

# **An Empty Sufuria**

**The Effects of a Marine National Park on the  
Livelihood Strategies and Income  
Diversification of Fisherman Households at the  
Kenya Coast**



**Nicole Versleijen**



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by

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**August 2001**



## Acknowledgements

This thesis would not have been written without the assistance of several people. First I should mention Dr. Marcel Rutten who brought me into contact with Prof. Jan Hoorweg. Had he not done that I would probably never have ended up at the Kenya Coast. I thank Jan Hoorweg<sup>1</sup> gratefully for his support and supervision during my stay in Kenya as well as in the Netherlands. He helped me with my field work and corrected the drafts. I also want to thank him and his wife Mrs Alice Hoorweg-Kubo for their great hospitality in Malindi as well as in Leiden. I really appreciate all the hours I spent at their house. Thanks also to my supervisor of Wageningen University and Research Center, Dr. G.M. Verschoor, for reading and correcting the drafts. Moi University should be thanked for the assistance in my visa application.

The CERS staff and fellow students in the Malindi office: Mary Gona, Tom Munyao, Joseph Tunje, Masad Omar, Genevieve Atamba, Andrew Wamukota and Abdi Nunow were not only very helpful and supportive during my fieldwork and writing, but also made my stay in Kenya a very pleasant period!

Without the help of my translators, it would have been impossible to carry out this fieldwork. Therefore I want to mention Fred Mulewa, Salim Mohamed, Florence Umazi and Margaret Kai. Next to the translation we had a good time together whenever travelling to meet the informants.

My host families made sure that I had a great time living with them and they provided me with lots of information. Many thanks therefore go to the Fondo family in Takaungu and the Cheupe family in Uyombo.

Of course I would not have been able to carry out this research without the co-operation of the fishermen of Takaungu and Uyombo, their wives and relatives. I really appreciate the time they took to answer my questions and explain things to me.

In the Netherlands, my parents, my sister, several friends and roommates supported me with the writing of my thesis and sent me loads of e-mails and mail during my stay in Kenya. This has been a big support for me. They also read and commented on several drafts, helped me with the computer whenever needed and kept encouraging me. Thanks to all of you. Although they are too many to mention here, I would like to give special thanks to Henny Petter for her support, advice and great friendship. Her own experiences abroad and on writing a thesis have been very helpful to me and her friendship was encouraging any moment I needed it.

Last but not least I want to thank my mother for supporting me in whatever I wanted to do. Not forgetting the piles of letters she wrote to me during my stay in Kenya and the always encouraging words she had ready for me on any occasion. The knowledge to have a loving mother and a safe home somewhere in this world is the best support one can have. Without her love and support I probably would not even have reached university.

During my stay in Kenya one of my best friends passed away in a terrible road accident. Jaap, I miss you terribly but your friendly smile, great spirit and the joy in life

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<sup>1</sup> Moi university CERS, Afrika Studie Centrum Leiden

which you found during the last years cheers me up whenever I think I can not bear your loss.

To all that I have mentioned above and all that assisted me in one way or another during my studies I want to say: *Asante sana*. Despite all this support, the author takes full responsibility for any errors occurring in this document.

Nicole Versleijen  
August 2001

## Abstract

This study was carried out in the districts Kilifi and Malindi. It focusses on the activities of artisanal fishermen and their households: the livelihood strategies they have, their attitude towards conservation, their indigeneous environmental conservation practices and the effects of the Watamu Marine National Park on these. In this study, data were collected through semi structured questionnaires, participant observation, life and career histories, network analysis and genealogies in Uyombo, Takaungu and the Watamu Marine National Park. Discussions were also held with the fishermen, Kenya Wildlife Service employees and people employed at the Watamu Marine National Park. In order to analyse the findings, an actor oriented approach is used, combined with the theories of political ecology and legal pluralism. By using these theories attention is paid to the historical background, wider context, human agency, property rights and community based natural resource management.

The study revealed that fishermen are aware of the degradation of marine resources but are unable to do something about it because of their poor situation. Due to their declining standard of living people start to diversify. Two types of diversification can be found: fishermen who diversify by starting to cultivate on a *shamba* and farmers who diversify by starting to fish. Because of this, people of other ethnicities and religions, than those of the traditional fishermen started fishing. This ended indigeneous ways of conservation. Finally the study revealed that many fishermen are willing to stop fishing. However, the lack of employment possibilities will probably only drive more people to fishing, causing more severe degradation of marine resources. The thesis ends with some recommendations which might attribute to a decline of the degradation of marine resources and the deteriorating situation of fishermen at the Kenya Coast.



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# Chapter 1

## Introduction

### 1.1 National Parks, Reserves, Marine Protected and Unprotected Areas

#### 1.1.1 Introduction

Conservation of natural resources is a highly actual topic at present. The conflicts between National Parks and local population have often been addressed and attempts to incorporate involvement of local population in the National Parks and conservation have been made. Most of these conflicts are based in history. Neumann (1995) shows, with the example of the Serengeti National Park, the changing perceptions of the Europeans concerning the role of the local population in National Parks. Initially the vision of the pure African nature, as supposed to be inside the National parks, included the people who claimed customary rights of occupation and use. The local people were considered primitive and living harmonious together with nature and wildlife. However this view later shifted into a clear distinction between a landscape of production and a landscape of consumption. Outside the National Parks nature was transformed for development, inside the National Park nature was to stay in its supposedly pristine state. Control over resources was shifted from the local population to the state. People were, sometimes violently, removed from their land and resettled outside the Park areas. Local populations had to change their livelihood strategies in order to survive when a National park was gazetted in their living area. More and more people needed outside help in order to make ends meet. Whereas the eviction already led to conflicts, other conflicts like poaching and disturbance by animals from the National Park lead to conflicts as well.

An awareness that conservation efforts are more effectively achieved through the participation of the local population (instead of simply removing them from the area) is slowly emerging. An example of this newly emerged approach is *community based natural resource management* (CBRNM). Community based natural resource management arises from within the community, or at least at community level, rather than at international or national level (Western & Wright 1994). From this point of view, the local population can be an integral part of the conservation at a specific area. Brown and Wyckoff-Baird (in: Johnson 1997) describe "the possible participation by communities in protected area management as a continuum which can range from 'limited input in decision making and control, to extensive input in decision making and ultimately stewardship of the resources". Although the importance of community participation in the management of protected areas is given some allowance, the form and intensity differs in many situations.

In Kenya however, this rise in attention to National Parks and their management is unbalanced. So far the main focus has been on Terrestrial Parks rather than on Marine Parks. Unlike for example pastoralists such as the Maasai, who have been and still are well-researched, fishermen have been neglected. As a result pastoralists are recognised as stakeholders in conservation and receive financial benefits from

the tourist sector. Fishermen, on the contrary, are not recognised as such, and hence receive no remuneration from their involvement in the conservation of Marine Parks. This is so despite the fact that the problems they are facing have the same origins as the problems the pastoralists faced and are facing.

### *1.1.2 The conservation-development conflict*

Through time, a shift in the perceptions and views concerning conservation can be noticed. Originally, conservation was a practise that satisfied human needs. Moving to fresh resources enabled optimising resource use and new lands for human habitation were always available. Therefore, traditional conservation practices are probably more aimed at maximising and allocating harvest than at conserving nature. Traditional conservation is not a ready made prescription for the current situation. Nowadays, conservation is primarily concerned with flora and fauna instead of human needs. The regulation of the use of natural resources became a case of state policies and legislation and governments intervened in order to secure resources in the interest of the whole society. As a result of intervention and shifting the emphasis on biodiversity and bio-ethics tensions emerged. On one hand, there was the right of communities to control their own land and resources, while at the other hand, there was the right of the outsiders to deny the local communities the use of resources. The first is favoured by liberalisation movements, the last by animal rights movements (Western & Wright 1994). When the natural resources declined, preservation was pursued rather than conservation. Preservationist policies lead to a protracted struggle over land rights, which continues to this day. Those National Park policies are aimed at a nature that is rather 'produced' than 'preserved'. Instead of a man-made and inhabited landscape, which it used to be for centuries before the gazettment of the park, it now had to become a pristine empty wilderness (Cronon 1995, Neumann 1995). Cronon (1995) refers to this producing of landscape rather than preserving as "wilderness thinking". Wilderness thinking is a construct of modern society and it creates an untenable division between people and nature. Wilderness thinking tends to conceal different interests between groups vis-à-vis nature and the fact that wilderness is all around and not just in places which need to be protected. Wilderness thinking also obscures conflicts between people since it ignores the differences between people, the various needs of people and the different perceptions of nature by different groups of people. Although preservation and development create very different landscapes, they are both based on the same ideology: the assertion of western control over African society and nature (Neumann 1995).

The fact that most of the biological diversity of the earth is situated in the Third World countries was acknowledged when groups which linked social justice for ethnic minorities with environmental issues increasingly spoke up. A shift in focus was needed, from the top down, centre driven conservation (or preservation) to the people who bear the costs of conservation (Western & Wright 1994). Like mentioned before, community based natural resource management is an approach which fits into this view. Conservation is about to flourish when it is embedded in local communities and when it is a voluntary rather than a forced effort. Therefore it is important to know who the stakeholders are and what their interests are in order to make CBNRM to succeed. CBNRM projects have two aims; conservation of nature and improvement of social and economic welfare of the participating communities

(Western 1994). In most developing countries, the state claim the ownership of resources, like for example land or wildlife. Although they sometimes allow community based tenure<sup>1</sup> in some of these areas, they refuse to acknowledge their presence, making the users squatters on public land<sup>2</sup> (Lynch & Alcorn 1994). Lynch and Alcorn (1994) claim that: despite dramatic improvements in the rhetoric of community-based conservation of natural resources most national governments still do not recognise the tenural rights of forest and fishery dependent people or their contribution to conservation and sustainable development.

For the fishermen living near a Marine Park, it is a struggle to regain access and use of sea resources. Local economic activities such as collecting cowry shells, fishing, harvesting forest products from the mangroves and leisure pursuits associated with water have been restricted or curtailed. Furthermore, the emergence of hotels were not lead by ecological and socio-cultural considerations but by unsupervised hotel developers who wanted to locate their facilities at the beach front. This construction of tourist hotels has foreclosed the sea ethic of the local people and it has alienated them from tourism development (Sindiga, 1999).

## **1.2 Watamu Marine National Park and National Reserves**

Marine National Parks (MNP's) and Reserves are together referred to as Marine Protected Areas (MPA's). A Marine Park is an area in a marine environment where the marine resources are protected by not allowing fishing activities or any other form of extraction; these areas are also referred to as no-fishing zone or no-take zone. Adjacent to the Park are the Marine Reserves. These are the immediate recipients of fish spill-over from the park. In the Reserves fishing by artisanal fishermen is allowed, but restricted by the regulations stipulated in the Fisheries Act<sup>3</sup> (1991). A Marine Protected Area is an area, which is managed by the Kenya Wildlife Service (KWS), and therefore falls under KWS regulations. The supervision in the MPA's is high, the KWS patrols regularly. The aim of Marine Protected Areas is to conserve the marine and coastal bio-diversity and related ecosystems. The Marine Unprotected Areas are areas where fishing is carried out with less government intervention. Although the fishermen are supposed to follow the regulations, the supervision is low.

The Watamu Marine National Park, together with the Malindi Marine National Park, was established in 1968. Malindi Marine National Park and the Watamu Marine National Park are surrounded by the Malindi-Watamu Marine National Reserve Mida Creek is a part of the Watamu Marine National Reserve (see chapter 2). In the Marine National Park, fishing is totally prohibited while fishing in the Reserves is allowed. To reach the Reserves the fishermen are allowed to pass through the Park (see figure 2.5 ) with their vessels<sup>4</sup>. The management of these areas is in the hands of the KWS, whose task is to monitor the fishing activities in these areas. Apart from their ecological role, the Marine National Parks are used as tourist sites.

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<sup>1</sup> Community based tenure systems consist of a mixture of group and property rights (Lynch & Alcorn, 1994)

<sup>2</sup>Public land is land owned by the government (Lynch & Alcorn, 1994)

<sup>3</sup>A document, which gives legislative guidelines for the general conduct at sea when fishing, and the way in which fishery resources should be managed.

<sup>4</sup> They are only allowed to pass through one area of the Park: the entrance of the creek

Marine National Parks and Reserves hold advantages and disadvantages for the fishermen living near the Park and the Reserves. One of the advantages of Marine National Parks is the "spill-over effect". The fish density inside the Park will increase because of the conservation. The fishermen fishing around the Marine National Park benefit since the fish can swim in and out of the Marine National Park. So the existence of a Marine National Park is supposed to enlarge the fish density of the area surrounding the Marine National Park (often a Marine National Reserve). As McClanahan (1996) claims, Marine Parks are useful if they somehow increase the total fisheries production of the region, but they may otherwise concentrate fishermen into smaller areas, causing increased overexploitation in unprotected areas. On the other hand, Malleret-King (1999) concludes from her study at the South Coast of Kenya that fisherman households fishing near the Kisite Marine National park are more food secure than others.

Of course, the main disadvantage for fishermen is that their fishing ground decreased since a part of it is designed as a Marine National Park. Often Marine Parks are established on what the fishermen refer to as "the best fishing grounds" since these are often the breeding places of the fish. The areas unsuitable for fishing by the local fishermen are unlikely to be suitable for the establishment of a Marine Park, because they are often characterized by a low amount of marine resources and hard to reach. Another limitation put on the fishermen is the limitation in gear they are allowed to use in the Reserves specifically, and in the unprotected areas in general. Gear like spearguns and nets with a small mesh size are forbidden. The attitude of the fishermen towards the Kenya Wildlife Service is hostile, there have been several conflicts. I will discuss this further in chapter 5.

### **1.3 Fishing and Fishermen at the Kenya Coast**

Fish and Fisheries form an intrinsic part of the livelihood of many people in developing countries (Payne, 2000). Kenya has about 600 km of coastline where fishing is an important economic activity. About eight thousand artisanal fisher-folk are involved in inshore fishing out of which about 13% is based at the Kilifi/Malindi coast (Kenya Department of Fishery). A large number of people depend on fishing for their income. This is from catching the fish up to processing and trading the fish, or the fabrication of the materials used for fishing. Some fishermen have alternative ways of earning an income, others do not. It is hard to establish the exact number of people directly involved in the fishing process; this is mainly due to the seasonal character of the occupation, which makes some fishermen part-timers. Another reason is that many small-scale fishermen try to evade paying licenses, thus lowering the government figures for registered fishermen. Estimations by the FAO (1984) indicate a number of 12,000 fishermen operating at the Kenya Coast, while Ardill and Sanders (1991) give an estimation of 6,250 fishermen. A more recent study of UNEP shows a number of 5,000 fishermen, of which 4,000 are considered to be artisanal.

Demographic trends show an increasing pressure on marine resources, as more individuals at the Coast gain their livelihood from fishing (Payne, 2000). The growth of the coastal population has not only increased the demand for fish but also the number of fishermen. However, at present there are estimations that 44% of marine fish stocks are maximally exploited, while 16% are over-exploited. Major increases in

fish catch are therefore unlikely to be possible in the future (Payne, 2000). Artisanal fishermen can cause degradation of the marine resources in the area they use for their fishing practices. The degree of degradation differs, depending on for example the gear used and the number of fishermen in the area. The number of fishermen at the Kenya Coast is difficult to establish exactly. Apart from the part-time basis of some fishermen, the movement of fishermen from one landing site to another makes it hard to estimate the number of fishermen involved in artisanal fisheries. The type of gear used differs among fishermen.

Fishing at the Kenya Coast is characterised by two seasons, *kaskazi* season, which is characterised by the north-east monsoon, and *kusi* season which is characterised by a south-east monsoon. During *kaskazi*, which is from November until April<sup>5</sup>, the catch is higher (McClanahan, 1996) and the sea calmer than during *kusi*, which starts in March and ends in September. The reasons for the higher fish catch during *kaskazi* include 1) changing efforts of fishermen who may not fish as often or as extensively during *kusi* season, 2) fish migration to other, more productive areas during *kusi*, which causes the fish density on the fish grounds to decline, and 3) lowered fish movements during *kusi* season, which makes it more difficult to catch the fish. The long rains which fall in April, May and June affect the fishing activities as well. During *kusi* season, some fishermen turn to other income generating activities like farming, wage employment or self-employment.

Fishing gear can be divided into two different categories. Gear made by the fishermen themselves, and gear that is bought. Gear, which is made by the fishermen themselves, includes traps, fixed fences and spearguns. The fishing gear that is purchased still has to be prepared by the fishermen after buying and include hooks, lines and nets. Many fishermen can travel by foot to fishing grounds, but boats are necessary to go further off shore. The vessels used by small scale fishermen are dug out canoes, *dhow*s<sup>6</sup> and small non-motorised *mashuas*<sup>7</sup> of less than 10 m in length. Artisanal fishermen are restricted to certain fishing areas because of their gear, their vessels and the roughness of the sea. They only operate in inshore waters. Not all fishermen own the vessel and gear they are working with; they borrow fishing equipment from a *tajiri*<sup>8</sup>.

Destructive fishing methods are those methods that damage marine resources, like coral reef, or promote the catch of non-targeted fish and fish species. Not only the type of gear used but also the area where it is used, and the way it is used, determines whether a method is destructive or not. For example, the use of gill-nets (*mpweke*<sup>9</sup>) is only destructive when used in an area with coral reef. The use of explosives and traditional poisons are destructive in every setting, and therefore their use is forbidden. Also the use of a speargun is forbidden. The reason for this is not totally clear. The fishermen claim that the use of a speargun is not destructive since they select a specific fish they are going to catch and chase it. By doing so, they

<sup>5</sup> Although in reality this might differ a bit: the seasons can't be fixed to start in a certain month and to end in another.

<sup>6</sup> A general name for several sailing vessels.

<sup>7</sup> A sailing vessel.

<sup>8</sup> A *tajiri* is a person who leases various types of fishing gear and vessels to fishermen for a share in the daily catch. In times of financial problems the *tajiri* also provides loans. This system makes the fishermen dependent on the *tajiri*.

<sup>9</sup> The fisherman drives the fish to the net

claim the environment is not damaged. Notwithstanding this, the opposite view is that spearguns damage the marine resources, for example when the spear misses the target and hits the coral.

Due to the increasing population, unemployment and decline in fish catch, fishermen are forced to diversify their livelihoods. Paradoxically, non-fishermen are diversifying as well. They start to fish. This might weaken existing indigenous ways of conservation. I will discuss this further in chapter 6.

#### 1.4 The Research Area

This study was done at two landing sites in Kilifi District, Coast Province, Kenya: Uyombo (Bandarini) and Takaungu. Furthermore, extra information was gathered on the employment patterns at and associated with the Watamu Marine National Park. More information on the research area is given in chapter 2.

Fig 1.1. The Kenya Coast<sup>10</sup>



<sup>10</sup> [http://safaris.topcities.com/map\\_marine\\_parks.htm](http://safaris.topcities.com/map_marine_parks.htm)

## **1.5 The Research Question and Sub-Questions**

The establishment of Marine Parks in combination with the increasing number of fishermen put a severe pressure on the unprotected areas and as such on the livelihoods of fishermen. This study will discuss the effects of the Watamu Marine national Park on income diversification and livelihood strategies of the fishermen.

*What is the effect of a Marine Park on the livelihood strategies and income diversification of fishermen and their households at Kilifi District, Coast Province, Kenya?*

The sub-questions are:

1. What are the characteristics of fisherman households (in socio-economic, educational and material terms)?
2. What are the expenses and income pattern of fisherman households?
3. What are the livelihood strategies of the fishermen and their households?
4. What were the livelihood strategies of the fishermen and their households in the past?
5. Which role plays the Watamu Marine National Park in the daily life of the fishermen?

## **1.6 Unit of Analysis**

The unit of analysis of this study is the household. The household is defined as:

“The people who are living (whether in one house or in one compound) and eating together” (Wong 1984).

## **1.7 Objectives of the Research**

Most research on National Parks has concentrated on Terrestrial National Parks and not on Marine National Parks. Fishermen have been neglected and only a few alternative forms of livelihood have been made available to them. This study will contribute to the existing knowledge on this topic and can hopefully help to find alternative forms of livelihood for the fishermen. This research focusses on the household income diversification of fishermen. It compares the demographic and household characteristics and livelihood strategies of fishermen in a Marine Unprotected Area with those in a Marine Protected Area. For both areas, the present day livelihood strategies, demographic characteristics, household characteristics and income diversification are compared with those of the past. The study looks at the fishing activities and the fishermen's attitude towards conservation. Furthermore, the study looks at which differences between the two landing sites can be attributed to the Watamu Marine National Park. Lastly, the ways of conservation and access and employment at the Watamu Marine National Park are studied in relation to those two areas.

## **1.8 Specific Objectives**

The specific objectives are:

1. To examine the livelihood strategies of fisherman households and their income diversification.
2. To examine the role of the Watamu Marine National Park in the attitude of fishermen and their household towards conservation of marine resources in general and the Watamu Marine National Park in the specific.
3. To examine how the fishermen and their households react on changing circumstances.
4. To examine the impact of the Watamu Marine National Park and National Reserves on the fishermen.
5. To examine the employment generated by the Watamu Marine National Park.
6. To give some recommendations in order to improve the current situation of the fishermen and to involve them in the conservation of the resources they use, e.g. the marine resources.

## **1.9 Main Assumptions**

The research had the following underlying hypotheses:

1. Due to the Marine National Park, fishermen living near it are more quicker forced to diversify their income earlier than the fishermen in a Marine Unprotected Area.
2. Fishermen depend more and more on their networks in order to sustain their living.
3. Fishermen diversify by farming.
4. The attitude of fishermen towards conservation depends on their perception of the existing regulations and implementation in the MPA's as well as the MUA's.
5. Traditional marine environmental conservation methods are practised by the fishing communities.

## Chapter 2

### The Study Area

#### 2.1 Kenya and the Coast

##### 2.1.1 Republic of Kenya

Kenya gained independence in 1963 and turned from a British colony into a republic. Jomo Kenyatta became the first president and was succeeded by Daniel Arap Moi in 1978. In 1982 Kenya was declared a one party state when the KADU (Kenya African Democratic Union) voluntarily merged with the KANU (Kenya African National Union). Pressure from the IMF and the World Bank made an end to the one party state and Kenya became a multiparty democracy at the end of 1991. Nevertheless the elections of 1993 as well as 1997 resulted in a victory for President Moi and KANU<sup>11</sup>. After independence the Kenyan economy initially flourished because of coffee exports and high coffee prices. However, nowadays the economy of Kenya is in a downward spiral. Most of the national income is used for the payment of debts. The main branch of the economy is the tertiary sector, with tourism as its most important segment.

The central government of Kenya is seated in Nairobi and forms the top of Kenya's administrative system. The Provinces, headed by the Provincial Commissioners (PC), are situated directly under the central government. Provinces are divided into Districts, headed by District Commissioners (DC). The Districts are subdivided again in Divisions, which are headed by the District Officers (DO). Chiefs are heads of locations and sub locations are the lowest level of administration, headed by assistant-Chiefs.

Kenya has one of the highest population growth rates in Africa. With a growth of 3,28% per year it ranks in the top five of African countries (Hoorweg et al. 2000).

##### 2.1.2 Coast Province

###### 2.1.2.1 Characteristics

Coast Province covers the districts Kilifi, Malindi, Lamu, Tana River, Taita Taveta, Mombasa and Kwale. The Coast Province is characterised by valuable resources like coral reefs, wetlands and mangrove forests with a rich biodiversity (Hoorweg et al., 2000). The Kenya Coast differs from the rest of the country in development, resources, history and economy. For example, the Arab influence in the history of the coast, the higher poverty rate, and the fact that the coast did not have a high priority

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<sup>11</sup> [www.sas.upenn.edu/African\\_studies/NEH](http://www.sas.upenn.edu/African_studies/NEH)

Figure 2.1 Kenya and its Parks and Reserves



in development programs in Kenya. According to Foeken (2000) the coastal region is not favoured in terms of physical resources. Because of the lacking combination of fertile soils and sufficient rainfall, crop performance is generally poor. Marine resources are perhaps the most important resource of the Coast Province since it attracts many tourists and the fishing.

Figure 2.2 A part of the Kenya Coast<sup>12</sup>



#### 2.1.2.2 Beach Tourism

A few decades after the British period, the coast began to attract resident Europeans from up country. These tourists saw the coast as an ideal place for holiday with its beaches and warm climate. This tourism was mainly focused on Malindi with its beautiful seaside, sand beaches and opportunities for deep-sea fishing. It was only after 1962 that foreign visitors went to the coast on the first, all-inclusive package holidays (Sindiga 1999). Nowadays international tourism is highly seasonal. The high season for arrivals starts in September and lasts until March. This seasonality is reflected in employment as workers must be laid off in the low tourism season.

Tourism leads to encounters between hosts and guests which may be productive to both sides. Often, though, such contacts also have negative effects for the Kenyan hosts. Some of these negative effects are:

- Tourist lifestyle in their isolated tourist resorts tend to accentuate the dramatic differences between foreign affluence and local poverty
- High numbers of school drop outs, petty crime, drug pending, prostitution and family disputes (Sindiga 1999)

<sup>12</sup> [http://www.reisefuehrer-online.de/Kenya\\_CoralCoast\\_Nord.htm](http://www.reisefuehrer-online.de/Kenya_CoralCoast_Nord.htm)

Only a few Waswahili<sup>13</sup> are employed in the tourist industry partly because of their Islamic culture, low level of education and because they associate tourism with immorality (Sindiga 1999). Consequently large numbers of up-country people (like Kamba, Kikuyu and Luo) have migrated to the coast to participate in the tourism industry.

## **2.2 Kilifi District**

### *2.2.1 Topography and Climate*

Kilifi District has three major topographical zones: the Coastal Plain, the Foot Plateau and the Coastal Range. The Coastal Plain is a narrow belt along the coast with a maximum altitude of about 60 metres. The zone stretches from the Tanzanian border to north of Kilifi town with an extension of ten kilometres inland and widens until it reaches 30 kilometres inland of Malindi. Creeks, estuaries and swamps with mangrove forest are found in this zone. The mangrove forest provides good fish breeding grounds. Fertility of the soils is moderate to low. The Foot Plateau is the western extension of the Coastal Plain and has an altitude between 60 metres and 135 metres although it is characterised by a flat surface alternated with some hills. The fertility of this zone is also moderate to low. The Coastal Range lies at an altitude of 150 to 460 metres. (Foeken 2000). Kilifi District has a bimodal rainfall. There is only one raining season from April until June, followed by a period of intermediate rains lasting until November or even December. The really dry months are January and February. The crop cycle though, is uncertain because rainfall fluctuates highly. It is very uncertain when the rains will start, how much rain will fall, where it will fall and how the rain is distributed over the seasons (Foeken 2000).

### *2.2.2 Agriculture and forestry*

The general agricultural potential is limited in Kilifi District (Waaijbergen 2000). Agricultural development is hindered by factors such as the general infertility of the soils, unreliable and inadequate rainfall and poor marketing of agricultural products. This notwithstanding, agriculture is an important economic activity and absorbs most of the labour force. Agriculture is mainly at subsistence level with maize as staple crop. Other food crops are cassava, rice, sweet potatoes and sorghum. Cash crops include coconuts, cashew nuts, citrus, mangoes and pineapples. Also some large-scale farming can be found: Vipingo Sisal Estates, where sisal is grown on a large-scale in combination with cattle ranching and Kilifi plantation, which majors in dairy products.

Forests are of great importance since they serve multiple purposes notably the conservation and improvement of water supplies, the prevention of soil erosion and nature conservation, as well as the needs of the local people in terms of fuel wood, building poles and timber (Foeken 2000). The largest forest in Kilifi District is the Arabuke Sokoke Forest (420 km<sup>2</sup>). The mangrove forests along the coast have a vital function in the coastal ecosystem. The *kayas*, which are traditional sacred places of the Mijikenda, are also forested areas and are gazetted as protected area under

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<sup>13</sup> Coastal ethnic group, see paragraph 2.3

forest reserves. Forests are threatened because of poor exploitation and reforestation techniques.

### 2.2.3 Tourism

Kilifi District has good tourist attractions ranging from the beaches, the coral ecosystems, historical sites and monuments to the many restaurants and hotels with an international reputation. Most of the tourists are concentrated in Watamu (which lies at the border of the Malindi-Kilifi Districts) where the marine park, Arabuke Sokoke Forest (Kilifi District), the Gede historical sites (Malindi District) and nearby Tsavo National Park are the main attractions. Tourism is important for the local industry because it creates employment for local people as guides, curios sellers, employment in the hotels etc.. However, tourism also has certain negative effects. Besides the effects mentioned in paragraph 2.1.2.2 'social-cultural' pollution caused by the introduction of foreign and often conflicting cultural values. Tourists can also damage the natural resources for example by walking on the coral reefs. The dependence on tourism for employment and foreign exchange makes Kilifi District vulnerable for cases of declining tourism.

## 2.3 Population

Many ethnic groups can be found in Kilifi district. Here only, the main of them, Mijikenda, Waswahili and Bajuni, will be discussed, since those are the ethnic groups involved in fishing activities.

### 2.3.1 The Mijikenda

The Mijikenda consist of nine tribes, the Digo, Duruma, Rabai, Ribe, Kambe, Jibana, Chonyi, Giriama and Kauma. These nine tribes are closely related linguistically and culturally. They live on the southern half of the Kenya Coast and in its immediate hinterland. In the mid 20<sup>th</sup> century they chose the name Mijikenda for themselves, the Swahili equivalents of *miji chenda* or *makaya chenda*. This refers to the nine villages where the Mijikenda tribes were settled until the 19<sup>th</sup> century. These nine village were bearing the same names as the nine tribes. According to oral tradition, the ancestors of most Mijikenda tribes came from Shungwaya, an area thought to have been in north-eastern Kenya or southern Somalia. Around the 16<sup>th</sup> century they were driven southwards by warlike Galla pastoralists (Waaijenbergh 1993). After their arrival in the coastal hinterland they settled in *kayas*, fortified towns or villages on the hills that overlook the coastal plains. For protection against invaders the *kayas* were situated on the tops of hills. They were enclosed by stockades and gates and surrounded by dense forest where the Mijikenda with their bows and poisonous arrows had an advantage over their enemies who used spears. These *kayas* were closely-knit societies controlled by elders (Waaijenbergh 1993).

In the surrounding forests, woodlands and savannahs the Mijikenda people practised shifting cultivation; the main crops were sorghum, finger and pearl millet and cow peas. They kept small livestock and a few cattle. Hunting and wild vegetables and fruits supplemented the diet. During the 18<sup>th</sup> and 19<sup>th</sup> centuries the Mijikenda developed a lively trade in agricultural surpluses, cash crops like tobacco, forest

products like gum, copal and wild rubber, arrow poison, cattle and ivory. Due to their geographical position they acted as intermediaries between the Arabs and Swahili and the Galla and Taita of the interior. From the mid 19<sup>th</sup> century onwards they lost part of the trade due to direct contacts between these people. The completion of the Mombasa-Nairobi railway in 1901 put an end to the long distance caravan trade (Waaaijenberg 1993).

The expansion of the regional trade, increase in population and the decline of the threat from the Galla led to a gradual exodus of people from the *kaya*. New villages were established at sites favourable for trade and people became accustomed to living in the fields they cultivated. The Mijikenda spread out over the coastal uplands and into the coastal strip (Waaaijenberg 1993). Dispersal from the *kaya* marked the start of a period of declining institutions, undermining of the power of the elders and the loss of consensus (Willis 1996). New ways of acquiring wealth shifted the balance of power from old men to young men. Clans intermixed and people lived scattered in almost independent homesteads many hours or days walk from the *kaya* (Waaaijenberg 1993). From 1895 to 1912, colonialism meant little more for the Mijikenda than some half hearted attempts to collect taxes, appoint some headmen, and make some unsuccessful efforts to recruit labour. Then the government decided to bring the Mijikenda under closer administration. In 1914 attempts to recruit young men for the carrier corps and to evacuate the areas north of the Sabaki culminated in the Giriama (the tribe most involved) uprising. There were casualties on both sides and young Giriama were sent to the carrier corps, huts and crops were destroyed and large number of livestock were confiscated. Some years later all had returned to normal, the evacuated areas were resettled and the Mijikenda resumed farming (Waaaijenberg 1993). The Giriama are the most populous of the Mijikenda people inhabiting the hinterland of the Kenya Coast (Temu 1972).

### 2.3.2 *The Waswahili and the Bajuni*

Generally speaking, the Waswahili are the result of intermarriage between black African and Arab groups over a long period of time. They developed a common language, Kiswahili, based mainly upon Bantu but borrowing some words from Eastern languages and adopting the Arabic alphabet. All are Muslims. Other features include a distinctive architectural style and trade connections which stretch, through intermediaries, as far as China (Koffski 1977). However, Middleton (2000) states that the Waswahili claim of Arab descent is not totally correct. According to him, recent research has shown that the identity of the Waswahili is basically an African one. Much of their culture originated from Arabia and India but the claim of an Arab origin is made by the Waswahili themselves. This claim was economically and politically more advantageous but also a way to distinguish themselves from slaves. Nonetheless, some families did come from Arabia and these are known as Arabs, although they have long since been physically mingled. These include the clans known as Mazrui and Nabhany, and many Sharifu families.

The Waswahili occupied a middlemen position in African-Asian commerce. They played the role of commercial leaders and organisers of other people in the region. In the sense that the Waswahili hegemony was more or less accepted the Waswahili encompassed and defined a larger coastal identity. With the decline of the Indian Ocean trade the influence of the Waswahili diminished.

In some cases the Bajuni are considered to be a section of the Waswahili while in other cases it is considered to be an ethnic group *an sich*. Prins (1972) for example sees the Bajuni as: *"the northernmost section of the Swahili"*. According to him, the Bajuni consist of at least three ethnic elements, the Bajuni from Somali affinity, those of late Arab pedigree and those who lived in and around Shungwaya "right from the beginning". Later they migrated to the coast (especially around Lamu) and settled over there. Reinforced by a new Arab admixture, they are staying there up to today. Elliot (1925-26), though, sees the two as different ethnic groups but agree that they have similarities for example in their origin: *"As well as the Swahili, the Bajuni have their origins in the mixing of Arabs and African. The meaning of the word Bajuni is "the people of two colours"*.

Middleton (2000) states that *"Some Swahili do use 'ethnic' names such as the Bajuni of the northern Kenya and farther south the Hadimu and Tumbatu of Zanzibar Island"* and are therefore more a special group within the Waswahili than beside the Waswahili.

Bajuni see themselves and are seen by other fishermen as the 'traditional' fishermen of the Kenya Coast. As such, the Bajuni distinguish themselves from the Waswahili. In most fisher villages the Bajuni started the first permanent settlements. Notwithstanding, those landing sites were in most cases visited before by migratory fishermen who might have been from another tribe.

The Bajuni have their own language, Kibajuni, which has similarities with Kiswahili. A Kiswahili speaking person is able to understand Kibajuni and a Bajuni is able to understand Kiswahili. Though, the languages are not the same one might say that Kibajuni is a dialect of Kiswahili and that therefore they belong to the same ethnic group. Another point in favour of this is that the Waswahili and Bajuni can freely marry each other. The Bajuni themselves make a distinction between themselves and the Waswahili. Therefore and because of their importance in the artisanal fishing at the Kenya Coast, the Bajuni will here be considered as an ethnic group next to the Waswahili.

## **2.4 Uyombo and Takaungu**

Takaungu is situated between Kilifi and Mombasa, while Uyombo is situated between Malindi and Kilifi, near Watamu (see figure 1.1).

### **2.4.1 Takaungu, the History**

Takaungu was settled in the first third of the 19<sup>th</sup> century by members and clients of the Mazrui family. However it is likely the Bajuni had founded a temporary fishing village at Takaungu (as they are known to have done in many places all along the coast) before the Mazrui arrived. Certainly, other Bajuni later migrated in numbers to the growing settlement of Takaungu (Koffski 1977).

When the sultan of Zanzibar regained control of Mombasa from a Mazrui governor, the Mazrui rulers left Mombasa and settled north and south of Mombasa, respectively in Takaungu and Gasi. The residents of Takaungu were led by Rashid Bin Salim Bin Abdallah. Takaungu became a centre of anti-Omani sentiment and actions.

Takaungu was a suitable setting for a settlement since it had access to agricultural land and convenient facilities for the trading *dhow*s. The situation of Takaungu at the entrance of a creek made it possible to defend the new settlement and to protect the *dhow*s. The natural cover surrounding Takaungu was carefully retained as protection against intruders (Koffski 1977). During the second half of the nineteenth century the Mazrui extended the settled areas until plantations stretched almost until Malindi. The danger of outside attacks steadily lessened. Internal dissension and profitable agricultural exports made it highly desirable for the residents to spread out.

Central leadership in Takaungu was never strong. Each Mazrui family maintained a house and property in town but many developed a real power base outside in one of the outlying agricultural areas. There the slaves cultivated crops and provided armed reserves. Copal was a major merchandise for the Mazrui. The Mazrui went up to Mida creek to look for copal but they never settled permanently there (Koffski 1977).

In the late 19<sup>th</sup> century the British assumed governmental control over the coast and found Takaungu a centre of opposition. The Mazrui resisted against the British rulers, resulting in an armed rebellion by a number of Mazrui leaders. The Mazrui were defeated in 1896 and the settlement consolidated into the colonial system (Temu 1972; Koffski 1977). Nowadays, Takaungu consists of Waswahili, Bajuni and Mijikenda. With the Mijikenda also other religions moved into Takaungu. Christians, Muslims and traditional African beliefs can be found. Takaungu has grown and where once were *shambas*, nowadays there are houses and have the *shambas*<sup>14</sup> moved to the fringe of the contemporary town.

#### 2.4.2 *Uyombo, the History*

Uyombo can be divided into two parts: Bandarini situated at the shore and the part of Uyombo which lies more back in the hinterland. The hinterland is mostly an agricultural area and the fishing activities focus on Bandarini. Bandarini has a short history, the first settlement must have been only a 60 years ago when a Bajuni fisherman from Lamu decided to build a house at Bandarini and start living there with his household. Most of the land at and near Bandarini is or was owned by this family. After this more people started living at Bandarini. However, it never grew out to a big village. The people who came to live at Bandarini usually came from further away than Uyombo.

#### 2.4.3 *Takaungu versus Uyombo*

If one looks at the town of Takaungu and the village of Uyombo, the first thing anybody would notice is the fact that Takaungu is much bigger than Uyombo. Besides the difference in history, there are other difference, for example the residence of the fishermen, access to water and electricity and the type of houses. These and others will be discussed in this paragraph.

Takaungu is a small town. Most of the fishermen who are fishing at Takaungu live in or near Takaungu. Many houses nowadays are constructed of blocks with roofs made of iron sheets. Middleton (2000) uses the concept "stone-town" to describe this kind of settlement. According to Middleton, stone-towns are nowadays considered as

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<sup>14</sup> Farming plots

the main 'Swahili' places, composed of square built stone houses (coral blocks) and set up in street and alleys. Some people rent their house (or a few rooms in a house) from a landlord. Most people have access to running water in or near their house, a few houses also have electricity. Several shops can be found. They offer diverse products and vegetables are sold from peoples homes. There are also three *hotels*<sup>15</sup>. A primary school, secondary school and Islamic schools are also present. The office of the sub chief, the office of the rotary and a health dispensary are also situated there. The primary school building is used for church services during the weekend. Since most of the people in Takaungu are Muslim, several mosques can be found.

The *tajiri* of Takaungu is somebody from a family long established in Takaungu. Fish traders come to buy the smaller fish to fry and sell them. Takaungu lies at a creek and stretches further alongside the sea board as well as inland. Only a few fishermen actually land their fish at the creek. Most fishermen of Takaungu land their fish further along at the beach (Kitangani) or go fishing at Vuma, which is known among the fishermen for high catches. Takaungu is surrounded by farming plots and can be divided into two parts, "Takaungu town" and "outside town". In the outside town area people mostly live at their farming plots or at least near them, while the people who are living in "Takaungu town" have to walk or ride a bike to reach their farming plots. While Muslims are mostly living in "Takaungu Town", a larger number of the Christians lives "outside town" and are spread over a larger area. Their houses are more often constructed of mud and *makuti*<sup>16</sup> than the houses in Takaungu town.

A rough sketch of Takaungu is shown at figure 2.3.

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<sup>15</sup>places where you can eat which sell tea, *mahamri* (triangle donut), *chapati* (kind of pancake made of flour, water and salt), *maharagwe* (beans), *ugali* (made of maize flour) and other dishes, depending on the size of the hotel

<sup>16</sup> Palm leaf

Figure 2.3 Takaungu, giving the locations of the households interviewed and the main buildings.



Legend to figure 2.3

- A. House of host family
- B. House/homestead of interviewed households
- C. Road to interviewed households "outside town"
- D. Primary school
- E. House of the *Tajiri* of Takaungu
- F. Road to Timboni (block cutting)
- G. Road to Vuma
- H. Hotel
- I. Road to Kitangani
- J. Road to private houses
- K. Rladha (Shariff's Cemetery)
- L. Fish Market (out of order)
- M. Mosque
- N. Road to Kibaoni (Mombasa-Malindi Road)
- O. Bus shelter
- P. Sub chief office
- Q. Rotary office
- R. Rotary & apostolic church sign
- S. Shop<sup>17</sup>
- T. Health office & dispensary
- U. Secondary school
- V. Road to Kilifi Plantations/ Malindi-Mombasa road
- W. Road to the entrance of the creek
- X. Mangroves

Plate 2.1 Takaungu creek



<sup>17</sup>Not all the shops are marked on the map, only the bigger shops are marked.

Uyombo has about five permanent houses. Most fishermen come from elsewhere, places like Roka, Matsangoni, Malindi etceteras. They live in Uyombo for a few days or weeks in small mud houses with *makuti* thatched roofs, and go back to their homes for short periods. These fishermen will be referred to as semi-permanent. Almost all the houses are constructed of mud, all the roofs are thatched with *makuti*. Middleton (2000) refers to this as the country town. The country-town consist of square built houses made of mud and *makuti* (impermanent materials). In Uyombo the houses are owned by the people who live in it, although in the case of the semi-permanent fishermen, the land on which the house stands usually does not belong to them. Nobody has access to electricity and water has to be fetched from a well near the shop (salt water) or from a well further away (fresh water). There is one small kiosk. Vegetables and other amenities have to be bought at Matsangoni (at the Mombasa-Malindi road) or from traders with bicycles who sell clothes, *khanga's*<sup>18</sup>, mangoes etc. Also one small *hotel* can be found. Uyombo has one primary school, although this school is not often visited by children from fishermen. This school building is sometimes used for church services. Most of the fishermen at Uyombo are Mijikenda and non-Muslim. This notwithstanding, one mosque can be found.

The *tajiri* of Uyombo is a Pemba<sup>19</sup> who married a local woman from the village. The catch can also be sold to the fish traders who come to buy the fish. Uyombo lies at the entrance area of Mida creek. It is situated near the Watamu Marine National Park. In order to go to their fishing grounds at sea and back, the fishermen from Uyombo are allowed to pass through one part of the Marine Park. All the fishermen from Uyombo land their fish at Bandarini. Bandarini itself consists of a few houses. In the hinterland of Uyombo people live on their *shamba* and are spread over a bigger area.

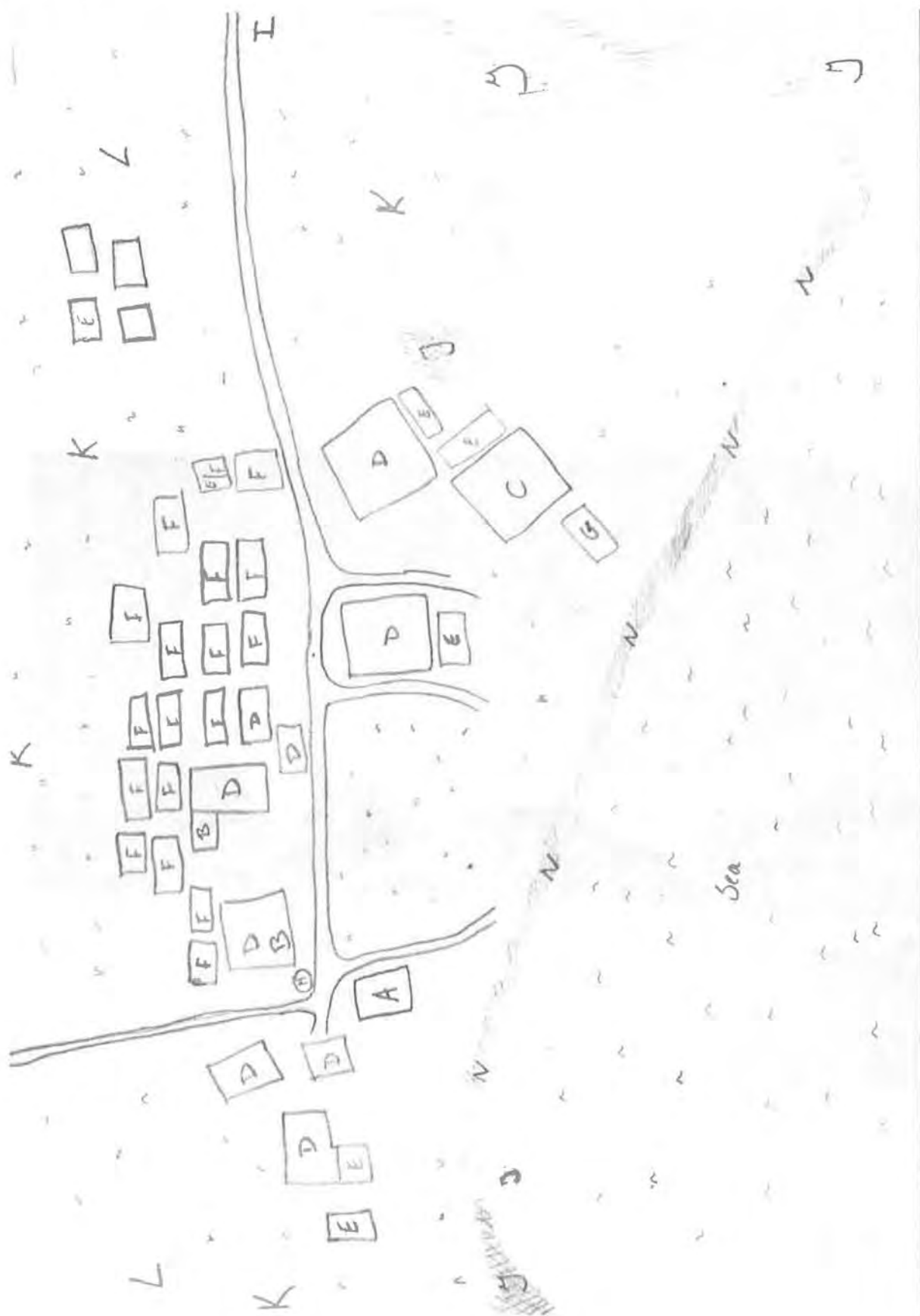
A rough sketch of Bandarini is shown at figure 2.4.

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<sup>18</sup> A large colourful cloth that has a traditional saying or proverb in Swahili

<sup>19</sup> Coming from Pemba, Tanzania

Figure 2.4 Uyombo, giving the locations of the households interviewed and the main buildings.



Legend to figure 2.4

- A. Mosque
- B. Shop
- C. House of the Tajiri
- D. Houses of the informants
- E. Shelter (used for cooking)
- F. Houses of (semi) permanent fishermen
- G. *Hotel*
- H. Well (salt water)
- I. Road to Matsangoni
- J. Mangroves
- K. Bushes
- L. Shamba

*Plate 2.2 Bandarini*



## 2.5 Fishing

To fish in Kilifi District one needs to be in the possession of a fishing license. A fishing license can be obtained from the Fisheries Office at Kilifi for Ksh. 100/= (about \$1,25). This license is valid for a year. However since controls are not tight, not all fishermen possess a license.

The fishermen of Takaungu have a chairman. New fishermen who want to fish at Takaungu have to pass by him and gain permission. The chairman introduces the new fishermen to the other fishermen and the chief. The only reasons to deny someone permission to fish at Takaungu lies in the gear used and the reputation of a particular fisherman. People from Takaungu who want to fish have to pass through the chairman as well. However the chairman himself admits that not all the people fishing at Takaungu right now have his approval. But as long as they do not use destructive gear and do not cause trouble, this is not a problem. The chairman is elected by the fishermen on a five year base. The current chairman of Takaungu has already been chairman for ten years (he was elected twice) and new elections are postponed since no one seems to see the need for it.

In Uyombo a village committee exists, of which most fishermen from outside Uyombo are members. The role of this committee is mainly to facilitate communication, and to represent themselves to external actors. Often internal discussions are held, especially regarding the Marine Park. The committee has meetings with officials concerning the Marine Park. Information can be passed to the fishermen through the committee. Also, new fishermen have to seek approval from the committee. Complaints can be made to the committee who will deal with them. The committee in Uyombo is working quite efficiently, an example of this is the removal of the Wapemba fishermen in the past<sup>20</sup> and the discussions concerning the Marine Park which were going on during the period of research (see chapter 5, box 5.6).

Fishing activities are male dominated. Fishing is considered not to be suitable for a woman. As one of the (Muslim) fishermen said:

*" God did not make a man and a woman to go out fishing both, the man should do the fishing and the woman should stay at or near the house"*

Some fishermen refer to women as not being physically strong enough for fishing. As one of the speargun fishermen puts it: "I cannot imagine my wife going out, swimming up to the good fish places and then chasing the fish"

During the *kaskazi* season, the area is visited by a group of fishermen known as the Wapemba, having their origin in from the Island of Pemba in Tanzania. In the search for better fishing grounds, the Wapemba spread along the Kenya Coast (King, 1999). They are referred to by the local fishermen as being destructive and using fishing gear and methods, which are not allowed by the government. However the use of the gear by the Wapemba seems to be tolerated by the Department of Fisheries (D.o.F.). Another fishing activity, which is regarded as highly destructive by the local

<sup>20</sup> In a joint action with the police, the fishermen of the committee chased the Wapemba fishermen away from the landing site in order to protect their fish catches (see chapter 5)

fishermen, are the offshore trawlers. In this case, the local fishermen complain about the government allowing foreign fishermen to break the rules since the trawlers fish nearer to the coast than they are allowed by the regulations. The trawlers pose a big threat to marine resources (Fulanda, 1999). This will further be discussed in Chapter 4 and 5.

## **2.6 Watamu Marine National Park**

### *2.6.1 Introduction*

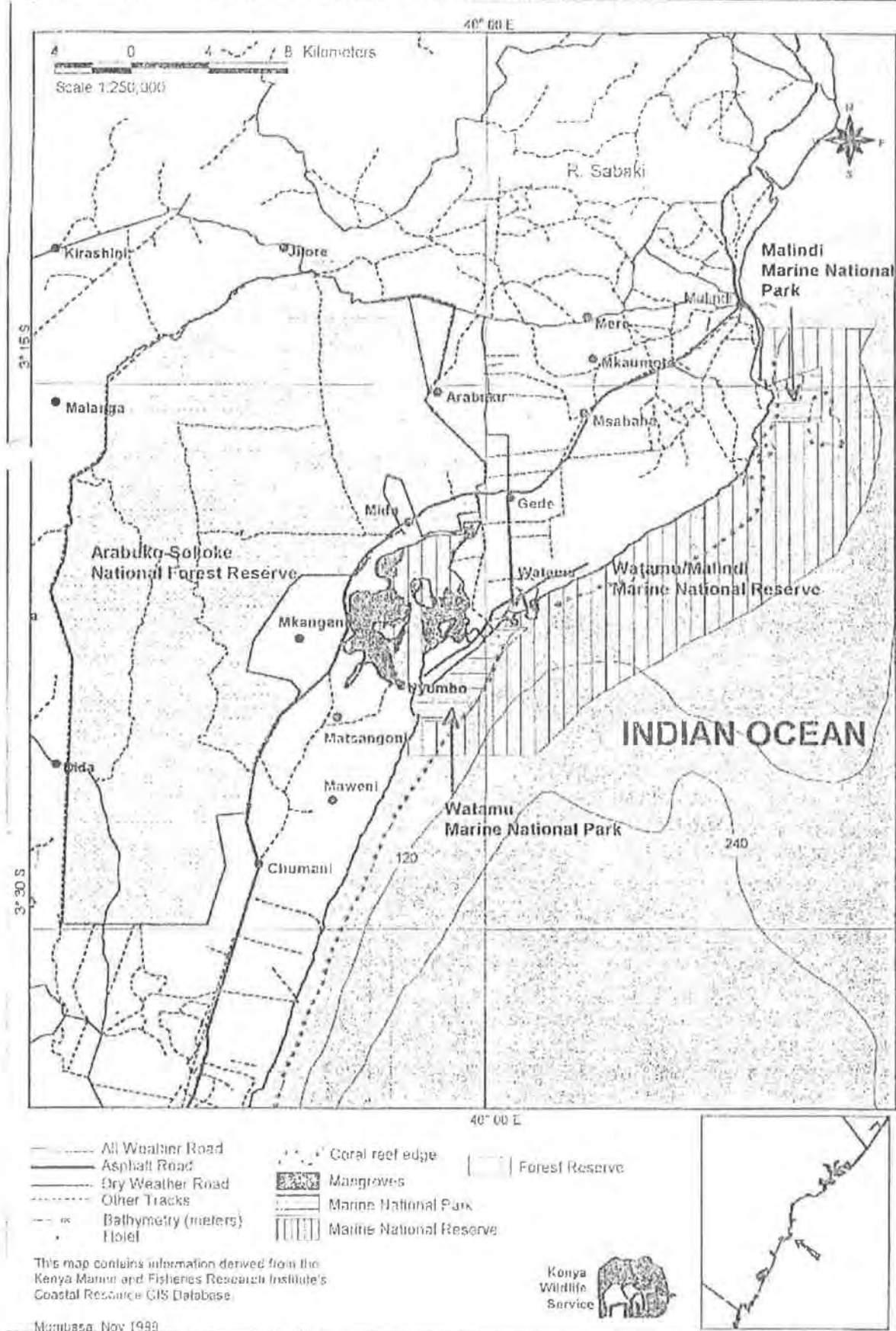
The marine and coastal environments of Kilifi District include Indian Ocean territorial waters and the immediate hinterland areas that border the ocean. A feature of the coastline is the fringing coral reef which runs between 0.5 km and 2 km off-shore with occasional gaps at the mouths of rivers and the isolated areas facing the creeks. The shoreline is dominated by beaches, cliffs or mangrove forests. The coral-reef system and mangrove swamps serve the most important ecological role and the former is a major tourist attraction.

The Watamu Marine National Park was established in 1968, together with the Malindi Marine National Park. Both Marine National Parks are situated in Malindi District, however Mida Creek is divided by the border of Malindi and Kilifi District. Both parks were designated as a Biosphere reserve in 1979 because of its reef ecology. The Watamu Marine National Park covers an area of ten square kilometres. Two reserves surround the Watamu Marine National Park. One part consists of the Malindi Watamu Marine National Reserve while the other consists of Mida Creek with its mangrove forests (Watamu Marine National Reserve) as shown in figure 2.5. The Malindi Watamu Marine National Reserves and the Watamu Marine National Reserve were also gazetted in 1968. The first Reserve covers a total area of 213 square kilometres while the Watamu Marine National Reserve (Mida Creek) covers an area of 32 square kilometres. The area comprises fringing reefs, a series of coral reefs, coral gardens inside the lagoons, seagrass beds and the Mida Creek mangrove forest. The coastline of the protected area has large tourist hotel developments.

The objectives of the Parks and Reserves are the following:

1. To encourage public understanding, appreciation and enjoyment of natural resources,
  2. To conserve and maintain representative areas of the resources,
  3. To promote research of selected coral reef and mangrove communities and
  4. The creation of recreation, education and generation of economic benefits.
- (Hof 1999)

Fig 2.5 Watamu and Malindi Marine National Parks and Reserves<sup>21</sup>



<sup>21</sup>Hof 1999

### 2.6.2 Regulations of the Watamu and Malindi Marine National Park

There are several acts and legal documents that obtain the protection and management of marine protected areas. Some of them are mentioned in the appendix. Those acts and legal documents deal with the establishment of the Kenya Wildlife Service<sup>22</sup>. Furthermore, these acts hold the regulations concerning the establishment, use, conservation and regulation concerning fisheries forest (mainly mangroves), territorial waters, national land use planning and tourist industry.

Within the Marine National Parks and Reserves some regulations are in force. These regulations are not only concerned with conservation but also with the access and the use of the area.

It is not allowed to:

1. Engage in any of the following marine activities without paying the prescribed fees:
  - Gogging
  - Water skiing
  - Diving
  - Site viewing in Mida Creek
  - Operate or use a glass-bottom boat or any other marine vessel in the park area;
2. Reside in the Marine National Park and Reserve;
3. Clear any vegetation in the Marine National Park and Reserve;
4. Possess any weapons, explosives or poison in the Marine National Park;
5. Collect shells, aquarium fish and corals in Marine National Reserve;
6. Kill or capture any mammal or turtle;
7. Harass any mammal or turtle so as to disturb its behaviour or breeding grounds;
8. Chase any marine mammal or turtle with intent to kill;
9. Take any marine mammal or turtle, alive or dead, including any marine mammal or turtle stranded on land;
10. Remove any marine animal or vegetation or alter existing forms of prehistoric, archaeological, historical or other scientific interest in the Park area;
11. Use the following prohibited methods while fishing in the Reserves:
  - Trawling within five nautical miles within the Marine National Reserve
  - Use of spears for fishing
  - Use of any explosives, poisonous or noxious substances or electric shocks for the purpose of rendering fish more easy to catch;
12. Fish in the Marine Park.

An exception to these regulations may be obtained through a special permit from the director of the KWS or an Officer authorised by him.

(Hof 1999)

I'll come back to the KWS regulations in the chapters 5 and 6, after discussing the research and the results from Takaungu in the next two chapters.

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<sup>22</sup> KWS is a parastatal body the Ministry of Tourism and Wildlife

## **Chapter 3**

### **The research**

#### **3.1 Introduction**

In the following chapter different theoretical approaches, which guided my research, will be discussed. The most important theoretical perspectives are the actor oriented approach and political ecology. Furthermore, the importance of legal pluralism needs to be pointed out since property relations play an important role in natural resource management. Attention will also be paid to Community Based Conservation (or Community Based Natural Resource Management) as opposed to Hardin's "Tragedy of the Commons".

One of the central concepts will be human agency which is central to the actor oriented approach as well as to legal pluralism. Human agency implies that the actors are seen as capable, knowledgeable and active. This means that property relations should also be regarded as social relations which are shaped by the actors involved. In order to get an in-depth understanding of the ongoing situation one need to look at the actual interactions. However the wider context should not be forgotten either. Furthermore, the sample as well as the methods used and the problems faced by the researcher will be discussed.

#### **3.2 The Theoretical Framework**

In order to study the effects of the Watamu Marine National Park on the livelihood strategies of fisherman households, one can use different views. There are many theoretical approaches and concepts which are related with natural resource management. It is necessary to look at these approaches since it can give an understanding of the current situation.

Several development theories, such as modernisation, view society through linear and structured paradigms of change. The underlying assumption of the modernisation theory is that development should be seen as a progressive movement towards technological and institutionally more complex and integrated forms of modern society (Long 1992). According to the modernisation theory, development can be achieved with the provision of all kinds of inputs like knowledge, technology and resources coming from outside, mostly the western world. This transaction should be regarded as a process of traditional societies "catching up" with the modern world (Kiely 1995). The less developed countries would gradually benefit; first the better off parts of the population and increasingly the urban and rural poor because of the so-called trickle down effect. The modern society is defined as a social system based on achievement, universalism and individualism.

Rostow explains why a dynamic social type oriented to economic progress appeared in the West and why this transition was impeded elsewhere (Patterson 1999).

According to Rostow, there are five stages of society through which all societies pass. These five stages are:

- i. The traditional stage
- ii. The preconditions for take-off
- iii. The take off
- iv. The drive to maturity
- v. The age of high mass consumption

These five categories are based on economic dimensions. The structure of a traditional society is developed within limited production functions, based on pre-Newtonian science and technology, and the attitudes towards the physical world linked with this kind of science and technology (Rostow 1961). The second stage of growth encompasses societies which are in transition to the third stage of growth which embraces societies without the old blocks and resistance to economic growth. The fourth phase is the phase of the societies which are extending modern technology over the whole front of its economic activities. Finally all societies will come to the age of high mass consumption, where the leading sectors in time shift to durable consumer goods and services (Rostow 1961). The first preconditions for take off occurred in England at the beginning of the 18<sup>th</sup> century, due to overseas expansion which made increased agricultural and industrial production necessary. While the era of take-off was achieved in England because of this technological motor, political regimes favourable to modernisation were needed elsewhere (Patterson 1999).

Looking at the situation at the Kenya Coast, one might agree with the modernisation theory on some points. The Watamu Marine National Park was more or less imposed from outside as the modernisation theory indicates that technology is imposed from the outside. And one may also claim that the decreasing importance of the *kayas* is a sign of increasing individualism. However the modernisation theory cannot be used to look at the whole situation. It is obvious that external forces trigger change however the modernisation theory is leaving little to no room for an active role of any significance for the people themselves. The fishermen and others living at or around the Watamu Marine National Park act and react in relation to the Marine Park. Another weak point of the modernisation theory is that knowledge, technology and resources cannot be just transferred from one to another situation since they are embedded in a constellation of social relations. Intervention and their outcomes are changed and shaped by internal relations, human actions and contexts. Technology does not determine social structure but it is social structure that determines technology. "Importing" new technologies does not automatically lead to acceptance thereof. For example "importing" new ways of conservation do not automatically lead to acceptance of those. The fishermen in South Coast tried to "prevent" their fishing grounds to become a Marine Reserve. The KWS was left with a major problem when the local fishermen rejected the proposed Diana Reserve. In the case of Watamu, the fishermen from Uyombo tried to negotiate with the KWS to get parts of the Marine Park back to fish in. Unlike the fishermen in South Coast they did not succeed.

Probably the weakest point of the modernisation theory is its assumption of an universal and linear process, which all the third world countries have to go through. The reactions to changing situations differ. Whereas one fishermen might view it as God's wish and will not change his way of living by for example starting to farm (as shown in Mohammed's case in chapter 4), other fishermen adopt other livelihood

strategies and diversify their income. These differential responses to change depend also on the context in which the change takes place. One might assume that when there would be more employment possibilities near Uyombo, there would be fewer fishermen and therefore fewer grievances under the existing fishermen. This might have led to a less hostile attitude towards the Marine Park.

Such a linear, deterministic and externalist paradigm as the modernisation theory, is not sufficient to explain current patterns of change and development in Third World countries (Long 1992). The actor-oriented approach advocates such a dynamic approach. Central to the actor oriented approach is the concept of human agency, implying actors as knowledgeable, active and capable. Social actors are able to react and interact with all kinds of social conditions. These interactions between the social actors need to be studied in order to get an understanding of the ongoing interests, relations and conflicts (Long and Villareal 1994). The fishermen should be looked at as active, knowledgeable and capable. They know that the marine resources are degrading and they know that this should be stopped. Therefore their hostile attitude is not towards conservation in the first place, but towards the way it is carried out. However the ongoing conflict is highly influencing their attitude towards conservation in general.

Wiersum (2000) states that there should be diverse approaches to actor-oriented studies. It is useful to make an analytical differentiation between an 'actor-in-context' and an 'actor-resource' focus. The 'actor-in-context' focuses on how resource use and management relates to overall livelihood strategies of the actors involved. The basic question concerned with the 'actor-resource' focus is which purposeful actions are undertaken by local communities in order to ensure continuous use of the resources and how that affects the resources. This focus stresses that the human agency not only exploits resources but also transforms it in order to suit human values.

The views in the discussion about common resource use have changed during the years. An important contribution to the discussion about common resource use has been the publication of "Tragedy of the Commons" by Hardin (1968). The "Tragedy of the Commons" narrative predicts the overexploitation of resources held in common because everybody has free access to the natural resources. The individual will try to maximise his profits from the resources while the community shares the costs. The result is an unbalanced, unsustainable cost-benefit balance (Hardin 1968). Hardin favours a strong governmental control or incidentally a privatisation of the natural resources. According to this narrative, fishermen would overexploit their fishing grounds whenever their access is not limited. In this way, the "Tragedy of the Commons" can be seen as a justification for the gazettement of a Marine Park. However, Hardin's "Tragedy of the Commons" has been criticised by many authors. In practise, there are many examples of commons which turned out to be ecologically sustainable. According to Berkes et al. (1989), Hardin did not look at the existence of property rights and regulations inside the community and as such failed to recognise the self-regulative capabilities of the resource users. Social pressure can strongly influence the resource users behaviour with regard to a natural resource. Hardin also fails to look at the wider context in which natural resource management is trapped. Land shortage, population pressure, the absence of alternative income opportunities etc. can also have considerable impact on the overexploitation and degradation of resources. In Kilifi District all this can be found, the population is growing and there is

a lack of alternative income opportunities. Most fishermen in Kilifi district are more than willing to give up fishing if they could get another job. However with the prevailing unemployment, people turn to fishing in order to get to least something to eat. The decrease in available farming plots makes people turn to fishing as well.

Gradually, ideas about conservation have been shifting, the major shift in the recent years being the one from the preservationist idea to the community based natural resource management (CBNRM). CBNRM pursue conservation goals by rather including than excluding local people. Whereas first tourism, the 'global community' and the state benefitted while the local community paid the costs, CBNRM aims at making the local people benefit from conservation measures or respond to development. In order to make this successful; a change in policy is necessary. At the Kenya Coast, this is not the case yet, as this thesis shows that most of the benefits from the Watamu Marine National Park do not go to the fishing communities. CBNRM also use the notion of human agency. The local community should be regarded as capable and knowledgeable and therefore able to fulfill a (major) role in the conservation of the natural resources. Using the notion of human agencies also implies that property relations should be looked at as social relations. For example, the *shamba*<sup>23</sup>, which is cultivated, can be the property of someone else. But also the right to access certain areas such as the Watamu Marine National Park should be seen as social relations, as the following example shows.

*"The last warden was different. We could talk to him and he listened to our problems. He even looked for a solution. When he was a warden we were allowed to fish in the entrance area of the creek<sup>24</sup> during some time at kusi season. With this warden, when you talk to him, he would not listen to you."*

In the case of the commons, people have to share the available natural resources in order to make a living. In order to avoid discontinuities which might endanger the cohesion and continuity of the actors involved, the management of natural resources need to be regulated in one way or another. Nowadays the management of natural resources is often subjected to complex normative regulations. Normative regulations cover a broad range of norms, concepts, rules, institutions, procedures and sanctions with different sources of legitimacy (Oudwater 1997). This existence of different regulations within one society can be referred to as legal pluralism (von Benda-Beckmann and von Benda-Beckmann 1996). According to Vanderlinde (in: Spiertz, and Wiber 1996: 3) "pluralism is a condition thus a way of being of existence for the individual who in daily life is confronted with several often contradictory, regulatory orders". This legal pluralism can be found at the Kenya Coast, all kind of regulations exist, some are captured in different acts as explained in chapter 2, others are regulations of the fishing community and looked upon by the fishing committee or the regulations are embedded in ceremonies. These are discussed in chapter 4 and 5.

Property can be described as a social dimension through which relations between social actors are shaped in an ongoing process of interaction. These property relations are embedded in economical, political and social-cultural contexts and they also shape management practices. Therefore, property relations are reflected in

<sup>23</sup> A plot on which cultivation of crops is practised

<sup>24</sup> Which is a part of the Watamu Marine National Park

particular social relations between people. The extent in which people are able to react, use and interact with prevailing regulations are constrained or enabled by a constellation of socio-economic and political condition, knowledge, power relations and normative rules about property relationship.

Different property regimes can be distinguished:

Property owned by the government,

Property owned by a community of resource users,

Privately owned property and

Property owned by no-one, open access

(Oudwater 1997)

The Marine Park is owned by the government, also the reserves fall under government regulation. The MUA are often considered to be open access. However, one could also consider these areas as owned by the community of resource users. The situation with the Wapemba show that the fisher community has certain regulations concerning 'their' fishing grounds. Fishermen who violate these regulations are summoned.

Schlager and Oström (1992) offer a conceptual scheme, which is more suitable to explain the complexity of property regulations. Their intention was to provide improved tools for analysis in order to be able to come to useful recommendations about how to manage a particular natural resource. The table is used to establish the value of the property rights in question. The actors are ranging from "authorised users" to "owner". Schlager and Oström are focussing on rights and rules, seeing rights as the product of rules. Rules are conceptualised as prescriptions that create authority. The fishermen can be considered to be "authorised users" since they are allowed to enter the sea and fish there, although even this is limited. Due to the fact that the authorised user might have no say in defining any rules concerning the management and exploitation of resources, it is possible that they do not feel obliged to follow these rules. A clear example of this is the use of a speargun. This is forbidden by the KWS, however it is still used by fishermen since they do not recognise the harm the KWS sees in the use of it.

*Table 3.1 Bundles of rights associated with position (Schlager and Oström, 1992)*

	Owner	Proprietor	Claimant	Authorised User
Access and Withdrawal <sup>25</sup>	x	x	x	x
Management <sup>26</sup>	x	x	x	
Exclusion <sup>27</sup>	x	x		
Alienation <sup>28</sup>	x			

If one looks at the situation concerning the Watamu Marine National park and Reserves, then one can see that through the establishment of the Park the fishermen

<sup>25</sup> Access: the right to enter a defined physical property

Withdrawal: the right to obtain the 'product' of a resource  
(Schlager and Oström, 1992)

<sup>26</sup> Management: The right to regulate internal use patterns and transform the resource by making improvements.  
(Schlager and Oström 1992)

<sup>27</sup> Exclusion: The right to determine who will have an access right, and how that right might be transferred.  
(Schlager and Oström 1992)

<sup>28</sup> Alienation: The right to sell or lease either or both of the above collective rights. (Schlager and Oström 1992)

lost their rights of access and withdrawal. These rights came in the hands of the KWS who also holds the right of management and exclusion. Concerning the reserves the fishermen maintained their rights of access and withdrawal, but they share these right with the KWS which also holds the right of management and exclusion. The KWS can limit the fishermen in their rights of access and withdrawal for example by determining the use of gear allowed in the reserves. An important distinction within the bundle of rights is between public and private rights. Most rights have both private and public aspects (von Benda-Beckmann and von Benda-Beckmann, 1996). Socio-political control rights are usually vested in institutions and positions of socio-political authority, which are supposed to represent the community. In the case of the KWS, which holds those socio-political control rights, this is not the case. The KWS does not represent the local (fisher)community and the interests of the fishermen are more or less neglected.

The model of Schlager and Oström can be criticised for the need of a broader perspective than shown by the model. Property regulations should merely be considered as social relations. Another point of critique is that actors might have more positions at the same time, in such a case it is hard to establish whether someone is only an "authorised user" or a "claimant". Although the actors involved are the key elements of the problem, one shouldn't neglect to look at the wider context and the background of the problem. Therefore I combine the actor-oriented approach with political ecology. Political ecology is a method of analysis that first examines the actions of local people that are related to the use of resources and that make links from this actions to the wider context of politics, economics and social relations. This approach incorporates the broader political-economical processes that structure the social and physical environments and actions of resources users (Peluso 1992 & 1996). Furthermore, political ecology emphasises the importance of a historical perspective. Throughout history, the way that natural resources are perceived, valued, defined, allocated and used have changed as well as the role of human actors in those. The historical perspective has to be taken into account in order to give an explanation of the current situation. The way the Marine Park was gazetted, the promises which were made, and the way the local fishermen used the area before the gazettelement should therefore be considered in order to be able to give an explanation of the behaviour, attitudes and actions of the fishermen nowadays. This is necessary in order to be able to explain for example the increase in fishermen caused by high unemployment which can be linked to a decrease in tourism and the attitude of fishermen towards conservation in general and the KWS. Therefore in a analysis of the situation concerning the Watamu Marine National Park, one should look at the historical, economical and political arena in which it takes place.

The rise of political ecology offered a Marxist-influenced analysis of resource use and environmental conservation. In the view of Blaikie and Brookfield (1987), political ecology combines the concern of ecology with a "broader defined political economy". Accordingly environmental problems in the Third World are less a problem of poor management, overpopulation or ignorance as of social action and political economical constraints. Central in Blaikie's and Brookfield's view is the concept of the "land manager" whose relationship should be considered in a "historical, political economic context" (Peet and Watts 1996).

I choose for a combination of the actor oriented approach and legal pluralism with political ecology as guidance for my research. In this way the weak points of the actor oriented approach (the neglect of the historical perspective and the wider context) are compensated by the political ecology approach. On the other hand, the weak points of the political ecology approach (only looking at these actions that are related to the use of resources, the wide context does not only influence actors but it happens also *vice versa*) are compensated by the use of the actor oriented approach. Social relations are reflected in property regulations. Different property regulations are concerned with the management of antural resources. Therefore I also used the theory of legal pluralism. However there should be paid attention also to Community Based Conservation and the "Tragedy of the Commons", since these views determine policy regarding natural resource management in general and National Parks specifically.

### **3.3 Methods**

This study was carried out at two different landing sites, Uyombo and Takaungu. Data collection consisted of members of fisherman households. The study makes a comparison between the two sites, one being in a Marine Unprotected Area (Takaungu) and the other in a Marine Protected Area (Uyombo). Additional information on the generation of employment by Marine National Parks was gathered from the Watamu Marine National Park. A historical perspective was used in order to study the effects of the Marine National Park. In order to gather the information the researcher went to both of the landing sites and stayed there for periods of two weeks, after those two weeks some days were taken to go through the gathered information and prepare to go to the next landing site. Also some daily visits were paid to the landing sites. The choice to visit one landing site first, than the other and than to go back to the landing site was made to keep the ways of gathering information and the experience of doing research more or less on the same level in both landing sites.

Before starting with the research, visits were paid to both sites in other to get some acquaintance with the areas. Visits were also paid to the chief's offices. The recruitment and training of translators took some time, as well as finding a suitable place to stay.

### **3.4 Sampling**

Since this research encompasses a comparison between two landing sites, it was necessary to sample in order to be able to compare the results. The choice was made to select 10 fisherman households at each landing site and to interview at least two people, a man and a woman, from each household. In some case, more than two people from the household were interviewed, because this was more convenient (for example to interview the head of the household if two other people from the household were already interviewed). In Takaungu as well as in Uyombo, more than ten households were selected. In both cases, only the men of the extra household were interviewed. This had different causes in Uyombo as in Takaungu. During the interview of one fisherman at Takaungu it turned out that it would be hard to establish

who belonged to his household, since he was somewhere else during the weekend than during the week. In Uyombo, a woman refused to do an interview while the interview and the life history of the man were already done. This made it necessary to select another household.

The sampling of these fisherman household were done random, starting with a fisherman and later interviewing other household member(s). The only guidance, which was brought in the sampling after about more than half of the number of households was selected, was the information which existed from the NIRP (Netherlands Israel Research Project) on religion and ethnic group, from a former survey. This is only used as a guideline in selecting the next informants on ethnic group and religion in the later stage of the research. However as will be discussed later, there are some (striking) differences between the characteristics of the sample used and the NIRP data.

The fishermen at Uyombo were approached when they landed or sold their fish since everybody goes to the house of the *tajiri* to sell or weigh the fish. The fishermen of Takaungu were met at the beach, at their house, at the creek or at one of the hotels. If I could not find any fishermen I asked somebody to direct me to the house of a fisherman. The sample drawn at Takaungu consisted of 11 fishermen and 10 women. Most of the fishermen at the sample are older than 40 years as shown in table 3.2. Most of their wives however are below the age of 40 years. Most of the fishermen and their wives at the sample are of Mijikenda origin (table 3.3) and most of them are Muslim (table 3.4). The majority of the sample has not been to school (table 3.5). However, more men than women have attended school, although there are more women who schooled above primary school standard four than men. The sample drawn at Uyombo consists of 12 fishermen, 1 retired fisherman and 10 women. As is shown in the tables 3.2, 3.3, 3.4 and 3.5 most of them are Mijikenda below the age of 40 year old and following the African traditional religion. Most of them have never been to school. Women are generally younger and have a lower educational grade than men. The majority of the women is below 30 years old while the majority of the men is below 40 years old. More women are Christian than men and the majority of women does not have had any education while the majority of the man does.

*Table 3.2 Age structure of the fishermen and their households*

	All informants Uyombo (n=23)	All informants Takaungu (n=21)	Only fishermen Uyombo (n=13)	Only fishermen Takaungu (n=11)	Women Uyombo (n=10)	Women Takaungu (n=10)
≤ 19 yr.	13,0%	0%	7,7%	0%	20%	0%
20-29 yr.	34,7%	24%	23,1%	18%	50%	30%
30-39 yr.	21,7%	29%	23,1%	18%	20%	40%
40-49 yr.	17,4%	14%	23,1%	18%	10%	10%
50-59 yr.	8,6%	14%	15,4%	9%	0%	20%
60 + yr.	4,3%	19%	7,7%	36%	0%	0%

Generally, the men are older than the women, this is logical considering the fact that an older woman is seldom married. The fishermen of the sample of Uyombo are younger than the fishermen of the sample of Takaungu. Combining this with the NIRP sample it may be concluded that the average age of fishermen at Takaungu is

higher than the average of Uyombo. A possible explanation for this might be the low number of schooling children and the high number of school dropouts at Uyombo, however they can also be found at Takaungu. Another possible explanation might be that the history of Takaungu and Uyombo as fishing villages (chapter 2) show that Takaungu has a longer history as a fishing village and therefore more elder fishermen who are originating from families who are already fishing for more generations.

*Table 3.3 Ethnic composition of the fishermen and their households*

	All informants Uyombo (n=23)	All informants Takaungu (n=21)	Only fishermen Uyombo (n=13)	Only fishermen Takaungu (n=11)	Women Uyombo (n=10)	Women Takaungu (n=10)
Swahili	0%	19%	0%	18%	0%	20%
Bajuni	13,0%	5%	15,4%	9%	10%	0%
Mijikenda <sup>29</sup>	82,6%	76%	76,9%	73%	90%	80%
Other	4,3%	0%	7,7%	0%	0%	0%

No Swahili can be found at Uyombo, whereas they can be found in Takaungu. At both sites the Mijikenda have a higher representation in the sample than the Bajuni and the Waswahili ("other" in the case of Uyombo refers to a Pemba fishermen married with a Bajuni woman). However, the Mijikenda are the "newer" fishermen. Most of them do not come from a family with a history in fishing, whereas the Waswahili, Bajuni and Pemba in most cases do. However there are dissimilarities with the NIRP data. The NIRP data show a 100% Mijikenda at Uyombo and a much higher percentage of Bajuni (coupled with a lower percentage of Mijikenda) at Takaungu. Though it seems almost impossible to have no Bajuni in the sample of Uyombo since the family who first came to live in Uyombo is a Bajuni family (chapter 2). The differences with Takaungu are hard to explain.

*Table 3.4 Religion of the fishermen and their households*

	All informants Uyombo (n=23)	All informants Takaungu (n=21)	Only fishermen Uyombo (n=13)	Only fishermen Takaungu (n=11)	Women Uyombo (n=10)	Women Takaungu (n=10)
Islam	17,4%	67%	23,1%	64%	10%	70%
Christian	38,4%	33%	23,1%	36%	50%	30%
African	47,8%	0%	53,8%	0%	40%	0%
Traditional						
None	0%	0%	0%	0%	0%	0%

In the case of religion there are no large differences with the NIRP data. Remarkable is the high percentage of the Islam in Takaungu. Although one might expect a higher number of Muslims at Takaungu than at Uyombo, because of the higher number of Waswahili and Bajuni, more Islamic Mijikenda can be found at Takaungu than at

<sup>29</sup>Mijikenda comprises: Giriama, Chonyi, Jibana, Kambe, Kauma, Rabai, Ribe, Digo and Duruma

Uyombo. This has to do with the fact that in Takaungu the notion of wealth is combined to the Islamic religion. As fishermen in Takaungu stated: when you become rich your convert to the Islam. I will discuss this further in chapter 4 and 6.

*Table 3.5 Education of the fishermen and their households*

	All informants Uyombo (n=23)	All informants Takaungu (n=21)	Only fishermen Uyombo (n=13)	Only fishermen Takaungu (n=11)	Women Uyombo (n=10)	Women Takaungu (n=10)
None	65,7%	52,4%	46,2%	45,5%	80%	60%
Primary 1-4	17,4%	19,0%	15,4%	36,4%	20%	0%
Primary 5-8	13,0%	23,8%	23,0%	9,1%	0%	40%
Secondary 1-2	0%	4,8%	0%	9,1%	0%	0%
Secondary 3+	4,3%	0%	7,7%	0%	0%	0%

The NIRP data show a higher education at Uyombo than at Takaungu. This sample shows a lower education at Uyombo than at Takaungu. According to several school teachers the level of education among fishermen is higher in Takaungu than in Uyombo. Therefore, no adjustments to meet the NIRP sample are made here. More men than women have been to school, however more women have been to primary school standard 5-8.

Comparing the sample with the NIRP data shows that the sample used in this research is reasonably representative. Where the differences with the NIRP data were large, informants were asked to give a picture of either Uyombo or Takaungu concerning the points of difference with the NIRP. Based on this, I consider the sample representative for the fishermen population of Uyombo and Takaungu.

### **3.5 Data collection**

Different techniques were used to collect data; first of all, the informant was interviewed using a list of questions. This list functioned more as a key topic list than as a questionnaire, since the questions were seldom asked literally or in a given order. After the first interviews the lists were adapted. After each interview a genealogy was made of the person, following the patriarchal line up to his or her grandparents if possible. This was done to find whether somebody came from a family with a history in fishing or not, or whether someone had his or her origins in the area or not. At five of the eleven households a life and career history from the man as well as from the woman was made in order to find out the changes in environment, lifestyle and income during the life of that person.

The information on the Watamu Marine National Park was gathered through informal interviews with people employed at the Watamu Marine National Park, and through short structural interviews with 4 rangers, 5 boat operators, 4 safari sellers, 5

employees from Turtle Bay Club, 5 employees from Hemmingway's Hotel and a group discussion with the beach operators.

Although I planned to do some participant observation, at Takaungu I did not. I decided not to spend whole days with somebody because this was a time consuming activity which would not give much information. Since I carried out my research during *kusi* season, some of the fishermen did not go out for fishing, younger fishermen tried to find alternative sources of income but older fishermen often just rested. Therefore they spent much time in or around the house resting, which made participant observation a less useful tool. Instead of that I decided to use a time allocation study. For three full days I checked 8 of my informants on what they are doing from 8.00 in the morning till 8.00 in the evening. Although I preferred to start at 7.00 in the morning my translator could not make it any earlier because of the distance she had to walk and her parents only allowed her to walk when the sun had fully risen. Also the planned fishing trips at Takaungu were mostly cancelled for several reasons, security being the main for this (see later). I actually did one of them and I went out with one fisherman once who showed me how people were fishing. At Uyombo I did participant observation with 4 people and scheduled the activities of three informants from 7 in the morning till 7 in the evening. Later I decided to follow one of those three informants a whole afternoon since she spent these afternoons away from Bandarini. In Uyombo I went out fishing with a few people, not necessarily being the same people as with whom I did the participant observation.

All the information gathered, except from the participant observation or the 'scheduling of activities' and one interview in Uyombo, was done with the help of a translator. At each landing site I used two translators, a girl/woman from the area for the interviews with the women and the male research assistant from the CERS<sup>30</sup> office who was familiar with the landing site as well.

### 3.6 Problems

This study faced some limitations. In this paragraph these limitations are described in order to give the full picture of the research. These limitations have influenced the research and also the outcomes; in some cases this may have lead to lacking information. The first of the limitations was the fact that the informants had already seen too many researchers and co-operated in so many researches from which they never saw any direct benefit. This turned out to be a problem in some cases. They did not want to co-operate anymore and when they did, they complained every time. For me this was easy to understand but it was harder to handle because I also could not promise them anything either. In many cases the level of co-operation was low, in some cases to the point that people refused to give answers if I did not pay them for it. In these case I always looked for a new informant since first of all, paying people for information may strongly influence the information. Second because it might have turned out to become the only way to gather information, because the other informants would start asking for money as well.

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Another problem that turned up was that some women turned out to be reluctant to co-operate for several reasons. One of the reasons was jealousy. The fact that the husband took another woman (and especially a white woman) to their compound was seen as a threat to their own position, and evolved in refusing to talk. Having the interviews done by the research assistant solved this problem. In one case, another household had to be found.

The use of a local woman/girl as translator in Uyombo turned out to be a problem. First of all, a lady with secondary education was hard to find and, when found, she turned out not to be a good translator. Since I felt that I really needed a female translator to interview the women, I decided to keep on using her as a translator, but tried to do so as little as possible.

A problem at Takaungu was the alleged hostility of some fishermen towards me, which I never personally noticed but which bothered people in such a way that they wanted to escort me every step I made alone in the dark. The reason for this seemed to be that I had a small sample and that the fishermen who were not in that sample were angry and afraid to miss the money which I, according to them, would definitely give to my informants (even though all my informants denied this). This also influenced my decision not to go fishing at the sea, but that was the only limitation I felt was put on me by this.

Although the limitations mentioned above influenced the research and the researcher's behaviour, they never led to problems which could not be solved. Notwithstanding one should keep these limitations in mind when reviewing the results which are presented in the next chapter.

## Chapter 4

### Takaungu

This chapter is divided in 6 main paragraphs. Paragraph 4.1 gives an analysis of the demographic characteristics. Paragraph 4.2 gives an analysis of the household characteristics, paragraph 4.3 deals with the fishing at and the fishermen of Takaungu. Issues concerning conservation are discussed in paragraph 4.4. A more detailed and specific picture of Takaungu is shown in paragraph 4.5 which holds a case study of one of the fishermen of Takaungu. Paragraph 4.6 holds the summary. Chapter 5 also consists of these paragraphs, but it deals with Uyombo and the Watamu Marine National Park. In chapter 6 a comparison between Uyombo and Takaungu will be made and the findings will be discussed.

#### 4.1 Demographic Characteristics

Most of the fishermen interviewed were Mijikenda of Muslim religion<sup>31</sup>. Nowadays more and more Mijikenda convert to the Islam. There are different reasons for this. One of my (Giriama) informants explained to me:

*"My father is not a Muslim, neither a Christian, but I converted to the Islam. The reason is simple, just look around the way the Muslims are living and the way the Christians are living. I'm a wealthy man, I'm supposed to be a Muslim"*

Or as one of the (Christian) woman I met at one of the hotels told me:

*"They only become a Muslim, because the Muslims are the more wealthier people here, they think that when they become a Muslim, their status will rise. It is only possible for a Christian to become a Muslim but not the other way around. Therefore, the number of Muslims is increasing."*

Parkin (1972) uses another explanation if he explains the conversion of the Giriama around Kaloleni to the Islam. People who turn to the Islam have done so because spirits possessed them. Those spirits were judged by a Giriama diviner to be of Islamic origin. Those spirits are that powerful that they are likely to cause the possessed person's illness and even death unless they are appeased. The spirits can be appeased by the possessed person converting to the Islam. Parkin refers to this as the institution of therapeutic Islam. This conversion to the Islam is only partial, since the person does not abandon his activities based on Giriama ideas and does not follow all the regulations concerned with the Islam. However communal restrictions are introduced between the person and the non-Muslim community. By doing so they establish a barrier between themselves and many of their kin and

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<sup>31</sup> Among the Mijikenda informants, only two (male and female, not a couple) informants are from the Digo tribe, which is the only tribe within the Mijikenda whose being Muslim dates further back in history.

neighbours. This is a way of avoiding claims on their wealth, like small loans, which won't be returned to them<sup>32</sup>.

All the informants interviewed were living at Takaungu. 36.4% of the households were situated "outside town" and 73.6% in the town. Most fishermen at Takaungu are born in Takaungu, although their wives come more often from outside Takaungu (see table 4.1). In most cases the women from outside Takaungu met their (future) husband when they were on a visit in Takaungu or they were known to a brother or other family member of their husband.

*Table 4.1 Place of birth of the informants*

	All Informants (n= 21)	Only fishermen (n=11)	Non-fishermen (n=10)
Takaungu	9	8	1
Not Takaungu <sup>33</sup>	12	3	9

Among the people of the Muslim community, polygamy is quite common. However, of the fishermen interviews over 50 percent did not have a monogamous marriage, and never had one<sup>34</sup>. Of the remaining, more than one quarter had a polygamous marriage<sup>35</sup>. Fishermen have different reasons for having several wives. Most common is the claim that they can afford it. Only a wealthy man has enough money to marry more than one wife and therefore having more wives also gives a man a higher status. Also the extra labour put into the household by an extra wife counts. One of the informants claimed that his first wife had problems handling all the work, especially when the number of children was increasing. When he married a second wife they could share the work and the care of the children.

Most of the fishermen do not come from a fisher family. Within the last two generations only a third had a relative with a fishing-related occupation (see table 4.2). From all the informants, less than one third had parents of which at least one had a fishing related job. The others had parents who do not have a fishing related job.

<sup>32</sup> Popkin (1972) states that, as in contrast to the pre-capitalist society, within the capitalist society people are able to enrich themselves at the expense of the survival of others, they can avoid the aid and support given in earlier times by assigning themselves to another society or group. Scott (1976) refers to this as the right to subsistence. According to Scott the right to subsistence is an active moral principle next to the right of reciprocity. Whereas the right to reciprocity requires the exchange of comparable values, the right to subsistence reflects "the social pressure on the relative well-to-do within the village to be openhanded to their less fortunate neighbours" (Scott 1976: 176). The core assumption of the right to subsistence is that "all members of a community have a presumptive right to living so far as local resources will allow" (Scott 1976: 176).

<sup>33</sup> Not Takaungu being: Pemba, Tanzania, Jaribuni, Mavueni, Kauma, Vuma, Chonyi Sokoke in Kilifi District, Mtwapa in Mombasa District, Dakacha in Malindi District and Tiwi and Vanga in Kwale District.

<sup>34</sup> Of the fishermen interviewed, 45.5% had a monogamous marriage and had never divorced another wife, 9.1% had a monogamous marriage but had divorced another wife (before marrying the current wife),

<sup>35</sup> Of which 9.1% had a polygamous marriage but one of the wives died (and therefore remaining with one wife), 9.1% is not married and 27.3% had a polygamous marriage.

Table 4.2 Occupation of the parents<sup>36</sup>

	All informants (n=21)	Only fishermen (n=11)	Non-fishermen (n=10)
Farmer only	8	3	5
Driver	1	1	-
Hunter	1	-	1
Fisherman	6	3	3
Fish trader	1	1	-
Furniture maker	1	1	-
Hotel employee	1	-	1
Palm Wine Tapper	1	1	-
Teacher	1	1	-

Most of the parent's occupations mentioned above are also carried out by the fishermen or another member of his household. This is done during *kusi* season or next to fishing in order to gain extra income. An exception to these are the occupations of teacher and hotel employee. They either require a higher level of education than the fishermen have acquired, or it is a full time occupation which can hardly be practised next to fishing and is thus is hardly available to fishermen. The fishermen whose parents had a fishing-related occupation are the *Mazrui* (fisherman), Wapemba (fisherman), Mijikenda (fisherman) and Bajuni (fish trader). Two of the wives of fishermen had a father who fished as well, one being a Mijikenda and the other a Waswahili. The Mijikenda whose parents had a fishing related occupation are rather an exception. The reason for this is that unlike the Bajuni, Wapemba and Waswahili, the Mijikenda do not have a history in fishing, as most Mijikenda started fishing this or the last generation. Like is shown in figure 4.1, the genealogy of a *Mazrui* fisherman, Waswahili have a much longer history in fishing than the Mijikenda (see figure 4.2: a genealogy of a Mijikenda fisherman). Most Mijikenda started fishing because it is easy to start with, accesible to everybody, you can learn it by looking at other fishermen and there are not many other jobs available, apart from block cutting at Timboni, which is physically heavy work and therefore not preferred above fishing.

*"Everybody can start fishing whenever he wants and in the way he wants. It is not like you have to look for it a long time and to go through a lot of trouble."*

(Mijikenda fisherman)

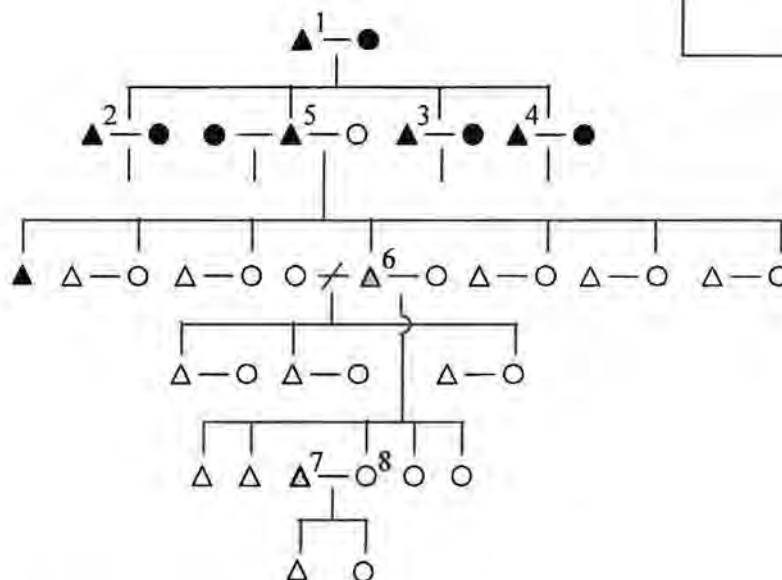
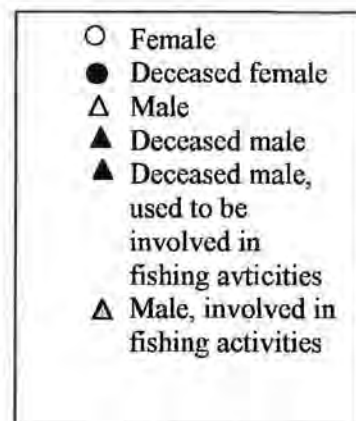
*"If there were other jobs I would do something else, but you know it is hard to find a job these days, even the tourist hotels are not offering many jobs anymore"*

(Mijikenda fisherman)

<sup>36</sup>All the parents, except two, were farmers as well. The exceptions are a Bajuni family and a *Mazrui* families which only relied on fishing.

Figure 4.1 Genealogy of a Mazrui fisherman, Mohammed<sup>37</sup>

1. Fisherman and farmer at Vanga
2. Farmer at Vanga
3. Farmer at Vanga
4. Farmer at Vanga
5. Fisherman at Vanga
6. Fisherman at Takaungu, Mohammed
7. Fisherman at Takaungu, Khadiri
8. Samira



Explanation of the genealogy by Mohammed:

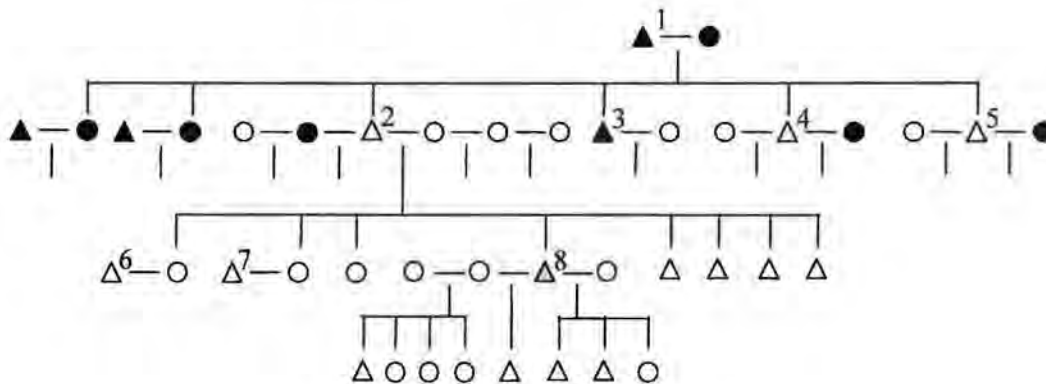
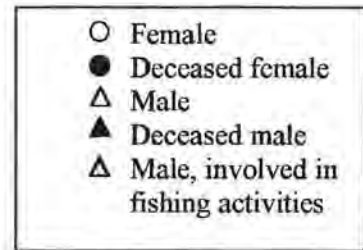
*"My fathers father was a fisherman at Vanga, his two wives worked on the small shamba. My father was the only son from the first wife and the second wife never gave birth. My father had three sisters who all married a farmer and remained at Vanga. He used to fish with his father when he was young, so he became a fisherman. He got 5 daughters and 2 sons including myself. My elder brother got sick and died when he was still young, he has not been married. My sisters got married and I do not know what their husbands are doing, but they are no fishermen! I married my wife at Vanga when I was already a fisherman. Just like my father I went fishing with my father when I was a little boy. Later I divorced and re-married. We moved to Takaungu, some of my relatives were fishing in Takaungu. I got five children, my eldest daughter married a fisherman."*

The case study of this fisherman is presented in paragraph 4.5.

<sup>37</sup>Since fishing is considered to be a male job, the occupations mentioned here are the occupations of the men. Only the occupation of males above 12 years of age is mentioned.

Figure 4.2 Genealogy of a Mijikenda Fisherman, Karissa<sup>38</sup>

1. Farmer at Kaloleni
2. Driver at Takaungu
3. Driver at Takaungu
4. Driver at Takaungu
5. Driver at Takaungu
6. Hotel Employee at Kilifi
7. Politician at Vuma
8. Fisherman at Takaungu, Karissa



Explanation of the genealogy by the Karissa:

*"My fathers father had two daughters and 4 sons, his daughters all married, but their husbands were no fishermen, I have no idea what they are doing, they are probably farmers. My father and his three brothers were drivers and they all started living at Takaungu. Later my father joined the land council and reallocated land. In this way he made a lot of money but people started disliking him. Now he has no job, he is an old man. My father has many wives so he got many children. I think he has about 20 children! My mother was his first wife, she had three daughters and five sons, I'm the eldest son and I started fishing as the first in the family. I used to be a driver before and I want to become a driver again but I lack the certificate. I'm also a farmer, I'm growing tomatoes on a piece of land. I have three wives and 4 daughters and 4 sons. When my sons and little brothers are older, I'll teach them how to fish, in such a way they can make more income.*

<sup>38</sup>Since fishing is considered to be a male job, the occupations mentioned here are the occupations of the men. Only the occupation of males above 12 years of age is mentioned.

The figures 4.1 and 4.2 show that whereas the Mijikenda fisherman was the first in his family to start fishing, in the family of the Mazrui, more fishermen can be found. Whereas the Mazrui started to fish because his father took him out fishing, the Mijikenda fisherman first went out fishing with some friends. Therefore, for the Mijikenda it can be considered to be a more conscious choice to start fishing than for the Mazrui fisherman.

#### **4.2. Household Characteristics**

All the households, which are situated "outside town", are located on their *shamba*. Besides the income from fishing they get food, and in some cases also cash income, from the farm. From the households interviewed there were only two households, which did not have a *shamba*. They were totally dependent on fishing. One household, which does not have a *shamba*, has apart from fishing also other sources of income as shown in table 4.3.

Table 4.3 Household characteristics

Household	Number of adults (≥17 year)	Number of children (<17 year)	Number of schooling children	No. of people involved in fishing or fishing related activities	Cash income next to fishing or fishing related activities	Food income next to fishing or fishing related activities	Being assisted by someone from outside the household	Assisting someone from outside the household
I	9	11	5	1	X	X	-	X
II	5	8	0	1	X	X	-	-
III	3 <sup>39</sup>	0	0	1	X	X	-	X
IV <sup>40</sup>								
V	5	5	0	2	-	X	41	-
VI	9	10	0	3	X	X	-	-
VII	2	3	2 <sup>42</sup>	1	-	-	X	-
VIII	2	2	2	1	X	-	-	X
IX	5	5	2	4 <sup>43</sup>	X	X	-	-
X	2	4	0	1	X	X	-	X

<sup>39</sup>However, the wives of a brother of the woman stayed there as well during the whole period of this research (6 months), but the informants claimed that they were just temporary visitors who would leave.

<sup>40</sup>The man and woman were giving such a different answers that it was impossible to capture it in a table, this household will be discussed later.

<sup>41</sup>During *kusi* money is borrowed from the shop owner, however since this money has to be paid back this is not considered as being financial assisted.

<sup>42</sup>The other left school and is an apprentice right now

<sup>43</sup>The woman is working as a fish monger during low farming season

The two adult men from household five are both fishing. Since one of them is 78 and lacking the strength to go out fishing during most of the *kusi* season, in this season the household mainly depending on the income of the other fisherman. It is also in this season that they often turn to shopkeepers for help, by letting them buy on credit. This will be paid back during *kaskazi* season, when both men are fishing and the fish catch per fisherman is higher than in *kusi* season. The money which remains during *kaskazi* season, after paying back the credit from the shop and buying the necessary things for the household, is invested in the house. They started out living in a house made of mud and stone, with a roof made of *makuti*. Now they live in a house made of blocks with a *mabati*<sup>44</sup> roof. Every year they build an addition to the house.

Household seven is the household of a Bajuni fisherman. They live in a rented house, but a new house is being built. Since the man was married before and has a child from that earlier marriage, he assists his child. He also assists one of his divorced sisters. However he does not have to borrow money from anyone to get through the *kusi* season. The most apparent reason for this seems to be that this man belongs to the group of "fishermen with sense". In the past years when the catch was higher and fishermen could make a good living from fishing, some fishermen put some money aside, gave it out as a loan or invested it in buying plots of land. Nowadays they are still handling their money with care, meaning they do not buy *mira*<sup>45</sup>, other drugs (in Takaungu *mira* is considered to be a drug) or alcoholic drinks. By saving some money, this fisherman managed to send his children to school, sustain his own household and even help his divorced sister. For himself this is also a way of securing his livelihood for the times he will be too old to go fishing:

*"When I'm an old man I can rely on my children to take care of me, since I put them at school and they will probably find a better job than fishing, but even if I am in need of money and my children are not able to help me, I can turn to my sisters children and ask for assistance. They cannot deny that to me, since I took care of them when they were young, so then they have to take care of me"*

In other words, by helping his relatives now, while he can afford it, he secures their help for himself in times he will need money.

The man of household number six is a furniture maker in the times he does not go fishing. Since his father was a furniture maker, he learned it from him (the father was a part of the household until his death). However, he only makes furniture on order and orders are not regular. The household is therefore mainly dependent on his fishing. Two of his sons help him fishing.

Household eight is the only household of which a member has a permanent job. The woman is a tailor at one of the private houses at Kitangani. During the *kusi* season the man is a part time fisherman. Most of the time he does not go out fishing.

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<sup>44</sup> Iron sheets

<sup>45</sup> Mira is another name for Khat. Khat is a natural stimulant from the *Catha Edulis* plant, found in the flowering evergreen tree or large shrub which grows in East Africa and Southern Arabia. Khat leaves contain psychoactive ingredients known as cathinone, which is structurally and chemically similar to d-amphetamine, and cathine, a milder form of cathinone. It is taken socially to produce excitation, banish sleep, and promote communication. It was used as a stimulant to dispel feelings of hunger and fatigue (<http://members.density.com/warmth/khat1.htm>).

Together with his brother he is also involved in constructing houses. In case there is no work, he can go out fishing. The woman sends part of her salary to her parents. The second household derives its income from fishing, farming and the money they get from the little *hotel* the woman has near the primary school. Her cousin works there for her (she cooks and so on).

The first household has, next to its income from farming and fishing, an income from the pieces of their shamba that they rent out to people who cut blocks<sup>46</sup>. The block cutters pay a monthly rent to cut the blocks there. The father of the informant seems to get a retirement benefit from a position he had in a former land council, although nobody is clear about that.

In some cases, relatives are being supported in one way or the other. This can have several reasons.

*"I'm the eldest son to my mother, my father died, so it is my duty to help my mother with raising my younger brothers. I assist in paying their school fees."*

(Mijikenda fisherman)

*"Everybody can get in trouble, and it is good to know you have people who can help you, but who will help you if you did not help them?"*

(Mijikenda fisherman)

*"When I'm an old man I can rely on my children to take care of me, I protected them when they were vulnerable and raised them and gave them education. When I cannot help myself anymore, they'll help me, it is a way of paying back. So when I help a child of a brother or sister, they'll have to help me when I'm old."*

(Bajuni fisherman)

During the *kusi* season, some fishermen turn to shopkeepers or relatives for help. However only one of the fishermen said that he needed assistance during the *kusi* season. Most fishermen (or their wives) could find alternative ways of income (farming, constructing houses and so on) during *kusi* season. In case they needed some help from anybody, only one fishermen thought he would not know anyone who would help him. Lucky for him, his wife was convinced that her brother would help her.

As shown in table 4.3, the size of the households differs from three up to twenty members. Although the household of three members was the household of a fisherman who had married two wives, most of the households with less than 5 members consisted of monogamous marriage where no other people beside the nuclear family were a part of the household. The household of four people consists of parents and their two sons. They deliberately chose to limit the size of their household to four since they wanted all their children to go to secondary school in order to offer them an opportunity to a job. The households with nine or more members were all, except one, households in which the man married several wives and the parents or married children with their nuclear family were a part of the household.

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<sup>46</sup> At Timboni, where this shamba is located, coral blocks are cut.

Table 4.4 Income, whether in food or cash, from non-fishing related activities<sup>47</sup>

Household number	Shamba	Self employment	Casual employment	Permanent employment
I	x	x	-	-
II	x	x	-	-
III	x	x	-	-
IV	x	x	-	-
V	x	-	-	-
VI	x	x	-	-
VII	-	x	-	-
VIII	-	x	-	x
IX	x	x	x	-
X	x	-	-	-

In the fifth household the woman denies they are cultivating anything on a *shamba*, whereas the man claims he is cultivating about a half acre of a *shamba* of a friend. He claims that he and his wife work on the *shamba* together. They cultivate maize. However he only started this a couple of years ago since his fishing income became less and less sufficient for the household needs.

<sup>47</sup> It was impossible for the informants to indicate the importance of the several sources of income. However all the fisherman claimed that the fishing was the main source, whereas some of their wives claimed that farming, if practised by one of the household members, was the main source of income.

Table 4.5 Shamba<sup>48</sup>

Household	Ownership <sup>49</sup>	Size (acre)	Crops												
			Food crops						Cash crops						
			Maize	peas	cassava	greens	beans	Greens	tomatoes	cashewnuts	Coconut tree products <sup>50</sup>	groundnuts	fruit		
I	I/G	3½/12	x	x	-	x	x	x	-	x	x	-	-	-	x
II	I/B	12/2½	x	x	-	x	-	-	-	-	-	-	-	-	-
III	B	2½	x	x	x	-	x	-	-	-	-	-	x	-	-
V	Bo	½	x	-	-	-	-	-	-	-	-	-	-	-	-
VI	G	1	x	x	x	-	-	-	-	-	-	-	-	-	-
VII	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VIII	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IX	I	2	x	x	-	-	-	-	-	-	-	-	-	-	x
X	I/G	2/1	x	x	x	-	-	-	-	-	-	-	-	-	x

<sup>48</sup> Household number four is not mentioned in this table because of the inconsistency of the answers

<sup>49</sup> B = Bought, I = Inherited Bo = Borrowed R = Renting, G= Government

<sup>50</sup> *Madafu*, coconuts, *Makuti*, coconut oil, palm wine etc.

In table 4.5 the information on the *shamba*'s is shown. In household one and two the man and woman gave different sizes of the *shamba*'s. In household one this is because the woman is cultivating mainly on the smaller *shamba* (3,5 acres) where they grow peas, beans, greens, cashewnuts, coconuts and fruits, while the man mainly cultivates the larger *shamba* (12 acres) with tomatoes and some maize. In household two the woman was right. She claimed the *shamba* is 2,5 acres. This might be explained by the fact that the man is not involved in cultivating the *shamba*, he even has problems locating the *shamba*. In four cases the land is inherited from the father of the husband. Sometimes a *shamba* was bought or distributed to them by the government. The *Mazrui* used to possess most of land between Takaungu and Kibaoni. They were given this land in possession for certain years. Since the land was not cultivated by the *Mazrui*, some years back the government started reallocating the land to the people living on it. The portion of land that somebody was living on and was cultivating was given to that person. However, nowadays this is still giving problems between the people living on and cultivating the land and the *Mazrui*. During this reallocation of land some people managed to get a larger plot than they were cultivating.

*Plate 4.1 A girl working on the shamba*



As shown in table 4.5, all the households cultivate more than one crop. Mixed cropping can be found on almost every shamba, although often coconut trees also are solely grown on a shamba. The tomatoes grown by the fisherman from household one are also the only crop on the *shamba*. Cultivation of the food crops and in most cases also the cash crops is guided by the rains. Since the rains are seasonal, planting the crops needs to be well planned in order to profit maximally from the rains. When the rains last longer as usual, some people plant maize a second time. Often seeds are preserved from the previous harvest. Except in the case of tomatoes; those seeds are bought. Even in case of shortage, people would rather buy, for example, maize flour on credit than use the preserved maize.

*"It is better to buy the maize flour than to use the mahindi<sup>51</sup> harvested from the shamba. It is always possible to buy the maize flour, but you are not sure whether it will be possible to buy the maize at the time you want to start cultivating. Maybe you have to wait or get it from far and than you might be too late for the rains."*

(wife to a Mijikenda fisherman)

The work on the *shamba* is done by all the members of the household who are capable (i.e. not too young and not sick). Since the man is fishing, he usually spends less time at the *shamba* than the woman (or women). Children are taken to the *shamba* from a young age. This is done for two reasons. First of all the mother can keep an eye on them and second, they can slowly learn how to cultivate crops and when they grow older they can help digging (etceteras). The women or, more commonly, the children take care of the smaller livestock. The cattle however fall under the responsibility of the man or the eldest son.

Table 4.6 Livestock

Household number	Goats	Sheep	Chicken	Ducks	Cows	Bulls
I	20	6	x	-	3	-
II	8	6	x	-	-	-
III	-	-	x	-	-	-
IV	x	-	x	-	-	-
V	-	-	-	-	-	-
VI	2	-	x	-	-	-
VII	-	-	x	-	-	-
VIII	3	-	x	-	-	-
IX	-	-	-	-	-	-
X	1	-	x	-	-	-

Goats are used as an investment, they can be sold if money is needed, but they can also be used for certain occasions like marriage. Sheep are more likely to be only used for investment. Chicken are slaughtered whenever the need occurs. Cows are seen as a sign of wealth. They are used as an investment of someone's money, for milk production. Especially bull calves are a valuable attribution to a household, since they can be sold. The risks with keeping cows are higher than with keeping for

<sup>51</sup> Maize

example goats. Cows are more vulnerable for sickness and in some cases, the health expenses can surpass the benefits of having a cow.

Table 4.7 Housing

House-Hold	In or outside town	No. of buildings <sup>52</sup>	No. of rooms <sup>53</sup>	Makuti roof	Mabati roof	Mud and stone/coral	Block	Block and mud and stone/coral
I	In	2	4	-	x	-	-	x
II	In	1	4	x	-	-	-	x
III	In	1	3	x	-	x	-	-
IV	In	---	---	---	---	---	---	---
V	In	1	4	-	x	-	x	-
VI	Out	3	4	x	-	x	-	-
VII <sup>54</sup>	In	1	3	-	x	-	x	-
VIII <sup>55</sup>	Out	1	2	x	-	x	-	-
IX	Out	1	4	x	-	x	-	-
X <sup>56</sup>	Out	1	3	x	-	x	-	-

The houses inside town are more likely to be made of blocks and *mabati*. A *mabati* roof is much more secure than a *makuti* roof<sup>57</sup>. Therefore one would expect that a *mabati* roof is a first priority. Notwithstanding, all the informants would choose for the block wall instead of a *mabati* roof if they would spend money on their house. The houses outside town are most likely made of *makuti* and mud-stone/coral walls. One hardly sees any block and *mabati* house outside town. However, some people have started building one, but to finish a house can take years since one builds an additional part when there is money available.

In household number four, the man rented some rooms (three) in a block-*mabati* building. His wife is still living in the mud-*makuti* house in which they used to live in together. The couple is constantly quarrelling and the woman does not want to live with her husband in the other building.

In case of marriage, a son and his new wife join the father's household or he starts his own household. In most cases the father pays the dowry for his son's first wife. It is also the father who discusses the marriage arrangements with the parents of the wife-to-be. In most cases in Takaungu, it is a Muslim marriage with a Muslim wedding ceremony. The couple is declared married by the mutual parents and rings are exchanged<sup>58</sup>. A goat is slaughtered and food is prepared and eaten by the guests and the new couple. Any form of entertainment<sup>59</sup> is possible but this causes a rise in the costs of the wedding. Therefore, a large wedding is a sign of wealth. Later guests accompany the couple to the husband's house. If a daughter marries she always leaves her father's homestead and follows her husband. In absence of a father the

<sup>52</sup>Kitchen not included.

<sup>53</sup>Kitchen not included, in the case of more buildings, number of rooms in the informants building

<sup>54</sup> They rented some rooms in a house, in the meanwhile they are building a block-*mabati* house, the information shown is the information on the house they rented

<sup>55</sup> He is building a new mud-*makuti* house next to the one he is living in right now and which is fallen into decay

<sup>56</sup> Building a block-*makuti* house next to the one he is living in right now

<sup>57</sup> A *makuti* roof is likely to catch fire, often houses got destroyed of this

<sup>58</sup> Rings are only exchanged in the case of the first wife. Marriage ceremonies with the second and following wives do not involve exchange of rings.

<sup>59</sup> For example *Kirumbuzi*, traditional fighting

marriage can be arranged by a uncle or an elder brother. Nowadays it happens that a man arranges his own marriage. This means he talks to the parents of his wife himself and pays his own dowry. In case of a Muslim marriage, the man can divorce whenever he wants. For divorce, the only thing needed is a certificate of your divorce. In most cases, the reason for divorce is a quarrel. If a couple divorces, the woman will usually return to her father's homestead. In case the children are still young, they will most often go with the mother (especially when they are still breast fed) and if the children are older, they might go with the mother or with the father. In some cases support sustenance is paid. This is most often in the case that the children live with the wife.

In case the sons or one of the sons stays with the household, a continuous movement of people in and out of the household will appear. Daughters are moving out but wives of sons are moving in. The new couple will get new children who will grow up and stay or leave the household. The eldest son living in the household will take over the position as head of the household when the father dies. In this way, the most logical way a son leaves the household will be by death unless he has moved out at some time.

In all the households, food is mentioned as the main expenditure the whole year through. Although some households live off their *shamba* for one or more months, food remains the main expenditure. *"You can do without new clothes, or you can take your children from school, but sima<sup>60</sup> need always to be there!"* (wife of a Mijikenda fisherman). For the households with children in school, school fees and additional things that need to be bought, are the second main expenditure. In case of renting a house, the monthly rent is also a main expenditure and also clothes and "household things" like soap, washing powder and paraffin are regular expenses.

*"Nowadays school is getting more and more expensive, it is not what it used to be, now you have to buy so many things and the school fees are much higher"*

(Mazrui fisherman)

In all households, everybody handles his or her own money, but contributes if necessary to the food expenses. The choice to assist in something else like the school fees of brothers is up to the person himself, but often felt as a social obligation.

*"If I would not help them, when I have the money, they would change their attitude towards me. You know, you are a family and you need to help each other. If you are the one with money, than you are lucky but you need to help your family with a bit of money."*

(Bajuni fisherman)

As mentioned before, Scott (1976) refers to this as the right to subsistence. According to Scott this right has a strong moral force since it is the minimum claim an individual makes on his society. The right to subsistence thus goes beyond the claim

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<sup>60</sup>*Sima* or *ugali*, made of maize flour and water to a ball of heavy dough. Often eaten with soup.

of the poor on the resources of the community itself but also their claim on the wealth of the people of the community who are better off.

In case of the need of money, you can always turn to relatives you once helped. It is quite unusual to help somebody who is not related to you without asking something in return within a certain period (for example credit in case of a shopkeeper).

*"If you borrow money from somebody, you give her a khanga<sup>61</sup> (two pieces) and when you pay back the money you get your khanga back. In this way there are women who have gathered about 20 khanga's!"*  
(Wife of a Mijikenda fisherman)

If the wife has an income, "household things" are often bought from her money, while food is often bought from the husbands money or money from several members of the household together.

The household chores like sweeping, cooking, fetching firewood, fetching water, taking care of the children, washing clothes of the children are all the duties of the women in the household. In some cases the man washes his own clothes while in other cases his clothes are washed by the wife or wives. If a man has more wives, it is more likely that they will wash his clothes than when a man has only one wife. Also younger men are more likely to wash their own clothes than older men are. Daughters are supposed to start helping in the household from around 10 years onwards. They start assisting their mother and after a year or so they will take over certain tasks.

#### 4.3. Fishing

Almost all the informants, except one, use one or more of the following gear: nets, lines and speargun. Other gear like *malema*<sup>62</sup> is also used. Some fishermen use different gear in the two different seasons, *kusi* and *kaskazi*. Fishermen with spearguns do not use vessels to go out. All other fishermen except one are using vessels. This can be a dug out canoe or a *dhow*. More than half of fishermen have fished and are fishing at other landing sites as well. Most fishermen claim that when they were young and did not had the responsibility of a wife (or wives) and children at home they were fishing at other landing sites the whole year through. Now that they have that responsibility they are fishing at Takaungu the whole year or move to one or two other landing sites during *kaskazi* season. However two of the fishermen had fished only at Takaungu.

*"In Takaungu I know that I can eat and sleep at the place of my brother in law, I do not have anywhere to go at other landing sites and than I will have to buy my own food!"*  
(Mijikenda fisherman)

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<sup>61</sup> Cloth, with a Swahili proverb on it, worn by the women.

<sup>62</sup> Trap

The other fisherman has another income generating activity during the *kusi* season (constructing houses) and therefore mostly fishes during the *kaskazi* season.

*"Fishing at Takaungu alone is enough for me. I have my family here and I have to take care of them. Maybe I can do some other jobs in Takaungu, so why should I move somewhere else?"*

(Mijikenda fisherman)

*Plate 4.2 A fisherman fixing his nets*



Most of the fishermen used to fish at other landing sites when they were young, being, in effect, migratory fishermen.

*"When I was a young fisherman I fished at other landing sites with my friends. We have been at Ngomeni, Watamu, Mayungu, Shariani, Shimoni and Gasi. During that time I was not staying at Takaungu, I was not staying anywhere, we fished somewhere for a while and moved on."*  
(Bajuni fisherman)

When the fishermen grow older most of them turn into what I will refer to as seasonal migratory fisherman. They fish at Takaungu during *kusi* season and at another landing site during *kaskazi* season. They claim it is not worth the trouble during *kusi* season, the catch at other landing sites during this season is only slightly different from that at Takaungu.

*"I mostly fish at Takaungu but during kaskazi season I may move to Mtwapa or Kilifi since the catch is often higher over there."*  
(Mazrui fisherman)

*"When I hear from other fishermen that the catch is higher in Wesa, I'll move to Wesa during kaskazi. You know for this kind of information you depend on each other."*  
(Mijikenda fisherman)

One can observe a change from migratory fishing to seasonal migratory fishing when a fisherman gets older, marries and starts his own family. A fisherman learns to fish at a certain landing site. When he is young and experienced he is a migratory fisherman, and when he starts his own family he becomes a seasonal migratory fisherman or a non migratory fisherman. It is often those seasonal migratory fishermen and non migratory fishermen who teach the new generation of fishermen, who closes the circle.

*"There is a difference between a young, unmarried fisherman and an older married fisherman. You are not facing the same responsibilities. You have to act to your responsibilities, so now I only fish at Wesa during kaskazi and at Takaungu during kusi season."*  
(Bajuni fisherman)

The reason why most fishermen move to other landing sites during *kaskazi* season is that they can obtain a better catch at the other landing site than at Takaungu. However most of the fishermen claim that alongside the Kenyan Coast an overall decline in fish catch can be noticed. Not only do they catch less, but also the low catch season, *kusi*, stretches over a longer period than before, which means the high catch season, *kaskazi*, is shorter. Especially the year this research was carried out (2000) the fishermen were complaining about the extremely late arrival of the *kaskazi* season and the heavy rains during the months of September and October. Apart from this change in seasons, their catch during *kusi* and *kaskazi* seasons has declined as well. For this the fishermen give several reasons. These reasons are shown in table 4.8.

Table 4.8 Reasons for the declining fish catch<sup>63</sup>

	Frequency an answer is mentioned
Increasing number of fishermen	6
Only God knows	4
Nobody knows	1
Trawlers and Wapemba	2

Although not all the fishermen agree on the point that the declining fish catch is caused by the increasing number of fishermen, all the fishermen agree that the number of fishermen actually have increased. The reasons for this are simple. Fishing can be practised by everybody, there is no need of a special certificate or level of education. Second, except from the block cutting at Timboni, there is hardly any work available. If one combines this with the first one, it is obvious that a lot of people turn to fishing to make an income. The informants also mention other reasons:

*"Children see how easy one can start fishing and drop school. They are not motivated to go to school, so why to go if you can make your living with fishing!"*

(Bajuni fisherman)

*"A fisherman teaches his friends and relatives how to fish, then of course the number of fishermen is increasing since everybody teaches more and more people!"*

(Mazrui fisherman)

I'll come back to the trawlers and Wapemba in the next paragraph.

<sup>63</sup>Different combinations of answers where given here, shown is the frequency an answer is mentioned.

#### **Box 4.1 A Bajuni fisher**

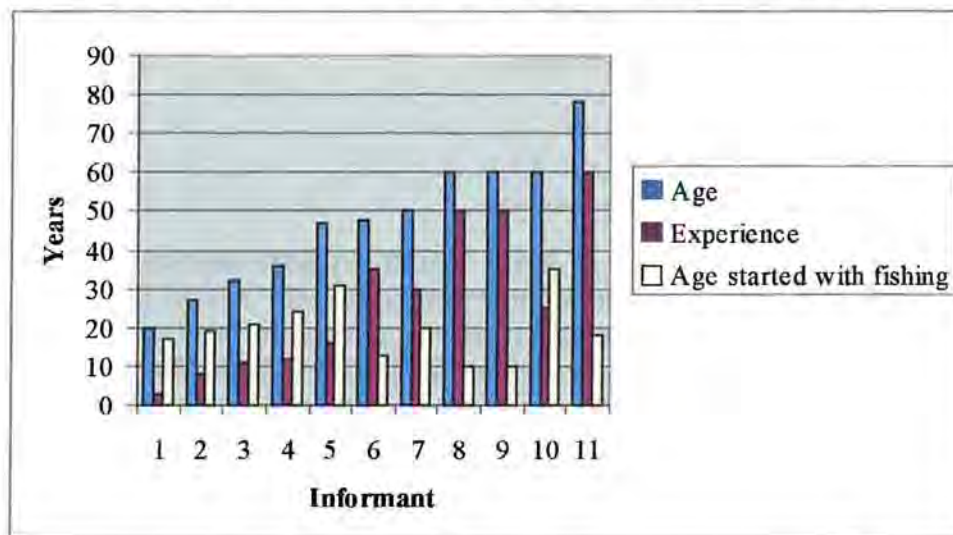
I was born during colonial times, here at Takaungu. But that was not the Takaungu there is right now. There were not that many buildings, the primary school was situated at the creek and for the rest there were only houses of people. But even those were not that many. At the places where most of the houses are right now, there were bushes. Most of the people who were staying here were Muslim. These Muslims were mostly Bajuni, Arabs and Waswahili. Mijikenda were there but they were very few as well as the Wayahoo from Tanzania. The Swahili and Bajuni are still living there but a lot of Mijikenda have moved in. The shamba's were used to build houses on, that is why you see so many coconut trees in between houses. The bushes outside Takaungu were cleared and became shamba's. Nowadays you have to go up to Vuma to find the nearest bushes to Takaungu.

The Mijikenda were farmers when they came here, the Bajuni were the fishermen. However since the Mijikenda saw that it was such a good job to make money with, they started fishing as well. Most of them were taught by the Bajuni. Right now, there are more Mijikenda fishermen than Bajuni, and still there are moving Mijikenda into Takaungu!

Most fishermen (over 50%) started fishing when they were under the age of 20 as is shown in figure 4.3. The fishermen who come from families that have a history in fishing or fishing-related jobs can be found in the categories 10-15 year, 15-20 and 20-25 year.

The fishermen who started fishing at the youngest age are the fishermen of 50, 60 and 78 years old, who all come from a family which has a history in fishing or fishing related jobs. They are respectively Bajuni, Pemba and *Mazrui*. However if we combine this graph with table 4.7 then it appears that there seems to be a relation between the answer given and the age and years of fishing experience of the person. The answers "Nobody knows" and "Only God knows" were given by the informants which were 50 or older and had more than 30 years of experience. The answer "Increasing number of fishermen" was given by the informants with less than 35 years of experience and the answers "Trawlers and Wapemba" given by the fisherman of 48 with 35 years experience and the fisherman of 27 with 8 years of experience, however the last one also mentioned the increasing number of fishermen.

Figure 4.3 Age, experience in fishing and age started with fishing



The elder fisherman with less experience has been working as a fish trader before starting to fish. The elder fishermen started to fish at a younger age than the younger fishermen (with the exception of the former fish trader). As explained earlier, the elder fishermen originate from fishing families. They started fishing with their fathers.

There are different options for a fisherman about what to do with his catch. All the fishermen except one, take a part of their catch home for consumption within the household. The one who is not taking a part home for consumption says that in his household there are too many mouths to feed and that the catch is of higher value when sold than when consumed. In other words, more food can be bought from the money obtained from the fish than in the case the fish is eaten.

The other part is sold to either the *tajiri*, the fish traders and the middlemen. This is shown in table 4.6. The reasons to sell to the *tajiri*, the fish traders or the middlemen are various and depend on a personal preference.

*"I sell my smaller fish to fish monga and the bigger to Awadh<sup>64</sup>, he is the only one buying big fish!"*

(Mijikenda fisherman)

*"When I started fishing, I borrowed some money from Awadh, that is why I'm still selling my fish to him, if you start selling your fish to someone you cannot change that all of a sudden. And he used to be the only one who bought the fish."*

(Mazrui fisherman)

*"I'm selling to any fish monger who want to buy!"*

(Mijikenda fisherman)

*"I sell my fish to one specific trader, he is my friend and he always pays directly."*

(Bajuni fisherman)

<sup>64</sup>The *tajiri* of Takaungu

Table 4.9 Fish selling

	Percentage of fishermen
<i>Tajiri</i>	27,3%
Fish traders <sup>65</sup>	45,5%
Middlemen <sup>66</sup>	9,1%
<i>Tajiri</i> and fish traders	18,2%

All the selected fishermen are fishing at least during *kaskazi* season with other people. This can be a relative, a friend or just anybody with whom they started fishing. Ethnic group or religion of the person does not matter. In the cases they are fishing with more people (a crew) there are different ways to divide the catch. This can depend on ownership of vessel and gear, relation to the person and the size of the catch.

*"I'm fishing with my sons, normally they only get a small part of the catch but in the period we are harvesting from the shamba they get more since than I do not need to buy food."*

(Mijikenda fisherman)

*"We divide the catch equally, only when we have a high catch I get an extra part since I am owning the nets."*

(Mijikenda fisherman)

About half of the fishermen claim that they can live from fishing alone, however in half of these cases the wives claim that they cannot live from fishing alone. All the households except one have at least one child who is schooling. If they did not have to meet the costs of schooling and would not give financial help to relatives, two more households could live from fishing alone (according to the men, both wives denied that in such a case they could live from fishing alone). However in all households, except one<sup>67</sup>, the income from fishing makes half or more than half of the household income. And all fishermen claim that during *kaskazi* season they can easily live from fishing alone. All ten fishermen agreed that in the future their children would not be able to live from fishing alone and that they need other income generating activities.

#### 4.4 Conservation

Figure 4.4 and 4.5 show the reasons for a fisherman not to go fishing on a certain day and the areas which he does not use for fishing. For most of the Muslim fishermen, Friday is a day of prayers. However some of the Muslim fishermen, especially the speargun fishermen<sup>68</sup> do go fishing on Friday but return earlier. For most of the Christians, Sunday<sup>69</sup> is their day of worship and therefore they do not go out on that day. There are two different types of *Eed* (holidays, festivals), The 'Eed-al-Adhaa comes after completing the "Hajj" (Pilgrimage) or when people return from

<sup>65</sup>Fish traders sell directly to consumers

<sup>66</sup>Middlemen sell to fish traders

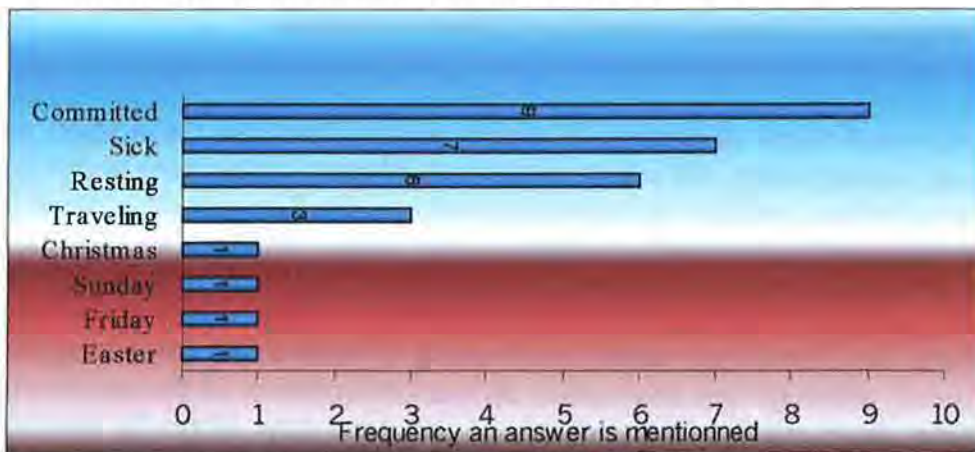
<sup>67</sup>This fisherman is having another income generating activity during *kusi* season and therefore fishing makes half of his income. However during *kaskazi* season his fishing makes more than half of the income.

<sup>68</sup>Speargun fishermen often fish at night or early morning, depending on the tide and personal choice.

<sup>69</sup>Some churches have their church services on Saturday.

pilgrimage. The 'Eed-al -Fitr comes after the fasting in the month of Ramadaan<sup>70</sup>. On those days, some of the Muslim informants do not go out. Christmas and Easter are Christian holidays and most of the Christian fishermen do not go fishing on those days. The roughness of the sea is a personal judgement, one might find the sea too rough to go out fishing while another will go. Often this is age related. The Mazrui fisherman of 78 does not go out fishing for most of the *kusi* season while his son (or son in law, he and his wife differ in opinion on that) goes out fishing and pays a share of his catch to the *Mzee* for the use of his vessel. Gear repair, which can be an arduous task if nets are used, is often done on days when the sea is too rough to go out fishing.

Figure 4.4 Days when a fisherman does not go fishing<sup>71</sup>

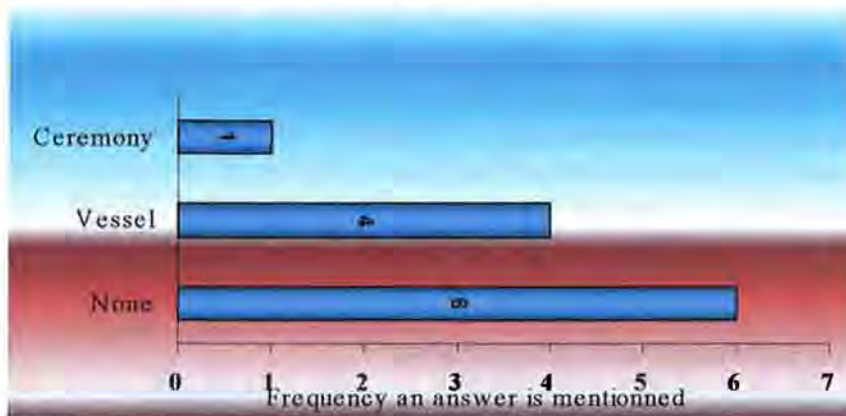


By figure 4.6 should be kept in mind that there might only be a very small or even no difference between the answers “none” and the answer “vessel”, since it is impossible for a fisherman to fish everywhere considering the limitations of his vessel. The answer “ceremony” means that the person is not fishing on the spot of the ceremony on the day of the ceremony. I will discuss the ceremony further in this paragraph.

<sup>70</sup><http://www.islamworld.net/eidfitr.html>

<sup>71</sup>Committed means committed at home in case of sickness of a relative, burial, a visitor and so on.

Figure 4.6 Areas not visited while fishing<sup>72</sup>



Looking at the figures 4.5 and 4.6 none of these reasons can be considered as indigenous ways of conservation. Whether, when and where a fisherman is fishing depends on his possibilities, religion and personal feelings. No time period or area is not used for a certain period by a large number of fishermen. Maybe the ceremony might be seen as such, however here it only applies for one day and as will be shown next in this paragraph, people differ about this not fishing on the day of the ceremony. However most fishermen admit that there is or used to be something like a ceremony (*sadaka*), although the description on the performance of the ceremony are different. Below there are the descriptions of the ceremony given by several fishermen.

*"They used to conduct the ceremony, but now three years have passed without conducting the ceremony, it is like people care less about it.*

(Bajuni fisherman)

*We used to prepare food and invite other fishermen, take the food to the beach and eat all together and go home, the leftover of food is given to the sea."*

(Mazrui fisherman)

*"If there is a low catch than fishermen come together and have this ceremony and because they have the ceremony something changes, i.e. a higher catch.*

(Mazrui fisherman)

*Food is prepared with fish. This is done on the beach and the fishermen invited some (not fishing) villagers and together they eat the food.*

(Mijikenda fisherman)

*Some Mavumba (grinned fish which has a very strong smell, the smell is the important thing of it, it can be rotten fish as well) are taken to the sea and some words are said and celebrations are done. This can be anywhere in the sea, the place is chosen by all the fishermen together."*

(Mijikenda fisherman)

*"The fishermen go to the beach with rice. A few fishermen go out fishing. When the fishermen are back, the catch they have is prepared and taken together with the rice. The fishermen and some other villagers (especially*

<sup>72</sup> "Vessel" means the areas which cannot be reached because of the vessel. Often this is the deep sea.

*young children) eat and celebrate together. After the ceremony the leftover of the food and the fish is divided and taken home. On the day of the ceremony only the fishermen who go for the fish for the ceremony are fishing. Before the conducting of the ceremony, the gods have to be pleased. The elder fishermen have to speak some words and then some rice and fish has to be given to the sea.*

*(Bajuni fisherman)*

*The ceremony used to be conducted every year to please the gods, regardless of a high or a low catch. In those days most fishermen were Muslims and they all agreed that the ceremony should be performed, nowadays however there are a lot of non-Muslim fishermen. There is no co-operation between the fishermen anymore and the non-Muslim fishermen are afraid that when they conduct the ceremony a few days afterwards a non-Muslim might drown in the sea."*

*(Mazrui fisherman)*

*"When there is a high catch, the fishermen gather at the beach and roast and eat the fish all together, but this is not anymore."*

*(Mijikenda fisherman)*

*"There is a ceremony in which blood should be given to the sea. A goat is slaughtered and prepared and eaten. Some is given to the sea. Elder fishermen say some words to the gods of the sea to ask them for a higher catch. After the ceremony there should not be fished at the spot of the ceremony for a week. This ceremony is not there anymore, the fisherman have become to many and are not co-operating anymore, the elder fishermen who were always arranging this have died years ago. I think the last ceremony like this must have been 10 years ago."*

*(Mazrui fisherman)*

The descriptions of the ceremony given by the fishermen do not match, although they all agree that there is eating at the beach. It is unclear to say when the ceremony has been conducted last because there are people in Takaungu claiming that there has been a ceremony last year others say there has not been a ceremony for years. With the ceremony there does not seem to be a longer period of non-fishing. The conclusion can be drawn that there is no ceremony which has a positive effect on conservation and that therefore also the ceremony cannot be considered as an indigenous way of conservation.

In November 2000, some fishermen decided to have a ceremony again, whether all the other fishermen agreed or not. This resulted in only nine fishermen actually agreeing in having the ceremony. The rest of the fishermen did not see the need for a ceremony. The reasons why those nine fishermen wanted to have the ceremony are first of all that they used to do it and therefore they should continue to do it. Secondly, the Gods had to be pleased so the fishermen would get a higher catch. All nine fishermen were above forty years old and Muslim. The ceremony consisted of eating on the beach, giving some food to the sea and not fishing on that spot on the day of the ceremony. However this last rule only counts for the people who are involved in the ceremony!

Some of the fishermen see clear reasons for the declining fish catch and also have an idea what should be done about it. The problem however is that some of these

solutions will make the fishing impossible for themselves or they need such a government intervention that it is not likely to happen within a short period.

First I will discuss the fishermen's views on Wapemba and the trawlers, than their views on conservation. I will not discuss the opinions of the four fishermen who claimed that only God knows why the catch is declining and therefore only God can do something about it.

The traditional fishing gear of the Wapemba is the *juya*, a small mesh size seine net. This way of fishing is highly destructive and already caused over-fishing at the fishing grounds at Pemba. That is the reason these fishermen have spread along the Kenyan Coast (King 1999). Some fishermen mention the Wapemba as being the main cause of the decline in the fish stock. With their *juya* nets they catch even the immature fish which are thrown back in the sea. Although the fishermen of Takaungu do not want them to operate at their landing sites, it is hard to stop the Wapemba, since they are not living at or near Takaungu and are only seasonal fishermen. However, there have been confrontations between the local fishermen and the Wapemba, sometimes with physical contact. Although the *juya* nets used by the Wapemba are officially forbidden, the Wapemba seem to be allowed to use it. This is highly frustrating for the local fishermen who claim that whenever they use a type of gear, which is not allowed (for example the speargun) and they are caught, they are fined. They feel that the government should do something about these foreigners emptying the Kenyan seas, while it is getting harder for a Kenyan fisherman to make a proper living.

A second cause of the declining fish catch mentioned by the fishermen is the trawling, which is also done by foreigners. According to the fishermen, the trawlers come much nearer to the shore than legally allowed and are a threat to their fisheries. The trawlers are considered to be highly destructive since they have a lot of by-catch, which they throw back as trash. A large part of this trash is unwanted fish, like juveniles, which are dead by the time they are thrown back (Fulanda 1999). Regarding the trawlers, they feel the same as they feel regarding the Wapemba: foreigners are making the life of a Kenyan fisherman harder and harder. But whereas they can chase the Wapemba away, the local population cannot do anything about the trawlers. *"Why is the government not helping us but only favouring these foreigners?"* (Mijikenda fisherman)

Some of the fishermen mention that conservation is necessary, but the question is how. Below some of the remarks of the fishermen concerning conservation are cited.

*"If they want fewer fishermen to fish they should give us other jobs. Most fishermen here will be willing to quit fishing as long as they know there is another job for them. The establishment of a Marine Park is not the way to solve the problem since it only leads to conflict. So many people depend on fishing for their living, you cannot just take that away from them!"*

(Bajuni fisherman)

*"Why should we talk about conservation, what can we do as long as the government does not do anything against the Wapemba and the trawlers!"*

(Mijikenda fisherman)

*"The only way to stop the decline in fish catch is to stop fishing for a certain period so the fish can increase again. But from what will the fishermen live in this period?"*

(Mijikenda fisherman)

*"Conservation of the fish stock should be done and there are several ways, like not fishing for some months or the establishment of the Marine Parks, but all these will ruin the fishermen of Takaungu, they won't be able to make a living anymore, they have to look for something else, but there is hardly anything else!"*

(Mijikenda fisherman)

*"There is not much which can be done, since all the things which will make an increase in the fish stock will kill us since we won't be able to fish!"*

(Mazrui fisherman)

According to the fishermen, the only way to relieve the pressure on the fish resources is by decreasing the fishing. However if this would be the case, other ways of employment should be offered. More than half of the fishermen (54,6%) is willing to stop fishing if another job is offered to him, the rest (45,5%) is not willing to stop. All the fishermen who had a father who was fishing as well are represented in this last category.

As shown in this paragraph, fishermen deal with problems of conservation of marine resources daily. It is intertwined in their livelihood strategies since the decline in fish stocks force them to look for alternative ways of earning an income. In the next paragraph a case study of one of the fishermen of Takaungu is presented. This case study gives more detailed and specific information of the subjects discussed in this chapter.

#### **4.5 Case study**

The use of an actor oriented approach results in information which is rich in details on networks, interfaces and agencies. This case study is built on this information gathered through life and career histories, observations and interviews. It is a detailed description of the livelihood strategy of one of the fishermen of Takaungu and the networks, interfaces, agencies, power relations and history. This case study will show that the livelihood strategies of the fishermen are changing. This is driven by their declining income due to a decrease in their fish catches.

Mohammed was born at Vanga near the Tanzania border around 1920. His father was a *Mazrui*<sup>73</sup>. He was the second son of his father's first wife. However his elder brother died when he was still young. This meant that Mohammed was the eldest son from that moment. His father was a fisherman like his father's father was a fisherman. The genealogy of Mohammed is shown at figure 4.1. Besides fishing, they were farming and his mother took Mohammed to the *shamba* while he was still a young boy. Mohammed started helping on the *shamba* at the age of six. The *shamba* surrounded their house, which was made of mud, corals and *makuti*. After a few years of helping on the *shamba* Mohammed started to help his father fishing, at the

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<sup>73</sup> Waswahili

age of eight. When he first started to fish, he only got a small part of the catch since he was only helping and his father was paying his food. A year later, Mohammed started fishing with some friends. From the share of the catch he got, he was able to buy a fishing line. This was when he was around twelve years old. This is when he started fishing on his own. In those days, fishing was a good job, there was always enough food on the table and household things, like soap, and clothes could be bought without any problem. Mohammed was still living with his parents. Nevertheless, he did not contribute any of the money he made to the household. His father's fishing and the *shamba* provided a sufficient income to the household. In this way Mohammed was able to save a part of his income. When he was eighteen years old he was able to buy a fishing vessel. He bought a *ngawara*, a vessel which looks like a catamaran.

Mohammed married when he was about 20 years old. He chose the woman he wanted to marry himself. He hardly knew the woman he wanted to marry. He had seen her in Vanga several times and decided that he wanted to marry her. Mohammed also knew her family, since they were living in Vanga as well. Mohammed went to his father to ask his approval. This was necessary since his father was supposed to declare him married. His father approved so Mohammed went to the parents of the girl. Mohammed did not only need their approval, but he also had to discuss the brideprice with them. Usually his father would have gone to the parents of the girl to discuss the brideprice, but Mohammed and his father had agreed that Mohammed would pay his own brideprice. Since he was a fisherman and he had his own income, he did not expect his father to pay it. Also considering the fact that Mohammed had never contributed to the household, but he had consumed within the household, he thought that it was more than fair to bear the costs of his brideprice himself. The only way Mohammed could pay his brideprice was in money and not in livestock since he did not possess any livestock. Nevertheless, Mohammed bought one goat and he paid the other part of the brideprice in money. If he had to buy the livestock first and then give it to the parents this would have led to a more expensive brideprice, which is less attractive to Mohammed as well to the parents of the girl. The goat Mohammed bought was symbolic, to pay the total brideprice in money would have been a sign of disrespect. The negotiations about the brideprice only took three days and on the third day the brideprice was paid and the couple was declared married by both the fathers. Mohammed took his new wife to the small house he was living in at his father's compound. His new wife started to help his mother in the household and on the *shamba*.

They got three children, two sons and a daughter, and things were going alright. Mohammed could make a good living from fishing so they did not have to worry about meeting their subsistence needs. Notwithstanding, due to quarrels, Mohammed divorced his wife and she went back to her parents compound, together with their three children. This divorce was easily settled since both of them agreed on it. They were both living in Vanga, his children often came to his place to eat or to play with their cousins. Since the children were eating at both compounds, Mohammed did not pay anything to the mother. However the children always slept at their mother's place and it was the mother who had to care for them in the first place and she bore the responsibility for the children.

About a year after the divorce, around the age of thirty, Mohammed married again. His wife, Fatima, was a Mazrui as well. This time Mohammed did not pay a brideprice. This had two reasons. First of all, Fatima was a divorcee as well. Second, the parents of Fatima had already died and she was not a young girl anymore and therefore could decide by herself whom to marry and what the brideprice should be. For the same reasons, Mohammed asked Fatima directly whether she wanted to marry him. Mohammed was a wealthy fisherman and Fatima agreed to marry him for several reasons. First of all, his wealth would guarantee her of a good life with no shortcomings. Second, she thought it was unlikely he would marry a second wife since if that was what Mohammed wanted he would have done that when he married the first time. Last was the point that a marriage would give some security to Fatima. As an unmarried single woman with no parents she could get in trouble meeting her subsistence when growing older. Marrying Mohammed would mean that she secured her subsistence. They got married by Mohammed's father and her uncle. After two years, they got a daughter, Samira.

When Mohammed was about thirty-five Vanga had really changed. When he was born, Vanga was surrounded by forest where wild animals were roaming around. Sometimes, some people from Vanga went hunting, in order to get some meat, but Mohammed's father did not go hunting, he was only a fisherman. Therefore, nobody taught Mohammed how to hunt so he never went hunting either. Mohammed also made enough money from fishing to buy some meat if he wanted to. There was a creek which was an excellent fishing spot, fish was in abundance. However these things had changed. People had settled where the forest used to be, causing a decline in the forest. But that should not have been a problem, were it not that there had come many fishermen, most of them from Tanzania. Vanga became too crowded and the wild animals had to be transported to other areas by the forest officers since they were bothering the people too much. The number of fishermen had increased and conflicts arose on the fishing grounds. Fish was no longer abundant in the creek and more and more migrant fishermen from Tanzania came to Vanga to fish. Often they also settled there. Mohammed felt that Vanga was changing too much. It was not the village he grew up in anymore and he was very dissatisfied with these changes.

Around 1950 some of Mohammed's relatives had migrated to Takaungu. Unlike Mohammed, they were migrant fishermen and had been fishing in Takaungu before. Mohammed had never felt any need to become a migrant fisherman and had therefore never fished anywhere else than Vanga. Mohammed's relatives decided to live in Takaungu and moved there with their households since they considered it a more suitable place to live and to fish than Vanga. Mohammed had heard of Takaungu from his relatives often. When he discussed the changed circumstances in Vanga with one of them<sup>74</sup> and his displeasure with that, Mohammed was told that there was a house he could buy. Mohammed decided to move to Takaungu. This decision was solely made by Mohammed and he was sure that his wife would follow him.

Since it was an expensive trip to Takaungu, Mohammed took the decision to rely on his relatives and just go instead of paying a visit to Takaungu by himself first. He sold

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<sup>74</sup> His relatives occasionally came back to Vanga in order to visit their family.

his *ngawara*, since it was impossible to sail to Takaungu with that vessel. A bigger and stronger vessel like a *mashua* was necessary for a journey like that. Around 1960, Mohammed moved to Takaungu with his wife and daughter Samira and some money and belongings. From Vanga Mohammed, Fatima and Samira went to Mombasa by bus. In Mombasa they looked for transport to Takaungu. It was a long and tiring journey, especially since none of them had travelled far distances before. When they arrived in Takaungu, they asked for directions to the house of one of their relatives. There, they were welcomed with a meal and a place to rest. The next day, Mohammed went to buy a house. He bought the plot on which he is still living. At that moment, there was not the house made of blocks and *mabati*, like there is nowadays, but a house made of mud and *makuti*. Each year, a part of the house was built or rebuilt. However, it was a good place to start, it was like their house in Vanga.

When Mohammed arrived in Takaungu, one of his relatives first took him to the chairman of the fishing committee, since he had to approve anyone who wanted to fish at Takaungu. This approval was given since his relatives claimed he was a fair fisherman and had never caused any problems at Vanga. During his first two weeks of fishing at Takaungu, he went with some of the local fishermen, in order to become familiar with the area. Mohammed felt like he was easily accepted in the fisher community.

Also Takaungu has changed through time. The Takaungu in which Mohammed arrived is different from the Takaungu there is nowadays. There were far less people, especially far less Mijikenda. Also the contacts between people were different. When Mohammed arrived in Takaungu, people helped him to start fishing and getting to know the best fishing grounds. There was an old man, the *Mzee*<sup>75</sup>, to whom everybody went when they needed advice. Nowadays, these things have changed, people have become less close to each other, the *Mzee* has died and is not replaced by someone else. A huge problem these days is that a lot of money is spent on drugs. This ruins households, because they cannot even pay the food for the children anymore. Also criminality and aggression among people in Takaungu has increased.

In those days, the fishermen really formed a community, they would help each other in time of need. Nowadays, there are too many fishermen and they do not form a group anymore. But there has also been a period in which the population of Takaungu was declining. Young people were attracted by the big town and moved to Mombasa. They thought that they could make a better living over there since there was a lot of employment, especially in the tourist industry. It became more and more difficult to make a living in Mombasa though and that made them but mainly their children move (back) to Takaungu. This caused problems, since land was reclaimed on the basis of inheritance. However, the land claimed was now cultivated by other people. They started to build more and more houses and clear more bushes in order to cultivate *shamba*'s. This is happening up to this day. Also more and more Mijikenda moved in to the town area, while they used to live away from the town, on their *shamba*. They started fishing as well, which added to the increase in the number of fishermen.

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<sup>75</sup> *Mzee* is the Swahili word for old man, used to address respected older men

Mohammed lived in Takaungu for almost a year when his second daughter was born. Later he would get one more daughter and two sons. Some years after his second daughter was born, a decline in the catch could be notified, which could not be attributed to a change in seasons.

When his daughter Samira was sixteen, Mohammed was asked for her hand. In the negotiation for the brideprice, Mohammed took into account his daughter's wish. Samira did not want to leave her father's house. This was also a convenient arrangement for Mohammed, since his sons were still very young and he was already getting old and he was not that capable of fishing during the rough season anymore. When his daughter's husband, who is a fisherman as well, joined his household, Mohammed had secured his income for his old days better than when his daughter would move out of his household. This would have been very difficult to arrange if the man in question, Khadiri, would have been the only or the eldest son of his father, but since Khadiri had more elder brothers, his parents did not object. This had no influence on the amount of the brideprice paid. It only took two days of negotiating and the marriage was arranged. The man moved in with Samira. The brideprice was paid in money, Mohammed was not interested in livestock. He had never kept any livestock and did not want to do so in the future. Also for Khadiri's family, money was the easiest way to pay the brideprice since the man was a fisherman and did not possess any livestock. The newly married couple got their own room in the house, which by this time was already made of blocks and *mabati* for the main part, instead of the mud and *makuti* construction.

Since Mohammed was fishing with lines, but used a vessel to reach the better fishing grounds, Mohammed and Khadiri made arrangements for the use of the vessel. Days when the sea was too rough for the old man to go out fishing, Khadiri would take the vessel to go fishing with his companions. Mohammed was paid a share of the catch. Just letting his son-in-law use it would not be beneficial to any of them. The only income the family makes is from fishing and if Mohammed is not fishing, the only source of income is the fishing of the son-in-law. When Mohammed lends his vessel to Khadiri and those fishing companions, he gets a share of the whole catch. This would mean that Khadiri would get a smaller part, since a part has to be paid for the vessel, but the total amount coming into the household is higher. An advantage for Mohammed is that in this way he will never be totally dependent on his son-in-law, but always have a (small) source of income.

During *kusi* season, the income available to the household was not always enough. In such cases, Mohammed bought on credit from the shop owners. This was quite common in Takaungu, notwithstanding that through the years more and more fishermen turned to the shop owners to buy on credit. And, like in the case of Mohammed, then turned to the shop owners to ask them for credit more frequently. The fishermen were not reluctant to turn to the shop owners for credit since they were sure that the *kaskazi* season would bring them a larger catch and that it would be easy to pay back the shop owners during this period. However, the reduced catches during *kusi* as well as during *kaskazi* undermined this system. The shop owners could not handle the increased demand for credit and some shops had to be closed down since the shop owner was too much indebted and the fishermen were not able to pay back the shop owners at that moment. Therefore, nowadays, shop owners are more reluctant to give out on credit. Mohammed however is lucky since he is still

borrowing from the same shop owner and since he pays back his debt each year, he trusts that he can go on buying on credit for more years.

None of Mohammed's children are schooling at the moment. They did not visit primary school, they go to the Islamic school however. Mohammed would have liked to have his sons in school, since education is necessary in order to get a good occupation. However, Mohammed lacked the money and never managed to have his children in primary school. Mohammed says that this is not only due to declined fish catches, but also to the fact that school has become much more expensive through the years. Nowadays, books and other school equipment has to be bought by the parents while it used to be supplied by the schools before.

Mohammed's sons from his first marriage casually visited him at Takaungu. In such a case, they would stay for a short while. When they wanted to get married they came to Mohammed to ask his approval. Mohammed had never seen his sons' wives, since they never came with them. His sons asking for approval was therefore more symbolic than effective. However this was for his sons a way of showing respect to their father. Mohammed gave his sons some money for the brideprice, however, they paid the main part themselves. According to Mohammed they were more wealthy than he was. Both of his sons were fishermen as well, but they also had acquired a large *shamba*. In such a way they could supplement their income from fishing with the harvest from the *shamba*. Notwithstanding, Mohammed felt it was his obligation to support them with the brideprice. On the other hand, he was never asked for the hand of the daughter from his first marriage and he never received a part from this brideprice. According to Mohammed this was right, his former wife raised the children all by herself and he never gave her any financial benefit.

Mohammed is unclear about his future. Although he thinks he can keep on buying on credit for the rest of his life, he is worried about his children. He wonders whether they will be able to live from fishing alone. On the other hand, what else could they do to make an income? They lack any schooling apart from the Islamic school. Furthermore Mohammed lacks the money to let them start their own business.

#### **4.6 Summary**

Fish stocks are declining and the number of fishermen is increasing. This will put further pressure on the fisherman households and on the marine resources. Either ways of conservation have to be found or alternative forms of livelihood should be adapted by the fishermen. However the possibilities of seeking new livelihood strategies are limited as well. Land is not plenty anymore and jobs are few. Conservation is a possible solution, but the question is how to achieve this. There is no indigenous conservation anymore within the fishing community in Takaungu. This means that new ways of conservation have to be introduced.

Among the Muslim fishermen one can distinguish the "original fishermen" (Bajuni and Waswahili) and the "new fishermen" (Mijikenda). The Mijikenda appear to be adapting better to the new situation. Whereas most of the Waswahili and the Bajuni still only live from fishing, the Mijikenda have other income generating sources. For this, some obvious reasons can be found. First of all, the Waswahili and especially

the Bajuni have a history of only focusing on fishing whereas the Mijikenda have a history in other livelihood strategies. This makes them more flexible in adapting to the new situation.

Two ways of diversification can be found. First of all the fishermen who (need to) diversify. Second farmers who diversify their income by turning to fishing. The Bajuni and Waswahili belong to the first group and the Mijikenda to the second. As mentioned before, this makes the Mijikenda less vulnerable to declining fish stocks than the Bajuni and Waswahili.

Although most of the fishermen say that nowadays they can live from fishing, this will be almost impossible in the future if the trend of declining fish stocks is not stemmed. Therefore, the future of their children will have to lie in something else than fishing alone. They face the necessity to find other ways of livelihood to sustain their families. However the fishermen are not unwilling to change their livelihoods but only think in terms of the two possibilities available to them now: block cutting or fishing. As long as fishing gives such an income that one can live from it, not many people will turn to block cutting.

Most household are characterised by a high number of children. This puts an extra pressure on the household. In order to give these children a chance to find alternative ways of livelihood, investments have to be made, for example in schooling. Given the problems some of the fishermen are facing during the *kusi* season, their children are likely to drop out of school. This results in a downward spiral, since they will turn to fishing as well, they won't be able to pay the school fees for their children, who will turn to fishing as well and so on. For every next generation of fishermen it will be harder to sustain their livelihoods. However another characteristic of the household is the fact that most of them except one have another source on which they can depend for food or cash. These resources are insufficient to supply the household with food or cash the whole year through, but still, they are a welcome addition to it. Often it is the woman (or the women) who are most actively involved in other ways of income generation.

In the next chapter, the results from Uyombo will be analysed. One would expect that, considering these fishing grounds are in the Reserves of the Watamu Marine National Park, less income diversification is necessary. One would also expect that the possibilities of income diversification are larger since the Watamu Marine National Park creates employment possibilities. However these do not seem to be the case.

Takaungu and Uyombo will be compared and discussed in chapter 6.



## Chapter 5

### Uyombo and the Watamu Marine National Park

This chapter is divided in 6 main paragraphs. Paragraph 5.1 gives an analysis of the demographic characteristics of Uyombo. paragraph 5.2 gives an analysis of the households characteristics and paragraph 5.3 deals with the fishing and fishermen of Uyombo. Issues concerning conservation (including the Watamu Marine National Park) are discussed in paragraph 5.4. A more detailed and specific picture of Uyombo is shown in paragraph 5.5 which holds a case study of one of the fishermen of Uyombo. The summary is given in paragraph 5.6.

#### 5.1. Demographic Characteristics

Most, more than half, of the sample taken in Uyombo are Mijikenda of Christian religion. The first fisher family which settled in Bandarini was a Bajuni family. One of them is still living there, three others are living in Malindi but still fishing at Bandarini for a certain period of the year. More than half of the fishermen at Bandarini are not living in Bandarini. Table 5.1 shows that most informants from the sample are from Uyombo hinterland. This has several reasons. First of all, fishermen living near to Uyombo are more likely to fish there during *kusi* as well as during *kaskazi* season than the fishermen who are living farther away, who mostly fish there during *kaskazi*. This made it more likely for the researcher to meet fishermen who are from Uyombo and surroundings than fishermen who are not. Second, at a certain moment the tide was in such a way that during the day most fishermen were out. In this period some household-interviews were done starting with the woman. So directions were given to households of fishermen by other fishermen instead of first talking to the fishermen and then going to his house together with him. Fishermen from Uyombo are more likely to know the way to another fisherman who is living at Uyombo than from a fisherman who is living farther away.

Table 5.1 Residence of the informants<sup>76</sup>

	All informants (n=23)	Only fishermen (n=13)	Non-fishermen (n=10)
Uyombo hinterland	10	3	7
Uyombo Bandarini <sup>77</sup>	6	6	0
Roka	2	1	1
Malindi	1	1	0
Matsangoni	2	1	1
Ibrahim	2	1	1

If one looks at the places of birth of the household members interviewed, it can be noticed that only one fisherman was born at Bandarini, being a 21 year old man (see

<sup>76</sup>All except Malindi (Malindi District) in Kilifi District

<sup>77</sup>The differentiation between Uyombo Bandarini and Uyombo hinterland is based on the distance to the landing site. Living at Bandarini mean that you live just some meters away from the sea by high tide.

table 5.2 ). His father moved to Bandarini to fish there. The other is a 19 year old woman whose father is a member of the first fishing family in Bandarini.

Table 5.2 Places of birth of the informants

	All informants (n=23)	Only fishermen (n=13)	Non fishermen (n=10)
Kijiwetanga <sup>78</sup>	1	1	0
Matsangoni <sup>79</sup>	5	1	4
Uyombo Bandarini <sup>79</sup>	2	1	1
Pemba <sup>80</sup>	1	1	0
Kizingitini <sup>81</sup>	2	2	0
Malindi <sup>78</sup>	1	1	0
Mavueni <sup>79</sup>	1	0	1
Baricho <sup>78</sup>	1	1	0
Baraki <sup>82</sup>	1	1	0
Vitengi <sup>79</sup>	1	1	0
Sabasaba <sup>79</sup>	1	0	1
Mariakani <sup>79</sup>	1	0	1
Msabaha <sup>78</sup>	1	1	0
Uyombo hinterland <sup>79</sup>	3	1	2
Roka <sup>79</sup>	1	1	0

If one looks at the occupation of the natural parents, one can see that also here, like in Takaungu, most fishermen do not have their origins in a fishing family. Only 23,1% of the fishermen had parents with a fishing related job, while 53,9% had parents who were farmers. Among the ones whose father had a fishing related job are the 20 year old Mijikenda fisherman mentioned above and two Bajuni, who are brothers and whose family was the first family to start fishing in Uyombo.

Table 5.3 Occupation of the parents

	All informants (n=23)	Only fishermen (n=13)	Non-fishermen (n=10)
Farmer <sup>83</sup>	13	6	7
Fisher	4	3	1
Farmers (livestock)	1	1	0
Businessman, fish trader and Fisher	1	0	1
Clerk at an office	1	1	0
Police officer	1	1	0
Vipingo estate	1	0	1
Municipal Council	1	1	0

<sup>78</sup>Malindi District

<sup>79</sup>Kilifi District

<sup>80</sup>Tanzania

<sup>81</sup>Lamu District

<sup>82</sup>Mombassa District

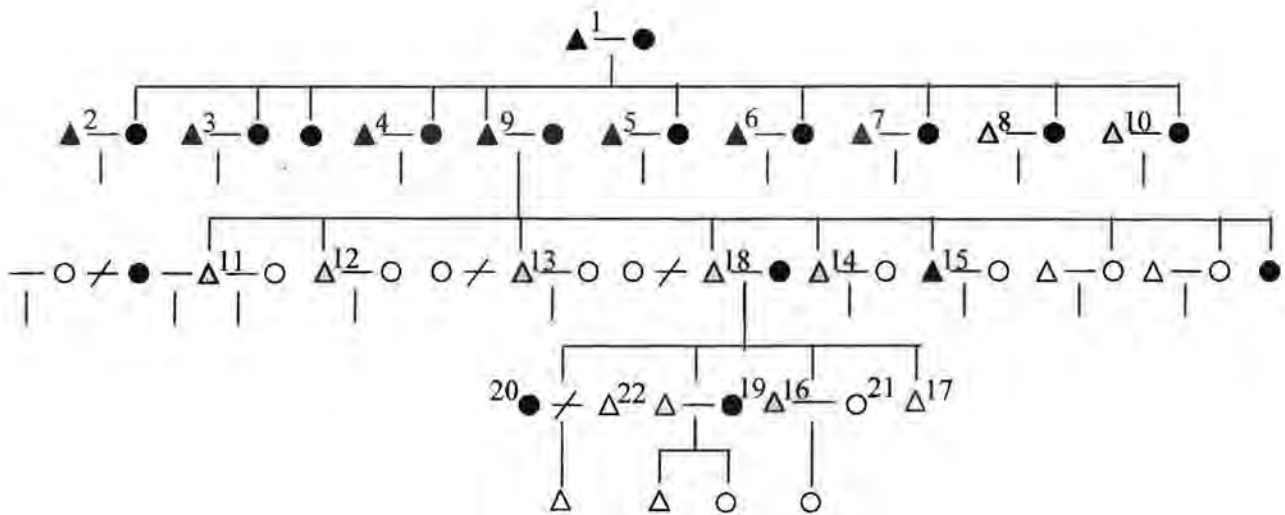
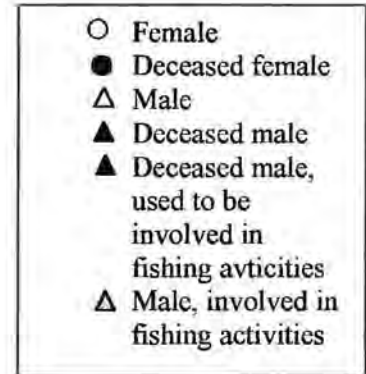
<sup>83</sup>Most people do have a *shamba* next to the other jobs mentioned (with one exclusion), however this are the people who were only living from farming.

Like shown in figure 5.1, the Bajuni comes from a big fishing family. For him, fishing is "*in his blood*". The two genealogies, one of a Bajuni and one of a Mijikenda show that the Mijikenda who are fishing right now are first or second generations of fishermen in their family, while with the Bajuni, they have been connected to the fishing for more generations.

In the Bajuni family, most if not all of his male relatives have fishing related jobs. To become a fisherman is for the Bajuni a logical choice since their father, grandfather, older brothers, uncles etc. are having a fishing related job as well. However this does not mean that a Bajuni never practises another occupation. As shown in paragraph 5.5, this fisherman had several other jobs before turning to a fishing related job. If one looks at the genealogy of the Mijikenda fisherman, one can see that none of his relatives had fishing related jobs. For him, the choice to go fishing was less logical than for the Bajuni fishermen. He tried something new which was not done by one of his relatives before.

Figure 5.1 Genealogy of a Bajuni fisherman, Rashid<sup>84</sup>

1. Sailor and farmer at<sup>85</sup> Kizingitini
2. Fisherman and farmer at Lamu
3. Fisherman and farmer at Lamu
4. Fisherman and farmer at Lamu
5. Fisherman and farmer at Lamu
6. Fisherman and farmer at Lamu
7. Fisherman and farmer at Lamu
8. Fisherman and farmer at Lamu
9. Fisherman and farmer at Lamu
10. Fisherman and Farmer at Bandarini
11. Fisherman and fish trader at Malindi
12. Fisherman at Malindi
13. Fisherman at Malindi
14. Fisherman at Malindi
15. Sailor, transport of goods, Lamu
16. Fisherman at Bandarini
17. Running the video show at Uyombo, Hassan
18. Fisherman at Bandarini (retired), Rashid
19. Fatuma, Gede
20. Esha, Bandarini
21. Selma, Bandarini
22. *Tajiri* of Bandarini



Explanation of the genealogy by the fisherman:

*"My grandfather was born at Kizingitini, he was a sailor and transported goods. However he did this only during one season, the remaining time he spent on repairing the boat, working on the land and enjoying the money*

<sup>84</sup>Only the occupations of the man (also in law) above 12 are mentioned.

<sup>85</sup>"at" means that the person is living in that place, he does not necessarily carry out his occupation in that place

*he had made. He only had one son, my father. My father was born at Kizingitini, Lamu and later moved to Bandarini. My father had a lot of sisters and they all stay at Lamu. Since he was a migrant fisher, he had been at Bandarini and I think he saw more possibilities for his family here than in Kizingitini. By that time, land was abundant here so he cultivated a big shamba. Also fish was abundant here, not as it is these days I have 6 brothers and three sisters, however all my sisters died. Most of my brothers have been fishing, one was also a fish trader. That was smart of him because in that way he did not lose money. Most of my brothers are still fishing, but I quit. My daughter married a Wapemba and he is fishing. I am too old for that. I have one son and three daughters, two of them died recently and my son, well he is too lazy and he is not listening to me. He is doing nothing except from running that video show!"*

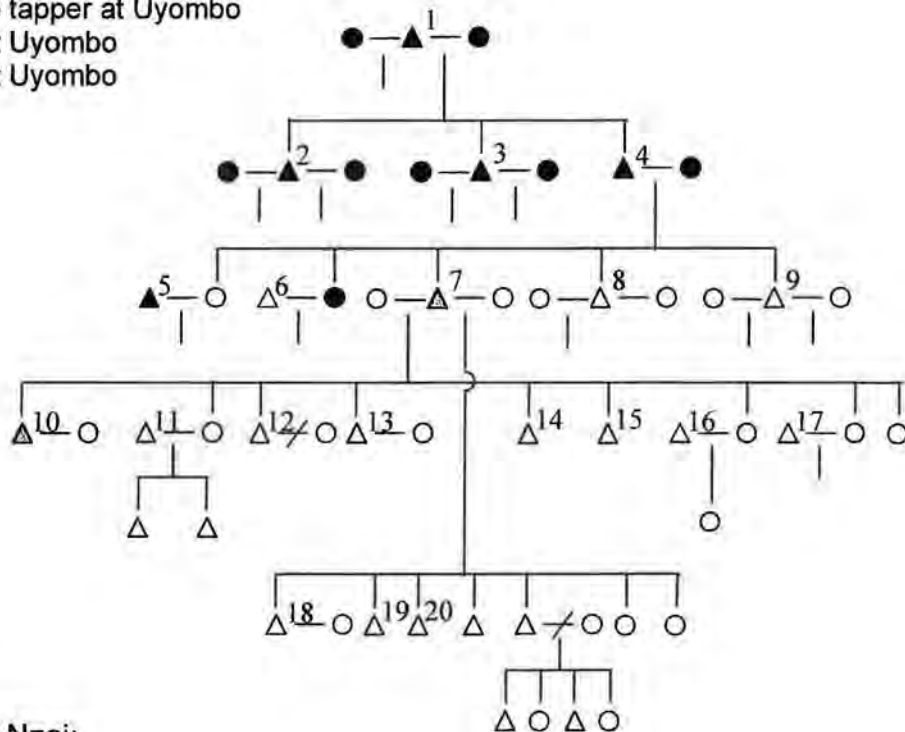
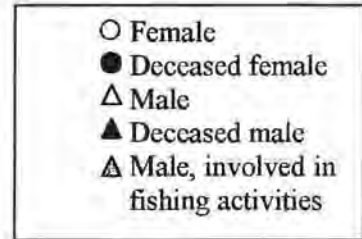
For further information, the case study of this fisherman is presented in paragraph 5.5.

#### **Box 5.1 Uyombo in the past**

My father was one of the first fishermen at Bandarini around 1918. Later, around 1960, he moved to live there. We were the only family living there. All the fishermen at Uyombo in those days were Bajuni. I did not join my father since I was married by that time and lived in Malindi, however I was fishing at Uyombo. When my father started fishing here and when he moved here things were different. First of all there was no Marine National Park, the fish catch was high, all the fishermen were Bajuni, there were not that many shamba's and so on. My father had a huge *shamba* on which about 50 labourers were working. Those were all Giriama. The Giriama were not fishermen these days but they were good farmers. The Giriama started fishing around 1970, they were taught by the Bajuni. Now they are more in number than the Bajuni, but that does not matter.

Figure 5. 2 Genealogy of a Mijikenda fisherman, Nzai

1. Farmer at Matsangoni
2. Farmer at Matsangoni
3. Farmer at Matsangoni
4. Farmer at Baricho
5. Farmer at Roka
6. Unemployed (an accident caused him an injury at his leg<sup>86</sup>) at Matsangoni
7. Fisherman at Uyombo, Nzai
8. Farmer at Matsangoni
9. Palmwine tapper at Matsangoni
10. Fisherman at Uyombo
11. Farmer at Uyombo
12. Working in a bar, at Uyombo
13. Houseboy at Mombassa
14. Palmwine tapper at Uyombo
15. Farmer at Uyombo
16. Farmer at Gede
17. Farmer at Matsangoni
18. Palmwine tapper at Uyombo
19. Farmer at Uyombo
20. Farmer at Uyombo



Explanation of Nzai:

*"My family is a family of farmers. When I was born, there was no fisherman in the family. We had been farming for a long time, my grandfather and his father and so on. Since they could live very well from farming, why should they do something else which they do not know how to do! But when I was young, the harvest was not that good anymore and it would become a problem for me to live from farming alone when I wanted to start a family. So I started fishing, an other fishermen took me out end learnt me how to do it. And some of my sons started to help me fishing and they will become fishermen as well!"*

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Polygamy is quite common in the fisher community. Most of the monogamous marriages can be found among Christian who give as reason that the church does not allow polygamy. Indeed all the Christian informants in the sample were engaged in a monogamous marriage. A total of five (male) informants had a monogamous marriage. Among them were all the Christians. Three male informants had a polygamous marriage, they have two wives. Two of them are Giriama who practice the African religion, the other one is a Wapemba who is a Muslim. In his case, one of his wives is a Wapemba who is still staying at Pemba, the other is a Bajuni with whom he is staying at her fathers house in Bandarini. One of the male informants is not married and four had married more wives before but the wives either died or they divorced them, so they remain with one or no wife. Among them there is one Bajuni who is married to one wife now but was married to ten other wives before (who died or which he divorced, see box 5.3), a Giriama who has married two wives, but divorced them before he married his current wife, a Giriama who has married and divorced another wife before (unofficially, see box) marrying his current wife and another Bajuni who had married two wives, but divorced one and one died.

#### **Box 5.2 An unofficial marriage**

My second wife is a divorcee, just like me. I liked her so I wanted to marry her. Since my father had already died by that time, I just decided by myself. The only problem was that I had nothing in the way of brideprice and I saw no possibility to raise anything in a short period. I should have asked her parents to marry her, but how could I ask a father for his daughter without having anything. I should at least give them something when I went to see them (i.e. the parents). Therefore we (me and her) decided not to ask her father. So actually I more or less stole her from her fathers *boma*. She just moved in here and we stay here as man and wife. Officially we are not really married. However when I have had the opportunity to raise some money, I'll go to her father and ask him to marry his daughter, and than we will officially marry!  
(Mijikenda fisherman)

### **Box 5.3 Marriages of a Bajuni fisherman**

I married my first wife when I was 18, that is a young age to marry, for a man, but not for a woman. My father had arranged the marriage. There was a big ceremony with singers, food and *kirumbizi*, traditional fighting as entertainment. It was a large and expensive marriage, but my father was a wealthy man so he could afford it, he wanted it that way. It was my father who picked my bride and who arranged everything. I took my wife to Malindi to live there and to fish there. We were constantly quarrelling, so we broke up. Since I did not have any children with her that was absolutely no problem, I signed the certificate and we were divorced. She moved back to her parents house and I stayed in Malindi. Soon I married again, but this time I arranged it myself and there was only a small marriage ceremony. But I also divorced this wife. In that period I married many wives, some of them died and others I divorced, You know if you do not match or things are not working out, you divorce. If there are no children this is real easy, if there are children, arrangements have to be made. If you divorce someone you have children with you give her some money to take care of the children until they are grown up. I gave them 60 shillings a month, in those days it was enough, now I cannot even live from it myself anymore, even a hundred shillings is not enough. When you divorce and the children are still young, they go with the mother, you know the mother is to nurture the children, to give them the breast, the father can only give money. When they grow up they can decide by themselves where they want to stay, whether the father or the mother. If the child stays with her, you pay the mother for the expenses, you never give money directly to the child. If it stays with the father, nobody is paid.

## **5.2 Household Characteristics**

All the households, except one, who are not living at Bandarini are residing at their *shamba*. They derive an extra income, whether in food or money, from the *shamba*. In certain households there are also other extra income generating activities.

Table 5.4 Household characteristics

Household	Number. of Adults (≥17 years)	Number. of children (<17 years)	Number of schooling children	Number of people involved in fishing or fishing related activities	Cash income next to fishing or fishing related activities	Food income next to fishing or fishing related activities	Being assisted by someone from outside the household	Assisting someone from outside the household
I	9	11	5	1	X	X	-	X
II	5	8	0	1	X	X	-	-
III	3 <sup>87</sup>	0	0	1	X	X	-	X
IV <sup>88</sup>								
V	5	5	0	2	-	X	<sup>89</sup> -	-
VI	9	10	0	3	X	X	-	-
VII	2	3	2 <sup>90</sup>	1	-	-	X	-
VIII	2	2	2	1	X	-	-	X
IX	5	5	2	4 <sup>91</sup>	X	X	-	-
X	2	4	0	1	X	X	-	X

<sup>87</sup> However, the wives of a brother of the woman stayed there as well during the whole period of this research (6 months), but the informants claimed that they were just temporary visitors who would leave.

<sup>88</sup> The man and woman were giving such a different answers that it was impossible to capture it in a table.

<sup>89</sup> During *kusi* money is borrowed from the shop owner, however since this money has to be paid back this is not considered as being financial assisted.

<sup>90</sup> The other left school and is an apprentice right now

<sup>91</sup> The woman is working as a fish monger during low farming season

As is shown in table 5.4, most households exist of four or more adults. In household number two this is not the case, since this is a young household. Even though the brothers of the husband are living at the same homestead, they are not sharing their meals and their income and are therefore not considered to be one household. The man moved out of his father's homestead when he married and built his own house. Their children are young. Household number five is the household of an older fisherman whose children already left the house. He and his wife remained with one of the wife's sisters. Household number eight is a very young household. The children are below the age of three. This man did not join his father's homestead because he was chased away after the separation of his parents.

Although household three has no income generating activity next to fishing, the *Mzee* is/was collecting funds for the renovation of the mosque and the hospital costs of his daughter<sup>92</sup>. He sometimes puts some money into his own household, in order to buy food. This will be discussed in paragraph 5.6 where the case study of this fisherman is presented. In household one, four people are involved in fishing (being the father and three of his sons), although the father is mostly busy with farming these days. All the people mentioned in this category ("number of people involved in fishing") are fishermen except from the woman from household eight who is a fish *monger*. One of the fishermen is a fish trader as well (household five).

✓ A few people are assisted by someone from outside the household. The *Mzee* in household number four is assisted by his brothers (one of them belonging to household number five) and neighbours sometimes give household number ten some food. One of the households is cultivating somebody else's plot of land without any rent payment. Although they do not consider this as being assisted from by outsiders. Therefore it is not mentioned in table 5.4. In the two cases when somebody from outside the household is being assisted, in household number one it is one of the parents who spends one or two months per year at this household and ✓ the fisherman from household number five is helping his brother.

All of the households, except three, would not know who to turn to in the case they need money. Relatives might be asked, but it is not certain they will help. Especially the young households are experiencing this. The older households think that one of their sons will assist them when they need money, since they invested in their future (by paying school fees for example).

*"It is hard to resist a request from your parents. Even if you have no money you should at least give them some food. Those are your parents, you need to help them like they helped you when you were young"* (Mijikenda fisherman)

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<sup>92</sup> Who died in the period this research was carried out

Table 5.5 Income, whether in food or cash, from non-fishing related activities<sup>93</sup>

Household number	<i>Shamba</i>	Self employment	Casual employment	Permanent employment
I	x	x	-	-
II	x	x	-	-
III	x	-	-	-
IV	x	x	-	-
V	x <sup>94</sup>	-	-	-
VI	x	x	-	-
VII	x	x	-	x
VIII	-	-	-	-
IX	x	x	-	-
X	x	x	-	-
XI	x	x	-	-

As is shown in table 5.4 most of the households have an income next to the income they get from fishing or fishing related activities. These are various kinds of activities. Most of the time it involves selling farm products, like fruits, cashewnuts (non-roasted), *madafu*<sup>95</sup>, palm wine, coconuts and *makuti*. Often the women sell these products. The palm wine is tapped from the coconut trees by the men, as well as the *madafu* which are cut by men. However fruits, coconuts and cashewnuts are usually collected by the women and the children. The man assists in these activities when he is not fishing and is at home. In order to make *makuti*, one does not need to grow coconuts on their *shamba*. In case one is in need of money, the leaves are bought or given to them and *makuti* is made. In the first household, the woman hires a woman who cooks in the small hotel which she owns.

The permanent employment mentioned in household number four concerns a son of the informant who is working as a houseboy. It should be mentioned that more fishermen claimed to have children (most often sons) working in a permanent job. However since such a job often requires a move to towns like Malindi, Kilifi, Watamu and Mombasa, those children leave the household.

<sup>93</sup> It is hard to say something about the importance in the contribution of the *shamba*, self employment, casual employment and permanent employment since this differs throughout the year and is often carried out by different members of the household. The informants themselves cannot give an idea of the importance.

<sup>94</sup> He owns a *shamba* but he hires somebody to work on it and sell the products

<sup>95</sup> young coconuts

Table 5.6 Livestock

Household number	Goats	Sheep	Chicken	Ducks	Cows	Bulls
I	2	-	6	-	-	-
II	2	-	x <sup>96</sup>	-	2	1
III	-	-	-	-	-	-
IV	2	-	x	-	-	-
V	-	-	-	-	-	-
VI	6	-	x	2	-	-
VII	6	-	x	-	-	-
VIII	-	-	-	-	-	-
IX	5	-	x	-	-	-
X	9	-	x	-	1	-
XI	14	-	x	-	4	-

Often, goats are used as investment, they can be sold if one needs money. However during certain occasions (marriage, funeral and so on), a goat may be slaughtered. Wealthier households may slaughter a goat for food without a special occasion. Chicken are slaughtered whenever the need occurs. Cows are used as an investment and for milk production. Also the breeding is important, bull calves can be sold and more cows are a valuable addition to the household. However one runs a risk with keeping cows, the expenses for the health of a cow can in some cases surpass the benefits of having a cow. Ducks are kept for the same reason as chicken. Household number four used to have about 30 goats but they got sick because of the heavy rains and died. Also a sickness has ravaged and reduced the number of chicken of most of the informants. In all the households, the goats, chicken and ducks are taken care of by the women and the children. The cows and bulls are taken care of by the man or by the eldest son. All the households which are in the possession of cattle do not herd it during the day but move it each day to a plot with grass near the homestead and move it in the middle of the day to a fresh part.

As is shown in table 5.7, households number five and number eight do not possess a *shamba*. Both the households have their own reason for that. The man from household number five is a Bajuni and most Bajuni make their living purely from fishing. Household number eight is a very young household which is still saving to buy a *shamba*. Therefore the woman in this household is working as a fish monger. Many *shambas* are inherited. One can distinguish between two different situations. A *shamba* is inherited by all the sons and they are cultivating it together on it. This situation is the most likely to happen when all or most of the sons joined the fathers household after marriage. Another possibility is that the *shamba* is divided between the sons. This is often the case when the sons live in their own homesteads, which necessarily near to the fathers homestead. However if the mother is still alive, the *shamba* will remain in one and all the sons are allowed to cultivate on it, but they are not allowed to do anything else with it.

All the households that have a *shamba* are growing maize, maize is the staple food. It is often consumed as *ugali/sima*, made of maize flour. Most of them are growing peas (whether cow peas or green peas) and cassava as well. Coconut trees are a

<sup>96</sup>Exact number of chicken is unknown

very good supplement to one's income. The uses are so many that its economic value is high. Also one can realise cash from the products of a coconut tree at any time of the year. This makes it a reliable help in times a household is in need of money. Often women turn to the making of makuti when they are in need of money. All the households which are in the possession of a *shamba* preserve last year's seeds for the next year. However this is mostly the case with food crops, the seeds for the cash crops are bought. Food crops are planted on an annual base, most, if not all, the cash crops are perennial.

In all cases, the women were working on the *shamba*, sometimes the man would help them. However, most of the work on the *shamba* is done by the women of the household. This has several reasons, first of all, the man is often out for fishing and when he is fishing at night, he is resting during a part of the day. A second reason is that the *shamba* is located near the homestead and he may need a lot of time with travelling to and from Bandarini. The household chores like sweeping, cooking, fetching firewood, fetching water, taking care of the children, washing clothes of the children are all duties of the women. In some cases the man washes his own clothes while in other cases his clothes are washed by the wife or wives. If a man has more wives, it is more likely that they will wash his clothes than when a man has only one wife. Also younger men are more likely to wash their own clothes than older men. Daughters are supposed to start helping with the household chores from around 10 years. They start with assisting their mother, however from an early age onwards they will take over certain tasks from their mother.

Table 5.7 Shamba

Household	Owner-ship <sup>97</sup>	Size (acre)	Crops											
			Food crops			Cash crops				Fruit				
			Maize	Peas	Cassava	Greens	Greens	Groundnuts	Cashewnuts	Coconut tree products <sup>98</sup>	Fruit			
I	Bo <sup>99</sup>	2,5	x	x	x	-	-	-	-	-	-	-	-	-
II	I/B	2	x	x	x	-	-	-	-	-	-	x	-	-
III	Bo	4	x	x	x	-	-	-	-	-	-	-	-	-
IV	I	12 <sup>100</sup>	x	x	x	-	-	-	-	-	-	-	-	-
V	B	10	-	-	-	-	-	-	-	-	x	x	x	x
VI	I	2	x	x	x	-	-	-	-	-	x	x	x	x
VII	I	8	x	x	x	-	-	-	-	-	-	x	-	-
VIII	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IX	I	3	x	x	x	-	-	-	-	-	x	x	x	x
X	I	4	x	-	-	-	-	-	-	-	x	x	x	-
XI	I	3	x	-	x	-	-	-	-	-	x	x	x	-

<sup>97</sup> B = Bought, I = Inherited, Bo = Borrowed, R = Renting

<sup>98</sup> *Madafu*, coconuts, *Makuti*, coconut oil, palm wine etc.

<sup>99</sup> Is planning to pay back bit by bit each year, finally to buy it

<sup>100</sup> Family shamba

All the houses except one are made of mud & stone/coral and *makuti*. This is shown in table 5.8. Households at Bandarini are more likely to have a homestead of one house, because they are all not living on their *shamba* and not living in their fathers homestead (except of the household of the Wapemba). They do not have a *shamba* or the *shamba* is situated further away. Most *shamba*'s are inherited.

Table 5.8 Housing

House hold	At Banda rini	No. of buildings <sup>101</sup>	No. of rooms <sup>102 103</sup>	<i>Makuti</i> roof	<i>Mabati</i> roof	Mud and stone/coral	Block	Block and mud and stone/coral
I	x	1	3	x	-	x	-	-
II	-	2	4	x	-	x	-	-
III	x	1	4	x	-	x <sup>104</sup>	-	-
IV	-	4 <sup>105</sup>	3	x	-	x	-	-
V	-	1	x <sup>106</sup>	-	x	-	x	-
VI	-	3	3	x	-	x	-	-
VII	-	5	3	x	-	x	-	-
VIII	x	1	2 <sup>107</sup>	x	-	x	-	-
IX	-	3	3	x	-	x	-	-
X	x	3	2	x	-	x	-	-
XI	-	3	2	x	-	x	-	-

At Bandarini, no house made of block and with *mabati* roof can be found. The informant with a *mabati* roof and a house made of blocks was living in Malindi, where this type of house is more common. Some houses had a cement door-jamb. Those were the bigger houses, like the one of the *tajiri*. Since there are no house made of blocks and with *mabati* in Bandarini, the bigger and higher houses were the kind of houses with gave status to the owner. Those houses were the one of the *Tajiri*, the shop owner and of one of the fishermen. This fisherman inherited the house from his father, if he would have to build a house like nowadays, he would not be able to raise the money.

For all the households, food is the main expense. In case there are children schooling, this also counts as a heavy expense, depending of course on the number of children at school. Purchase of clothes is often mentioned as a main expenditure as well. Money in the household is often handled by the person that earns this money itself. Only for the food costs and the cost for the schooling children, money is shared. This is arranged by the head of the household.

<sup>101</sup> Kitchen not included.

<sup>102</sup> Kitchen not included.

<sup>103</sup> In the case of more buildings, number of rooms in the informants building.

<sup>104</sup> However plastered with cement

<sup>105</sup> Not counting the kiosk, which is in the middle of the homestead

<sup>106</sup> Unknown

<sup>107</sup> Sitting and cooking area

*"When I come back from fishing and I sold my catch, I give a little money to my father so he can buy food. When the school fees of my brothers need to be paid, my father asks me for money. However my brothers dropped school because even with the three of us we could not raise all the school fees. As soon as there is enough money, they'll go back to school."* (Mijikenda octopus fisherman)

A married son either joins his fathers homestead or he starts his own homestead. The first marriage is often arranged by the father, the couple is declared married by the mutual parents. In case of a second marriage of a man, he often arranges it himself, however he still has to asks the father of his wife. With a marriage there is not often a big ceremony involved. Muslims however tend to have a bigger ceremony than non-Muslims. Their ceremony consist of inviting people and eating together. Most non-Muslims often do not have a ceremony. The couple is declared married when the dowry is arranged and given to the parents of the woman and the man takes his wife to his homestead.

Divorce is quite common in the fisher community, however again, among Christians it is less common than among non-Christians. The reasons for divorce can be multiple.

*"I divorced my other two wives since they were quarrelling with me the whole time and they did not give me any children. I needed another wife, so I divorced them and I married again."* (Mijikenda fisherman)

*"I divorced my first wife because we were quarrelling all the time and also my mother was not happy with her, she was quarrelling with everybody!"* (Mijikenda fisherman)

In most cases of divorce, a woman goes back to her parents place. When the children are still young they will most likely go with the mother, later however, they will often have the possibility to join the fathers household. The reason why the children go with the mother when they are young is that they need the nurturing of the mother. When they are older, they need the guidance and financial aid of the father.

In case of marriage, the son often joins the household of his father or starts his own household. In Uyombo there is one exception to this. The Wapemba who married the Bajuni is staying with the wife's fathers household. The reason for this is that his fathers household is at Pemba, and since he wanted to stay in Uyombo, he could not take her to his household. Another reason is that at his fathers household, his other wife is living.

*"I cannot take my wife (i.e. his second wife) to Pemba, how can you expect them to live under one roof which each other? They will be quarrelling the whole time!"* (Pemba fisherman)

The third reason is that the father of the second wife was, at the time of marriage, living in that house with his son of 18 years old, his divorced daughter<sup>108</sup> and his second wife. His son of 18 was a fisherman but left that job. Since the father is too

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<sup>108</sup>Who died in the period this research was carried out.

old to fish himself, there was no source of income in the household. On the other hand, the respondents faced the need to purchase land build a house. He could save these expenses by joining the household of his father in law.

### 5.3 Fishing

In table 5.9 the percentage is counted of a certain gear used in the fishing practices of the fishermen in the sample. Of the fishing informants 41,7% is using vessels while fishing. Some people turn to different gear during *kusi* or *kaskazi* season. This is because some gear which they are using during *kaskazi* season are impossible to use during *kusi* season because of the roughness of the sea.

Table 5.9 Gear used by informants

	Percentage
Speargun	15.8%
Nets	26.3%
Lines	31.6%
Traps ( <i>malema</i> )	21.2%
Stick	5.3%

The fishermen who use the speargun and the stick are mostly younger fishermen. Especially with the speargun, a fisherman needs to be in a good shape in order to swim long distances and to be able to chase and catch the fish.

Plate 5.1 A fisherman preparing his malema at his compound



Plate 5.2 A speargun



Most fishermen (58,3%) have only fished at Bandarini. All the fishermen, except the Wapemba, who are living at Bandarini have fished there for their whole life. About 42% has been fishing at other landing sites as well. Fishermen are migratory, seasonally or permanently fishing from Bandarini. The change from migratory to seasonal migratory fishing is caused by growing responsibilities in the household. These can be the death of the father, which turns the person in questions into the head of the household. Bearing these responsibilities, he cannot be a migrant fisherman anymore. Marriage and the birth of children can also be a growing responsibility. Also the care for a *shamba* can make someone decide to turn to non-migratory or to seasonal migratory fishing.

*"Most of the time I fished at Bandarini. I also fished at Wesa but the transport to the landing site was taking too much of my time."*

(Mijikenda fisherman)

*"When my father died I stopped fishing at other landing sites, I was the head of the household right now and than you are not supposed to be absent the whole time!"*

(Mijikenda fisherman)

Fishermen have different reasons to fish somewhere else during *kaskazi* than during *kusi*, however most of these are related to the catch.

*"During kusi I'm fishing at Bandarini, but during kaskazi I go fishing at Watamu since the catch is much higher there."*

(Mijikenda fisherman)

*"I'm sometimes fishing at Uyombo but often at Bamburi or Malindi, at Bamburi I catch 10-20 kilos, while here (Bandarini) I only catch 5-6 kilos"*

(Bajuni fisherman)

Another characteristic of fishermen at Bandarini is that some of them are part time fishermen, meaning that they are only fishing during *kaskazi* and that they turn to farming during the *kusi* season. However since this research was carried out during *kusi* season, these fishermen are not in the sample.

Fishermen give different reason why they are fishing at Bandarini. Some reasons are the same reasons as the ones mentioned above about a migrant fishermen turning into a seasonal or non migrant fishermen, others are: familiarity with the landing site, difficulties of transporting the vessel to another landing site etc..

*"I'm fishing at Uyombo because this is the place I started fishing and here I started my family. Of course I could have moved with my family to another landing site, but I did not feel like."*

(Mijikenda fisherman)

*"Everybody knows the fish catch here is lower than at a lot of other landing sites, but you know if you are having a mtumbwi<sup>109</sup>, how can you get that mtumbwi to another landing site, the sea is too rough to pass through and did you ever see someone transporting a mtumbwi by road?"*

(Mijikenda fisherman)

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<sup>109</sup>Dug out canoe

#### Box 5.4 A Wapemba fisherman

I started fishing at Pemba (Tanzania), later I went fishing at Mtwapa (near Mombassa, Kenya), after that we went to Uyombo. I came here with a friend of mine from Pemba. He had been here before. I stayed at Uyombo for about two years and then I went back to Pemba to my wife and children there. I stayed there for a year but came back to Uyombo again. I married here when I came here in January and now I'm staying here.

The fishing grounds in Pemba are not that good anymore, most Wapemba are moving to Kenya during *kaskazi* season. But I'm not like them, they are using other gear and they do not stay here permanent. They come for a few months and then go back to Pemba again. I'm living here right now, I married someone from here and my friend with whom I'm fishing is living here as well. At Uyombo there are more Wapemba, the *tajiri* is a Wapemba who married here and also my friend with whom I am fishing is a Wapemba. He is also married and living here.

All the fishermen at Uyombo agree that their fish catch has been declining over the years, but they give different reasons for it. Those reasons are shown in table 5.10.

Table 5.10 Reasons for the declining fish catch

	Frequency with which an answer is mentioned
Increased number of fishermen	8
Marine National Park	5
Weather/ sea is getting rougher	2

*"The weather is getting worse, you know more rain and more wind, that is making the sea rougher and the kusi season longer, that is why there are no fish."*

(Bajuni fisherman)

*"There are so many fishermen these days and the Marine National Park has taken such a big area that there is hardly any place left to fish."*

(Bajuni fisherman)

However not all the fishermen see the growing number of fishermen as a reason for the declining fish catch, as shown in table 5.10, they agree that the number of fishermen is actually increasing. There is also agreement on the reason for the increasing number of fishermen. There is nothing else to do, you see people fishing then you are young or you are schooling so when you need money you start fishing as well. A lot of the young fishermen dropped out of school when their parents were not able to pay their school fees anymore, other did not go to school but turned to

fishing when they grew up and had to start earning their own money. There are several reasons why a fisherman starts fishing.

*"I was a fish trader but thought it would be more beneficial when I caught my own fish and sell it myself so I'm not losing any money somewhere in-between!"*

(Bajuni fisherman)

*"You know when you reach a certain age you have to start earning money for yourself, you cannot always depend on your father. So I wanted to earn my own money, well fishing was my only possibility."* (Mijkenda fisherman)

*"My father needed money so I started fishing, I had people seen doing that for all those years so I just started myself."*

(Mijikenda octopus fisher)

*"While I was schooling I often went swimming at Bandarini, you see people fishing, it is an easy way to make your living, so I started fishing."*

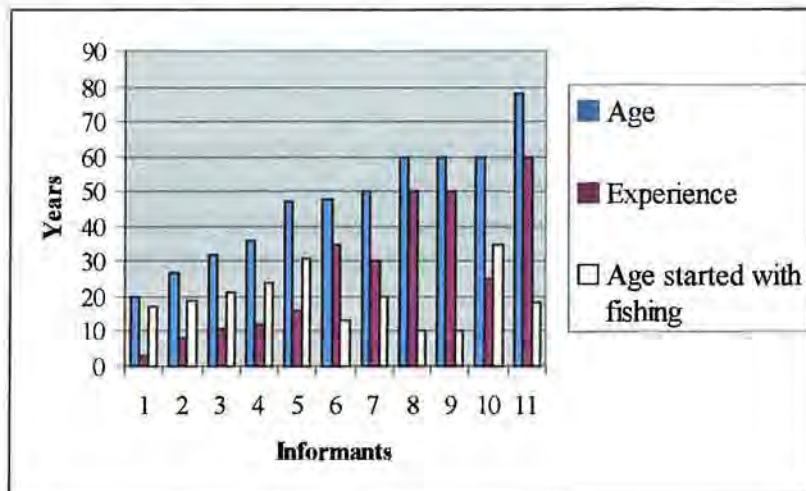
(Mijikenda fisherman)

#### **Box 5.5 Reasons to go fishing**

I went to school up to standard four. By that time one of my younger brothers was schooling as well. However when my father couldn't raise enough money to pay our school fees he asked us to quite school and to assist him with the school fees of my younger brothers who were not schooling yet. So we dropped school and we started fishing, I am still looking for another job which will give me a better income because from fishing alone you are not able to survive. But the jobs are few especially for the people with low education. That is why I help my father with the school fees of my brothers, than they will have a chance on a better job.

If one looks at figure 5.3 it is remarkable to see that the older fishermen tended to start fishing at a younger age. However if one looks at the education the fishermen have had, it is mainly the younger fishermen who went to school and therefore started fishing later when they dropped out of school.

Figure 5.3 Age, experience in fishing and age started with fishing



All the fishermen, except one, started fishing under the age of twenty years. The fisherman who started fishing around the age of 21 was a fish trader before he started fishing and continued to carry out that job while he was fishing. The reason that most fishermen starts fishing below the age of 20 is that in most cases they do not go to school or they are dropping out of school and look for something with which they can make some money.

There are different options for what a fisherman can do with his catch. All the fishermen, except one, consume a part of their catch themselves or did take it home. This depends on whether they live at Uyombo, go to their homestead each day or spend a while at Bandarini. All the fishermen who live at Bandarini take a part home for consumption. All the fishermen who are go home each day, except one, take a part of their catch home. The fisherman who is the exception claims that if he would take a part home the person with whom he is fishing will do the same and there is nothing left for sale. Most of the fishermen who stay a while at Bandarini consume a part of their fish catch. Of course this share of the catch is much smaller than when they would take it home. A fisherman can sell his catch to the *tajiri* or to the fish traders. Table 5.11 shows how fishermen sell their fish. Since the *tajiri* is the only one who has a weighing scale, all the fish is weighed there. If someone sells his fish to the *tajiri* this is done for free, if one does not sell his fish to the *tajiri* than 5 shillings have to be paid for the use of the scale. The reasons to sell to a certain fish trader or to the *tajiri* are various.

*"I sell my fish to any fish monger who will pay me immediately."*

(Mijikenda fisherman)

*"I sell my fish myself, than at least I know that I get the best profit out of it."*

(Bajuni fisherman)

*"There aren't that many fish mongers buying octopus, so I sell to anyone who wants to buy it."*

(Mijikenda octopus fisherman)

*"I sell to a fish monger who is a friend of mine, you know I can trust him. He will help me when I need money."*

(Mijikenda fisherman)

*"Why sell to a specific fish monger, they are all paying the same price."*

(Pemba fisherman)

*"I sell my fish to Cheupe<sup>110</sup>, he helped me with a loan when I started fishing so I sell my fish to him."*

(Mijikenda fisherman)

Table 5.11 Fish selling

	Percentage
Tajiri	16,7%
Fish traders	75,0%
Sell by himself	8,3%

Some of the fishermen in the sample are fishing together with someone else. This is the case for all fishermen who use a vessel and all fishermen who use nets. Fishermen who go fishing with line, by foot or with speargun are fish alone. If one is fishing together with someone else this can be a relative, a friend or just anybody with who they started fishing at a moment. If there are more people involved in fishing (a crew) than there are different ways to divide the catch. This depends on the gear used and whether a vessel is used and the ownership of those. As well on the relationship one is having with the person with who he is fishing and how experience the person is. Someone who is just learning how to fish is more likely to get a small part than someone who is an experienced fisher. If one used a vessel or gear which is owned by the *tajiri*, than a part of the catch should be paid to him. Except from paying a part to the *tajiri* there does not exist a common rule for this and it depends on the people involved and the arrangements made between them.

*"Of course I'm getting more of the catch than my son, I'm paying for the food."*

(Mijikenda fisherman)

*"I'm getting 2/3 of the catch and my friend 1/3 since I own the boat."*

(Mijikenda fisherman)

All the fishermen say that they cannot live from the fishing alone, therefore all the households have an extra way to generate income. All fishermen agree that it will be impossible for future generations to make a living from fishing if nothing changes and the fish catch keeps on declining.

## 5.4 Conservation

Since Uyombo is situated near the Watamu Marine National Park, I will first discuss the Watamu marine National Park here, attention will be given to the management of

<sup>110</sup>The *tajiri*

the Watamu Marine National Park, the conflicts which exist with local fishermen and the employment generated by the Watamu Marine National Park.

#### 5.4.1 *Watamu Marine National Park*

##### 5.4.1.1 Management of and Conflicts with the Watamu Marine National Park

The goals the Park and Reserve management pursue are mentioned below.

1. Promotion of eco-tourism
2. Enhance bio-diversity conservation
3. Promote conservation of critical habitats

(Hof, 1999)

However, the local fishermen are not mentioned specifically, unless they are included under number three.

The management of the Watamu Marine National Park faces regular problems regarding the artisanal fishermen. Although fishing in the Marine National Park is prohibited, poaching takes place. This remains a concern of the management. However some of the rangers claimed that the actual incidents of poaching were minimal since they caught most of the fishermen fishing in the Park. This was easy for them, outsiders often inform KWS if they see or know somebody is fishing within the Marine National Park. If a fisherman is caught fishing in the Marine National Park he is straight away taken to court (according to the rangers). His vessel and gear is seized and will be returned to him after he has paid his fine or he has spent his time in jail. It is allowed to fish in the reserves, although not all the fishing gear is allowed. A fisherman should be in possession of a license. However there is no limit to the number of licences given out, which causes the number of fishermen to keep on increasing. As a result the fishermen face a decline in their fish catch. This has made them request to KWS to degazette the Park area (or a part of the Park area).

Another point of conflict is the trawling. The fishermen are frustrated that nothing is being done against this extremely destructive way of fishing and blame the KWS that they are *“only after the small and poor fisher, why are they not doing anything about these big and rich foreign fishermen”* (Bajuni fisherman). However the regulation on trawlers is stipulated in the Fisheries Act and therefore has the Park management no adequate legal status to address the problem.

But also the glass bottom boats, diving, snorkelling and other water sport activities can do harm to the marine environment. One can think of the feeding of fishes, anchoring on the reefs, damage to the reef heads and so on. The Park is aiming at tourists to get its income, therefore the sake of a tourist is important for the KWS and one of the duties of the rangers is to look after the safety of the tourist. This way of behaving makes the local fishermen claim that the Marine National Park is only for tourism and that, again, they are disadvantaged for the sake of foreigners.

#### 5.4.1.2 Benefits of the Watamu Marine National Park: Employment Generation

In the area of the Watamu Marine National Park different groups of people have found employment. They are the KWS employees, the hotel employees, the safari sellers, the beach operators (curio sellers) and the boat operators.

In order to become a KWS ranger, one has to fit certain requirements. Nowadays, one has to have four years of secondary education, in the past eight years of primary school education was sufficient. What further might be in favour of your selection is physical fit, eye sight, tall (above 5 feet 8 inch) and having someone who can recommend you.

The task of a KWS ranger is to inspect on the fishermen, the boat operators (tickets) the beach operators (licences), the safety at the beach and selling tickets at the gate. Also the radio operators are among the rangers.

*Table 5.12 Number of people employed at the KWS, Watamu Marine National Park*

<b>Staff</b>	<b>Number</b>
Warden	1
Assistant Warden	1
Sergeant	1
Corporal	2
Coxswain	1
Accountant	1
Driver	1
Rangers	19

Table 5.13 Employment at the Watamu Marine National Park area

Group	No.	Association	Sex	Main <sup>111</sup> Ethnicity	Main Religion	Main Occupation. Parents	Education needed for the job
Safari-sellers	58	Safari sellers co- operation	M	Akamba	Christian	Farmer	Need to speak foreign languages, at least English
KWS	27	-	M/F <sup>112</sup>	Mixed	Mixed	Mixed	Secondary school and KWS training
Boat operators	70	Watamu Association of Boat Operators (WABO)	M	Bajuni	Muslim	Fisher	Need to speak foreign languages, at least English
Beach operators	110	Umoya Watamu Beach Operators	M/F <sup>113</sup>	Akamba	Christian	Farmer	Need to speak foreign languages, at least English
Hotel employees Turtle Bay	248	-	M/F	Mixed	Mixed	Mixed	Depends on what kind of job
Hotel employees Hemmingway's	100 p <sup>114</sup> 95 c <sup>115</sup> 12 t <sup>116</sup>	-	M/F	Mixed	Mixed	Mixed	Depends on what kind of job
<b>Total<sup>117</sup></b>	<b>720</b>						

<sup>111</sup> With main is meant: the most prevailing.

<sup>112</sup> However more male than female

<sup>113</sup> However, more male than female

<sup>114</sup> Permanent

<sup>115</sup> Casual

<sup>116</sup> Trainees

<sup>117</sup> In this total are not the employees from the other two hotels included and therefore it doesn't reflect the total number of people working at the Watamu Marine Park area.

The Boat Operators are joined in the WABO (Watamu Association of Boat Operators), one has to pay a monthly fee of KSH. 100/= to be a member and one has to be a member of the WABO to be allowed to operate a glass bottom boat in the Marine National Park. An exception to this are the hotels who are allowed to operate their own glass bottom boats. This forms a problem for the boat operators since they get less clients. Guest from a hotel are more likely to take the glass bottom boat of the hotel than one of the boat operators since the boat operators are not allowed to own booking desks in the hotels. The members of the WABO are not all focused on one spot but they are divided over the area of the Marine National Park. This is arranged by the WABO. The advantages of the WABO are that as being an association the WABO can represent the boat operators and that is easier to complain with KWS, hotels or others involved. There is more control over what is going on. As a association it is easier to get loans, cheaper to apply for licences and insurance than as an individual.

The total amount which is made by the boat operators operating on one boat is divided following the crew(s)-captain-engine-boat system. Each of them are getting an equal share. The captain is the one taking care of the engine while the crew looks for the coral and cleans the glass. In some case there are two "couples" of captain and crew working on one boat. While one "couple" is out with tourists, the other is looking for new tourists to go with them on the next trip. Often the crew operating on a boat are relatives of either the captain, the owner of the boat or the owner of the engine. One of the problems the boat operators are facing is the decline in tourism. High tourist season is in November, December January and February and that is the period they have to make enough money to sustain the rest of the year. During the months of the year with extremely low tourism (may June July), boat operators may turn to other income generating activities like fishing, working on the *shamba* or being employed as a casual labourer.

Some boat operators who started as a crew managed to become captains or even boat owners. In most cases, to become a boat owner the person is helped by what they call friends. Usually *wazungu* who had gone on a trip with their boat once or more and later, they offered financial assistance. A crucial skill for a boat operator is to speak at least English, however more foreign languages like German and Italian come very handy in the process of arranging with people to go out. Everybody can in principle become a boat operator, as long as you become a member of WABO and there is a boat you can join as crew.

The safari sellers are also joined in a co-operation, the Safari Sellers Co-operation. The advantage of the Safari Sellers co-operation is that there is a certain control. The safari sellers are attached to a certain company, of which they are selling the safaris and to a certain hotel in front of which they are operating. This is to anticipate that there are too many safari sellers operating near one hotel. When a safari seller arranges a safari for his company he receives a commission. This commission depends on the price he negotiated with the client and the kind of safari he sells. The safari sellers can negotiate the price but a lower price will result in a lower commission. The average commission is between 15 and 20%. The safari sellers suffer from the decline in tourism and many of them go upcountry to their home area during the low tourism period to cultivate on the *shamba* or to work as a casual labourer. The need to speak foreign languages also exists for the safari sellers. To

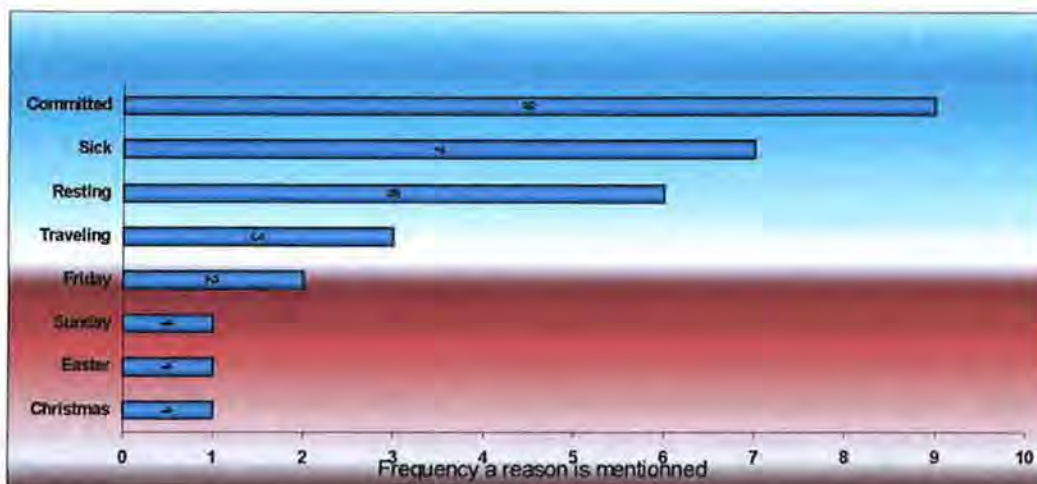
become a safari seller you have to find a company whose safaris you can sell. They see if you are an eloquent speaker, trustworthy and capable.

The Umoja Watamu Beach Operators is the association of the beach operators, curio sellers. The Umoja Watamu Beach Operators is having a limit of 150 beach operators which are allowed to operate within the Marine National Park. This number has been set by the government/KWS. The curio are bought at Mombassa. Problems facing the beach operators are the expensive licences (Ksh 2000/= annual), the decline in tourism and the poor state of their craft stalls.

#### 5.4.2 Conservation and the Fishermen of Uyombo

There are some days a year a fisherman is not fishing. This is shown in figure 5.4. There are also some areas which a fisherman does not visit when he is fishing. For most Muslims, Friday is a day of prayer and therefore a day of not working (i.e. not fishing). Similarly, for most of the Christians, Sunday is a day of worship and therefore a day of not fishing. Also most of the Christian holidays (Christmas and Easter) are days of not fishing for them.

Figure 5.4 Days when not fishing



The areas, which are not visited for fishing, are the Marine National Park and the rough sea. Some fishermen admitted that they go fishing in the Marine National Park some nights when their catches are really low. The rough sea is an area which is not visited by most of the fishermen since the sea is too rough for their vessels. Fishermen who go out fishing by foot or swimming are also limited in their fishing area simply because they cannot reach every area. They are also limited by their physical strength, since they always have to keep in mind that they have to swim or walk back with their catch. However all these considerations for not going fishing on a certain day or not going fishing in an certain area given no signs of existing forms of indigenous conservation. However the fishermen who come from a fishing family and fished at other places, like for example Lamu, recall that there was something like a ceremony in those places. Nothing like that has been done in Bandarini.

Like in Takaungu, the Wapemba are not liked in Uyombo. However, they seem to have found a way of solving the problem. In a communal action of the fishermen, the Kenya Wildlife Service and the local police the Wapemba were literally chased away. This seems to have had such an effect on the Wapemba fishermen that they have not returned to the landing site since. However the trawlers remain a point of frustration for the local fishermen. According to the fishermen, the trawlers are using destructive fishing gear and are coming too near to their fishing grounds. They are frustrated that the KWS is not doing anything about it. *"Why is the KWS making our life difficult and allowing foreigners to destroy the fish. They are doing more harm than we do!"* (Mijikenda fisherman)

The solution of the fishermen for the declining fish catch is that their fishing grounds should be enlarged. The Marine National Park occupies most of the area which is suitable for their fishing. The entrance of the creek, which is also occupied by the Marine National Park, is the best fishing ground. However some fishermen also mentioned some benefits from the Marine National Park, although they emphasised that they would never outweigh the disadvantages, i.e. the loss of their best fishing grounds. Those benefits are increased security by the guarding of the KWS and the attraction of (white) tourists. This gives them the possibility to sometimes sell fish to *wazungu* which always means you can sell the fish at a higher price. On the other hand however, sometimes these tourists come to have a look around in Bandarini and the way they dress, or more the way they do not dress is seen by the villagers as improper. Contact with tourists or resident *wazungu* cause a breakdown in existing values. Fishermen blame the contact with the "other culture" for several problems they face regarding the younger generation. Children's disrespectful behaviour regarding their parents, AIDS, prostitution and drugs use and abuse are an increasing problem.

Also some nets were donated by KWS. These are now in the property of the youth group of Uyombo, and can be borrowed from them. However arguments within the youth group about what to do with the money makes the group function less efficient. Another benefit of the Marine National Park according to some fishermen is that they tag some fish which are hard to catch and if someone catches a fish like that he receives some money.

Most fishermen deny that the Marine National Park is doing anything on conservation of fish stocks. According to them the only aim of the Marine National Park is tourism and therefore the only one really benefiting from the Marine National Park are the tourists. And again this means that, at least in their eyes, the government prefers to have foreigners benefit rather than the local people. The fishermen also claim that at a certain moment the Marine National Park was expanded and that the area which was added to the Marine National Park (which was before a Marine Reserve) is not used (meaning that this area is not visited by tourists).

*"For me I do not know why the Marine National Park is here. What was told to us was that the Marine National Park would just be outside the creek and not inside here. I do not know why the Marine National Park is here. During the colonial era when they started creating the Marine National Park they were just operating at the other side of Watamu, but later on they covered even the Uyombo areas."*

(Bajuni fisherman)

*"According to me, the reason why the government took that place to conserve it as a Marine National Park is that there are a lot of tourists around this area. And they formed the Marine National Park so they can get money from the tourists, the entry fees they charge them. Before they took only a small area, later on they expanded it, with an area which is never visited by tourists and which is the area of main interest for the fishermen."*

(Mijikenda fisherman)

The fishermen claim the whole area of the Marine National Park is larger than the ten square kilometres which the KWS says form the Marine National Park. Also KWS utilises park regulations in reserve areas and effectively making the area of the Marine National Park even larger.

*"Since 1968 when the Marine National Park was established, when they established it they came to the fishermen of Uyombo who were very few in those days and explained to them that they were going to preserve the area so that the others who would come later can benefit from what they are doing. But now the number of fishermen are increasing, the reason for that is that most parents who are fishermen cannot afford school fees for their children so they take them fishing too, so the number of fishermen has increased and the area of fishing here at Uyombo is not large enough since the main part of the area has been taken by the KWS. Whatever the KWS has said to them before is that they are going to cover an area of 10 km<sup>2</sup> but later on they have just extended the area, and this area is more than 10 km<sup>2</sup>. They should reduce the size of this."*

(Mijikenda fisherman, chairman of the committee)

*"They covered the area which had the best fish catch. It is taken as a Marine National Park, but they do not use it. The tourists are always going to the other part of the Marine National Park"*

(Mijikenda fisherman)

The relation between the fishermen and KWS is tense. The fishermen recall occasions when they were caught passing through the Marine National Park coming back from fishing outside the Park. In such a cases they were beaten up and their catch was taken. Also other complaints like not having their gear and vessel returned after being caught by the KWS and being forced to give parts of the catch as a bribe are heard.

*"They took our best fishing grounds and they are beating us and arresting us for no reason. The entrance of the creek is the best fishing area; they took it without making any use of it. It is like, putting a very fertile shamba in front of a farmer and tell him not to use it."*

(Mijikenda fisherman)

*"Why they have to beat us the whole time, take us direct to court, that is a fair way, not by beating people."*

(Mijikenda fisherman)

*"Sometimes you are caught by the KWS with your vessel and gear and they take you to court and you are fined or taken to jail but after court you won't get your vessel or gear back."*

(Mijikenda fisherman)

*"When you come out from fishing and you meet a KWS officer who wants to have something to eat for free but your catch is so low, you cannot give him anything, than you are in problems, he will get you next time, than you are in big problems."*

(Mijikenda fisherman)

The alleged spill over effect of the Marine National Park which is supposed to be a benefit for the fishermen is not there according to them.

*"There is no spill over benefit from the Marine National Park. It is a lie, even before the Marine National Park was founded, there was more fish than nowadays, nowadays the fish is rare and the fish, which is there, they escape to the Park."*

(Bajuni fisherman)

Another sign of poor communication between the KWS and the local fishermen is that the fishermen often do not understand the reasons behind KWS regulation, though they know the rules there exist a gap concerning the exact regulations concerned with the Marine National Park and the reasons for this regulations. All the fishermen know for example that it is not allowed to fish with speargun, however they do not know why they are not allowed to do so, since according to them there is nothing harmful about fishing with a speargun.

*"The KWS claims that with a speargun you can hurt a fish without catching it. But there are a lot of fish getting injured at the sea; you cannot forbid the sharks to try to catch fish. There is nothing wrong with speargun and since the speargun fishermen are fishing on big and slow fish, most of the time at night when the fish is even more slow, it is seldom the case that you injure a fish without catching it. Speargun fishermen chase the fish. A lion can fight with a buffalo, he can injure the buffalo without killing it, you cannot take a lion to court."*

(Mijikenda speargun fisherman)

*"About the regulations, we were not informed, we just found it there, all of sudden they told us that what we are doing was not allowed. We did not know anything, how should we know, they did not tell us and than they started to beat us for things we did not know it was not allowed."*

(Mijikenda fisherman)

*"We do not even know if they are following the right regulations, you know the regulations are there, but we are unaware of them so how can we know if what we are doing is allowed or not. You have to learn it from experience, you know, first somebody has to be caught and than we know that it is not allowed, and we cannot even check if they are lying or telling the truth."*

(Mijikenda fisherman)

*"There is a book given to us concerning the management plan but what they are stating in there is not truth."*

(Shop owner, vice-chairman of the committee)

To this problem also adds the fact that most fishermen have none or a very low level of education. Therefore they are on others to inform them on the regulations.

None of the fishermen is or has been employed at the Marine National Park. This is not because the fishermen do not want to, but they often do not possess the qualifications needed. However for the jobs that require a lower level of education, more often people from Watamu are asked since they live closer to the Marine National Park. An employee from Bandarini would have to cross the creek every day or travel the whole distance by road.

*“Almost everybody would accept any job offered. There are people who tried but they were not accepted. They do not offer the job to us but to outsiders.”*

There are fisher who admit that the Marine National Park is a way of conserving the fish stocks but they do not think this is the right way.

*“There is a decrease in the fish catch and the Marine National Park is a way of conservation but not the right one, how can they take better care of fish than of people. Since they are conserving this area as a breeding ground, we haven't seen any fruits from this effort, we were promised to benefit from it but we do not.”*

According to them there are other ways of conservation.

*“Conservation should be done by proper methods of fishing, being net, lines and traps. This are the methods used by most of the fishermen, the others use stick to catch octopus.”*

## 5.5 Case Study

The use of an actor oriented approach results in information which is rich in details on networks, interfaces and agencies. This case study is built on information gathered through life and career histories, observations and interviews. It is a detailed description of the livelihood strategies of one of the fishermen of Uyombo and the networks, interfaces, agencies, power relations and history.

Rashid was born around 1925 as a son of a Bajuni fisherman at Kizigintini, Lamu. He had five brothers and three sisters. The genealogy of Rashid is shown in figure 5.1. Rashid grew up at Kizingitini. When he was about ten years old, he went out fishing with his father sometimes. When he was 14 years old, Rashid started his own business. He was a *shada*, a businessman, for several years. With money borrowed from his father he bought little bottles of perfume in Mombasa and sold them in Kizingitini. Meanwhile, his father and brothers moved from Kizingitini to Uyombo. His sisters married and remained with their husbands at Kizingitini. Rashid remained at Kizingitini with his relatives. He was a *shada* for about 10 years and by then he was able to start a *duka*<sup>118</sup> in Tanga, Tanzania, with the money he had saved throughout the years. This is also where he married his first wife. He met her in Tanzania and since his father was still in Kenya and he was wealthy enough to pay his own brideprice he arranged the marriage on his own, with his fathers approval. However after 10 years of good business, the Tanzanian government closed down his business since he refused to pay them bribes. This is when he picked up his old job of being a *shada*. This time he bought *khanga's* and *kikoy's*<sup>119</sup> in Tanzania and sold them in Mozambique. Some of his uncles were living in Mozambique. Rashid used to stay with them a few days to do his business, go out fishing with them for a day or so and then he would go back to Tanzania, where his wife was still living. But business was going down and he decided to go back to Kenya to join his father and brothers. He divorced his wife. She had not given him any children yet and she did not want to go to Kenya, but preferred to stay with her family in Tanzania. The divorce was easily arranged because there were no children and Rashid and his wife both agreed on the divorce.

So, when Rashid was about 40 years old he returned to Kenya with no responsibilities towards a family and as quite a wealthy man. In Kenya, his father and brothers were the first and only people living in Bandarini. In the hinterland of Bandarini, more in the direction to Matsangoni, there were more people. However, they were all Mijikenda and they were all farmers. The only people fishing at Bandarini were Bajunis. They came from other village alongside the coast to fish there. There were no governmental regulations that concerned fishing. However since everybody knew everybody it was easy to call somebody to order in the case of bad fishing practises or bad behaviour. Rashid decided to become a fish trader because all of his brothers were already fishing and a cool box<sup>120</sup> was easier and cheaper to obtain than a fishing vessel and gear. The first thing he needed to do was to build up a network. He found an old friend, Mohammed, who was also a Bajuni

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<sup>118</sup> Shop

<sup>119</sup> Cloth

<sup>120</sup> A cool box in this situations is every box which is made in such a way that no water can leak out. It can be closed and is big enough for ice blocks

from Kizingitini. Mohammed lived in Mombasa at that time. They arranged that Mohammed would come to pick up the fish and to sell in Mombasa. This way, Rashid could stay in Bandarini and sell the fish from his house, while Mohammed sold it in Mombasa. This business went very well, and soon Rashid was able to buy some vessels, which he could rent out to other fishermen. This way he was able to indebt several fishermen to him: they had to pay the rent of the boat with a part of their daily catch. Rashid was then assured of a daily supply of fish. Later Rashid also started renting out fishing gear like nets.

The Watamu Marine National Park was established about three years after Rashid had come to Bandarini. KWS rangers came to Bandarini to tell the fishermen that a Marine National Park was about to be gazetted. The KWS told them that they were not allowed to fish in the entrance area of the creek, between the two marked points and at the area near Watamu. The fishermen were allowed to pass through the Marine National Park. Furthermore, the KWS said that the fishermen would also have certain benefits of the Marine National Park. However these benefits were never defined by the KWS. The Marine National Park would be surrounded by a Marine Reserve in which certain fishing gear would be forbidden. Little opposition was given to the KWS since there were not many fishermen and they actually did not really have an idea about what the KWS was talking about. The concepts of a Marine National Park and Reserve were unclear to them and there was nobody with any experience in such a thing. The fishermen believed the KWS when they were told that they would benefit from them. Therefore, the fishermen, represented by Rashid's father, more or less agreed on the gazettelement of the Marine National Park. More or less because their agreement was never asked for but they did not put any real opposition towards the gazettelement of the Marine National Park and Reserve.

Rashid lived with his father and brothers in Bandarini. Some of his brothers married and moved with their wives to Malindi. The houses they had built were made of stone and *mabati*. This was a sign of their wealth. Rashid had a good income also. He was able to purchase more gear, vessels and a new cool box. Rashid remained in Bandarini. His father died when Rashid was 45. His father left the land and the house for Rashid and his brothers. The land was sold to outsiders and a small part in Bandarini remained in the family. On one part a hotel was built. Because of the bad location of the hotel (hard to reach by car) it never really flourished and closed down some years after opening.

Bandarini grew, more and more Mijikenda started fishing, with the Bajuni being their teachers. The Mijikenda started building house (all of mud, stone and *makuti*) for their households. However most of them stayed at Bandarini alone for several days a week and build small huts. These huts were build on the land of Rashid and his brothers. Although these fishermen did not have to pay any rent or alike, they had to ask Rashid's or his brother's permission to reside there. Although Rashid's brothers did not live at Bandarini anymore, they still came there to fish. They went fishing together with Mijikenda who wanted to learn how to fish.

While visiting his brothers, who lived in Malindi, Rashid met his second wife. She was a friend of one of his brother's wives. Rashid was the only one of his family left in Bandarini and he had decided that it was necessary to marry again and start his own family. Rashid was a wealthy man and it would be good to have someone who could

inherit his wealth when Rashid would die. Since Rashid's father had died, Rashid arranged his own marriage with the help of his elder brother. They negotiated with the woman's parents and a brideprice was paid. The negotiations did not take long and it was not hard for Rashid to raise the required brideprice. The marriage was carried out in Malindi. The ceremony was performed by someone of the Muslim Council. After the marriage, the guests and Rashid and his new wife had a meal together. A year after the marriage, Rashid became the father of a daughter, Fatuma.

Unfortunately, his companion in Mombasa, Mohammed, died. This made Rashid quit his job as a *tajiri*, because he heavily depended on his sales to Mohammed. Also, Rashid and Mohammed had been in this together from the beginning and Rashid did not feel like doing it alone or attract another person to work with. Since he had been fishing his whole life, even when he was a *tajiri*, it was easy for him to decide to turn to fishing to make an income. In these days fishing was a good way of making ones living. Since Rashid was a Bajuni, he had always called himself a fisher, even in the periods he was rarely practising fishing. According to Rashid, fishing is in the blood of a Bajuni man. Rashid: *"You are born as a fisherman and even the Bajuni who have other jobs go fishing now and then."*

So when Rashid was sixty, he started fishing again. The decision to start fishing was further enhanced by material facts. Most of the land was sold when his father died so he did not have a *shamba*, but he had vessels and gear at hand. Also the fact that his house was at Bandarini and he had the responsibility of a wife and some children who he could not leave alone for too long made the decision to go fishing again logical. Rashid and his wife had three more children, two girls and a boy: Selma, Esha and Hassan.

By this time, Rashid was still a wealthy man. He did not need to fish every day. Some days a week he was just sitting in front of the house, watching the other fishermen and talking with his brothers who still came to Bandarini to fish. He had a big house and enough income to buy food and clothes and let his children go to school. None of the children finished school though. His eldest daughter, Fatuma, had been to school for two years but had left school in order to help her mother with the household. The two younger daughters, Selma and Esha went to school. When a year later his son Hassan was about to go to school, Rashid's wife died. The reason for her death is unclear since she had not been sick but just went asleep and never got up again. His daughters left school in order to take care of the household. While his daughters were taking care of the household, his son went to school and Rashid himself went fishing less and less. Fatuma married and went to Gede with her husband. Her husband had occasionally fished at Bandarini and had asked Rashid for her hand. The brideprice negotiations had taken a week and finally the brideprice was paid to Rashid in money.

Since Rashid was getting too old to fish, he quit fishing totally about 6 years after he started. Physically he was not able to go fishing anymore. There was no *shamba*. This meant that he had no regular income. He depended on what Fatuma and his brothers gave him and what his other daughters, Selma and Esha, made selling food. After Hassan reached the fourth class, Rashid took him out of school. This had two reasons. First of all, school became more expensive since the new schooling system required the parents to buy books and other materials for their children. Second Rashid thought that Hassan could give him a hand with getting an income. Hassan

however did not go fishing like his father wanted. He was hanging around in Bandarini during the day, walking from his father's house to the house next door, talking to the women over there. Sometimes, in the evenings he ran the video show. This meant that he collected the entry fees and installed the television, video recorder and the generator. The video show was owned by the shop owner who supplemented his income this way. Esha got married to the Pemba who came to Bandarini and became the new *tajiri*. For this Pemba it was extremely important to marry a local girl in order to be able to practise his job as a *tajiri*. He needed contacts with the fishermen of Bandarini to build up networks. A marriage with one of the daughters of a respected fisherman from Bandarini would be a great help in this. Since the brideprice was very welcome as an addition to the income of the household, the marriage was quickly arranged. Rashid's last daughter, Selma also married a Pemba who came to Bandarini to fish some year later. In order not to leave the old Rashid without a woman to take care of him, the last daughter stayed with him and her husband moved in. This would not have been the case if the Pemba would have had a house of himself. However since he was newly arriving this was the best arrangement for both. Esha had a son. Some years later however, she divorced the *tajiri* because of quarrels. The daughter moved back into Rashid's house.

The real problems started when his daughter in Gede, Fatuma, fell sick in February 2000. Since there were doctor bills which had to be paid, there was no chance Fatuma could spare any money for her father. Rashid wanted Hassan to go fishing, but Hassan refused. He would rather continue to operate the video show in Bandarini. Rashid claimed that Hassan was making only a little bit of money with that and that the owner of the video show paid him irregularly. This has caused several conflicts between Rashid and his son. Rashid stated that he has raised his son, gave him food, clothes and let him go to school. Now Rashid was old, he expected Hassan to take care of him. Instead of doing that, Hassan was only hanging around and spending the money he makes on clothes and "snacks" for himself. Hassan was still eating at his father's house, where the only real source of income is the fishing of the son in law, Selma's husband, and the small shamba Selma and her husband were renting. Rashid felt like Hassan should behave like a real man and work, but he cannot force him to do anything, he cannot tell him to leave the house. He is Rashid's only son and he will inherit the house.

The daughter stayed ill and instead of having help from his daughter, Rashid saw himself faced with the problem of raising money for his daughters medical bills. He went to the district officer in Kilifi and applied for a fund raising. This fund raising is more often done and is a legalised way of asking people for money. Other occasions on which permits for fundraising are given besides a sick relative are: renovation of buildings which are for communal use or rebuilding of a house after severe damage through for example fire. Rashid came back with a letter showing that he was allowed to ask people to help him with his daughters medical bills. Attached to the letter there is a list on which the names of people and the amounts they gave can be written. First of all, he went to relatives to ask them for assistance. Since he was sure his brothers would help him with a reasonable amount, they should be the first ones on the list. It was better to start with a high amount than with a low amount since the letter and the list would be shown to the other people he would ask and higher amounts on the first lines of the list would set the others to give as much as they

could spare in order not to yield to the others. The longer such a list becomes, the more it is used as a sign of someone's wealth and relation to the requesting person. Since Rashid is one of the first fishermen and most fishermen of Uyombo either learned fishing from him or his brothers or used some of his gear in the past, he is highly respected. However this respect is undermined by the behaviour of his son. In the eyes of most villagers this behaviour shows absolutely no respect for his father. Rashid's inability to deal with his son's behaviour is detrimental to his status. After his brothers, Rashid went to the richer people of Bandarini, the *tajiri* and the shop owner, knowing that they would also contribute a reasonable amount. Furthermore, all the fishermen of Bandarini were asked to contribute. He also went to Matsangoni and Gede to ask people he knew for money, as well as people he did not know. He raised funds for about two weeks and after that he had some days of rest.

After those two weeks he took his daughter to a *mganga*<sup>121</sup> since he did not believe that the hospital would be able to heal her. Taking into account the amount of money available for any treatment, he thought he would have a bigger chance with a complete treatment of a *mganga* than with half a treatment at the hospital. However, he did not mention to anybody that he was taking her to a *mganga*. He was afraid that there would be people who would object to it, since they contributed in the money. He told some of them afterwards.

Meanwhile, the only source of income was still the his son in law's fishing and the little *shamba*. Rashid got more and more annoyed by Hassan refusing to go fishing, claiming that there was nothing to fish anymore. In the eyes of his son, fishing was not a job to be proud of. He rather ran the video show, which was more of a special position since he was the only one in the village doing it. Rashid could not recall that either he or any of his brothers had ever treated their father this way. Considering that Rashid was in need of money and that he had to rely on the money he sometimes got from his brother instead of his young, healthy son making a proper income, hurts his pride. Another problem bothering Rashid's mind was that it would be hard to find a wife for his son in the neighbourhood, since his reputation of being lazy and a do-nothing was known and no parents would marry their daughter to him. At least Rashid was sure he would not do it when it was his daughter. His son could not expect to live from his sisters and brother-in-law's money. His son in law also had to spare some money to send to his first wife in Pemba, in order to take care of the children.

Rashid had one other way to raise small amounts of money for the household. He received a permit in order to raise money for the renovation of the mosque. Since he really needed money, he sometimes adjusted the list and put some money into his own household. Although some villagers knew this, nobody said anything about it since they felt sorry for the old man.

His daughter died two months after she fell sick. The message reached Bandarini by someone from Gede. It was already in the afternoon and she had to be buried before sunset<sup>122</sup>. Not all the villagers could reach Gede in time in order to attend the funeral. At this moment the tide was low and some fishermen were already in. The shop owner decided that the most important people and the closest related would cross

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<sup>121</sup> Witch doctor

<sup>122</sup>She was a Bajuni and therefore belonged to the Islamic Religion. Muslims have to be buried before the sunset.

the creek in the vessel of the fishermen. The people who went to the funeral were Rashid, his son, his daughter (his son in law was still at sea), some of their neighbours, the wife of the *tajiri* (the *tajiri* himself was in Malindi at that moment) and the shop-owner. They walked over the sandbanks as far as they could and then they went by vessel. The vessels took them to Watamu. There they got a *matatu*<sup>123</sup> to Gede. In this way, they could make in it time for the funeral. Some other people had started walking to Matsangoni, but since it took almost an hour to reach Matsangoni and then there they had to wait for a *matatu* to Gede there was a big chance they would be too late. If you had bad luck, this whole trip would cost you about one and a half up to two hours while from Watamu to Gede would be less than a hour.

After the people left for the funeral, the remaining people of the village gathered around the house of the *tajiri* waiting for the fishermen to come in. After about an hour, everybody spread and went back to what he or she was doing. The fishermen who came to sell their fish at the house of the *tajiri* remained there a bit longer than normally. Everyone was talking about Rashid and pitied him and the situation he was in. It was already dark when the people from the funeral came back. They came walking from Matsangoni and Rashid looked devastated. The people of Bandarini gathered at and around the house of Rashid. Speculations were made of what the girl could have died of and how terrible this was for the old man. The next day, Rashid's house remained a busy place, people walking in and out and given him small gifts like food or a little money. Rashid did not come out of the house for a couple of days. The second day, people kept on bringing food to the house of Rashid. Three days after the burial, life in Bandarini had turned back to normal now, except for Rashid who was very quiet, while he normally was a very talkative man.

After two weeks Rashid was as talkative as he had always been again. However the subject of his dead daughter, Fatuma, was avoided. He was also giving more and more attention to his grand-son. The child was sleeping at his house, but often went to his father's place for food or attention when his grandfather did not want to give him any. Rashid's daughter, Esha, was in Malindi trying to find a job in order to make some money. Since there was some harvest from the *shamba*, there was no problem getting food for the moment. Rashid hoped that the *kaskazi* season would come quickly. In this way his son in law should have a larger catch which could help them when they finished with the harvest from the *shamba*.

Rashid was struck by another loss a month later. In Matsangoni, a far relative on his way to Matsangoni had met a cousin of Rashid from Malindi who was sent in order to tell Rashid that his daughter, Esha had died in the hospital of Malindi. Since he was on the way to Bandarini, he told the cousin that he would bring the news, so the cousin could go back and start preparing the funeral. When he arrived in Bandarini, Rashid was not there. Hassan took one of the bikes of the *tajiri* and went looking for his father, while the brother in law of the *tajiri* took the other bike and went looking as well.

People gathered at Rashid's house and decided to leave for Malindi in order to attend the funeral. Money was raised to carry the costs of transport and the funeral. The brother in law of the *tajiri*, who had returned from his search, took the money and

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<sup>123</sup> A small Nissan van used for public transport, the name *matatu* has it origins in the time that a drive with a *matatu* was three shilling. *Tatu* is the Swahili word for "three".

went to Matsangoni by bike in order to try to find two *matatu's* which he could rent to go to Malindi. After a quick change of clothes, a group of about 25 people, mainly women, started to walk to Matsangoni, the group grew up to about 30, since some fishermen who returned from fishing managed to catch up with the group. Arriving at Matsangoni, there was only one *matatu* waiting. This meant that half of the group had to wait. Close friends and relatives went in this *matatu*. When it was about to leave, Rashid arrived and he was also squeezed into the *matatu*. After an hour, all the women had left for the funeral and there were only some men waiting for transport. However they decided to turn back to Bandarini, since the chance they would miss the funeral increased. Also like one of the fishermen said:

*"A funeral of a woman is more for the women. As long as my wife is there to represent my family than it is alright. The mourning as well as the singing and dancing is mainly done by the women, while the men stay aside drinking mnazi"<sup>124</sup>.*

The remaining men went to the *hotel*, had a meal and discussed the bad luck of Rashid. They also discussed his son and his behaviour. They all agreed that their son shouldn't dare to be so disobedient. According to them, Rashid was too old and he had allowed the boy too much when he was young. Nobody expected him to turn to fishing, they all saw big problems for the old man in getting something to eat. The people who remained at Bandarini could not stop talking about this bad luck of Rashid. His daughter was not even sick, but admitted to the hospital only that morning. They all agreed that this was more than he deserved since he had always been a very kind man to everybody. A lot of fishermen at Bandarini learned how to fish from him and Rashid had often given them advice.

Rashid returned from the funeral before dark together with the other people from Bandarini. Mourning could be heard from his house for a long period. Rashid remained in his house for about a week and people were walking in and out for the whole day, often carrying some food or fruits. His grandson remained at his house this whole week and was only seen at his father's house at dinnertime. After a week, Rashid came outside again, but in that week he had turned into a very old and broken man. From that moment on, he would never meddle with anything. He did not talk to his son anymore about starting to fish, he did not raise any money for the renovation of the mosque and he left his daughter and son in law to manage the household. He was only sitting outside, often with his grandson on his lap, looking at the sea. His grandson remained sleeping at his grandfather's house, while he took most of the meals at his father's house.

Rashid had turned from an active and, according to many people, fortunate man into a devastated old man. The problems over raising an income for his household were overcome by the death of both of his daughters. Although his networks would probably be sufficient to help him with at least get some food, Rashid lost his dignity and proud attitude. This was not only caused by the death of his daughters but also by the attitude of his son. As one of Rashid's brothers, who is facing problems with a drug addicted son himself, claims:

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<sup>124</sup> Palm wine

*"Development might bring some good things but it also breaks down our old values. Our children see the wazungu and adopt their habits which does not fit with our culture. Our children become disobedient, lose respect for elder people and the values we lived by for years and generations. Criminality is increasing and we cannot control our own children anymore. We are facing problems which are unfamiliar to us and we do not know what to do about it."*

As this case shows, different networks and livelihood strategies are used by Rashid in order to make a living. Through the years, Rashid's wealth had severely declined, according to him this was due to as well as his bad luck, as the decline in fish catch as the gazettement of the Marine National Park. The latter put extra pressure on the existing social relations. Next to a declining income and a limited access to the resources they use for their livelihood, existing values are broken down.

## **5.6 Summary**

All the fishermen at Bandarini face major problems nowadays. In the past it was possible to live from fishing alone, nowadays this is not anymore. Additional ways of generating an income have to be found in order to pay the rising costs of living. The living standard of the households are declining, which mostly affects the children. They have to drop out of school (or never even go to school), because they need to financially assist their parents at an early age. Here a downwards spiral exists, since the only job available to the low and non educated at Bandarini is fishing.

Households of fishermen fishing at Uyombo are characterised by a high number of children and a low number of schooling children. Education of the younger children is often done at the costs of the elder children who have to drop out of school to assist their younger brothers and sisters with school fees. Nearly all fishermen have an income either in food, in cash or both next to his fishing. This is a necessity in order to survive. Coconut trees and cashewnut trees make valuable contributions to a household income. The multiple use of coconut trees give households a source of income the whole year through and are therefore a valuable asset. Assistance from outside the household, most often from relatives, is more and more often necessary. However, assistance is given less often than before. Many people are facing the problems of unemployment and increasing costs of life. Therefore assisting someone is not as common anymore, and a lot of fishermen realise that if they need assistance, they will stand alone.

The fishermen consider degazettement of a part of the Marine National Park as the only possible solution to their problems. A larger (and better) fishing area will relieve the pressure of too many fishermen on a small area and therefore increase their catch. However to achieve this will be a big problem. Fishermen are not seen as stakeholders in the Marine National Parks and their voice is hardly heard. On the contrary, the fishermen feel that they are looked down upon. The KWS is treating them in an inhuman way. Their low catches force them to try to find ways of generating more income, for example by fishing in the Marine National Park or by using illegal gear. This will force them into more conflict with the KWS and this will make their voices less likely to be heard by the KWS or the Kenya Government.

Most of the people employed at the Watamu Marine National Park are from upcountry. Several reasons for this can be named, the main one being education. The need to speak a foreign language, bars the fishermen of Uyombo from these jobs. Their education is often low and the lack of foreign languages is the main disadvantage for them in a job interview. The long transport by road between Watamu and Uyombo may play a role. Also the fishermen of Uyombo lack the networks in order to get a job. Many people find jobs with the help of someone else, whether in recommending or in just pointing at a vacancy. All this brought together makes it very unlikely, even in the future, for the fishermen to be employed at the Watamu Marine National Park.

The fishermen of Uyombo are forced to diversify their income in order to sustain their living, because of the declining fish catches. This requires additional livelihood strategies. Because of the existence of the Marine National Park the fishermen feel that they are left with no other option than to diversify. However the Marine National park does not offer them any possibilities to diversify.



## **Chapter 6**

### **Discussion: Takaungu versus Uyombo**

Along the Kenya Coast fish stocks are declining and an extra pressure is put on the livelihood strategies of fishermen. In order to sustain their livelihood, fisherman households have to diversify their sources of income. In most cases this is done by farming and especially by the cultivation of cash crops. However if the trend of declining fish stocks continues, this would not be enough either.

This chapter will compare Takaungu and Uyombo, the two places of research at the Kenyan Coast. Uyombo is situated near a Marine National Park and Takaungu is not. The first differences one will notice between Takaungu and Uyombo are the visual differences as mentioned in chapter 2. However this chapter will not deal with those difference but with the differences in demographic characteristics (paragraph 6.1), household characteristics (paragraph 6.2), fishing (paragraph 6.3) and conservation (paragraph 6.4). The final conclusion will be given in paragraph 6.5, recommendations will be done in paragraph 6.6.

#### **6.1 Demographic Characteristics**

On both landingsites, fishing is male dominated. This is mainly because of the physical strength one needs and the existing labour division: fishing is a man's job. Women are only involved in the marketing of the fish, often as fish mongers. Fishermen range in age from ten to over seventy. However, the fishermen who are around ten years old are often fishing with their father or another experienced fisherman. Many of the older fishermen fish rarely and irregularly. The most active fishermen are between twenty to forty years of age since they have the physical strength that is needed to do the job. Very young fishermen and older fishermen are disadvantaged because they either lack the experience or the physical strength. Therefore they are less productive. I will discuss this in the next paragraph further.

If one compares the fishermen of Takaungu and Uyombo than it can be noticed that at both landing sites the fishermen are mostly of Mijikenda origin. However in Takaungu most fishermen are Muslim whereas in Uyombo most fishermen follow an African traditional religion. Except from the Digo, the Mijikenda do not have their origins in the Islam. However during the years, some turned to the Islam, some turned to Christianity and some remained with their original believes. In Takaungu many Mijikenda converted to the Islam. The reason for this is the fact that being a Muslim in Takaungu is connected with having a higher status. As explained in chapter 4 paragraph 4.1 people turn to Islam when they feel that status belongs with them. The explanations given by Parkin, Scott and Popkin all refer to the avoidance of claims put on your wealth. Being Muslim is connected with being more wealthy. For example, most of the shopkeepers are Muslim. The Mazrui have also contributed to this picture. They more or less as an example of the to achieve status, being a very wealthy and important family in the history of Takaungu. Mijikenda convert to the Islam in order to distinguish themselves from the other Mijikenda in terms of religion but also in terms of wealth.

This livelihood strategy cannot be found in Uyombo. The only case of convertment to the Islam I came across in Uyombo was when people got married. When a non-Muslim woman marries a Muslim man this woman will convert to the Islam. However, this hardly has any effects on her way of living. In Takaungu it is the men who choose to convert to the Islam, followed by their wife or wives. The reason for this difference between Takaungu and Uyombo can be found in history. Whereas Takaungu has a history (see chapter 2), which is mainly dominated by the Mazrui, Uyombo lacks this history. Therefore the idea of the connection between being a Muslim with being wealthy does exist in Takaungu but does not exist in Uyombo. Something which can be lead back to this same cause, is the fact that Takaungu is the home to more elderly fishermen than Uyombo. Takaungu was already a landing site over a century ago. Uyombo was not. Therefore in Takaungu there are more fishermen who had one or both of their parents in a fishing related job than in Uyombo. The fact that most fishermen from Takaungu are born in Takaungu and are living in Takaungu contributes to this as well. In Uyombo this is not the case. Most fishermen are living away from the landing site (Bandarini) and are not born there. However, if they would live at Bandarini, it would be a much bigger village than it actually is right now.

Overall seen, Takaungu is a small town, whereas Uyombo is a small village. Takaungu has a history as being a fisher community for over centuries whereas Uyombo lacks this history and therefore lack the fishermen's connection to the area. However, contradictory is that whereas in Takaungu an employment possibility next to fishing and farming exists, e.g. block cutting at Timboni, this is not the case in Uyombo.

## 6.2 Household Characteristics

With respect to the households of the fishermen from Bandarini, all of them, except one, have at least two sources of cash income. The only household which does not have a second source of cash income is assisted monthly by a brother of one of the household members. All the households, except two, are having at least two sources of food income. From the two households who do not have this, one household only cultivates cash crops on his *shamba* and the other household is saving money to buy a *shamba*. In Takaungu all the households, except two, have at least two sources of cash income. One of those two has to buy on credit during *kusi* season. The other one can manage without. All the households, except two, have a food income from at least two sources. The reason why those other two households do not have a *shamba* is that "*we do not need it*". In Takaungu, the households are more secure of their income than the households in Uyombo.

If one looks at the households who have a *shamba*, then all households in Takaungu grow food crops and five households (out of eight) grow cash crops. In Uyombo all the household, except one (nine out of ten), grow food crops and seven out of ten grow cash crops. Whereas in Takaungu only three out of these five grow coconut trees to sell products from it, in Uyombo all the households growing cash crops (seven) grow coconut trees to make money . The main advantage of growing coconut trees is that one can obtain a cash product for it in every period of the year. This emphasises the importance of the cultivation of coconut trees to provide cash for the

fisherman households. All seven households in Uyombo need to make and sell *makuti* several times during *kusi* season while in Takaungu this is not necessary for every household that grows cash crops.

If one looks at the livestock owned by the fisher households in Uyombo and in Takaungu than one can notice that there are unexpected high numbers of cattle owned by fisherman households in Uyombo. However this is not really the case. The cattle of household number ten and the cattle of household number eleven do not belong to the fisher in the household but to their fathers, who are in both cases farmer. The cattle are not owned by the fishermen. Both fishermen admitted that they never would be able to buy it. Actually the fisher in household ten owns exactly one goat and the fisher in household eleven owns two goats. The fisher in household two bought his cattle when he was employed in one of the hotels in Mombasa. Now, with an income only from fishing, he is not able buy any more cattle. However the fisher from household number one in Takaungu actually bought his cattle from the money made from fishing. All the livestock is his, except five of the goats, which belong to his father. Furthermore, all the livestock mentioned by the fishermen from Takaungu belongs to the fishermen themselves and not to a relative. In four of the eleven households in Uyombo however, the main part of the livestock belongs to the father of the fisher. This brings me to another difference between the fishermen from the sample in Takaungu and those in Uyombo. In Uyombo, all the fishermen who are not permanently living at Bandarini, except the one living at Malindi, are living at the homestead they grew up in. In some cases the father already passed away, in some cases he or the mother is still alive. The point is that all of them are cultivating a *shamba* which belongs or belonged to their father. If they had not cultivated their father's *shamba*, they would have been forced to find alternative sources of income to save money for a *shamba* and sustain their livelihood.

In Uyombo, three households are assisted from outside the household and two households assist somebody from outside the household. In Takaungu, one household is assisted from outside the household and four households assist somebody outside the household. This shows that the households in Takaungu are more capable of fulfilling the demands of their household with fishing than the households from Uyombo. Most of the fisherman households from Uyombo need their second source of cash income to meet the household demands and to let their children eventually go to school. In Takaungu the second cash income is less necessary for the short term, so this can be invested in for example the purchase of livestock. Also more requests for help to relatives are made in Uyombo than in Takaungu while in Takaungu more people from outside the household are assisted. This is a sign of more wealth in Takaungu than in Uyombo. But this also shows a severe problem. In Uyombo, people become less and less able to help and more and more in the need for help. In Takaungu people expected they would have someone to fall back on in times of need since they also assist some people. This is not the case in Uyombo.

The case of Rashid differed from this because of his position in the fisher community. The case of Rashid in Uyombo shows that Rashid is assisted by several people surrounding him. Rashid's brothers are still quite wealthy, although also their wealth has declined through time. Rashid can still rely on their assistance, especially since they have still a regular contact, his brothers often come fishing at Bandarini. Rashid

also managed to react on his changing social circumstances through the fund raising. However one need to have knowledge on the social relations in Bandarini in order to understand this. An example for this is Rashid's fundraising for the mosque. If any other fisherman would have used this fundraising for its own household, it is likely that whether someone would have said something about it, or than only a very small number of people would have contributed. Since Rashid was a respected old man whose situation was pitied by a lot of people, nobody said anything about it and were even willing to contribute to the renovation of the mosque, irrespective their religion.

Something which reinforces the poor situation of certain fishermen is their abusive use of *mira* and *mnazi*. A lot of money is spend on those, which not only makes the household budget to decline but also the fishermen's capability of earning an income, for example in case of drunkenness.

Households with children below the age of 10 as well as the households where the children have moved out through marriage, migration or death and which lack people in the active age group or remained with only one or a few of them are worse off then before. As shown in the case study of Takaungu, Mohammed was very eager to have his son-in-law and his daughter live with him, since this would mean that there would be a productive person in the household. As Chayanov (1966) states, the domestic phase a household is in is relevant for the welfare of that household. A household with little children has a few people contributing in the production (e.g. the father and the mother) and a lot of people involved in the consumption (first domestic stage). When the children grow up, this changes and they produce more than they consume (second domestic stage). At the moment the parents are old and their children move out of the household or get married and have children themselves, the wealth of the household decreases and the consumption is higher than the production again (third domestic stage) (Durrenberger & Chayanov 1984). Mohammed managed to slow down this last stage by having his son-in-law join his household. However, a severe decline in wealth could be seen. The same counts for Rashid's situation. He also managed to have a son-in-law belonging to his household.

The households which are in the first domestic change are more vulnerable in Uyombo than in Takaungu. As mentioned in the last paragraph, one had more change to find assistance in Takaungu than in Uyombo. Takaungu offers also more employment possibilities. A fisherman could start block cutting at Timboni during *kusi* season for example in order to get through this low catch period.

One can conclude that households need to diversify their income. The most difficult periods for a household are when they are in the first and third domestic stage and during *kusi* season. Fishermen are aware of these problems and try to avoid this in their livelihood strategies. They can do this in several ways. Arrangements can be made in order to try to prevent to enter an unprofitable domestic stage. A fisherman household can also start more income generating activities, however the availability of these are limited. To rely on social relations and count on assistance from a friend or relative becomes increasingly difficult. Many people are facing the same problems and therefore for a lot of households it is hard to give any assistance.

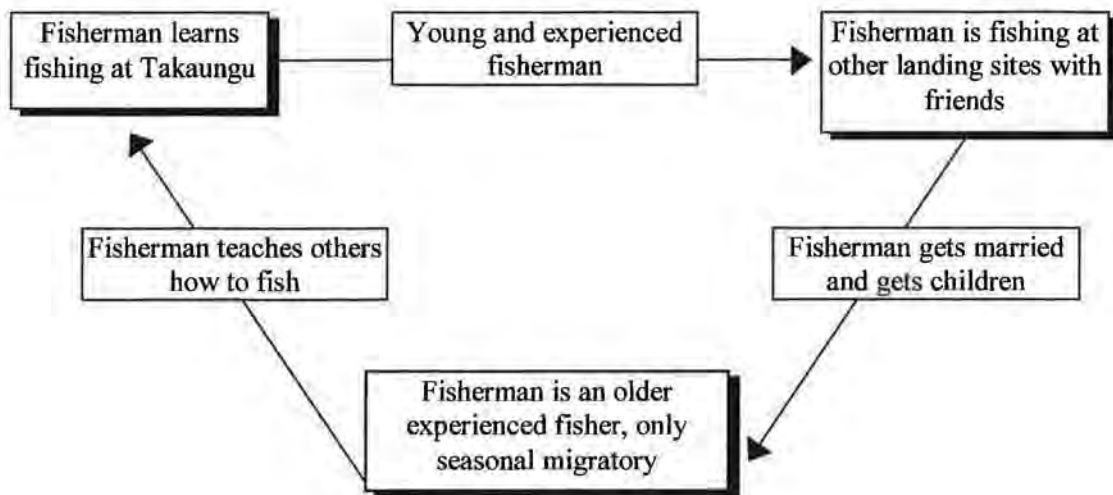
### 6.3 Fishing

Fishing practices along the Kenya Coast are characterised by a few differences. There is hardly any difference between the gear used at the researched landing sites. The only difference may be in the frequency certain gear is used. One would expect a more frequent use of speargun at Takaungu than at Uyombo since all the fishermen described it as a very effective with which a high catch can be obtained. However, in Uyombo the regulations concerning the use of the speargun are upon while the control on this in Takaungu is rare. Fishermen prefer to use the gear they are experienced in and, related with this, give them the highest catch. Most fishermen start fishing at a young age, as an on-job training by assisting their father, their uncle or friends. Often they become experienced in the use of a certain gear during this period and they will keep on using this specific type of gear. Whether gear is environmentally friendly or allowed is often not taken into account in the first place. Also the costs of the gear are considered. *Malema*, for example, is obtained at low costs since it is made by the fishermen themselves with materials from the surrounding area. Nets, for example, are of higher cost. Although speargun are often locally made, the need for a proper flashlight and batteries in order to fish at night cause a rise in the costs of this particular gear. The decision whether to use one gear or the other is therefore a balance between the costs and the potential catch obtained with that kind of gear.

The migration of the fishermen of Takaungu seems to be higher than the migration of the fishermen in Uyombo. In Uyombo, seven of the fishermen from the sample had only been fishing at Bandarini. In Takaungu this were two fishermen. This can be explained by several facts. One of the two fishermen in Takaungu as well as three of the fishermen from Uyombo dropped out of school in order to supplement their parents income with fishing. These fishermen were often the eldest son in their household. They helped their parents on the *shamba*. Until one of their brothers would reach the age on which they could also make some income, they would not be likely to leave their parents household. Another reason might be that for certain vessels like *mtumbwi* and the smaller *dhow*s it is hard to leave Bandarini. Just outside the entrance of the creek, the sea is very rough and since the other way out is blocked by the Marine Park, a fisherman needs to have a second vessel to be able to fish somewhere else.

In Takaungu as well as Uyombo, a circle can be found. Fishermen teach new fishermen how to fish. These new fisherman first become migrant fishermen. From the moment they start facing certain responsibilities, they become permanent fishermen and start to teach new fishermen how to fish. This is shown in figure 6.1.

Figure 6.1 Migratory fishing



The reasons to go fishing in Uyombo and Takaungu seem to be the same. There is no or hardly any other job available. However one should bear in mind that in Uyombo, fishing is often the only option people have, while in Takaungu fishing is a choice made out of two options, fishing or block cutting.

At both landing sites, the fish is sold to either fish traders, middlemen or *tajiri*. Concerning the fish catch of the fishermen at both landing sites, there are differences. The catch at Takaungu is much higher than the catch at Uyombo. This becomes clear from two things. First of all the way the people talk about their catch. If a fisherman in Takaungu is asked how the catch is divided among the crew his answer often starts with: "Say we have a catch of Ksh. 1000/= ". The fishermen in Uyombo however gave as example catches of about Ksh. 300/=. Second, from the NIRP fish catch data it becomes clear that the fish catch per fisherman is more than 4 times higher in Takaungu than in Uyombo. However, the variety of species is more than twice as high in Uyombo as in Takaungu. Taking into account McClanahan's statement on the effect of Marine Parks on the fish stocks in the surrounding area, one can argue that the lower fish catch in Uyombo can be attributed to the Watamu Marine National Park. McClanahan (1996) claims, Marine Parks "are useful if they somehow increase the total fisheries production of the region, but they may otherwise concentrate fishermen into smaller areas, causing increased overexploitation in unprotected areas". The higher variety in fish species can probably also be attributed to the Watamu Marine National Park.

Fishing activities are influenced by the prevailing winds. During *kaskazi* season, fishing activities are high, and during the south east winds, *kusi*, fishing activities are low. This makes *kusi* the most difficult period for fisherman in order to sustain a living. As one of the wives of a Mijikenda fisherman claimed:

*"If the decline in fish catch as well as in farming continues I will soon be serving an empty sufuria<sup>125</sup> instead of a meal."*

Fishing intensities decline on Fridays, especially in Takaungu where the main part of the fishermen adhere to the Islam. Friday is their day of prayers. In Uyombo, fishermen often go fishing during the night. Especially the speargun fishermen practise night fishing. Not only because their catch might be higher but also because at this time, they hope to be bothered less by the KWS. The use of a speargun in a Marine Reserve is prohibited by the government. Notwithstanding, it is still used by fishermen. The fishermen using it are often young Mijikendas since a lot of physical strength is involved. They are often school drop outs who turn to fishing in order to help their father in making an income.

#### **6.4 Conservation**

McClanahan et al. (1996 & 1997) discuss the fishing and cultural traditions in Diania-Kinondo area. This area is mainly occupied by the Digo. Digo ceremonies generally begin at sacred sites on land (*kaya* or the related *mizimu*) and continue at sacred sites at sea (*mizimu*). Secret sites used in those *sadaka* are very old. Those specific sites on land or at sea were originally selected generations ago by elders who had visions in which spirits came to them and told them to perform certain acts and catches would increase and problems would be solved (McClanahan et al. 1996 & 1997). Areas of sea which were viewed as places of unusual phenomena, particularly dangerous areas or areas inhabited by sea spirits were avoided by the Digo fishermen and served therefore as small, self imposed marine protected areas. This conservation may have been largely achieved by fear or respect the fishermen had for the inhabiting spirits in the *mizimu*. However, halfway the 20<sup>th</sup> century, the elders relaxed the rules about fishing around *mizimu* as catches declined and fishermen fished everywhere to get some fish (McClanahan et al, 1996 & 1997). Also Glaesel (1997) refers to such a ceremony. Glaesel (1997) also claims that an influx of fishermen from non-fishing communities like the Mijikenda into fishery is to blame for using unsustainable fishing methods and as such are causing an extra degradation of marine resources. They supposedly lack the emotional connection with the marine resources, which can be found with the Bajuni for example.

Fishermen regard fishery resources as common property with free and unregulated access, often referred to as open-access. The seas are open and do not belong to any particular individual fisherman or community. According to Hardin (1968) such a situation will lead to overexploitation of the resources. The individual will try to maximise his profit from the resources while the community shares the costs. In this line of thinking, limited access will be the best way to manage the marine resources. But can one talk about profit maximisation while for most of the fishermen fishing is merely a way of surviving? Hardin neglects that there might be factors which force local resource users to use the resource beyond its sustainable use. If one takes the lack of employment possibilities into consideration, the motive of limited access in order to protect marine resources loses its justification. Hardin also fails to pay attention to the capacities of the actors involved and the situations and relations in

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<sup>125</sup> Cooking pot

which they are embedded. An example of this is the arrival of the Wapemba in Uyombo. The fishermen felt the need to defend "their resources". However, if the Wapemba would have fished with less destructive gear, they would probably not have been chased away.

Hardin also neglects what van Wiersum refers to as the "actor-resource-focus". One needs to look at the purposeful actions undertaken by local communities in order to ensure continuous use of resources and how this affects the resources (van Wiersum 2000). A ceremony as described by McClanahan et al (1996 & 1997) and Glaesel (1997) can be considered a purposeful action in order to ensure continuous use of resources. In Takaungu, the local fisher community undertook actions in order to ensure continuous use of these resources. It is certain that in Takaungu ceremonies have taken place. It is also certain that no ceremony has taken place in Uyombo. Therefore one could claim that in Takaungu indigenous forms of conservation might have existed while these never existed in Uyombo. Nowadays, this situation is the opposite. Taking into account McClanahan's statement on the effect of Marine Parks on the fish stocks in the surrounding area, one can state that the smaller fish catch in Uyombo with regard to Takaungu can be (partly) attributed to the Watamu Marine National Park. The fishermen are concentrated in a smaller area, due to the Watamu Marine National Park. As a result, this smaller area is overexploited. The Watamu Marine National Park and KWS make sure that conservational practices are abided by in Uyombo. Fishers in Takaungu don't explicitly practice conservational methods anymore.

The situation with the Wapemba shows that, though maybe not explicit, there are internal regulations among fishermen. The chairman of the fishermen committee in Takaungu explained that anybody who was fishing with destructive fishing gear<sup>126</sup> would have to account for this. Also, the chairman of the village committee of Uyombo says that people using destructive gear are made aware of the effects of their fishing. Natural resource management is often subjected to this kind of normative regulations. The fishermen see themselves confronted with a legal pluralism and have to find a way to deal with it. Several ways of regulation came under pressure when other ethnic groups and religions entered the fisheries in Takaungu and Uyombo. Also the national and international interference through Acts and Parks and Reserves created a pluralism which made it hard for the fishermen to find a way to deal with it. Often the fishermen don't know all the regulations and they seldom know the reasons behind a certain regulation. This legal pluralism also causes problems with subscribing the positions of owner, proprietor, claimant and authorised user, as used by Schlager and Ostrom (1992). According to the fishermen, the sea cannot be considered to be private property, therefore the right of alienation (see chapter 3) is not in question. However, considering the Marine National Parks and Reserves, the Government of Kenya has given the rights of access, withdrawal, management and exclusion to the KWS. This has negatively influenced the fishermen's attitude towards KWS and thus conservation.

Fishermen's attitudes towards environmental conservation and the protection of fishery resources would change positively if their incomes would improve. Fishermen

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<sup>126</sup> What the KWS considers to be destructive fishing gear is not necessarily considered as such by the fishermen. An example of this is the speargun. However, the fishermen consider the *juva* nets of the Wapemba as a very destructive fishing method, while the KWS does not consider them as such.

are ready to undertake conservational projects when this improves their living standard.

The fishermen from Takaungu as well as from Uyombo don't fish on certain days. For both landing sites these days are either connected with their religion, or with sickness, resting, commitments at home or travelling. In both landing sites, the fishermen are not fishing in the areas they cannot reach with their vessel and, in the case of Uyombo, in the Marine Park. However this has nothing to do with the indigenous ways of conservation as mentioned above.

A reason for the disappearance of the ceremony as an indigenous way of conservation is that fishing has become a multi-ethnic activity. Fishing used to be a mainly Swahili-Bajuni dominated activity. Their beliefs and practices were related to their way of living near the sea. The origins and beliefs of the Mijikenda are not connected to this area. When they started fishing they valued these ceremonies less and since they were supposed to be an effort of all fishermen together, the ceremony lost its value. Also religion plays a role here. When Christian fishermen entered the scene, the practices and beliefs of the Bajuni and Swahili were judged as being unchristian, so the Christian fishermen did not want to co-operate in their ceremonies. An additional cause is that more and more young people get involved in fishing. They do not adhere to the customs of the older fishermen. The ceremony has fallen into decay since it was rejected by the younger fishermen as useless. Another point, which is made by some fishermen from Takaungu, is that whether they want to do something about conservation or not, is not the question. They feel like they cannot do anything about it. Conservation can only be done in the traditional ways if you are a wealthy fisher, i.e. if your catches are high throughout the year. Nowadays, not fishing for a day would have an immediate effect on their household income and the subsistence of their household. Their households have to be fed each day and therefore, these indigenous ways of conservation are not suitable anymore.

If one compares the attitudes of the fishermen of Takaungu and Uyombo towards conservation there is a big difference. In Takaungu most of the (younger) fishermen admit that there is a need for a way of conservation. However they are also aware of the fact that whatever way of conservation it is, they would not be able to practise their fishing anymore. The only alternative way of conservation they see is to move people away from fishing by offering other ways of employment. However, seen the declining employment opportunities, more people will start fishing in the near future instead of less. People who have nothing else to do will turn to fishing and by this influx, an even higher pressure will be put on the marine resources. In Uyombo people are averse of conservation. According to most of the fishermen it is logical that their catches are that low since there are too many fishermen in a small area, which is limited by the Marine Park as well as by the rough sea. The fishermen only see two solutions. First of all, the entrance area must be given back to the fishermen, i.e. they want to degazette that part of the Marine Park. Secondly, they want alternative employment offered to fishermen. Most fishermen do not want to fish but cannot do anything else. The downward spiral of declining fish stock - less income - more school drop outs - more fishermen - more exploitation of fish stocks is very strong in Uyombo. But in Takaungu it is also present.

The fishermen of Uyombo have a negative attitude towards the Watamu Marine National Park. They have not (directly) benefited from its presence. The fishermen suggest various ways in which they can benefit from the Watamu Marine National Park. First of all, parts of the Watamu Marine National Park should be opened for fishing during *kusi* season. Second, the fishermen should receive parts of the gate collections of the KWS. Third, employment at the Watamu Marine National Park or related employment, like in the hotels, should be offered to the fishermen since they are deprived of a income by the Watamu Marine National Park. A Marine Park generates employment, but this employment is often not available to the fishermen, since they usually lack sufficient education and enough starting capital. Therefore, the benefits of the Marine Park are very low for the fishermen and this results in an angry and aggressive attitude of the fishermen towards the Marine Park. Especially since their voices do not seem to be heard by the officials and the KWS, in their eyes, treats them, inhuman.

In order to understand the adverse attitude of the fishermen towards conservation in general and the Watamu Marine National Park specifically, one need to look at the relations between the KWS and the fishermen and the conflicts that are arising. The interests of the KWS and the fishermen are almost contradictory. Whereas the fishermen want to make an income through fishing, the KWS wants to control and limit their fishing activities as much as possible. The most clear example of conflicts between the KWS and fishermen is of course when a fisherman is caught fishing in the Watamu Marine National Park illegally. Fishermen also talk about being arrested and assaulted when just passing through the Watamu Marine National Park and, in such case, being blamed for fishing inside the Marine National Park. They complain severely about being beaten up and being deprived of fishing gear and vessel by the KWS. This makes their relationship with the KWS extremely tense and aggressive. Since they associate every way of conservation with the Watamu Marine National Park and the KWS, they are very adverse towards it.

The need for conservation is hardly denied by the fishermen, most of them agree that it is important for their future livelihood strategies. However most fishermen, especially those in Uyombo, are nowadays forced into a situation which gives them hardly any possibility to look at the long term. Their main aim is to fulfill the short term demands of their household. In order to make it possible that the fishermen play an active role in the conservation of marine resources in the future, it is important they have a positive attitude towards conservation. The fishermen are unlikely to adopt any conservation measure in their livelihood strategies when they are adverse of conservation.

## **6.5 Conclusion**

Coastal communities heavily depend on marine resources for their subsistence. Therefore it is important that effective management strategies are put into practice in order to ensure sustainability. Effective management can only arise from within the community or at least at the community level rather than internationally or nationally (Western 1994). Successful management strategies of fishery resources must be accepted by the people involved and in particular at the grass root level where the resource users are. The resource users, the fishermen, should be involved in

decision making and regulations. Concerned authorities should partly shift the management of resources from government institutions to the local fishing communities. This means that the fishermen would have to be willing to co-operate.

Most fishermen are aware of the situation they are in. They are aware that something should be done about the declining fish stocks. However, the question is what should be done. Every way of conservation will interfere with their fishing and therefore is no solution for them. Creation of more employment would withdraw people from fishing and as such take some pressure off the marine resources. However, since the employment possibilities stay limited, more and more people will turn to fishing to get at least something to eat. Another necessity for this grass root management is that fishermen should form co-operations or committees. In Uyombo this is the case but in Takaungu this would have to be established before management by the grass root users is possible.

Income diversification is a way for the fishermen to deal with their declining income. One can distinguish two kinds of income diversification. On the one hand there are the Waswahili and the Bajuni who are primarily fishermen and supplement their income by starting to farm. On the other hand there are the Mijikenda who are primarily farmers and who supplement their income by starting to fish. This is an important distinction which should be kept in mind when considering management strategies. Income diversification of fisherman households could also be regarded as a way of conservation. If a household shifts the importance of fishing as a source of income to an alternative source of income, a fisherman is likely to decrease his fishing activities. Doing this on a larger scale, this would mean a release of the pressure on marine resources.

According to the fishermen the creation of a Marine Park is not a proper solution for conservation. First of all, the fish stocks are still declining after the gazettment of the Marine Park, just like before. Second, the fishermen are left with such a small area to fish in that the density of fishermen in this area is extremely high. Another point is that the existence of a Marine Park in a certain area seems to make the fishermen averse towards conservation. They only associate conservation with the Marine Park and therefore with their low fish catches. Therefore they do not see the introduction of conservation, but the abolition of conservation, i.e. the Marine Park, as a solution of their problems. This attitude could change if the fishermen would benefit from the Watamu Marine National Park. Ways in which the fishermen see benefits are:

- Seasonably allowing fishermen to fish in the Marine Park area,
- Derive parts of the entrance fees for the benefits of the fishing community,
- Alternative employment for the fishermen.

#### The Research Problem

*What is the effect of a Marine Park on the livelihood strategies and income diversification of fisherman households at Kilifi District, Coast Province, Kenya.*

If one compares the villages of Uyombo and Takaungu than one can claim that the Marine Park has no effect on the income diversification of fisherman households. Most of the households in Uyombo have diversified less than the households in Takaungu. It can be argued though, that this is more an effect of the structural

differences between the two villages than of the Marine Park. Takaungu offers more opportunities to diversify income (for example block cutting at Timboni) than Uyombo.

Notwithstanding, the Watamu Marine National Park does have an effect on the livelihoods of the fishermen of Uyombo. As described before, the fishermen of Uyombo face lower catches and an overall lower household income than the fishermen from Takaungu. Whereas in Uyombo nobody can live from fishing alone, some people in Takaungu can. One can argue about the degree in which this could be attributed to the Watamu Marine National Park. However since the fishermen are forced into a smaller area and considering the growth of the fishermen population it can at least partial be attributed to the Watamu Marine National Park. Sure is that the fishermen have not benefitted from the Watamu Marine National Park, as was promised at the gazettment.

Also the attitudes towards conservation are effected by the Marine Park. In Takaungu a much more positive attitude towards conservation than in Uyombo exists, Only they do not know how this should be done. In Uyombo, most fishermen totally abandon the idea of conservation, claiming this is a idea of *wazungu* and the government and that they only want it for their own good. The Marine Park is therefore not only reflected in their fishing activities but also in their general thinking. Their negative attitude towards conservation can influence their livelihoods in the long term. They are less likely to participate in any CBNRM programm in case this will proposed to them.

## 6.6 Recommendations

Fishermen are trapped in a vicious circle of poverty. They are socially and economically marginalised. This is a result of limited ways of income diversification and low incomes. This forces them to fish in such a way and to such an extent that it causes degradation to marine resources. This, in turn causes their incomes to decline again. In order to break this circle, fishermen have to change their attitude towards conservation. Also their incomes have to be improved through by alternative sources. In what follows there are some suggestions on how to reach better conservation of marine resources while dealing with the deprived situation of the fishermen

- i. Fees from Marine Parks should be used to increase the welfare of the fishermen in the area,
- ii. A better relation between fishermen and the KWS should be established through a change of the attitude of the KWS towards the fishermen as well as vice versa,
- iii. Sponsoring should be arranged for primary education of fishermen and members of their household in order to give them a chance for an alternative job,
- iv. Information and education on how to apply for a job, job interviews etc should be given to the fishermen and the members of their household in order to lessen the disadvantages they have in applying for a job,
- v. Those fishermen who are willing to diversify but lack the capital to start self employment should get financial assistance,

- vi. The management of fishery resources and the related areas<sup>127</sup> should fall under the jurisdiction of one organisation which consults the local population in times of decision making. Right now the protected areas fall under the KWS while the unprotected areas fall under the responsibility of the Department of Fisheries (D.o.F.),
- vii. In the same way, the management of marine resources should be handled by one ministry instead of two<sup>128</sup>. At the moment the policy and implementation structure are unclear. It is quite difficult for the two Ministries to contribute towards environmental education.
- viii. Information on and discussion with the fishermen concerning policy, regulations and implementation should take place
- ix. More studies should be done on the possibilities to provide fishermen with other jobs
- x. More studies should be conducted on fisheries to provide information required for the set up of management of marine resources.

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<sup>127</sup> Like Mangroves

<sup>128</sup> At the moment, the management of marine resources falls under two ministries; the Ministry of Agriculture and Livestock Development and the Ministry of Environment and Natural Resources.



## Appendices

### 1.

#### **Acts related with the management of marine protected areas.**

Some of the acts and legal documents that obtain the protection and management of marine protected areas.

1. The Wildlife (Conservation and Management) Act (1989)  
This is the principal act regulating wildlife conservation and management in Kenya. The Act establishes the Kenya Wildlife Service<sup>129</sup> (KWS) as the implementing agency.
2. The Forest Act  
This act provides for the establishment, control and regulation of forests and forest areas in Nairobi area and on unalienated Government land.
3. The Fisheries (Industry) Act (1989)  
Provides regulations for development, exploitation, utilisation and conservation of fisheries and connected purposes.
4. The Maritime zone Act (1989)  
This act consolidates the laws relating to territorial waters and the continental shelf of Kenya.
5. The Land Planning Act (1968)  
Provisions for planning the use and development of land.
6. The Physical Planning Act (1996)  
This is a legislative framework for systematic national land use planning.
7. The Tourist Industry Licensing Act (1968)  
Provisions for regulating the tourist industry are made by this act with a view to promote its well being and development.  
(Hof, 1999)

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<sup>129</sup>KWS is a parastatal body of the Ministry of Tourism and Wildlife

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## 6.

### List of Swahili words

<i>Boma</i>	Compound
<i>Chapati</i>	Pancake made of salt, water and wheat flour
<i>Dhows</i>	A general name for several sailing vessels
<i>Duka</i>	Shop
<i>Hotel</i>	Place where you can eat
<i>Juva nets</i>	A small mesh size seine net
<i>Kaya</i>	Fortified town, later the area where ceremonies are carried out and where the spirits of the ancestors are living
<i>Kaskazi</i>	Season characterised by the North East monsoon and higher fish catches
<i>Khanga</i>	Cloth with a Swahili proverb on it, mainly worn by woman
<i>Kikoi</i>	Cloth mainly worn by man
<i>Kirumbizi</i>	Traditional fighting
<i>Kusi</i>	Season characterised by the South East monsoon and lower fish catches
<i>Mabati</i>	Iron sheets
<i>Madafu</i>	Young coconuts
<i>Mahamri</i>	Triangle donuts
<i>Maharague</i>	Beans
<i>Mahindi</i>	Maize
<i>Makuti</i>	Palm leaf roof cover
<i>Malema</i>	Trap
<i>Mira</i>	Khat
<i>Mashua</i>	A sailing vessel
<i>Matatu</i>	A small van used for public transport
<i>Mavumba</i>	Grinned or rotten fish
<i>Mganga</i>	Witch doctor
<i>Mizimu</i>	A <i>kaya</i> which is situated in the sea
<i>Mnazi</i>	Palm wine
<i>Mpweke</i>	Gill nets
<i>Mtumbwi</i>	Dug out canoe
<i>Mzee</i>	Old man
<i>Ngarawa</i>	A sailing vessel, which looks like a catamaran
<i>Sadaka</i>	Ceremony
<i>Shada</i>	Businessman
<i>Shamba</i>	Farming plot
<i>Sufuria</i>	Metal cooking pot
<i>Tajiri</i>	A person who leases out various types of fishing gear and vessels to fishermen for a share in their catch
<i>Ugali</i>	Heavy dough made of water and maize flour
<i>Wazungu</i>	White people (single: <i>mzungu</i> )

## 7.

### List of acronyms

CERS	Coast Environmental Research Station
CBNRM	Community Based Natural Resource Management
DC	District Commissioner
D.o.F.	Department of Fisheries
DO	District Officer
IMF	International Monetary Fund
KWS	Kenya Wildlife Service
KADU	Kenya African Democratic Union
KANU	Kenya African National Union
MPA	Marine Protected Area
MUA	Marine Unprotected Area
MNP(s)	Marine National Park(s)
MNR(s)	Marine National Reserve(s)
NGO	Non-Governmental Organisation
PC	Provincial Commissioner
UNEP	United Nations Environment Programme
WABO	Watamu Association of Boat Operators



## References

- Ardill, J.D. and Sanders, M.J. eds. (1991)  
*Proceedings of the Seminar to Identify Priorities for the Fisheries Management and Development in Southwest Indian Ocean, Albio, Mauritius, 3-5 Sept. 1991*, Fisheries Report No. 457, Food and Agricultural Organization, Rome.
- Benda-Beckmann, F. von and Benda-Beckmann, K. von (1996)  
Water Rights and Policy, In: Spiertz, J. and Wiber M.G., *The Role of Law in Natural Resource Management*, VUGA Uitgeverij, 's Gravenhage, pp. 77-100.
- Berkes, F., Feeney, D., McCay, B.J. and Acheson, J.M. (1989)  
The Benefits of the Commons, *Nature*, vol. 340, pp. 91-93.
- Blaikie, P. and Brookfield, H. (1987)  
*Land Degradation and Society*, Methuen, London.
- Chayanov A.V. (1966)  
*The Theory of Peasant Economy*, Homewood, Illinois
- Cronon, W. (1995)  
The Trouble with Wilderness; or Getting Back to the Wrong Nature, In: Cronon, W. (ed.), *Uncommon Ground: rethinking the human place in nature*, W.W. Norton, New York and London, pp. 69-90
- Durrenberger, E.P. and Chayanov A.V. (1984)  
*Chayanov, Peasants and Economic Anthropology*, Academic Press, Orlando [etc.].
- Elliot J.A.G. (1925-26)  
A Visit to the Bajun Islands. *Journal of the African Society* .Volume 25, pp. 10-22, 147-163, 245-263, 338-358.
- FAO (1984)  
*Fisheries Report*, No. 320, Food and Agricultural Organization, Rome.
- Foeken D. (2000)  
Physical Resources and Infrastructure. In: Hoorweg J., Foeken D., Obudho R.A. (eds.), (2000), *Kenya Coast Handbook: Culture, resources and development in the East African littoral*, Africa Study Centre, Leiden, pp. 29-42.
- Fulanda, B. (1999)  
Fishing, a Threat to Fisheries Resources: Notes on the shrimp trawling in the Ungwana Bay, paper presented at the *Coastal Ecology conference II*, Mombasa.

- Glaesel, H. (1997)  
*Fishers, Parks and Power: The socio-environmental dimension of marine resource decline and protection on the Kenyan Coast* (Ph.D. thesis), University of Wisconsin, Madison.
- Greenberg, J.B. and Park, T.K. (1994)  
 Political Ecology, *Journal of Political Ecology Case Studies in History and Society*, vol. 1.
- Hardin, G. (1968)  
 The Tragedy of the Commons, *Science*, vol. 162, pp. 1243-1248.
- Hof van het T. ed. (1999)  
*Management Plan: Malindi and Watamu Marine Parks and Reserves*, first draft 1999, KWS, Mombasa.
- Johnson, A. (1997)  
 Process for Effecting Community Participation in the Establishment of Protected Areas: A Case Study of the Crater Mountain Wildlife Management Area. In: Filer C. (ed.), *The Political Economy of Forest people in Papua New Guinea*, NRI Monograph 32, NRI/IIED, Waigani pp. 391-429
- Kenya, Republic of. (1991)  
 Fisheries Act, Chapter 373, In: Republic of Kenya, *Laws of Kenya*, The Government Printer, Nairobi.
- Kiely, R. (1995)  
*Sociology and Development: The Impasse and Beyond*, UCL Press, London.
- King, A. (1999)  
 Strategies used by Local Fishers to ensure Access to and Control over Scarce Resources: The case of Galu and the wider implications for marine resource management, paper presented at the *Coast Ecology Conference II*, Mombasa.
- Koffski, P.L. (1977)  
*History of Takaungu East Africa 1830-1896*. (PhD thesis) University of Wisconsin, Madison.
- Long, N. (1992)  
 Introduction. In: Long, N. and Long, A. (eds.) *Battlefields of Knowledge: The interlocking of theory and practise in social research and development*, Routledge, London.
- Long, N. (1992)  
 From Paradigm lost to Paradigm regained? In: Long, N. and Long, A. (eds.) *Battlefields of Knowledge: The interlocking of theory and practise in social research and development*, Routledge, London.

- Long, N. and Villareal, M. (1994)  
The Interweaving of Knowledge and Power in Development, In: Scoones, I. and Thompson, J. (eds.), *Beyond Farms First: Rural peoples knowledge, agricultural research and extension practices*, Intermediate Technology Publications Ltd, London, United Kingdom, pp. 41-52.
- Lynch, O.J. and Alcorn, J.B. (1994).  
Tenurial rights and community-based conservation. In: Western D. and Wright R.M. (eds.), *Natural Connections: Perspectives in Community-based Conservation*. Island Press, Washington, DC pp. 373-392..
- Malleret-King, D. (1999)  
A Food Security Approach to the Benefits of the Kisite Marine National park on the Surrounding Fishing Communities, paper presented at the *Coast Ecology Conference II*, Mombasa.
- McClanahan, T.R. (1996)  
Oceanic Ecosystems and Pelagic Fisheries. In: McClanahan, T.R. and Young (eds.), T.P., *East African Ecosystems and their Conservation*, Oxford university Press, Oxford, pp. 39-66.
- McClanahan, T.R. and Obura, D.O. (1996)  
Coral Reefs and Nearshore Fisheries. In: McClanahan, T.R. and Young (eds.), T.P., *East African Ecosystems and their Conservation*, Oxford university Press, Oxford, pp.67-99.
- McClanahan, T.R., Rubens, J., Glaesel, H. and Kiambo, R. (1996)  
*The Diani-Kinondo Coral Reefs, Fisheries, and Traditional Management, Coral Reef Conservation Projects*, Coral Reef Conservation project, Mombasa.
- McClanahan T.R., Rubens J., Glaesel H. and Kiambo R. (1997)  
The Effect of Traditional Fisheries Management on Fisheries Yields and the Coral Reef Ecosystem of Southern Kenya, *Environmental Conservation*, vol. 24, pp.105-120.
- Neumann, R.P. (1995)  
Ways of Seeing Africa: Colonial Recasting of African Society and Landscape in Serengeti National Park, *Ecumene*, Vol. 2(2), pp. 149-169
- Oudwater, N. (1997)  
*Eating with the Chiefs: A study on the present management of the Mweru-Luapula fishery*, unpublised MSc. thesis, Wageningen University.
- Parkin, D.J., (1972)  
*Palms, Wines and Witnesses*, San Francisco: Chandler.
- Patterson, T. C. (1999)  
*Change and Development in the Twentieth Century*, Berg, Oxford.

- Payne, I. (2000)  
The changing Role of Fisheries in Development Policies. *Natural Resource Perspectives*, Number 59, Overseas Development Institute, London.
- Peet, R. and Watts, M. (1996)  
*Liberation Ecologies; Environment, development, social movements*, Routledge, London.
- Peluso, N.L. (1992)  
The Political Ecology of Extraction and Extractive Reserves in East Kalimantan, Indonesia. In: *Development and Change*, vol. 23, No. 4, pp. 49-74.
- Peluso, N. L. (1996)  
"Reserving" Value: Conservation ideologies and state protection of resources. In: E.M. Du Puis and P. Vandergeest (eds.), *Creating the Countryside*, Temple University Press, Philadelphia.
- Popkin, S.L. (1979)  
*The Moral Economy of the Peasant; The political economy of rural society in Vietnam*, University of California Press, Berkley.
- Prins, A.H.J. (1972)  
The Shungwaya Problem, Traditional History and Cultural Likeness in Bantu North East Africa. *Anthropos; International Review of Ethnology and Linguistics* pp. 9-35.
- Rostow, W. W. (1961).  
*The Stages of Economic Growth: A non-communist manifesto*, Cambridge University Press, New York.
- Schlager, E. and Oström E. (1992)  
Property Rights Regimes and Natural Resources: A Conceptual Analysis. *Land Economics*, vol 68 (3), pp. 249-262.
- Scott, J.C. (1976)  
*The Moral Economy of the Peasant; Rebellion and subsistence in South East Asia*, Yale University Press, New Haven.
- Sindiga, I. (1999)  
*Tourism and African Development: Change and challenge of tourism in Kenya*, African Studies Centre, Leiden.
- Sindiga, I. (2000)  
Tourism. In: Hoorweg J., Foeken D., Obudho R.A.(eds.), (2000), *Kenya Coast Handbook: Culture, resources and development in the East African littoral*, African Study Centre, Leiden, pp.223-236.

Spiertz, J. and Wiber, M.G. (1996)

The Bull in the China Shop: Regulation, property rights and natural resource management, An Introduction, In: *The Role of Law in Natural Resource Management*, Spiertz, J. and Wiber M.G., VUGA Uitgeverij, 's Gravenhage, p 1-16.

Temu, A.J. (1972)

The Giriama War 1914-1915. In: Ogat BA (Ed). *War and Society in Africa*, ten studies, pp. 125-236.

UNEP (1998)

Regional seas: Management and conservation of renewable resources in the South Asian seas Region, *UNEP Regional Seas Report and Studies*, No. 62, UNEP, Nairobi.

Waaijenberg, H. (1993)

*Land and Labour in Mijikenda Agriculture, Kenya, 1850-1985*, African Study Centre, Leiden.

Waaijenberg, H. (2000)

Agriculture, In: Hoorweg J., Foeken D., Obudho R.A. (eds.). *Kenya Coast Handbook: Culture, resources and development in the East African littoral*, African Study Centre, Leiden, pp. 175-196.

Wiersum, K. F. (2000)

Tropical Forest Resource Dynamics and Conservation: From local to global issues, *Tropical Resource Management Papers*, No. 33, CERES, Wageningen.

Western, D. (1994)

Ecosystem Conservation and Rural Development: The case of Amboseli, In: Western, D. and Wright R. M. (eds.), *Natural Connections: Perspectives in community based conservation*, Washington, Island Press.

Willis, J. (1996)

The Northern Kayas of the Mijikenda: A gazetteer, and an historical reassessment, *Anzania*, vol. 31, pp. 75-98.



Wong, D (1984),

The limits of using the household as a unit of analysis, In: J. Smith et al, *Household and the World*, Beverly Hills, Sage Publications.

Consulted Internet sites:

[http://safaris.topcities.com/map\\_marine\\_parks.htm](http://safaris.topcities.com/map_marine_parks.htm)

[http://www.sas.upenn.edu/African\\_studies/NEH](http://www.sas.upenn.edu/African_studies/NEH)

[http://www.reisefuehrer-online.de/Kenya\\_CoralCoast\\_Nord.htm](http://www.reisefuehrer-online.de/Kenya_CoralCoast_Nord.htm)

<http://www.islamworld.net/eidfitr.html>

