende activiteiten en ‘exploiteren’ vele verschillende bronnen van bestaan, niet alleen in de stad maar ook op het platteland. Zoals voor zovele stedelingen in Afrika bezuiden de Sahara die niet langer in staat zijn zichzelf en hun gezinnen te onderhouden met één bron van inkomsten geldt, is het zoeken van aanvullende bestaansbronnen geen uitzondering meer in Nakuru. Daartoe zijn zij – arm en niet-arm gelijk – afhankelijk van zowel stedelijke als rurale bestaansbronnen.

Die bestaansbronnen zijn in deze studie grofweg verdeeld in agrarische en niet-agrarische economische activiteiten. En vanwege het zwaartepunt van deze studie is voorts een onderscheid gemaakt op basis van de locatie van de activiteit, dat wil zeggen urbaan dan wel ruraal. Naast deze activiteiten ‘exploiteerden’ veel huishoudens ook hun sociale netwerken (zoals kredietrotatiegroepen, die veel voorkomen onder vrouwen), bijvoorbeeld ingeval van een gebrek aan geld of voedsel in huis. Een andere bestaansstrategie die in Nakuru werd aangetroffen was het sturen van een deel van het urbane huishouden naar het rurale ‘thuis’. De mix van al dit soort activiteiten is zeer complex en is niet hetzelfde voor alle huishoudens in ruimte en tijd. Bestaansverwerving is niet alleen ‘meervoudig’ maar ook ‘multi-lokaal’, met zowel een stedelijke als een plattelandscomponent. Vanuit het perspectief van bestaansverwerving kan onderscheid gemaakt worden tussen huishoudens met een ‘mono-lokale’ en huishoudens met een ‘multi-lokale’ bestaanverwerving. Dit impliceert tegelijkertijd een herbezinning op de conventionele definitie van het begrip ‘huishouden’ waarbij geen rekening wordt gehouden met meer dan één ruimtelijke economische basis, al dan niet een (tijdelijke) opsplitsing van het huishouden (respectievelijk mono- en multi-lokale *huishoudens*).

Ongeacht het specifieke bestaansverwervingsprofiel van een huishouden wordt de strategie van een individu of een huishouden bepaald door (onder meer) de toegang die men heeft tot menselijk, natuurlijk, fysiek, financieel en sociaal ‘kapitaal’. Bijvoorbeeld, rurale landbouw door urbane huishoudens – hetzij door henzelf of door rurale leden van het huishouden, rurale familieleden dan wel gehuurde arbeid – is uitsluitend mogelijk als men toegang heeft tot een stuk grond op het platteland. In Nakuru hadden bijna alle huishoudens toegang tot zulke grond. Meestal betrof dat de grond van de voorouders in het rurale ‘thuis’ of een gekocht dan wel gehuurd stuk land ergens anders. De rurale stukken grond varieerden qua grootte, eigendom, wijze van verkrijging en gebruik (hoe en door wie).

Ondanks dat profiteerden niet alle huishoudens met toegang tot een ruraal stuk grond van de agrarische activiteiten daar. Voor sommige huishoudens (15%) was de grond noch een bron van voedsel noch een bron van inkomen. Dat houdt in dat de overige 85% van de huishoudens in Nakuru een multi-lokale bestaansverwerving had, dat wil zeggen met een economische voet in zowel de stad als op het platteland. Tweederde daarvan hield zich feitelijk met rurale landbouw bezig. Urbane huishoudens profiteren van rurale landbouw middels een inkomen – door middel van de verkoop van producten – en middels voedsel voor eigen consumptie. Voor de huishoudens in Nakuru was de activiteit een aanvullende voedselbron en voor velen ook een inkomensbron. Sommige huishoudens benadrukten dat zij niet hadden kunnen overleven zonder de gewassen die zij verbouwden en/of de dieren die zij hielden op het platteland. De bijdrage van rurale veeteelt aan de voedselzekerheid van het stedelijke huishouden was echter geringer dan die van rurale akkerbouw, omdat vee voornamelijk werd gehouden uit het oogpunt van sociale zekerheid. In het algemeen was rurale veeteelt onder de huishoudens in Nakuru minder algemeen dan akkerbouw.

Hoewel de verschillen niet altijd statistisch significant zijn, waren de huishoudens met een multi-lokale bestaansverwerving – degenen dus met toegang tot (een deel van) hun eigen voedsel en daarmee geld uitsparend voor andere uitgaven – in een gunstiger voedselsituatie in vergelijking met de huishoudens zonder toegang tot rurale voedsel- en inkomensbronnen (mono-lokale bestaansverwerving). Eenderde van de akkerbouwende huishoudens bijvoorbeeld haalde ten minste de helft van hun voedselbehoefte van het rurale land; en voor nog eens de helft van de akkerbouwers was het een klein deel tot de helft van hun voedselbehoefte. Hoewel veel studies zijn gedaan naar het belang van *stedelijke* landbouw, voor het begrijpen van de voedselzekerheidssituatie van urbane huishoudens en het vermogen van arme huishoudens om te overleven zijn *rurale* landbouw en de daaruit voortvloeiende voedselstromen van het platteland naar de stad essentieel.

Behalve voedselstromen van het platteland naar de stad blijven de bewoners van Nakuru banden onderhouden met de rurale gebieden door middel van al dan niet frequente bezoeken en uitwisseling van goederen en geld. Naast de conventionele stromen van goederen en geld kwamen nieuwe vormen van stad-plattelandrelaties in deze studie naar voren. De omgekeerde geldstroom, waarbij stedelijke huishoudens geld ontvangen vanuit de rurale gebieden, vindt ook plaats. Zoals hierboven al gemeld is eigen voedselproductie (rurale landbouw) steeds belangrijker geworden voor het urbane huishouden. Retourmigratie, waarbij sommige leden van het urbane huishouden in het rurale ‘thuis’ gaan wonen, steekt steeds meer de kop op, maar als een kostenbesparende maatregel voor het stedelijke huishouden. Er zijn voorts aanwijzingen dat stedelingen hun

rurale thuisgebieden minder frequent bezoeken dan voorheen. Ook de reële waarde van de financiële stromen naar het rurale ‘thuis’ neemt af. Kortom, de rurale gebieden (of verwanten) zijn niet uitsluitend ontvangers van goederen en diensten vanuit de stad maar leveren ook een belangrijke bijdrage aan de bestaansverwerving van de stedelijke huishoudens. De economische balans van de stad-plattelandrelaties blijkt te zijn verschoven ten gunste van de urbane huishoudens.

De banden die bestaan tussen urbane en rurale huishoudens zijn daarom essentieel voor het vermogen van stedelijke huishoudens om te overleven, in het bijzonder voor de arme stedelingen die gevoeliger zijn voor economische stress en shocks dan de huishoudens die beter af zijn. Hoewel zowel de armen als de rijke(re)n afhankelijk zijn van rurale bestaansbronnen, zijn die van groter belang voor de overleving van arme urbane huishoudens. Voor hen dragen de meervoudige inkomensverwervende activiteiten bij aan het verminderen van hun kwetsbaarheid met betrekking tot economische stress en het stabiliseert hun inkomens die anders sterke seizoensmatige fluctuaties zouden (kunnen) vertonen.

Concluderend stelt de studie een aantal beleidspunten aan de orde. Omdat huishoudens er meervoudige bestaansbronnen op na houden is het van groot belang dat nationale overheden zulke gegevens integreren in hun nationale statistieken. De beschikbare statistieken met betrekking tot werkgelegenheid en inkomen bijvoorbeeld zijn zelden een weerspiegeling van het feit dat individuen en huishoudens er hoogstwaarschijnlijk meerdere inkomensgenererende activiteiten op na houden en niet afhankelijk zijn van één enkele inkomensbron; en dat dit in de tijd sterk kan variëren. Beleid zal effectiever zijn wanneer het de inkomensstrategieën op het niveau van het huishouden als uitgangspunt neemt. De realiteit van multi-lokale bestaansverwerving – met zowel urbane als rurale elementen – zal in ogenschouw genomen moeten worden bij de formulering van beleid met betrekking tot stedelijke voedselzekerheid, evenals bij het ontwikkelen van ‘sustainable’ urbane en rurale ontwikkeling in het algemeen. Een dergelijk beleid zou grotere kansen moeten bieden voor individuen en huishoudens – met een mono-lokale dan wel een multi-lokale bestaansverwerving – om hun bestaansbasis en welzijn te vergroten en hun kwetsbaarheid te verminderen.

Research Reports still available
published by the African Studies Centre

Copies can be ordered from: African Studies Centre
Attn. Karl Dorrepaal
Tel: (+31) (0)71 5273490
Fax: (+31) (0)71 5273344
E-mail: dorrepaal@fsw.leidenuniv.nl

For selling prices, see the ASC website [www.ascleiden.nl] under *Publications*

- 23 Paul Hesp, *Producer prices in Tropical Africa*. 88 pp., 1985
- 24 J.H. Schoenmakers, *Staatsvorming in Guiné-Bissau*. 104 pp., 1986
- 25 Kwame Arhin, *West African colonial civil servants in the nineteenth century*. 55 pp., 1985
- 27 Emile van Rouveroy van Nieuwaal, *Muslims in Mango*. 66 pp., 1986
- 28 Nel van Hekken, *Leven en werken in een Nyakyusa dorp*. 436 pp., 1986
- 29 W.A. Ndongko, *Economic management in Cameroon: Policies and performance*. 185 pp., 1987
- 30 Geert Diemer & E. van der Laan, *Irriguer pour subsister*. 190 pp., 1987
- 32 Kees Schilder, *State formation, religion and land tenure in Cameroon. A bibliographical survey*. 257 pp., 1988
- 33 Henk Tieleman (ed.), *Scenes of change: Visions on developments in Swaziland*. 231 pp., 1988
- 34 Ineke van Kessel, *Aspects of the Apartheid state. A bibliographical survey*. 251 pp., 1989/91
- 38 N. Jua, *Economic management in neo-colonial states: A case study of Cameroon*. 44 pp., 1990
- 39 D.W. Nabudere, *The IMF-World Bank's stabilisation and structural adjustment policies and the Uganda economy, 1981-1989*. 65 pp., 1990
- 40 Tjalling Dijkstra, *Marketing policies and economic interests in the cotton sector of Kenya*. 100 pp., 1990
- 41 Henk Tieleman & Tom Kuhlman, *Enduring crisis, refugee problems in Eastern Sudan*. 156 pp., 1990
- 42 A. Touwen, *Socio-economic development of women in Zambia*. 74 pp., 1990

- 43 Dick W.J. Foeken & Adel P. den Hartog (eds.), *Seasons, food supply and nutrition in Africa*. 110 pp., 1990
- 44 Kees Schilder, *Popular Islam in Tunisia*. 171 pp., 1991
- 47 H. Schoenmaker, *Staatsvorming, rurale ontwikkeling en boeren in Guiné-Bissau*. 323 pp., 1991
- 48 Cyprien Fisiy, *Power and privilege in the administration of law. Land law reforms and social differentiation in Cameroon*. 311 pp., 1992
- 49 Gerti Hesseling, *Pratiques foncières à l'ombre du droit. L'application du droit foncier urbain à Ziguinchor, Sénégal*. 214 pp., 1992
- 50 Adri van den Berg, *Women in Bamenda. Survival strategies and acces to land*. 102 pp., 1993
- 51 Rob Buijtenhuijs & Elly Rijnierse, *Democratization in Sub-Saharan Africa. An overview of literature*. 97 pp., 1993
- 52 Rob Buijtenhuijs & Elly Rijnierse, *Democratisation en Afrique au Sud du Sahara. Un aperçu de la littérature*. 95 pp., 1993
- 53 Henk Waaijenberg, *Land and labour in Myjikenda agriculture, Kenya, 1850-1985*. 51 pp., 1993
- 54 John Houtkamp & Laurens van der Laan, *Commodity auctions in Tropical Africa. A survey of the African tea, tobacco and coffee auctions*. 93 pp., 1993
- 55 Jan Abbink, *Eritreo-Ethiopian studies in society and history: 1960-1995. A supplementary bibliography*. 203 pp., 1996
- 56 Jacqueline de Vries, *Catholic mission, colonial government and indigenous response in Kom (Cameroon)*. 134 pp., 1998
- 57 Annette van Andel, *Changing security. Livelihood in the Mandara Mountains in North Cameroon*. 258 pp., 1998
- 58 R.A. Obudho & Dick Foeken, *Urban agriculture in Africa: A bibliographical survey*. 95 pp., 1999
- 59 Maud Radstake, *Secrecy and ambiguity. Home care for people living with HIV/AIDS in Ghana*. 139 pp., 2000
- 60 K. Hailu, *Rural development and agricultural policy in central western Zambia. The case of Kaoma-Nkeyema tobacco scheme*. 88 pp., 2000
- 61 Abdirizak A. Nunow, *Pastoralists and markets. Livestock commercialization and food security in north-eastern Kenya*. 196 pp., 2000
- 62 Daniel K. Arhinful, "We think of them." *How Ghanaian migrants in Amsterdam assist relatives at home*. 163 pp., 2001
- 63 Mark Breusers, *Pathways to negotiate climate variability. Land use and institutional change in the Kaya region, Burkina Faso*. 249 pp., 2001
- 64 Antje van Driel, *Sharing a valley. The changing relations between agriculturalists and pastoralists in the Niger Valley of Benin*. 229 pp., 2001

- 65 Klaas van Walraven & Céline Thiriot, *Democratization in sub-Saharan Africa: Transitions and turning points. An overview of the literature (1995-1996)*. 213 pp., 2002
- 66 Klaas van Walraven & Céline Thiriot, *Démocratisation en Afrique au sud du Sahara: Transitions et virage. Un bilan de la littérature (1995-1996)*. 223 pp., 2002
- 67 Anke van Vuuren, *Women striving for self-reliance. The diversity of female-headed households in Tanzania and the livelihood strategies they employ*. 297 pp., 2003
- 68 Houinsou Dedehouanou, *Resisting reforms. A resource-based perspective of collective action in the distribution of agricultural input and primary health services in the Couffo region, Benin*. 341 pp., 2003
- 69 Leon Bijlmakers, *Structural adjustment: Source of structural adversity. Socio-economic stress, health and child nutritional status in Zimbabwe*. 301 pp., 2003
- 70 Jan Hoorweg & Nyawira Muthiga (eds.), *Recent advances in coastal ecology. Studies from Kenya*. 412 pp., 2003
- 71 Daniel K. Arhinful, *The solidarity of self-interest. Social and cultural feasibility of rural health insurance in Ghana*, 222 pp., 2003
- 72 Riekje Pelgrim, *Witchcraft and policing. South Africa Police Service attitudes towards witchcraft and witchcraft-related crime in the Northern Province*, 154 pp., 2003
- 73 James Gichiah Njogu, *Community-based conservation in an entitlement perspective. Wildlife and forest conservation in Taita, Kenya*, 273 pp., 2004
- 74 Kees van der Geest, *"We're managing!" Climate change and livelihood vulnerability in Northwest Ghana*, 288 pp., 2004
- 75 Dick Foeken, Michael Sofer & Malongo Mlozi, *Urban agriculture in Tanzania: Issues of sustainability*, 195 pp., 2004
- 76 Ruth Noorduyn, *The assertion of rights to agro-pastoral land in North Cameroon: A cascade to violence?*, 408 pp., 2005
- 77 Arthur Molenaar, *Gacaca: Grassroots justice after genocide. The key to reconciliation in Rwanda?*, 170 pp., 2005
- 78 Mirjam de Bruijn, Han van Dijk, Mayke Kaag & Kiky van Til, eds., *Sahelian pathways. Climate and society in Central and South Mali*, 287 pp., 2005
- 79 Casper Erichsen, *"The angel of death has descended violently among them." Concentration camps and prisoners-of-war in Namibia, 1904-08*, 170 pp., 2005
- 80 Getnet Tadele, *Bleak prospects: Young men, sexuality and HIV/AIDS in an Ethiopian town*, 282 pp., 2006.