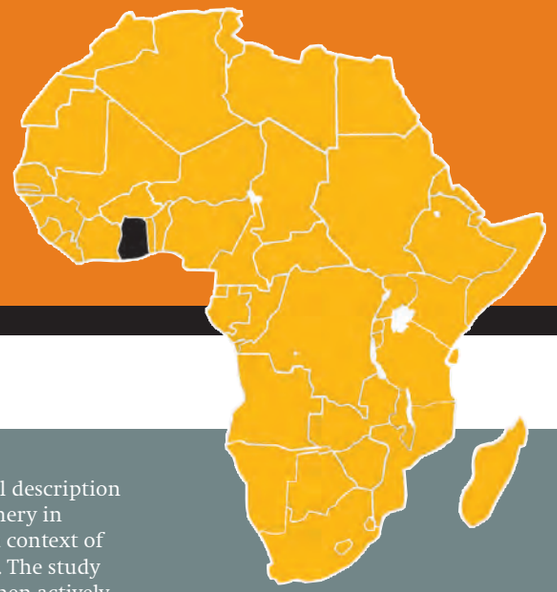
Creating space for fishermen's livelihoods : Anlo-Ewe beach seine fishermen's negotiations for livelihood space within multiple governance structures in Ghana

Kraan, M.L.



African Studies Collection 19

This PhD thesis provides a detailed empirical description and analysis of the Anlo-Ewe beach seine fishery in Ghana. The Anlo-Ewe fishermen operate in a context of declining catches affecting their livelihoods. The study shows how the Anlo-Ewe beach seine fishermen actively negotiate livelihood space in a context of multiple governance structures - including state and non-state authorities and agencies - and migration.

Marloes Kraan studied cultural anthropology at the Free University, Amsterdam, followed by a PhD at the Amsterdam Institute for Metropolitan and International Development Studies (AMIDSt) of the University of Amsterdam.

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Knowledge is like a baobab tree;
no one can encompass it with their hands

Ghanaian proverb

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Abbreviations

AMIDSt	Amsterdam Institute for Metropolitan and International Development Studies
APW	Ali – Poli – Watsa (canoe)
BA	Baird and Associates
BSC	Beach Seine Company
CBFMC	Community Based Fisheries Management Committee
CCS	Cross Cultural Solutions
CECAF	Committee for the Eastern Central Atlantic Fisheries
CF	Chief Fisherman
CFA	CFA Franc. CFA stands for *Communauté Financière Africaine* (African Financial Community)
CNN	Cable News Network
CPP	Convention People's Party
CPUE	Catch Per Unit Effort
DA	District Assembly
DCE	District Chief Executive
DFID	Department for International Development
EEZ	Exclusive Economic Zone
EPA	Environmental Protection Agency
FAO	Food and Agriculture Organisation of the United Nations
FD	Fisheries Department
FG	Fishing gear
GDP	Gross Domestic Product
GHC	Ghanaian Cedi[1]
GLDD	Great Lakes Dredge & Dock Company
GIS	Geographic Information System
GNCFC	Ghana National Canoe Fishermen Committee
GoG	Government of Ghana
HH	Household
HIPC	Heavily Indebted Poor Country
HP	Horse Power
ICZM	Integrated Coastal Zone Management
IDAF	Programme for Integrated Development Artisanal Fisheries in West Africa
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
IUU	Illegal, Unreported and Unregulated (fishing)
JSS	Junior Secondary School
KSDP	Keta Sea Defence Project

[1] In this thesis the value of 2004 is used whereby 11.000 Cedis equals 1 Euro. In 2007 the Cedi was re-denominated, 10,000 Cedis became 1 Cedis. When I need to give the value of amounts mentioned in Cedis from the time before the Euro, I use the US dollar.

MARE	Centre for Maritime Research
MFRD	Marine Fisheries Research Division
MK	Marloes Kraan
MP	Member of Parliament
MPA	Marine Protected Area
MoFA	Ministry of Fisheries and Agriculture
MSC	Monitoring Control and Surveillance
MSY	Maximum Sustainable Yield
NCU	National Coordination Unit
NDC	National Democratic Congress
NGO	Non Governmental Organisation
NMDO	National Disaster Management Organisation
NPP	National Patriotic Party
NRM	Natural Resource Management
PNDC	Provisional National Defence Council
PT	Public Toilet
RAMSAR	Wetland sites taken up in the RAMSAR treaty. Named after the Iranian place Ramsar where *The Convention on Wetlands* was signed in 1971
RPI	Research Planning, Inc.
SFLP	Sustainable Fisheries Livelihood Programme
SSS	Senior Secondary School
WD	Wildlife Department
UN	United Nations
UNCLOS	United Nations Convention on Law of the Sea
US	United States of America

Acknowledgements

Even though many PhD theses have lengthy acknowledgements, the idea persists that a PhD is a lonely process. This is very untrue. This PhD has become what it is by the very fact that I have been surrounded by people who have actively, directly or indirectly contributed to it. First of all I should mention the people with whom I worked and lived in Woe, Akosua Village and Half Assini, as well as in Accra, Lomé, Kpeme, Anecho, Cotounou and (indirectly) Abidjan. I would like to thank all the fishermen and women, leaders, elders, priests, chiefs, government officials who have spared their time and experiences with me, trusted me and of which some were willing to share part of their lives with me. Some people questioned what was in it for them and why they should spend time talking to a stranger. I must admit that the benefits have only been, and most likely will remain, few and far between as that is the nature and pace of applying scientific knowledge. I would like to thank everyone for their contributions to this PhD thesis and for all the other things I learnt from you in the process.

Akpe ka ka ka ka!

Special thanks are due to everyone who made me feel at home in the research locations of Woe, Akosua Village and Half Assini. These include my co-residents at the Woe compound where John was based, behind *Agric*. Thanks for your hospitality, for teaching me how to grind pepper and tomatoes, how to fetch water from the well, how to sweep properly and for killing the scorpions. Thanks to Beauty and her daughters in Akosua Village for taking Anthony and me in as guests to your house, for the splendid and plentiful meals and for patiently answering our questions. Thanks also to Isac and his wife in Half Assini. It was wonderful how you took Sesime and me into your house without really knowing us, furnishing us with great facilities and allowing us to take part in your life. You allowed us to see everything and ask all the questions we wanted to. I still remember our goodbye. *Akpe ka ka ka ka*! Special thanks are also due to Andy Korkor in Woe, to Gabriel Afadzinu in Akosua Village (and Woe). Both of you were my guides to the Anlo culture, to understanding what fishing is all about and to the 'real' stories. Thanks for your trust and openness. I would also like to thank Mr Smiles from Winneba. I cherish my lengthy conversations during which we discussed my field-work experiences. Since he had lived in the States, we enjoyed discussing the clichés that exist based on a comparison between Ghanaians and 'the West'. I explained how I admired the aura of strength, pride, health, and happiness often combined with remark-able beautiful clothing of many people in the 'poor' villages in which I performed my research. I would compare that to how people in 'the West' could walk with their shoul-ders down, tucked into their thick coats, looking grumpy, stressed and minding their own business. Mr Smiles would then respond by explaining his hypothesis on solar energy and auras, an idea which I became increasingly in favour of once I was back in the Netherlands! Thanks also to the owners of *Abutia Guesthouse* in Woe, the nice little restaurant *Happy Me*al in Woe and *Lagoon Lodge* in Winneba.

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[2] Driehoek = triangle in Dutch

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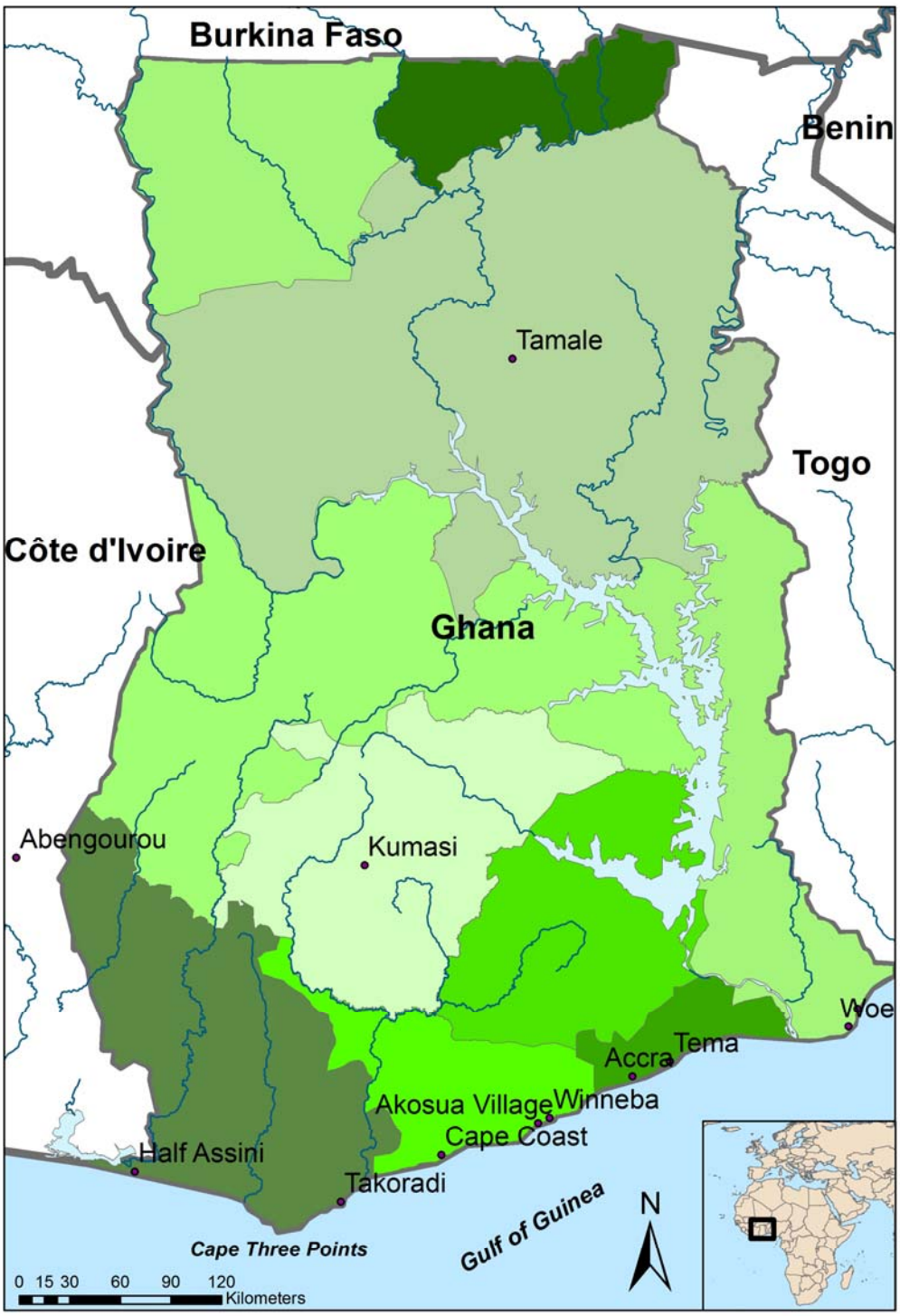
Figure 1.1 Map of Ghana



Map showing the research locations in Ghana, and the major coastal towns.
Source: author and GIS department AMIDSt.

1

Introduction

One man no chop[1]

Introduction

Reports on the rapid depletion of the world's oceans underline again and again the importance of fisheries management. Biologists warn us that oceans will be empty by 2048 (Worm *et al*. 2006) with only jellyfish left for us to eat (Pauly *et al*. 1998, Pauly & Watson 2003). The State of World's Fisheries and Aquaculture presented by the United Nations Food and Agriculture Organisation (FAO) every two years continues to adopt a warning tone with the authors writing that eighty percent of the world's major fish stocks are either over-exploited, fully exploited, rebuilding or depleted. The latest report states that most of the stocks of the top ten commercial species, which account in total for about thirty percent of the world capture fisheries production in terms of quantity, are fully exploited or overexploited (FAO 2009: 30). These findings are worrying from a global environmental perspective and echo the findings on the rapid depletion of, for example, tropical forests. Yet they are even more alarming in terms of food security in developing regions, as it has been estimated that ninety percent of the world's fishers are small-scale fishermen[2] providing food and livelihood especially in developing countries (FAO 2005: 10).

In Africa, any depletion in fish stocks will have serious implications in terms of food security and livelihoods. In many African countries fish is generally still considered a cheap source of animal protein, affordable to poorer population groups (Heinbuch 1994: I; Feidi 2001). In sub-Saharan African countries fish makes up twenty-two percent of the total animal protein intake, which can exceed fifty percent in some of the poorest countries,[3] where other sources of animal protein are scarce or expensive (WorldFish

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[1] Name of a canoe in Ghana. It indicates that people need to work together in order to have food, or more generally to accomplish a task at hand.

[2] In this thesis I will use the concept fisherman instead of the more gender-neutral fisher. This choice follows from the fact that in Ghana practically all fishers are men.

[3] Such as Equatorial Guinea, Gambia, Sierra Leone and Ghana (WorldFish Center 2005: 2).

Center 2005: 2).[4] Moreover, fish has quite a long shelf life (up to six months) due to processing techniques like smoking and drying and this facilitates distribution and consumption in inland areas (Mensah *et al.* 2006: 8, DoF 2003: 28).

Figure 1.2 Smoking fish in Half Assini

Fish supplies in Africa are in crisis however. The per capita fish consumption is declining due to a growing population and a decline in capture fish production (WorldFish Center 2005: 7). The contribution that fisheries make to poverty reduction is becoming threatened due to increasing scarcity (*Ibid.*). Small-scale fisheries are becoming increasingly marginalised, with the scarce resources being concentrated in fewer and fewer hands (Berkes *et al.* 2001, Hauck 2008: 637). These facts call into question the fishing agreements between distant water fleets from the former Soviet bloc, Asia and the European Union with West African countries (see for more discussion: Kaczynski & Fluharty 2002, Alder & Sumaila 2004, Brown 2005, Béné 2008) as well as current practice that more than fifty percent of global fish production is traded, with a net flow from developing to developed countries.[5]

In Ghana, the country of focus of this research, fish even contributed up to 63 percent of the total animal protein intake in 2000 (WorldFish Center 2005: 3) with a per capita fish supply of about 27 kilograms per annum (Heinbuch 1994: i), making it one of the countries in Africa with the highest fish-consumption (Mensah *et al.* 2006: 8). However,

[4] See also http://www.fmsp.org.uk/Documents/keylessons/FMSPBrief3_Food%20Security.pdf [Access date: August 2008].

[5] See Trade flows between developed and developing countries at www.globefish.org [Access date: November 2008]. In 2003, 60 percent of fish imports of developed countries came from developing countries. Exports from developed countries to developing countries are very important; these are mainly low priced small pelagics which account for 6 percent of total trade (FAO 2005).

with declining catches and a growing population, imports need to go up to keep domestic supply up to the necessary level. Yet imports in Ghana do not meet domestic demand (Alder & Sumaila 2004: 171, Overå 2005). Fisheries in Ghana are also enormously important in relation to livelihoods, with an estimated ten percent of its population directly (as fishermen and processors) or indirectly (as traders, canoe carvers or petrol sellers) dependent on fishing (Mensah *et al.* 2006:6, Akyeampong 2007; interview Mr Hutchfull, 13-10-2005). This is because fisheries in Ghana are largely rural in character, being dominated by artisanal fisheries[6] responsible for seventy-five percent of marine catches. Fisheries therefore play a major role in poverty alleviation (Mensah *et al.* 2006: 10). Together with the (semi-)industrial marine and inland sector, fishing contributed 380 million US$ to the national economy in 1996[7] (Atta-Mills, Alder & Sumaila 2004: 13) and was 94 million US$ worth of exports in 2002 (FAO Ghana Country profile[8]). The fishing sector is therefore very important for Ghana in terms of livelihoods and food security.

In 2002, research was presented at a conference in Dakar showing that West Africa was no exception to the global fisheries crisis. Biomass of demersal and large pelagic fishes (i.e., excluding small pelagics such as 'sardinella') has declined by a factor of thirteen over forty years (from 1950 to 2000) in the waters of North West Africa[9] (Christensen *et al.* 2004: 218) because of increased fishing effort. Other research shows that 68 percent of capture fisheries between Morocco and the Congo are fully developed[10] or in decline and therefore 'in urgent need of management action' (Garabildi & Grainger 2002: 111).

These facts call into question the foundations of fisheries management theory and practice, and give cause for a new approach (see also Kooiman & Bavinck 2005: 11-12). The question is what should this new approach be? Answering that question is not easy because fisheries relate to so many domains (biology, ecology, social and political sciences and economics), and concepts are often misunderstood, thereby making the discussion even more complicated (Bromley 2008). For a long time, biologists have been influential in determining what fisheries management, based on data and models, was all about (Pauly 2006). A lot of fisheries management plans and measures were based on their assessments, knowledge and research data. Economists have also been quite influential with their ideas on quotation and taxation (neo-liberal economics) and with reasoning out of transaction costs (institutional economics) (Van der Burg 2000). Input from the social sciences (with exception of the economists) started only quite recently (Johnson 2006b) and that has been a serious omission. Jentoft (1998: 178) formulated three strong arguments as to why social sciences should play a more active

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[6] I will use the concept artisanal and small-scale fisheries interchangably. Both concepts have their own connotations (see Johnson 2006a). With these concepts I refer to the sub-sector in Ghana using canoes (or even only nets such as cast nets) for their fishing operations. The artisanal or small-scale subsector stands opposed to the (semi-)industrial sector.

[7] In 1996 Ghana had a GDP of 6.9 billion US$. See: http://devdata.worldbank.org/AAG/gha_aag.pdf; [Access date: September 2008].

[8] http://www.fao.org/fishery/countrysector/FI-CP_GH/en [Access date: March 2009].

[9] Biomass as defined in this article excludes small pelagic and mesopelagic fishes (Christensen *et al.* 2004).

[10] A 'fully' developed fishery is a fishery which, following a period of rapid and steady increase of fishing pressure and catches, has reached its maximum average yearly production. It is usually understood that such a fishery yields close to its maximum sustainable yield. FAO glossary: http://www.fao.org/fi/glossary/ [Access date: September 2008].

role in fisheries management. In the first place ‘to manage well you need to know not only fish, but also fishers and fishing’. Secondly, fisheries management is a political process (more than a scientific one), which needs to be understood (see also Bromley 2008). Thirdly fisheries management is a system in itself and social sciences is based on long-term experience in the area of institutional formation, function and consequences.

This study should be seen in the light of declining catches, and feeds into the need for a new approach in fisheries management in which the social sciences play a greater role. Social science research in the area of fisheries management in West Africa is scarce and few studies address the local features and demands of small-scale fisheries and fishermen (Lindqvist & Mölsä 1992: 192). There is a lack of research on the West African region and particularly on the socio-economics of fisheries. As a result, some critics state that there is a ‘need for research into indigenous knowledge of fisheries management’ and a ‘need for studies into fishery community organisation’ (Bortei-Doku Aryeetey 2002: 324, 339).

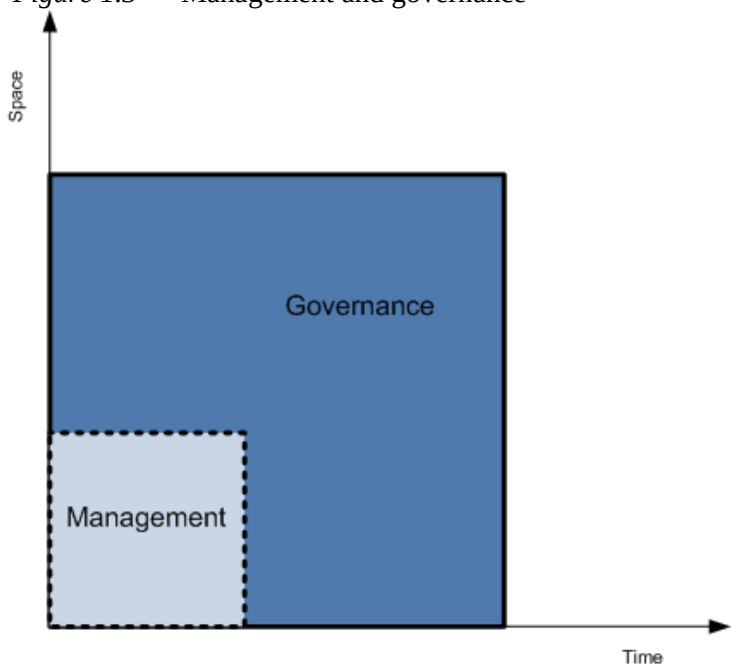
This study contributes to this goal by presenting a case study of one of the artisanal fishing groups active in the West African Region, namely the Anlo-Ewe beach seine fishermen in Ghana. This study is about how the Anlo-Ewe beach seine fishermen negotiate livelihood space within multiple governance systems, both at home and in migration settings in Ghana. The research will reveal, and is also built around, three themes characteristic of artisanal fisheries in Ghana, each of which adds to the complexity and dynamics of fisheries governance in Africa. The first is that fishing is a livelihood activity, meaning that it is central to the livelihoods of fishermen, which are understood as being wider in scope than income alone. The importance of this will be addressed in this study. The second is the mobility of artisanal fishermen since many have migrated within and beyond Ghana to fish. The third is the pluralism of governance systems. Fisheries in Ghana take place in a multiple governance context, with organisations related to the post-colonial government and to traditional governments. It is important to note here that I use the term *traditional* through want of a better term, and because this is the term used in Ghana to refer to this phenomenon, although it is also referred to as chieftaincy. It is, however, a false division between modern (Government of Ghana) and traditional (chieftaincy) for the contemporaneous traditional governments are incorporated into the modern governing structure.

Governance as a concept is becoming increasingly important in science and policy. As we will see below, the concept is also being used more and more often in relation to fisheries, replacing the concept of management. Before we continue it is important to know what is understood by fisheries management and governance in this thesis. I would like to use the definition of Kooiman & Bavinck (2005) who described governance as ‘the whole of public as well as private interactions taken to solve societal problems and create societal opportunities. It includes the formulation and application of principles guiding those interactions and care for institutions that enable them’ (*Ibid.*: 17). Governance consists of three orders. It deals with day-to-day affairs at the first order, and that order can also be called management. Management is therefore part of governance and is understood in this thesis as all kinds of activities people purposely undertake on a collective level to regulate fisheries (by making rules or developing norms based on existing – or new – values). The second order of governance focuses on the institutional arrangements within which management takes place. The third order comprises the principles and values of meta-governance, such as rationality, responsiveness and performance (Kooiman & Bavinck 2005: 19-20).

In Figure 1.3, I have visualised how I understand the difference between management and governance, and how both relate to space and time. In contrast to Kooiman & Bavinck I believe that managers can also be involved in making or changing institutional arrangements (second order governance). Thus where Kooiman & Bavinck would see the dashed line between management and governance as the border for first order governance, I believe that second order governance is partly included in the management box.

'Governance is the broader concept, which invites a more reflexive, deliberative and value-rational methodology than the instrumental, means-end oriented management concept' (Jentoft 2006: 671). Governance is concerned with the goals one wishes to pursue and management with how to achieve those goals (Jentoft 2008).

Figure 1.3 Management and governance



Source: author

Theoretical debates

This thesis builds on the debates of natural resource management, governance and livelihood. This section will begin with natural resource management and the important sub-debate on the commons in order to acquire a better understanding of the elements that need governance. Fish as a natural resource and fisheries as its related activity have their own characteristics and will be discussed before we proceed to examine (fisheries) governance and livelihood.

Natural resource management

In the 1980s awareness increased about environmental problems and scarcity of natural resources, which fed into a scientific debate on natural resource management.

• Common pool resource

An important sub-debate is that of the commons. A common pool resource is a valued resource[11] that is available to more than one person and subject to degradation as a result of overuse. It is difficult and costly to exclude other users and one person's use subtracts from what is available to others causing free riding and overuse (Dietz *et al.* 2002: 18; Jones & Carswell 2004: 144). Fish is generally considered a common pool resource. Debates on governance of common pool resources have been considerably influenced by the publication of Hardin's *Tragedy of the Commons* (1968). The dilemma that Hardin describes is that a common pool resource can be sustained only if all the users restrain themselves. However, if you restrain yourself while your co-user does not, the resource can still collapse. In that case you will have lost the short-term benefits of taking your share (Dietz *et al.* 2002: 3). His argument, that only private or state property rights regimes could prevent the collapse of common pool resources has been influential, and has led to a lot of intervention (Jones & Carswell 2004: 143; Béné 2004: 79). Hardin made use of game and rational choice theory, which was quite heavily criticised later for its one-sided, limited 'rational' economic view of mankind (Van Est 1999: 10). More importantly, however, it has been misleading since Hardin confused common property regimes with open access scenarios (Jones & Carswell 2004: 143; Bromley 2008: 10). Evidence from around the world has shown that a lot of common pool resources, including fisheries, have been managed under a variety of systems (see Béné 2004: 71 for an overview). 'Open access to fisheries resources is the exception' (Cormier Salem 2000: 210 cited in Béné 2004: 71). Degradation of marine environments due to over-fishing is therefore often not caused by an absence of governance, but by new driving forces surpassing the capacity of old management systems (Chuenpagdee *et al.* 2005: 26-27, see also for forests Sarin *et al.* 2003). The proposal that is often made that new property rights systems are needed to halt further degradation, is therefore misleading (Bromley 2008: 10-11). Mostly they already exist and may be in need of revision.

It is likely, once people started to depend on fish for their livelihoods, that fisheries worldwide were managed under access arrangements rather than on the basis of pure open access (Bavinck 2001: 28; Acheson 1981: 281, for forests see Sarin *et al.* 2003). Such systems for regulating usage of common pool resources have been called property rights regimes. Three basic institutional types (ideal types) of property rights regimes have therefore been identified: government ownership, private ownership and ownership by a community. However, each of these types has a wide variety of subtypes or hybrid forms (Dietz *et al.* 2002: 18, 21).

There is a difference between *de jure* and *de facto* rights with the former being the official legal institution in place and the latter the institution in practice.[12] In West African countries, for instance, marine fisheries resources are more or less classified (*de jure*) as state property (Boretei-Doku Aryeetey 2002: 332). Access to Ghanaian waters is officially restricted to Ghanaian nationals and joint ventures have only been set up for tuna vessels, with Ghanaians and foreign operators each holding 50 percent of the shares (MFRD 2004: 9). At local level, access is *de jure* arranged under state property

[11] It is important to understand that not all available elements that can potentially be used in nature are resources and that defining something as a resource is a social definition (Dietz 1996: 33-34).

[12] De facto: originated among resource users, not (yet) recognised by government authorities, de jure: enforced by a government, given lawful recognition by formal, legal instrumentalities (Schlager & Ostrom 1992: 19).

giving open access to all Ghanaian nationals. However *de facto* it is arranged under traditional custody. Local chief fishermen are often responsible for the access arrangements. In the African context it is important to realise that property rights have a different meaning, based on a different understanding of ownership (Gordon 2006), something which has been analysed in the legal pluralism debate which will be discussed in more detail later on (Chapter 6).

Fisheries governance includes access arrangements, but is more than that. Fisheries governance is the total of rules and regulations with regard to fisheries aimed at reducing risks and creating opportunities. In the next section we will discuss some characteristics of fishing that are important to understand before we can discuss fisheries governance in more detail.

• Characteristics of fishing

Fishing is a risky business. Going out on the open sea in a small wooden boat, crossing the surf, losing sight of land means taking risks.

> The sea is a dangerous and alien environment, and one in which man is poorly equipped to survive. It is a realm that man enters only with the support of artificial devices (i.e. boats, canoes, platforms, scuba gear or other technologies), and then only when weather and sea conditions allow. (Acheson 1981: 276)

Therefore, the sea, sudden weather changes or technical failure can jeopardise the expedition and in some cases the consequences are fatal. Marine fishing is still the most deadly of occupations. The lives of fishermen are threatened by storms, rough waves, cold and fatigue (Johnson *et al.* 2005: 85-86). Out at sea fishermen are chasing or looking for a resource that (often) is not directly visible and therefore a catch is never guaranteed. Besides this, there are a lot of species with different habits and many of them are not always available, due to seasonality. Some species migrate, but fish populations can also fluctuate drastically (naturally) in ways that are difficult to predict (Acheson 1981: 276). In addition, fishermen often compete with each other. Even if they succeed in filling their nets or boat with a good catch, they are still not sure of getting a good price, since the market is equally unpredictable and largely out of their control (Van Ginkel 1993: 2). The market with its fluctuating demand curves and its increasing quality demands, also determines the prices for the necessary inputs such as nets and fuel, and therefore has a double impact on fishermen's income. The more fishermen become integrated into the global market, the greater the impact those economic risks will have on them (Johnson *et al.* 2005: 86).

Fishermen operate as it were in two worlds: the natural world (in which the fish swim) and the social world (in which fishermen, traders and consumers live). Fishermen need to have access to both worlds by making use of their knowledge and they try to safeguard their livelihoods by creating certain agreements. The vertical connection between different worlds has been called a fish chain (Thorpe *et al.* 2005: 41-44). This fish chain can stretch across geographical distances and administrative boundaries or span time frames (Adhuri & Visser 2007). It can be limited to one beach in a certain village and can describe one sequence of catch and sales, or it can also be extended to a world region with lots of fishing techniques targeting lots of species being sold to many markets and reaching consumers far away.

Fishing is not only a risky business, it is also a trade in which fishermen are often largely absent from their households and communities. Fishermen work long hours in an all-men environment. Fishermen's wives have to run the household without their

men (Acheson 1981: 277). They are often actively involved in the business by processing fish or by having other income deriving activities to add to the household income. Together they are also impacted by policies and governmental interventions of many kinds. The fact that fishermen are away from home for long periods means that they are easily unrepresented in the political arena and become dependant on others (*Ibid.*).

Based on the above one might wonder why people ever take up fishing. However, it is important to understand that fishing is also an attractive activity. Fishermen in general are usually committed to their occupation (Acheson 1981: 295). They value the freedom of the job, being their own boss, being outdoors and meeting the challenges fishing presents to them (Pollnac & Poggie 2006: 31). Fishers derive satisfaction from their work and are very proud of their identity (Van Ginkel 2003). Fishermen are engaged in a livelihood activity that has often been performed before by their parents and grandparents and which is often continued by their children (see for Dutch fisheries: Salz *et al.* 2008: 53). Fishing is attractive because of the income it generates, and its instant revenues (compared to farming which means waiting before one can harvest what has been planted). Moreover, the fishing sector has often served as a safety net for other rural inhabitants (particularly in Senegal: see De Vries 2003: 108; Pinnegar & Engelhard 2008: 12; Béné 2003).

Amidst the uncertainty and the potential opportunities fisheries offer, it is obvious that fishermen will try to organise their business in such a way that risks are reduced or spread over a number of people (for instance in the crew organisation) and that opportunities can be pursued (Acheson 1981: 277). They make agreements on rights and rules amongst each other and they have dealings with others on matters related to their business. All these basic forms of regulation and organisation in the fish chain, aimed at reducing risks and creating opportunities, can be referred to as fisheries management. In the next section I will elaborate on fisheries governance (including management).

Fisheries governance

Fisheries governance as a concept refers to both scientific debates and to political and administrative practice, including management. Moreover, as we saw in the context of the fish chain, fisheries governance can be understood at multiple time and space scales. Governance is dealt with by international bodies such as the FAO, or regional bodies such as the Committee for the Eastern Central Atlantic Fisheries (CECAF) in West Africa and national governments like the one in Ghana are also involved. At sub-national level, fisher groups undertake managing activities by having rules and access arrangements. Fisheries governance deals with both the natural and the social world (connected by the fish chain), and therefore both natural scientists and social scientists are involved although the first are generally in a more dominant position than the second.

Fish, being part of the natural world, are not only edible, but also provide ecosystem functions. The health of marine ecosystems in return determines fish productivity. Therefore, the availability of fish and healthy marine ecosystems are linked (Chuenpagdee *et al.* 2005: 25). Declining catches have caused biologists to advise governments on the quantities of fish that can be caught in a sustainable manner, otherwise known as the maximum sustainable yield (MSY). Assessing how much can be caught is a difficult task, partly because of the ‘shifting baseline syndrome’ (Pauly 1995). This refers to how every new generation of fisheries scientists accepts a new (further declined) baseline of stock size and species composition used to evaluate change. Another important notion

that influences fisheries management is that of 'fishing down the marine food web' (Pauly *et al.* 1998). Research has shown how global fish landings have shifted from larger to smaller fish, with a lower trophic level[13] (see Gascuel 2002). Management plans based on single species assessment are the subject of increasing criticism and ecosystem-based management is therefore required (see the FAO Code of Conduct for Responsible Fisheries article 6.2 part 2[14]). However, according to some, the latter is also more difficult and less reliable and no firm conclusions have yet been drawn as to what is best (Cardinale & Svedäng 2008).

There is also an ongoing debate amongst social scientists on how fisheries should be governed, complex as this issue is due to the ever-increasing concerns (Jentoft 2006: 671). The acknowledgment that fisheries are complex, diverse and dynamic at different scales is reflected in the use of the more inclusive term governance in the debate. The governance concept implies more integrated approaches: 'governance goes beyond the problems at hand to consider longer-term societal trends and needs' (Kooiman & Bavinck 2005: 16). As fisheries scientists have developed their thinking from single species to the ecosystem approach, so have social scientists rediscovered systems thinking. Social scientists describe 'fishery systems' as comprising social systems and management systems (Charles 2001) or as the 'system to be governed' (the fish chain) and the 'governing system' (Kooiman *et al.* 2005). One of the basic dichotomies in social science research is that of structure and actors. As described above, systems thinking has been reintroduced in the fisheries niche of social sciences, despite years of criticism of this kind of systems approach (for instance the livelihoods approach). This study wishes to bridge the gap between the more actor-oriented livelihoods approach and the more structure-oriented governance approach by using the concept of negotiation.

The social science input as to what fisheries governance should be has become increasingly normative and the question being asked is whether the present situation is desirable? (Jentoft 2006: 672) As formulated by Kooiman (2005: 242): 'If we want fisheries governance to be more effective, we need to address its fundamental principles'. Governance is recognised as having normative elements, as it is based on principles at meta level, such as democracy, as reflected in the desire to address the complexity with involvement by the different stakeholders (Gray 2005). It is an issue that *needs* to be addressed by the joint effort of bureaucrats, scientists, user groups and politicians (representing broader public interests) (Jentoft 2006: 672-673). The approach comes in the era of 'good governance'. In this context, Jentoft argues – based on the ideas of Flyvbjerg (2003) – that the contribution of the social sciences to fisheries resource governance must essentially be 'phronetic' – reflecting on interests and values – as that is where its strength lies. Phronesis is ethical knowledge relating to 'what is good or bad for man' (quoting Aristotle) (Jentoft 2006: 673). This phronesis is not, however, concerned with universals alone but, to quote Aristotle again, 'must also take cognisance of particulars, because it is concerned with conduct, and conduct has its

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[13] Trophic level refers to the animal's position in the food chain as determined by the number of energy-transfer steps from plants (trophic level = 1) to that level (explanation given in Alder & Sumaila 2004: 168).

[14] The Code of Conduct for Responsible Fisheries was developed by FAO in response to recent developments and concerns in the world fisheries, with the goal to establish principles and international standards to responsible fisheries. http://www.fao.org/DOCREP/005/v9878e/v9878e00.htm [Access date: October 2008].

spheres in particular circumstances' (Jentoft 2006: 678). Kooiman *et al.* (2005) have ended up dealing with mostly universals, as they wish to address fisheries governance in the North and the South (Kooiman & Bavinck 2005: 22) whereby they focus on shared meta-principles at a global level (Bavinck & Chuenpagdee 2005: 245). Meta-principles are, however, also subject to scale. This study wishes to apply the Kooiman *et al.* (2005) governance approach to a concrete case and is therefore concerned with a particular group, in a particular location using a particular fishing technique, fishing and living and making decisions in a particular setting. At the same time it will position this particularity in larger contexts and showing 'how people are necessarily both local and global actors' (Walley 2004: 11).

The livelihoods debate

The livelihoods approach was introduced in the 1990s as a new approach to understanding poverty and assisting in poverty reduction. It came as a reaction to the way poverty was perceived and discussed in development cycles and in macro-economic approaches (Kaag *et al.* 2003: 3; Faillier & Kane 2004: 123). It was intended to alter the approach of perceiving the poor as people who are only lacking (money, food and access) and as victims of structural constraints, to people imbued with agency (Kaag *et al.* 2003: 5). Thereby it also shifted the focus on financial aspects of poverty to other dimensions, also bringing in dynamics (Lewins 2004: 37). The livelihoods approach implied an actor-oriented perspective at micro level, which came up in academia after the decades with a structural focus (De Haan & Zoomers 2005: 28). The livelihoods approach will be discussed in more detail in Chapter 3. In this section we focus on how the livelihoods debate relates to that of fisheries governance.

• Livelihoods and fisheries governance

The Sustainable Fisheries Livelihood Programme (SFLP) argues that '[f]ish resources are a source of food, employment and wealth. Fisheries management is therefore a development issue as well as an environmental one'.[15] The importance of sustaining small-scale fisheries and thereby enhancing development is being increasingly recognised (Allison & Ellis 2001: 377). About ninety percent of fisheries world-wide are small-scale, producing fifty percent of fish and providing livelihoods to millions of people in poor fishing communities (FAO 2005: xv). The link between poverty and small-scale fisheries is often strongly emphasised in a lot of literature (De Vries 2003, Pauly 2006), yet should be met with some caution. The almost universally accepted perception that 'fishery rhymes with poverty' (Béné 2003) has been challenged by empirical data as being at least more complex than often presented, yet has still led to the idea that the root of the problem lies in the economic and biological aspect of the activity: 'Poverty in fisheries has been explained through a linear relationship between the low incomes of fishermen (due to low catch) and the over-exploited resources (created and/or maintained by the open access nature of the fisheries)' (Béné 2004: 79). Yet, as the environmental entitlements debate (see Chapter 3) shows, it is not so much the scarcity of a resource or lack of production that increases poverty but lack of access to it (Sen 1981 quoted in Béné 2004: 77). And as the livelihoods approach has emphasised, income is not a true assessment of poverty: one may lack financial resources

[15] http://www.sflp.org/briefs/eng/flyer.pdf. See Chapter 3 for more background on the Sustainable Fisheries Livelihoods Programme (SFLP).

but have access to natural resources and therefore not be poor (Béné 2004: 76). As Béné has assessed, fishing communities often reflect the general lack of development of the rural areas in which they exist. However, fishermen are often not the poorest of the poor (Béné 2004: 76; see also Odotei 1991, Mensah *et al.* 2006: 10 for Ghana; Hoorweg *et al*. 2009 for Kenya).

New approaches to fisheries governance were sought at the beginning of the 1990s, when clear signs of overexploitation of the world's fish stocks became apparent. These had to be directed to conservation and relate to environmental but also to social and economic concerns. The FAO developed the Code of Conduct of Responsible Fisheries which was adopted on 31 October 1995 (FAO 2005: xii). The second general principle of the Code of Conduct (article 6.2) states that:

> Fisheries management should promote the maintenance of the quality, diversity and availability of fishery resources in sufficient quantities for present and future generations in the context of food security, poverty alleviation and sustainable development.

Article 6.18 recognises the important contributions of small-scale fisheries to employment, income and food security:

> protect the rights of fishers and fish workers, particularly those engaged in subsistence, small-scale and artisanal fisheries, to a secure and just livelihood, as well as preferential access, where appropriate, to traditional fishing grounds and resources in the waters under their national jurisdiction.

In response to the growing awareness of poverty in fishing communities and the lack of attention these communities often receive, the FAO developed the SFLP together with the Department for International Development (DfID) and twenty-five participating countries in West Africa, which commenced in 1999. It is a 'regional development project whose overall objective is to reduce poverty in inland and coastal fisheries communities through the sustainable improvement of their livelihoods'.[16] Its two main working and reference tools are the Sustainable Livelihoods Approach and the FAO Code of Conduct. It resulted in a lot of research that put the issue of poverty and small scale fisheries firmly on the political map.

Allison & Ellis (2001: 387) applied the livelihoods approach to small-scale fisheries research and found that:

> fisheries sector development analyses have tended to focus on what small-scale fisher folk do not have – access to infrastructure, finance and technology – rather than what they do have – adaptable and flexible income generating strategies, resilient resource management institutions, knowledge, skill and social capital.

Small-scale fisheries have long been ignored by national governments due to their preoccupation with modernising the fisheries and therefore on developing a (semi-)industrial sector. When small-scale fisheries were included in policy they were encouraged to 'develop' or 'modernise' with a view to increasing the efficiency of fishing effort by 'supplying artisanal fishers with improved boat designs, or subsidising credit for the purchase of outboard motors, promoting nets made of more durable materials' (*Ibid.*: 382). A lot of modernisation programmes have, in effect, undermined the adaptive capability of small-scale fisheries due to a lack of understanding of small-scale fisher's livelihoods (see also Platteau 1989a). Or, as Lewins formulates it: 'Well-meaning policy interventions have so often failed to produce change because the social and political realities faced by the poor are rarely understood or considered' (Lewins 2004: 44). The

[16] For more information see www.sflp.org.

livelihoods approach provides a means by which to 'better understand the nature of small-scale fishery production systems' (Allison & Ellis 2001: 378) in which flexibility, geographical mobility and livelihood diversification are characteristic adaptive responses (*Ibid.*: 380).

• Livelihoods and governance

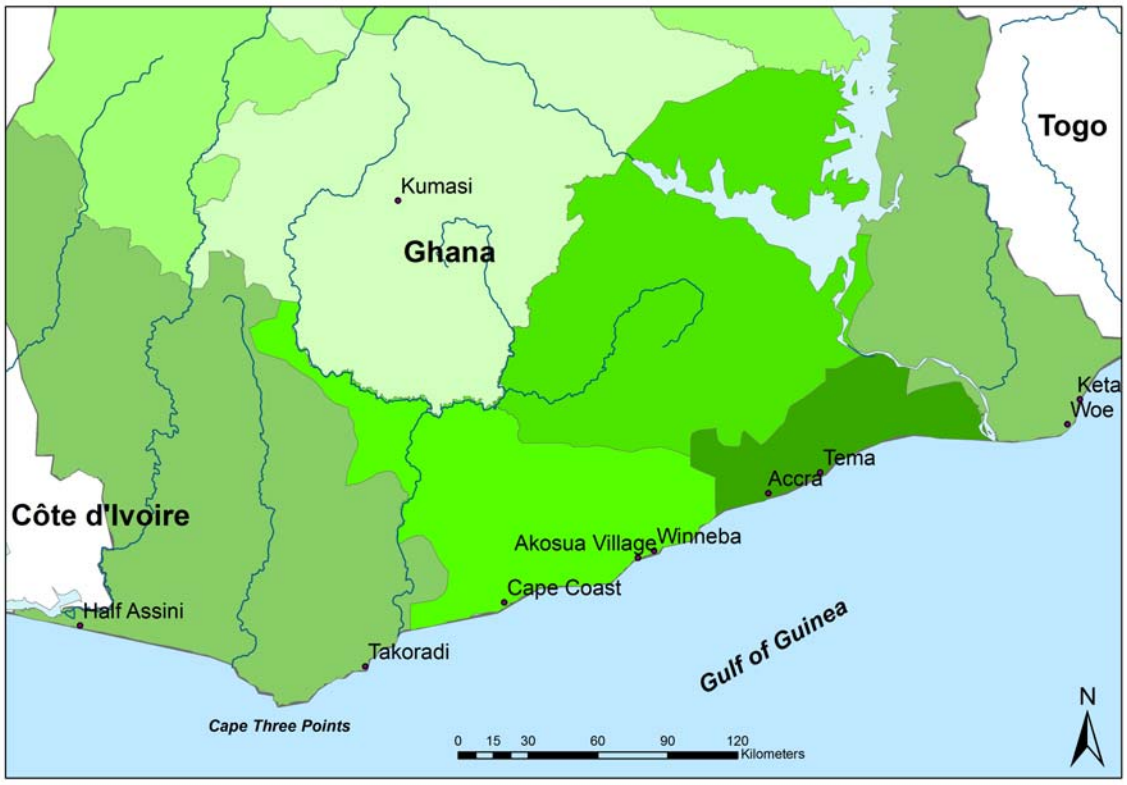
The strength of the livelihoods approach is that it gives agency to local actors and that it has highlighted the multidimensionality of poverty (De Haan & Zoomers 2005: 33). The weakness is that structural influences do not receive enough attention or are downplayed (*Ibid.*). The attention paid to agency and livelihood options was useful as an anti-thesis to structuralist tendencies before, but it needs rebalancing (see Brons *et al.* 2007). This is also recognised by livelihood specialists, who included structures, processes, government and institutions in the livelihoods approach as visualised in the schemes by the 'transforming structures and processes' box later called 'policy institutions and processes', often together with 'social relations, institutions and organisations'. Nevertheless, in a lot of livelihoods research, 'transforming structures and processes' or 'policy institutions and processes' are regarded more like a black box (Carney 2002: 46), a full container in which a lot happens which cannot be seen or precisely studied. In the livelihoods approach, structural influences are all too often portrayed as fixed whereas, in fact, structures are also susceptible to change and object of negotiations. Kaag *et al.* (2003) recognise the challenge for livelihoods research as being not to lose sight of power relations and the structural environment, and they advocate a processual perspective that 'puts people and their actions at the centre of the analysis, but that at the same time considers these actions as the result and the constituent of broader and longer term processes' (p. 7). Such an approach should capture 'the ongoing dynamics of people's interaction with their social, institutional and material environment' (Kaag *et al.* 2003: 18). That is what this study wishes to do, namely to shed light on what happens in the interaction between actors within certain structures. We are able to do so by bringing the concepts of livelihood and governance together in one conceptual framework. Before we continue discussing the conceptual framework of this thesis, we first need to focus on the fisheries sector in Ghana and position the beach seine technique used by the Anlo-Ewe, who are central to this study.

Fisheries in Ghana

This study was carried out at three locations, Woe, Akosua Village and Half Assini, along the 536 km coastline of Ghana. Ghana is located in the central part of the Eastern Central Atlantic, along the Gulf of Guinea, between Ivory Coast and Togo, and stretches from longitude 3º06'W to 1º10'E and between latitudes 4º30' and 11º6' (see Figures 1.1 and 1.4). It has a population of over 22 million in 2008 (CIA world fact book), with an annual growth rate of 2.6 percent (Mensah *et al.* 2006: 4).

Ghana lies in the tropical equatorial belt where average temperatures are between 25ºC and 35ºC and where climatic conditions change mainly due to the amount and distribution of rainfall, with there being two distinct wet seasons each year, a major one in May-June and a minor one in August-September (Mensah *et al.* 2006: 4). Ghana has long sandy beaches, interspersed with rocky shores, estuaries and lagoons (92 in total). The beaches are subject to erosion, a problem contributed to by the Cape St. Paul wilt

Figure 1.4 Map of the coast of Ghana



Map showing the research locations and major harbours of Ghana: Tema and Takoradi. Source: author & GIS department AMIDSt.

disease killing large numbers of coconut trees (Mensah *et al.* 2006: 4). Ghana's oceanography is subject to two upwelling periods,[17] a major one from July-September and a minor one of three weeks between December-January.

In this section we describe the fishing sector in Ghana and then position the fisher group which is central to this study (the Anlo-Ewe) and their technique *vis-à-vis* other fishing groups (Fante, Ga, Effutu and Nzema) and their techniques. In Table 1.1 we can

Table 1.1 Relevant characteristics of Ghana's coastal regions

Region	*Coastal Ethnic Groups*	*Coastline (km)*	*No. of fishermen*
Western	Nzema	105	6,750
	Ahanta	80	10,990
Central	Fante	150	28,300
	Awutu-Effutu	25	6,450
Greater Accra	Ga	45	16,150
	Dangbe	70	13,370
Volta	Anlo-Ewe	75	14,355

Source: Coastal Zone Profile of Ghana in Mensah *et al.* 2006: 37.

[17] Upwelling means that sea surface temperatures fall below 25ºC (normally between 27-29ºC), surface salinities increase and dissolved oxygen values generally fall; affecting the biological activity with a rise in phytoplankton and zooplankton production and spawning fish resources giving a boost to the fisheries resources (Mensah *et al.* 2006: 5).

see which ethnic groups are dominant in which coastal regions, the length of the coastlines and the number of fishermen.

Ghana has a long fishing history and, together with Senegal, has the largest fishing industry in West Africa. Fishing is one of the most important economic activities in the country (Ferrais *et al.* 1997: 448).

Fishing history

Old European travel reports provide evidence that Ghanaians (Fante in particular) were already fishing at sea before 1471 (Odotei 1991: 168). Odotei refers to the report of a Portuguese traveller who founded the Castle *Sao Jorge da Mina* in 1482, and who spoke of 'the many nets that were found here when this land was discovered' (*Ibid.*). Haakonsen cites the same Portuguese traveller: the 'negroes' were 'great fishermen who go fishing two or three leagues at sea in some canoes resembling a weaver's shuttle' (De Surgy 1969: 1 quoting Duarte Pacheco Perreira (1506-1508) in Haakonsen 1992: 75). Not all scientists agree. Law (1989) for instance contests that the West African coastal people fished at sea or traded along the coast before the arrival of the Europeans. Law argues that the canoes of the coastal people, hired by the Europeans to provide a link between the European ships and the coast, had been modified from riverine to marine use (Law 1989 in Overå 2001: 8). However, Odotei argues that the Fante already had trade links along the coast from Ivory Coast to Benin, and that the Europeans only intensified their import and export activities (Odotei 1991: 169).

There generally is consensus however that the Fante taught other coastal groups, like the Ga and Ewe, how to fish at sea (Overå 2001: 9). They moved to new coastal locations in pursuit of the migrating fish and later also as a result of following the Europeans, who had offered the Fante jobs as surf men. The Ewe only really started fishing at sea when a new net, the beach seine, became accessible to them with a European origin. This net is called '*yevudor*', which means 'the white man's net' (Nukunya 1991: 209) (see Figures 1.5 and 1.6).

The Ghanaian fishing sector

The contemporary Ghanaian fishing sector consists of marine fisheries, inland fisheries (with most of the fishing taking place on Lake Volta) and aquaculture. The marine sector is the most important providing eighty percent of domestic supply.[18] Fish is Ghana's most important non-traditional export commodity[19] and in total the fisheries sector accounts for five percent of the agricultural GDP, worth a total of 96 million dollars in 2002 (MFRD 2004: 5). Fish and seafood exports from Ghana consist mainly of tuna (76 percent[20]) (caught by the industrial sector), frozen fish (mostly demersals[21]), shrimps, lobsters, cuttlefish and dried / smoked fish (MFRD 2004: vi).

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[18] http://www.fao.org/fishery/countrysector/FI-CP_GH/en [Access date: July 2008].

[19] Since the 1980s Ghana has been pursuing an export-diversification strategy of development with a greater emphasis on the non-traditional export sector. Non-traditional export products are agricultural, processed and semi-processed and handicraft products. In Ghana fish is one of these, and then mostly tuna, shrimps, lobsters and prawns. Other products include pineapples, mangoes, textile and rotan furniture (Addo & Marshal 2000).

[20] In 2000, tuna accounted for 40,710 tonnes of the 53,060 tonnes of exported fish in total (Mensah *et al.* 2006: 10).

[21] Demersal fish are fish that feed on or near the bottom of the sea. They are also known as bottom feeders, benthic fish or groundfish.

Figures 1.5 and 1.6 The beach seine (*yevudor*)


Ghana's marine waters are home to small and large pelagic[22] and demersal species. The Ghanaian marine ecosystem is severely affected by the two upwelling periods, when fish production increases sharply (MFRD 2004: vi). In 2000, the total quantity of fish caught by Ghanaian vessels (see Table 1.2) was 467,700 tonnes. Most of the fish were caught in marine waters (355,000 tonnes), 87,500 came from inland waters (Lake Volta, rivers, dams and aquaculture) and 25,200 tonnes were caught by Ghanaian vessels in foreign waters (Mensah *et al.* 2006: 9). Although considerable, total production is not enough to sustain Ghana's demand for fish which has been estimated at 600,000 tonnes per year (*Ibid.*). Ghana therefore imports fish from Europe and other West African countries, mainly from Morocco, Mauritania, Namibia, Norway, the Netherlands, Belgium, Senegal and the Gambia (FAO Ghana profile).

• Artisanal sector

Artisanal fishing is the most important sub-sector in marine fisheries, contributing 60-70 percent of the marine fish output (Mensah *et al.* 2006) (see Figure 1.7). In 2005, there were approximately 13.000 canoes (Interview, Mr Hutchfull, 13-10-2005). The latest official figures date from 2001 when there were reportedly 9,981 marine artisanal canoes operating (see Table 1.2) from 304 landing beaches in the vicinity of 185 villages along the Ghanaian coast (MFRD 2004: vi). The artisanal sector is officially (*de jure*) allocated an exclusive zone for fishing up to the 30 meter-depth-line from the coast, within which the semi-industrial sector cannot come (Bortei-Doku Aryeetey 2002: 334).

Traditional processing methods such as smoking, salting and drying are used all along the coastline to preserve most of the fish caught – both by the artisanal and inshore fleets (MFRD 2004: vi). The gear used by the artisanal fishermen can be classified into five groups: purse seine nets (39.8 percent), drifting gill nets (2.9 percent), set nets (29.7 percent), hook and lines (11.9 percent) and beach seines (8.9 percent) (the percentages are based on figures from 1992 – Ferrais 1997: 450). Besides these, fishermen also use cast nets and traps (Mensah *et al.* 2006: 17). The common fishing craft is a dugout canoe carved out of a single trunk of wood, symmetrical in shape, double ended and ranging in size from 3 to 18 metres in length and 0.5-1.8 metres in width (Ferrais 1997: 449). The targeted species are small pelagic (most

[22] Pelagic fish live in the water column (in contrast to demersal fish that live near the seabed).

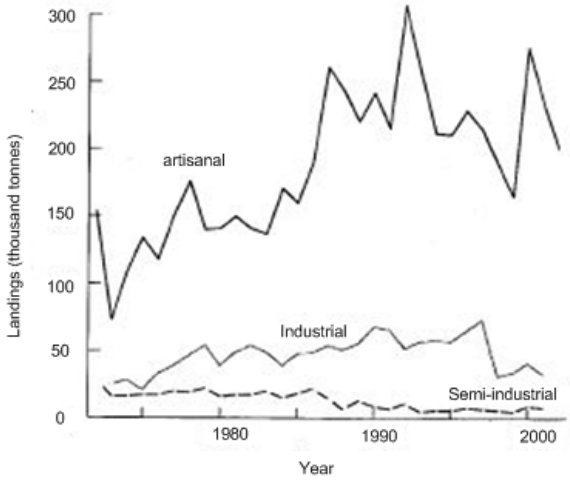
Table 1.2 Number of marine fishing vessels in Ghana

fleet	1997	1998	1999	2000	2001	2002
canoes	8,895				9,981	
inshore vessels	241	239	239	236	244	230
industrial trawlers	48	47	38	46	45	34
shrimpers	14	11	6	3	3	2
tuna bait boats	36	35	39	34	33	33
tuna purse seiners	5	6	8	10	10	10

fleet	2003	2004	2005
canoes			13,000
inshore vessels	172	151	348
industrial trawlers	54	67	75
shrimpers	6	4	5
tuna	36	35	36

Note: The inshore vessels are locally built wooden-hulled vessels between 8-37 metres long and are used for purse seining during the upwelling seasons and for trawling during the rest of the year. Due to a decline in target species and high costs of operation and maintenance this fleet has decreased over the years (MFRD 2004: 9). In 2005 however a sharpe increase can be seen again. Source: 1997-2002; MFRD 2004:9 and 2003-2005; Ministry of Fisheries 2006, Mr Hutchfull (Fisheries Department) - personal communication (2005).

Figure 1.7 Ghanaian marine fisheries landings in Ghanaian waters 1972-2000



Source: Atta-Mills, Alder, Sumaila 2004: 14. Referring to sources Koranteng (1998), Fisheries Commission (1998), Koranteng - personal communication (2003).

important are the highly variable sardinella, and anchovies), large pelagic (mainly tuna) and demersal species (see Appendix 1). The demersal species show clear signs of stress – landings exceed the potential yield (Mensah *et al.* 2006: 25).

The various coastal ethnic groups in Ghana have specialised in certain gear types. The Anlo-Ewe in beach seine fishing, the Fanti, Effutu and Ga in purse seine and drifting gill net (ali) fishing, the Dangbe and some Ga in line fishing with ice (lagas) (Mensah *et al.* 2006: 37; Ferraris, Koranteng & Samba 1997: 206). This specialisation

can partly be explained by the fishers' environment. For example, fishers living nearby rocky areas are more likely to use line gear than nets. However, tradition and fear of the unknown also play a role (Mensah *et al.* 2006: 17). Artisanal fishermen have designed different types of gear that they use at different times depending on the availability of certain species (see Appendix 1).

• Modernisation

In the course of time the artisanal sector has gradually 'modernised', for example through the introduction of outboard motors (made available through loan schemes or lower import taxes by the government which also set up repair shops and often subsidised petrol), nylon nets which replaced the former nets made out of natural materials (such as cotton and coconut) and new gear such as purse seines, monofilament and ice boxes (Mensah *et al.* 2006: 29-30).

Figure 1.8 (Semi-)industrial vessels in Tema

'On the whole post-independence fisheries policies have tended to favour industrial fisheries at the expense of the artisanal sector' (Bortei-Doku Aryeetey 2002: 336; see also Platteau 1989a, Mensah *et al.* 2006, Bavinck 2005). As in other developing countries 'the idea prevailed in official circles that rapid growth of fish production (…) would be better ensured through radical modernisation of the fishing sector – which implied the importation of industrial harvesting, processing and marketing techniques or methods from developed countries – than through a gradual upgrading of traditional techniques and methods' (Platteau 1989a:589). For example, in the FAO report on Ghana in 1961 we read: *These [communities] are among the most rudimentary fishing communities, where literacy is practically unknown and the people are superstitious to such a degree that much of their fishing activity is controlled by fetishes and taboos* (FAO 1961: 6).

Worldwide marine fishing catches increased dramatically after the Second World War due to these technological innovations (access to fishing grounds further out and improved technologies for catching fish in larger quantities and for targeting certain species). At the same time national and international demand for fish grew considerably, most notably in developing countries (Delgado 2003: 2). This, combined with an emerging ideology of modernisation ('the old is backward and doomed to remain so')

and of planned development (‘growth and change can and must be initiated from above’) all came together in a policy favouring the (semi-)industrial sector (Platteau 1989a: 577). However, the artisanal sector did not disappear or dissolve into the modern sector. On the contrary – despite long term neglect – it developed, grew and was highly successful (see also Haakonsen 1990, Chauveau *et al.* 2000). The artisanal sector in Ghana accounts for more than sixty percent of marine fish landings (see Figure 1.7) and contributed considerably to levels of employment. What is even more impressive is the fact that this growth happened during a period of general African economic regression (Chauveau 1989).

The general assumption was that traditional forms of agricultural production would gradually disappear once connected with the (capitalist) market-system at national, macro-regional and international levels. This has not, however, turned out to be the case. A couple of explanations have been given for this, some of which use rational capitalist reasoning, for example that, due to ‘the handicraft character of many agricultural tasks, an hour of wage labour is (…) much less cost-effective than an hour of own (family) labour’ (Platteau 1989b: 625) and ‘small-scale producers tend to ‘self-exploit’ themselves under conditions of intense competition’ (Platteau 1989b: 629).

We should realise that making these ‘simplistic distinctions between modern and traditional, small-scale and large-scale, or capitalist and pre-capitalist organisational forms’ (Platteau 1989b: 644) should only be done for analytic reasons such as comparison. They should be seen as ideal-types. In reality there is a lot of overlap between these forms (see also Bavinck 2005, Johnson 2006a). The danger with making this kind of division is that one might fail to differentiate within, for instance, the ‘small-scale’ sector. It should be understood that small-scale can contain a variety of scales, which are all small in comparison to the industrial boats while, for instance, a motorised purse-seine canoe of thirty metres length and two metres width that stays out at sea for a couple of days with ice boxes and a gps on board is ‘large’ and ‘modern’ compared to an non-motorised canoe of six metres length which is used for fishing with a small set-net, set in the morning and collected the following day. In addition, artisanal fishermen can be very heterogeneous in terms of ownership and in the share of the catch, knowledge and access (to credit, capital, markets). In terms of wealth and access in relation to beach seine fishing, a net owner differs greatly from a company member with no special role, other than pulling the net in.

• (Semi-)industrial sector

The (semi-)industrial sector was introduced as a means to develop the Ghanaian fishing sector. This had already started in colonial times (1946) through the introduction of small motor vessels built in the UK, followed by Ghana’s State Fishing Cooperation (1960) and all in all this led to the development of a modern capital intensive sector in the early 1970s with 350 motor vessels in operation (Platteau 1989a: 576). The activities of the industrial sector were mainly meant to involve fishing in the distant waters of Angola and Mauritania. However, after the declaration of the Exclusive Economic Zones[23] (1983 for Ghana – Mensah *et al.* 2006: 5) the sector’s activities shifted to Ghanaian waters and the fleet declined to 169 vessels in 2000 (Koranteng & Pauly

[23] An Exclusive Economic Zone is a coastal zone extending up to a maximum of 200 nautical miles (about 370 km) from the baseline from which the breadth of the territorial sea is measured (normally the low water line along the coast). This depends on the specific geographical situation, with or without adjacent or opposite states (Molenaar 2005).

2004: 76; Mensah *et al.* 2006: 13-15, 19; Atta-Mills *et al.* 2004). The introduction of the (semi-)industrial sector also meant the creation or alteration of harbours (Tema and Takoradi) and the development of harbour facilities, ice plants and cool stores, infrastructure improvements and processing plants.

The semi-industrial or inshore sector operates from Tema, Winneba, Apam, Mumford, Elmina, Sekondi, Takoradi and Axim – places with harbour or semi-harbour facilities. Locally-built wooden vessels with inboard engines (up to 400 hp) are used. The vessels are multi-purpose and are used for purse-seining (during the upwelling periods) and bottom-trawling (done in waters deeper than thirty metres), although purse-seining is preferred (due to it using less engine power). The vessels use ice to preserve the fish caught during fishing trips of three to five days (Mensah *et al.* 2006: 13-5, 19; Koranteng & Pauly 2004: 76).

The industrial sector consists of large, steel hulled foreign-built trawlers, shrimpers and tuna bait boats and purse-seiners which operate from the two harbours in Ghana with suitable berthing facilities, namely Tema and Takoradi (Mensah *et al.* 2006: 15) (see Figure 1.4).

Migration

Migration is a characteristic of artisanal fisheries in Ghana (but also in other countries in the West African region such as Senegal, Liberia, Benin and Nigeria) and has been the subject to increased interest on the part of researchers. Ghanaian migrations have been recorded from the beginning of the 20th century (Chauveau 1991). Most Ghanaian fishermen can be found in Togo, Benin, Ivory Coast (Mensah *et al.* 2006: 45; Odotei 1995, 2002b), as well as in Congo, Cameroon, Guinea, and Sierra Leone (Jul-Larsen 1994, Haakonsen & Diaw 1991, Solie 2006, Ferrais 1997, Odotei 1995, Hendrix 1986, Wagner 1991). In Liberia, Côte d'Ivoire, Benin and Togo, Ghanaian fishers have a strong foothold in the artisanal fishing sector. They are held to be responsible for fifty to ninety percent (!) of the catches. Furthermore, Ghanaians have had a strong technical influence on the fishing sector in West Africa. They taught a lot of West Africans to fish using their techniques and equipment and the Ghanaian canoe is used in many countries in West Africa. The high mobility of fishermen in the sub-region is also a result of the fact that marine resources are shared between countries and this thus has implications for fisheries governance (Bortei-Doku Aryeetey 2002: 331).

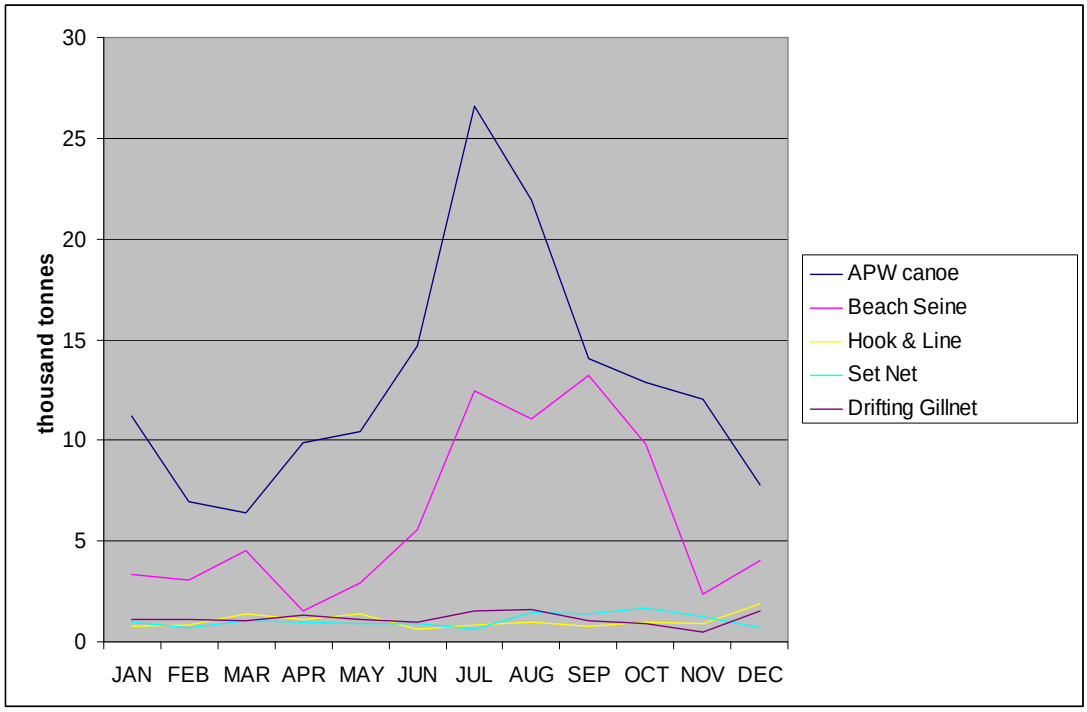
Fishermen in Ghana are also internally mobile, mainly as the result of the movement of fish species due to upwelling (see Chapter 5). The sardinella start migrating (in Ghana) from the Western Region and move eastwards to the Volta Region, with the fishermen in their wake. The Fanti and Ga fishermen are the most mobile while Anlo-Ewe fishermen have developed a more permanent form of migration which has led them to settle with their families in the Central and Western Regions (Mensah *et al.* 2006: 44-45). Fishermen mobility also has implications for Ghanaian fisheries management as, for instance, it makes canoe fishery data assessments more difficult (Ferraris & Koranteng 1995).

The role of beach seine fishing in Ghana

As we noted above, the Anlo-Ewe have become specialised in beach seine fishing. Although some Fanti, Ga and Dangbe fish with this gear (Mensah *et al.* 2006: 37) most of those who use it are Anlo-Ewe. The beach seine is a commonly used technique all along the coast of Ghana. The beach seine is used throughout the year and that makes it

quite an important type of fishing gear in Ghana (Mensah *et al.* 2006: 19). We used data from the Ghanaian Fisheries Department[24] to perform some calculations to see what the importance of beach seining in Ghana is in terms of catch and value of the catch. Figure 1.9 shows the total catch in 2004 of the artisanal sector, differentiated according to gear. It shows that the beach seine is the second most important gear as regards total catch (73,848 tonnes), after the Ali-Poli-Watsa (APW) canoe (154,946 tonnes). The figure also shows the fluctuation in catches throughout the year, with peak catches in July and higher catches in the minor upwelling season in January as compared to the low season (March, April).

Figure 1.9 The share of the artisanal catches per month in 2004, according to gear



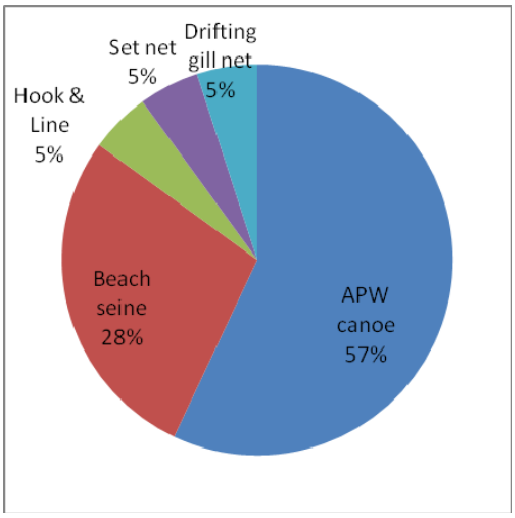
The subsequent lines follow the order of the legend so therefore APW canoes caught the most and the drifting gill the least. Source: author, based on catch data of the MFRD.

The percentage of beach seine fishing to the total catch (in weight) is estimated at 27 percent (see Figure 1.10).

If we focus on the value of the catch (Figure 1.11), we see that the contribution of the beach seine is more or less the same as regards volume, given that it contributed 28 percent of the total value of the artisanal marine catch in 2004. Fishing by drifting gillnet and hook and line is relatively more valuable and accounts for fifteen percent (of a five percent catch) and nine percent (of a five percent catch) respectively. APW canoe fishing results in relatively less valuable fish catches per volume.

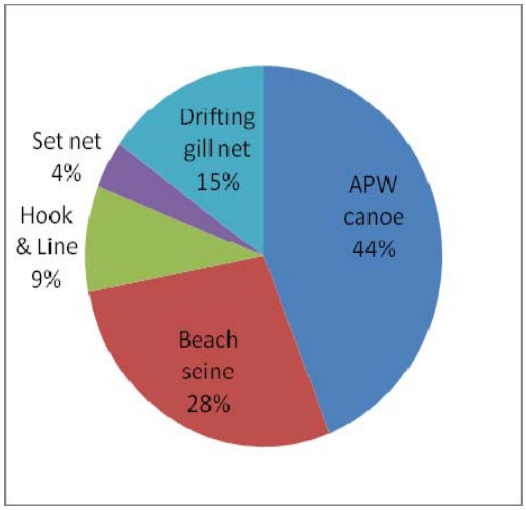
[24] See Chapter 2. This data was made available to me via Dr Bannerman of the MFRD.

Figure 1.10 The spread of the total artisanal catch (in weight) in 2004, by gear



Source: author, based on the catch data of the MFRD.

Figure 1.11 The share of the total artisanal catch (in value) in 2004, by gear

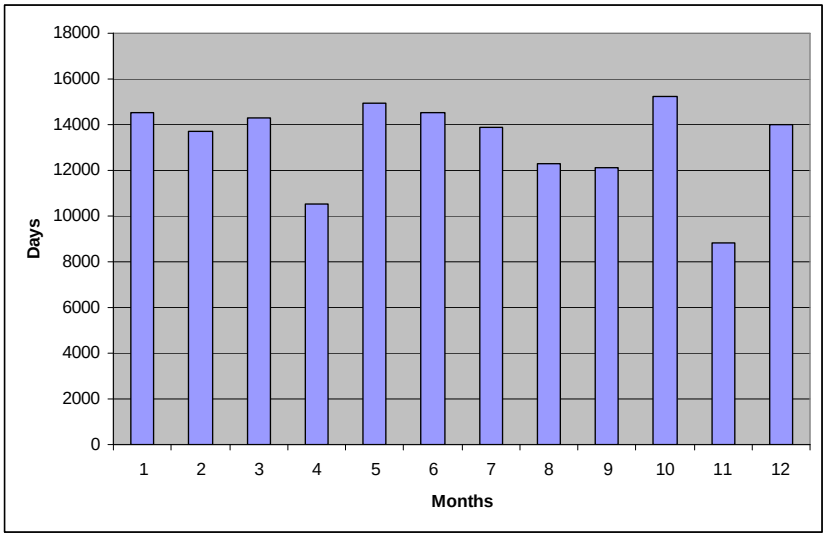


Source: author, based on the catch data of the MFRD.

When comparing beach seine fishing to the other gear types on the basis of effort (days spent with fishing) we see that the beach seine companies are quite consistent throughout the year. Levels of effort were lower in April and November, most likely because of the bad weather (see Figure 1.12).

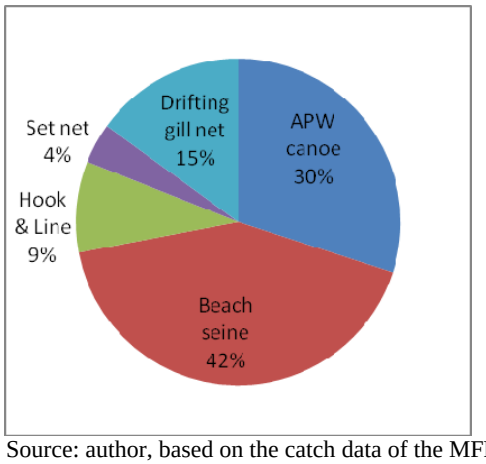
If we relate the catch to the effort we can see what the catch per unit effort (CPUE) is for the different gear types (see Figure 1.13). The beach seine is most efficient in terms of CPUE, which means that it catches a fairly large amount of fish (catch) based on a fairly low amount of time (effort in days).

Figure 1.12 The effort (total days) of all beach seine gears in 2004 per month, in Ghana



Source: author, based on the catch data of the MFRD.

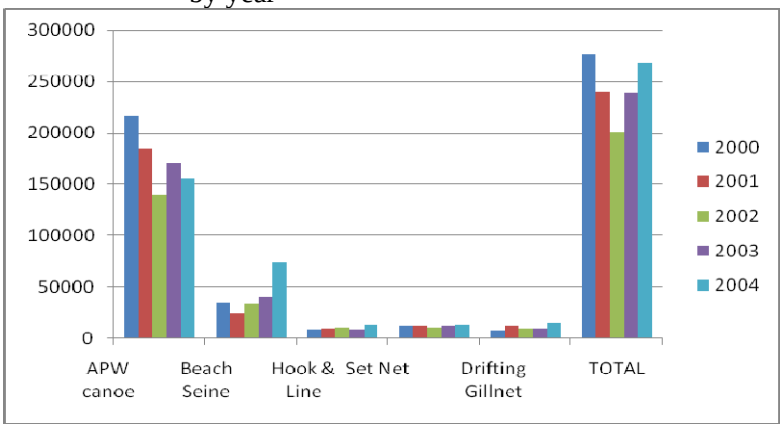
Figure 1.13 Catch per unit effort of artisanal catches in 2004 per gear in Ghana



Source: author, based on the catch data of the MFRD.

Finally if we look at two time series of catches from 2000-2004, we see that the total catches of all gears decreased from 2000-2002 and then increased again from 2003-2004 almost to the level of 2001 (Figure 1.14).

Figure 1.14 Artisanal catches in Ghana (in tonnes) per gear, by year

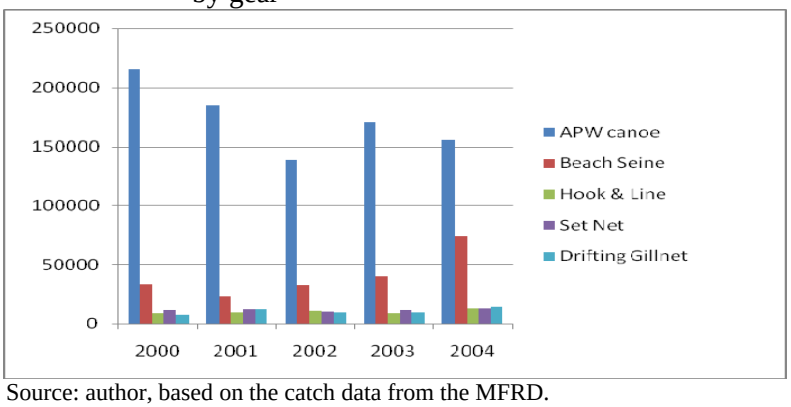


Source: author, based on the catch data of the MFRD.

In Figure 1.15 we can see that the relative importance of beach seine fishing has grown, although it should be kept in mind that this is a very short time series.

Although the subsector is significantly important, the technique has been criticised for its negative impact on fish stocks (see for example Hosch 2002: 14-15). The non-selectiveness of the gear, which catches almost everything within scope of the net due to the small mesh-sizes used, is a major point of concern.

Figure 1.15 Artisanal catches in Ghana (in tonnes) per year, by gear



Source: author, based on the catch data from the MFRD.

Beach seines catch adult sardinellas during the upwelling periods and anchovies, juvenile sardinellas and juvenile demersal fishes during the non-upwelling periods (Mensah *et al.* 2006: 16). As nearshore waters (especially in the vicinity of lagoons and estuaries) play an important nursery role, beach seines with small mesh sizes are said to have quite negative biological effects. This has been shown in research performed by Nunoo *et al.* (2006). They therefore recommend 'a co-managed (fishers and government) three-month ban on beach-seining (between May and July) as the most appropriate control measure towards the sustainability of Ghanaian fish stocks' (*Ibid.*). In some West African countries (Gabon and The Gambia) beach seines have been banned all together.[25] As we saw above, the beach seine is important in Ghana (as it is in other countries such

Figure 1.16 Little fish caught in a beach seine

[25] www.fao.org/DOCREP/005/Y3274E/y3274e09.htm [Access date: January 2009].

as Togo and Benin), so an outright ban would be politically difficult to implement.[26] In addition, fisheries officers and polititians are aware of the social function of the beach seine, providing work, income and fish to many fishing communities where alternatives are often not available. The beach seine is in that sense a controversial technique.

Research questions and conceptual framework

The central question of this thesis is: *How do Anlo-Ewe beach seine fishermen negotiate livelihood space, within multiple governance systems, both at home and in migrant settings in Ghana?* This central question generates a couple of sub-questions. These are presented below and will be discussed later, together with a definition of the main concepts of this research. As indicated, each of the sub-questions will be answered in Chapters 3 until 7 of this book. This is followed by Chapter 8 in which the main question is answered by discussing two cases, after which there is a general conclusion (Chapter 9).

1. How have Anlo-Ewe beach seine fishermen organised their livelihood? (Chapters 3 and 4)
2. How can we understand the migration of Anlo-Ewe beach seine fishermen? (Chapter 5)
3. What are the relevant multiple governance structures in Ghana for Anlo-Ewe fishermen? (Chapter 6)
4. How is Anlo-Ewe beach seine fishing managed at local level, both by the fishermen themselves collectively within the traditional governing structure, and by the Government of Ghana? (Chapter 7)

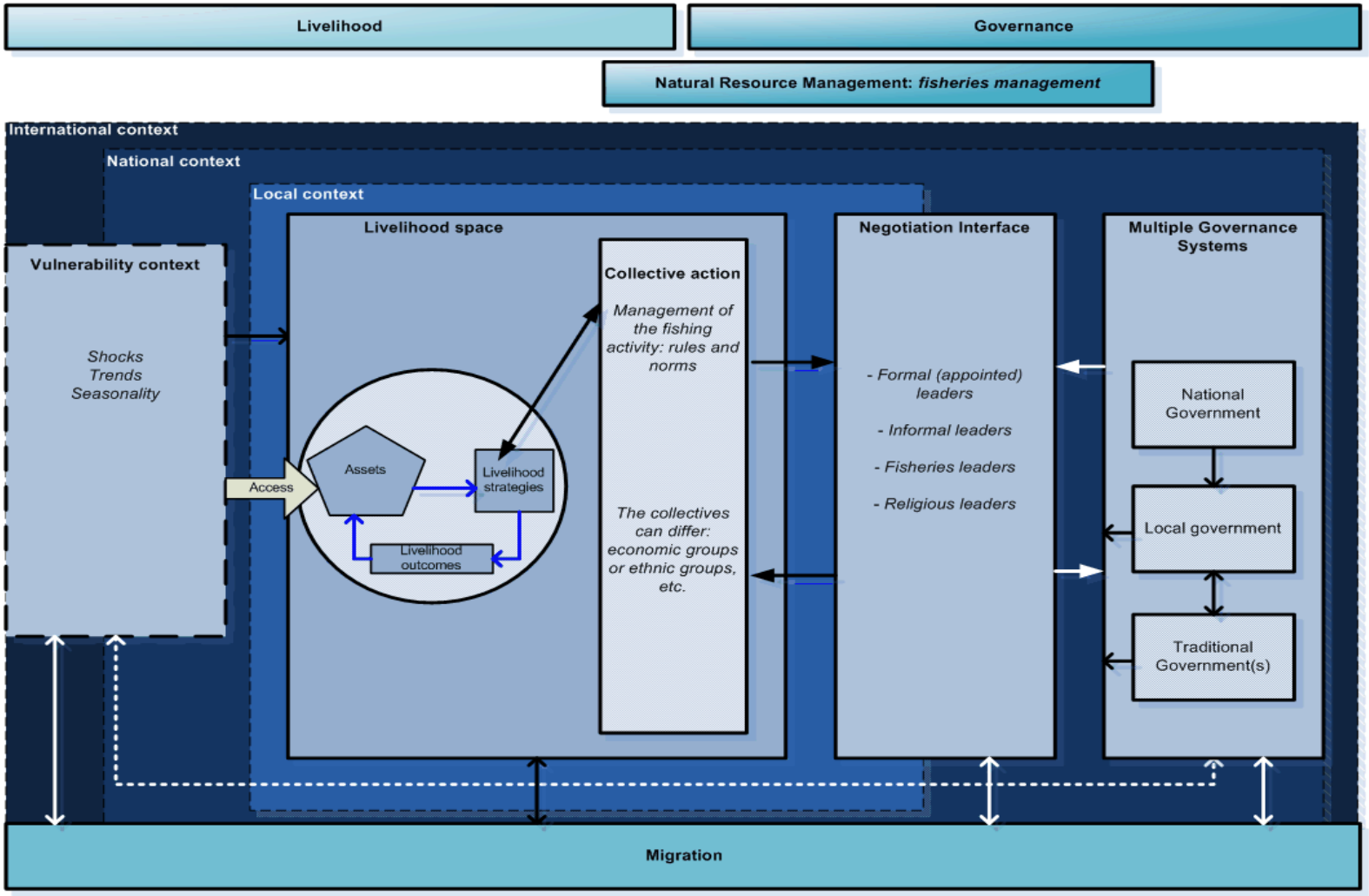
The conceptual framework of this thesis is presented in Figure 1.17. The three theoretical debates that have informed this study have been depicted at the top of the framework. The width of the debate sections relates to the domain in the figure below them. Livelihood and Governance meet above the box of collective action, and fisheries management begins with collective action and continues to the governance box, as both fishermen and governing actors are involced in management. Governance includes management, but is more than that.

Anlo-Ewe beach seine fishermen
This research focuses on Anlo-Ewe beach seine fishermen. This means that I do not pay special attention to other ethnic fishing groups, or to Anlo-Ewe fishermen using other techniques in Ghana. It also means that my focus is on men, as the fishing sector is sharply divided by gender, with the men fishing and the women processing and trading. The scope of the research would have been excessive if I had included processing and trade as well. However I do refer to women and market processes when necessary. Naturally ‘the Anlo-Ewe beach seine fishermen’ are not a homogeneous group, so where possible I try to differentiate within the group.

Sub-question 1: Livelihood
How have Anlo-Ewe beach seine fishermen organised their livelihoods? (Chapters 3 and 4)

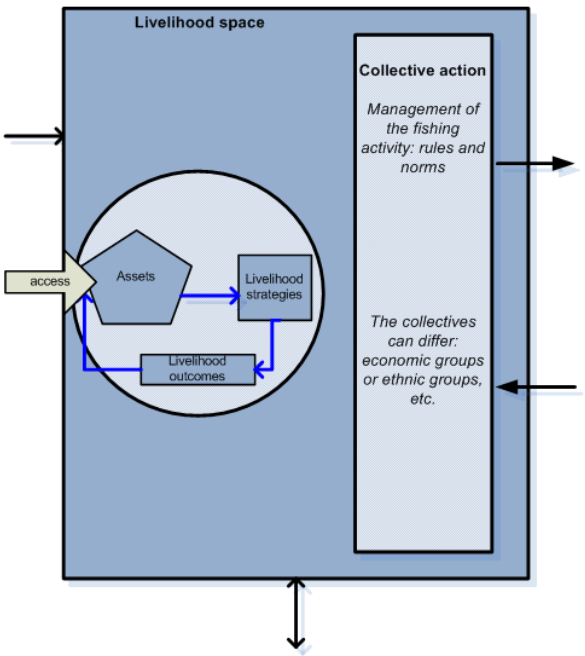
[26] Although a ban was suggested when a new Demersal Fisheries Management Plan was drawn up (Koranteng 2000: iv).

Figure 1.17 Conceptual framework



Source: author

• Livelihood space



This section of the conceptual framework represents the local level; what do the Anlo-Ewe fishermen do, how do they live, what is their history, and how have they organised themselves? The section is embedded in the local context with, around that, attention to the higher level contexts. This book is mainly about the livelihood space of the Anlo-Ewe beach seine fishermen. This includes the 'livelihood cycle' (as shown in the figure) of access to assets resulting in livelihood strategies with livelihood outcomes which again affect the assets. Fishing is the most important livelihood activity (strategy) and the fishermen's self organisation (collective action) follows the logic of the activity.

The main activity of the Anlo-Ewe beach seine fishermen is fishing. It is a full-time occupation (Mensah *et al.* 2006: 20; Nukunya 1989). In this research I use the livelihoods approach in order to understand the assets needed to undertake beach seining (resource, inputs, companies and crew). This is done to understand how access to the assets is mediated by social relations, organisations and institutions and how the vulnerability context affects Anlo-Ewe fishermen as well as to understand the livelihood strategies and livelihood outcomes. When discussing assets, the focus is on fishing (as the main livelihood activity). People have a lot of other assets that might not be directly useful for their livelihood (such as being a great dancer), although it should be kept in mind that those assets can always become useful for their livelihood in future situations (for example when co-dancers from a dance group help you financially when you become ill and are unable to fish).

One of the criticisms of the livelihoods approach is its material bias. 'We need a framework that bridges the more materialist and the more hermeneutic and actor-centered notions of poverty and livelihood' (Bebbington 1999: 2022). Bebbington made the observation in the Andes where policy was directed at helping rural dwellers stuck in 'nonviable' livelihood activities to leave the land and move to urban areas. However, it was shown that residence in these areas meant more to these people than was realised. 'Rural residence and relationship to land constitute important dimensions of their ethnic identity: an identity whose maintenance may, beyond any material measure, be a critical determinant of their sense of being poor or not' (*Ibid.*: 2026). As Wartena argued: 'non-economic considerations often play a dominant role in people's livelihood choices' (Wartena 2006: 71). The image of actors acting as an *homo economicus* is still dominant in a lot of research, as reflected in the usage of the term capitals (see Chapter 3), and by the fact that a proportion of researchers uses the concept livelihood as synonym for income (*Ibid.*: 72).

I therefore add the concept of *space* to livelihood to emphasise the fact that these activities are not only linked to their outcomes (e.g. income) but also to the location where they take place, to the people who do it and to the history connecting all of them. As fishermen are linked in many ways to what they do, they negotiate their livelihood

space and this connects a spatial element to elements of identity, room for manoeuvre, room in which to exist, live, work. As livelihood activities take place in a certain location (place) and are linked to it, there is always a certain place-boundedness that needs to be taken into account. Each place, with its cultural, social, economic and geographical characteristics, produces its own unique pattern of re-alignment between actors, processes and consequences. Livelihood space gives these connotations. Fishermen need to negotiate their livelihood space, that is space to live and work in (physical), space within the fishing sector, by creating a certain niche (economic / sectoral) and space to where one is accepted, finding or having one's place in society, positioning oneself within social relations (social / cultural). The focus of this research is on the livelihood activity (fishing) and elements of identity are not studied in detail (this book is not a study of lifestyle) but are taken along when important for an understanding of the choices the people central to this research make.

Including a spatial connotation positions my work in a geographical context. Using the concept of livelihood space also gives me the possibility to do three things. First I can give proper attention to place and ground the research at the locations in which it took place. Each place, with its cultural, social, economic and geographical characteristics, produces a unique pattern of re-alignment between actors, processes and consequences. I have therefore chosen to examine certain topics in depth throughout the thesis by focusing on certain cases as they have occurred in certain places. Secondly, the space concept gives me the opportunity to make a connection between the different places. After all, space includes not only place but also networks. A translocal perspective on migration (see Chapter 5) emphasises the linkages between the places migrants are in and the places they came from and this results in a connected space between which people, goods, money, images and ideas flow. The Anlo-Ewe livelihood space incorporates more places due to migration. At the same time I compare the places that the fishermen live in with each other to account for the uniqueness of each place. Thirdly, space can be seen to be social space, space in which one lives, engages in activities and has room to manoeuvre.

The access arrow has been positioned in such a way that it links the livelihood space in which the 'livelihoods cycle' (access to assets resulting in a livelihood strategy resulting in outcomes affecting access) takes place, which place is the first to influence access. Access to assets is somewhat cyclical in nature. Livelihood outcomes give access to new assets. Yet it is also influenced by organisations, social relations and institutions not directly related to the 'livelihood cycle'. Consequently, the layers of the local-international context are also connected by the access arrow. This also includes those coming out of collective action and governance. Finally the vulnerability context can influence access to the assets so that box is also connected to the access arrow.

Determining what is internal and external to the 'livelihood cycle' depends, of course, on the level one examines, for example household, company or collective level (see Chapter 2, units of analysis). Collective action takes place in different coalitions and levels and with different identities i.e. as beach seine fishermen, as lineage, as women, as crew members, as net owners or as Anlo-Ewe fishermen in a certain migration village.[27] It is also important to realise that, in addition to the collective action of fisher folk, collective action can also take place by other groups in a community (e.g.

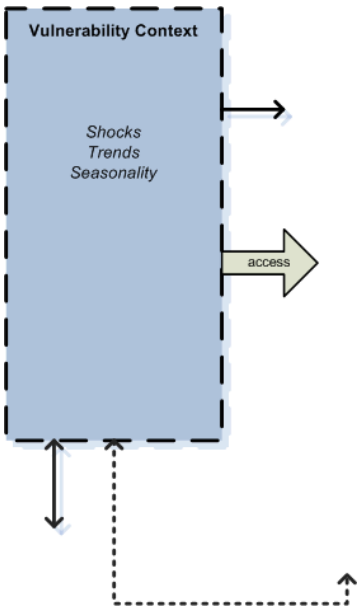
[27] In this thesis I will use the word 'village' where in specific cases, if a village has more than 5000 inhabitants, the word 'town' can be more appropriate. When not referreing to a specific village or town I will use the word village.

farmers). Fishermen sometimes also take part in those alliances, since they have multiple identities. Collective action is connected to the 'livelihood cycle' by a double sided arrow because it is both a product and a contributing factor. Many (local) management activities take place in this section (such as conflict resolution within a company), without government interference. The arrows with the negotiation interface flow via the collective action box. This does not mean that fishermen do not interact with government representatives on an individual basis as well, but that is not a feature of my research.

The arrow connecting the migration box indicates that migration has implications for livelihood space, but that migration is for instance also a livelihood strategy. The link with the vulnerability box is discussed below.

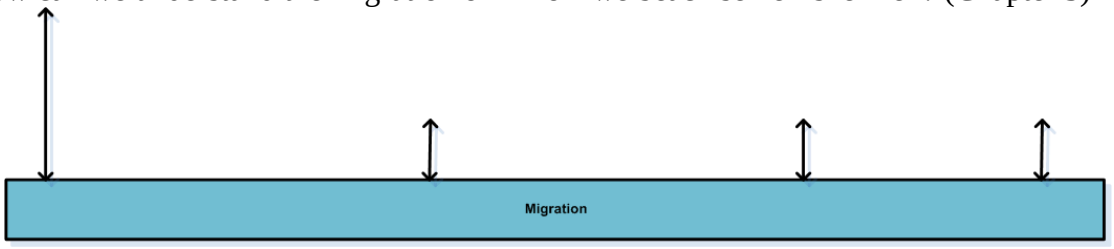
• Vulnerability context

The livelihood activity of fishermen (fishing) takes place in a vulnerability context, with shocks, trends and seasonality influencing their livelihoods. A few examples are provided throughout the book (Chapters 4 and 8). I show how coastal erosion means less beach (natural asset) and that this possibly contributes to migration (livelihood strategy) and how catches are seasonal due to the influence of the upwelling. Trends include for instance population pressure. Governance influences the vulnerability context, for instance with regard to certain trends, by having a population policy or by being able/unable to respond to certain shocks, hence the double-sided dashed arrow between the vulnerability context and governance. The vulnerability context also has implications for, or influences, migration and vice-versa.



Sub-question 2: Migration

How can we understand the migration of Anlo-Ewe beach seine fishermen? (Chapter 5)



From the available literature we know that migration is an intrinsic part of artisanal fisheries in Ghana. Anlo-Ewe fishermen are known for their migrations in Ghana and in the whole West African region. Migration is a general theme of this thesis which underlies all other parts of the framework and is connected to all, even though people migrate as a livelihood strategy meaning that migration is therefore part of the livelihood 'cycle'. It will sometimes be explained as a livelihood strategy, sometimes as a result of vulnerability and also as an outcome of the negotiation for livelihood space of the Anlo-Ewe beach seine fishers. Migration is shown to have a strong influence on the diversity

of actors in the negotiation interface (locals and migrants), it results in collective action based on ethnicity and it has implications for access to assets. Migration also influences governance systems, as it makes the interface increasingly complex. The fact that people migrate (as a livelihood strategy) means their negotiation interface becomes more complicated (with other governance systems coming into the negotiation picture).

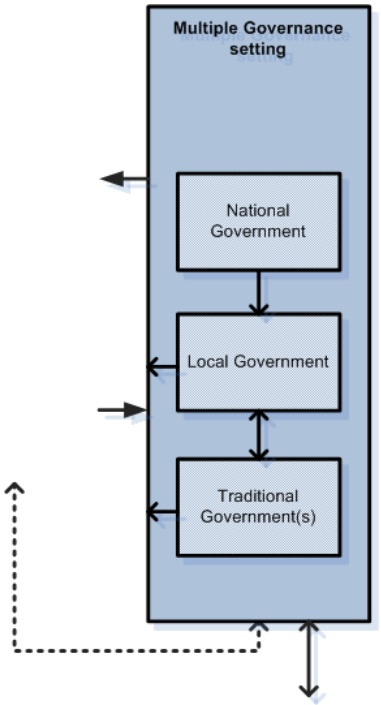
Migrating to another community, outside your home area (read the Anlo-Ewe region), requires negotiation for space, that is space to fish and space in which to live and access to the market. Outside Ghana the space to fish was often available because locals did not fish at sea and valued sea fish highly. Within Ghana the ethnic-technical division in the artisanal sector created negotiated niches along the coast. Different techniques use different fishing zones at sea, partly targeting other species (= space at the market) and therefore creating space for other fishermen. The 'we are all Ghanaians' norm also exists and this creates social space. Migration does make the negotiation of fishermen even more important since it adds to the multiplicity of governance structures within which fishers operate and it has implications for fisheries governance.

In their search for space, which in the case of these fishermen entails physical movement in the form of migration, they often cross administrative boundaries. Livelihood space conceptually connects the different places between which the fishermen have set up linkages. In my migration chapter (Chapter 5) I use a translocal approach to understand how the fishermen's migrations (moving away from the narrow push-pull studies performed so far on fisher migration) and livelihood space fits in nicely with the flows of people, goods and ideas of transnational theory.

Attachment to a place and migration are sometimes thought of as being contradictory to each other. When I discuss livelihood space, I describe the 'place' (home area) in which the Anlo-Ewe currently live (Chapter 3), and give a historical sketch of 'their' place and their society. I nevertheless have two reasons not to think of that as a contradiction, at least in the case of the Anlo-Ewe. First of all, if we assess the myth of origin – we see (and that has been confirmed by oral and archival sources) that the Anlo-Ewe come from elsewhere, from Notsie in Togo. This myth of origin is very important and is recounted in interview settings, or referred to in my research, as well as in the work of other researchers amongst the Anlo-Ewe (Greene 1996, Geurts 2002). This migration saga is therefore part of their identity. The Anlo-Ewe are an Ewe subgroup, and the *Anlo* in their group name is derived from their story of origin. At the grand finale of the migration saga of the Anlo-Ewe Whenya, one of the collective ancestors of the Anlo-Ewe arrives at the place at which Anloga (the capital of the Anlo state whose name also includes the letters *nlo*) is later founded. He has arrived, and will go no further. He underscores that by coiling up. *Nlo* refers to that bodily action (coiling up), and this is as such central to what it means to be Anlo-Ewe, as Geurts describes: 'When Mr Tamakloe [an informant in Geurts' research] folded into himself, it was an enactment, a presentation of the condition of 'being Anlo' for more than three hundred years. *Nlo* emerges, then, as a trope, an enacted metaphor, for a melancholy sensibility, an embodied consciousness with its obverse: *nlo* as persecution and power; *nlo* as resentment and respect' (Geurts 2002: 130).

Secondly, seeing migration as a contrast to local embedding, or place boundedness, is linked to the understanding of migration as a rupture, an anomaly that needs to be explained. '[T]he natural state of people and the world was conceived of in terms of stability and coherence' (De Bruijn *et al.* 2001: 64).

Sub-question 3: Governance
What are the relevant multiple governance structures in Ghana for Anlo-Ewe fishermen? (Chapter 6)



Fishermen negotiate their livelihood space within available governance structures. In Ghana there is not only the state government, but also local governments and several traditional governance structures of for instance the Anlo-Ewe, the Effutu, the Nzema, and the Ashanti. Policies (legislation) and politics play a role in fisheries and conflict resolution (Chapter 7) often takes place within organisations related to these governance structures. Fishermen negotiate with representatives of governance organisations at the interface. Negotiation is an activity engaged in by people within governance structures. The fact that there is a multiplicity of governance organisations means fishermen make choices, choose ways to solve their issues and provide for their needs. Representatives of governance organisations also negotiate, manoeuvre, and act.

The Anlo-Ewe fishers live in a village that is organised according to certain structures. The village is headed by a chief who is also the head of the traditional council. There is also a town council headed by a chairperson and participated in by assemblymen who represent the village at the higher level district's assembly. These structures are dual, being of the Government of Ghana and traditional government(s), and both are linked to higher levels than village level. Within these structures we can therefore find all sorts of organisations within which people collectively operate.

The national government is represented at the local level via decentralisation (that is why there is an arrow from the national government to the local government). My research was performed at the local level in villages where a lot of governing takes place via the local governments, which are connected to traditional government. Between the local government and the traditional government there is a double sided arrow reflecting the variety of connections, between those organisations.

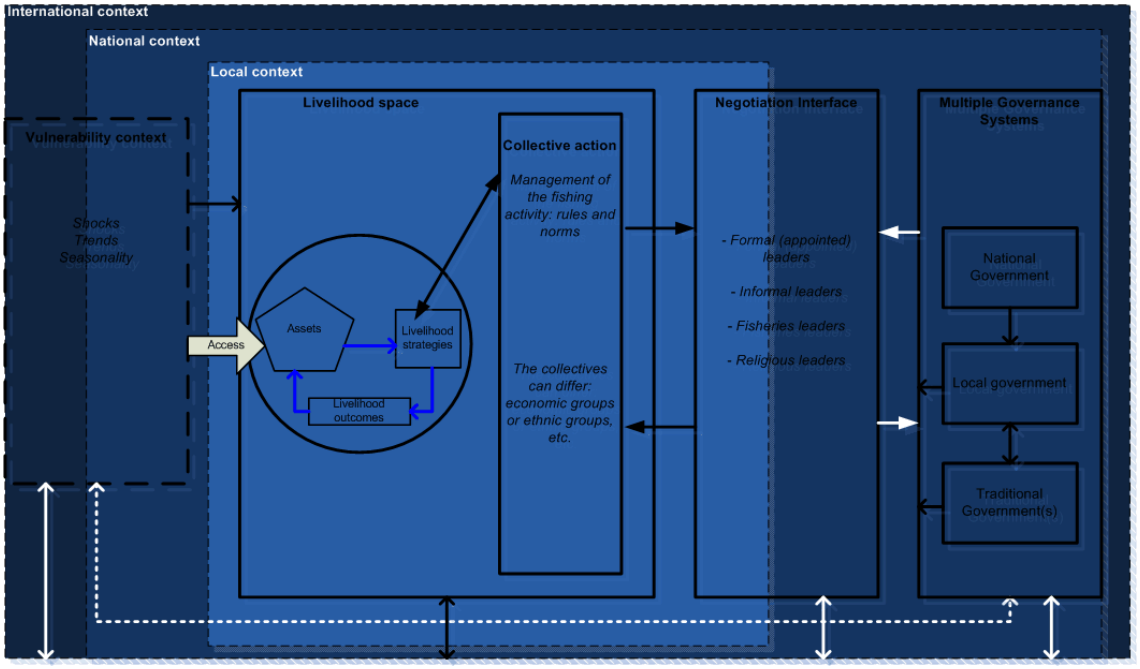
The governance section is also connected to the migration section. Migration has implications for governance and vice versa. For example, the government, as a management tool, may want to count canoes. This is a difficult exercise in Ghana due to internal migration. After all, it is difficult to ascertain where the canoes you count on the beach come from, where their home base is and when they return to this base. On the other hand, some government measures can promote migration, such as a ban on certain nets. This will, most likely, lead to fishermen migrating abroad to fish.

The '(s)' after traditional government(s) indicates migration. Fishermen on migration will be confronted by a new traditional government (of their host population) when on migration. Besides this they will be subject to the governance of their own traditional government (via their traditional leaders such as the chief fisherman). This shows how migration makes governance issues more complex.

In addition to the governance organisations of the Government of Ghana and the traditional state(s), there are also organisations or roles that are hybrid. With hybrid I mean

that they belong both to the traditional domain as to that of the Government of Ghana. One could argue that the entire domain of traditional governance is in fact hybrid as it is regulated under the Chieftaincy act of the Government of Ghana (see Chapter 6), however I would like to differentiate between traditional and hybrid. Not in the least place to avoid giving primacy to one system above the other. That is why I describe this situation as dual governance. Hybrid institutions are in fact a mixture between the traditional domain and that of the Government of Ghana. They can be institutions that for instance have been introduced by the Government of Ghana in the traditional domain such as that of the chief fishermen, in case of the Anlo-Ewe. It is important to make distinction between hybrid and traditional however, because the institution of chief fisherman may be hybrid amongst the Anlo-Ewe but should be regarded as traditional amongst the Fanti. These hybrid organisations or roles will often come into being in the negotiation interface, in interaction with the fishermen (or other locals), traditional officials and government officials.

Context



Within the conceptual framework we have also highlighted the international, national and local context. The triple-layered context in the conceptual framework indicates that all that happens is embedded in larger structures and (sub-)cultures. For instance, the Anlo-Ewe fishermen in Woe are inhabitants of the town of Woe, belong to the Anlo-Ewe group, the Ewe, are inhabitants of Ghana in West Africa, etcetera. It is quite difficult to define culture due to the large number of definitions. Nevertheless, a core element of culture is the whole of values and norms, with the latter being based on values which guide people's behaviour. Each culture defines ways of doing things in different situations. Norms are more or less binding expectations of behaviour (De Jager & Mok 1994: 69-71). Understanding why people behave as they do therefore means recognising the norms that are at work, and understanding the values on which they are based. These norms and values are core elements of culture. I describe the local context of the Anlo-Ewe fishermen in Chapter 3.

• Institutions

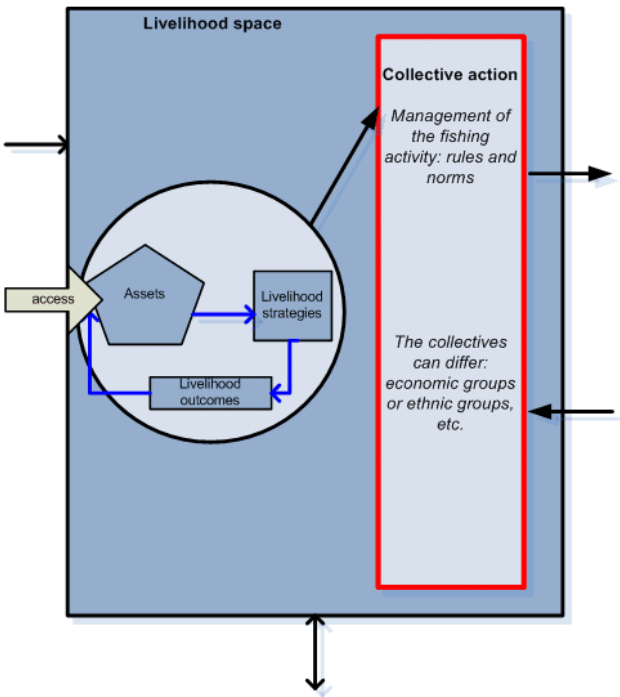
When norms become more fixed, thereby becoming collective patterns of behaviour, they can be called institutions. Giddens provides a brief definition of institutions as being 'standardised modes of behaviour' (Giddens 1979: 96). Institutions can be written down rules (laws) but can also be norms (traditions) which have not been committed to paper. All norms and institutions are based on, and related to, certain values (see also Kooiman & Bavinck 2005: 15-17). Institutions persist over time by serving collectively valued purposes (Uphoff 1986). Institutions 'tie us, as individuals, to society' (Jentoft 2004: 138). Institutions therefore form the basis of all action and interaction in social settings.

As institutions are linked to values and are part of certain (sub-)cultures, people (and their organisations) can relate to a plurality of institutions based on their different identities or roles. For example, a local village leader working as chair of the town council relates to the government's ways of doing things, yet he has also been born and bred in his village and can therefore also relate to the ways of doing things in the village. These different ways of doing things do not necessarily have to correlate. For instance, the town council meeting takes place according to certain procedures that need to be followed just as a meeting in the neighbourhood of the village is organised according to the local tradition. As we saw above, hybrid organisations can also be created on the basis of a mix of two or more ways of doing things. The role of chief fisherman is one such hybrid form, being based on traditional (Fante) governance but being spread along the Ghanaian coast by the government of Ghana.

Sub-question 4: Management

How is Anlo-Ewe beach seine fishing managed at the local level, both by the fishermen themselves collectively within the traditional governing structure and by the Government of Ghana? (Chapter 7)

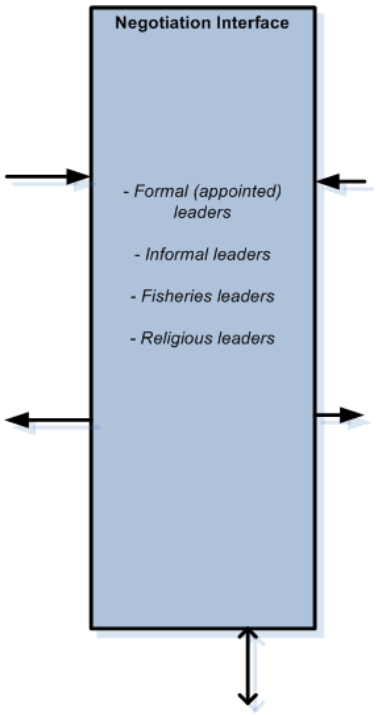
Fisheries management is a form of collective action. Fishing is an activity engaged in by more than one person whereby people make agreements, organise the activity and interact (come into action) with each other and act together (collective action). Fishermen can meet with the government to discuss fisheries matters in a collective manner. In some cases, government and fishermen manage to make co-management arrangements.



Collective action refers to situations in which resource users organise themselves in order to achieve specific objectives. The Anlo-Ewe beach seine fishermen have also organised themselves in various ways to manage their fisheries. In Chapter 7 we discuss the institutions of fisheries management at

local level, focusing on what the Anlo-Ewe beach seine fishermen undertake collectively and also on the regulating activities undertaken by the government in relation to the artisanal fisheries sector. These activities are defined as fisheries management. Beach seine fishing is therefore regulated by the fishermen and by the state and both activities are compared. It is important to keep in mind that when people organise themselves collectivly, one needs to ask who are part of the collective.

Central research question: Negotiating livelihood space



Fishers and actors of the governance structures meet each other at the interface, where fishermen negotiate livelihood space. Interaction with government structures most often takes place via leaders or representatives. It also frequently takes place within particular organisations (such as a town council meeting, or in court).

The Ghanaian government tries to get a grip on the fishermen, their communities and their fishing activity and they give or take space. Fishermen negotiate about their aspirations, wishes, demands, ideas and needs in relation to their livelihoods. They make certain choices by doing so, pursue certain strategies and make use of the dual governance structure. It can be a political game whereby all actors make use of certain strategies to pursue their goals.

I emphasise the notion of interaction, seeing fishermen as actors, dealing with multiple governance systems within and across institutional structures. This is important because in much fisheries management literature, management is seen as intervention from above. Interaction is also placed at the centre of the interactive governance approach of Kooiman *et al.* (2005), who define interaction as a mutually influencing relationship between two or more actors, with an intentional and a structural dimension (Kooiman & Bavinck 2005: 18). I prefer, however, to use the concept of negotiation to emphasise the political side of interaction. Negotiation in comparison to interaction has less a connotation of *optional* action and therefore is more purposeful. Negotiation is understood as an activity that can take on different guises. It can be direct or indirect (in the form of manoeuvring), institutionalised or can take the form of an apparent lack of interaction. The concept stresses the agency, power of actors thus making them into stakeholders who have a certain interest to protect. The concept is therefore used frequently in situations of conflicting interests. After all, there is no need to negotiate if all the parties agree.

Fishermen need space to carry out their fishing activities, and they need access to assets. Fishermen will often negotiate amongst themselves, with other ethnic groups and with representatives of governance organisations. In order to emphasise this, I have made the concept of negotiation central to the research question. The concept of negotiation, which is central in the process of acquiring access to resources, emphasises the political aspect of creating a livelihood and also serves as the critical link between livelihood and governance and between actor and structure.

The ability to negotiate is dependent on assets and this highlights the fact that assets are not ‘simply resources that people use in building livelihoods: they are assets that give them the capability to be and to act’ (Bebbington 1999: 2022). Assets are ‘the basis

of agents' power to act and to reproduce, challenge or change the rules that govern the control, use and transformation of resources' (*Ibid.*). This negotiating is carried out through the use of social capabilities, both amongst fishermen themselves and with governance organisations. Livelihood studies mainly address these horizontal negotiations, 'in which reciprocity and solidarity are the norm' (Glavovic *et al.* 2002: 5). 'Vertical links between individuals and groups with varying levels of power and resources, including state and private sector actors, have been overlooked in the Sustainable Livelihoods literature, and this has drawn attention away from the potential of poorer people to claim support from the powerful' (Shankland 2000 in Glavovic *et al.* 2002: 5, see also Brons *et al.* 2007). The fishing-related livelihood studies performed to date tend to focus on what fishermen do and how they do it and they mainly deal with relationships within the group. Although these studies refer to the agency of local actors, they pay almost no attention to their agency in relation to others (individuals or groups) in which often power differences play a role (Glavovic 2002). This is something my study will pay attention to by focussing on negotiation processes of fishermen in multiple governance structures. Using the concept of 'negotiated livelihood space' also indicates an ongoing process. Most likely this process will continue without any major problems for years. However, this situation can change very suddenly (due to changed regulations or because of ethnical tension in a context of migration endangering their fishing activity). This research focuses on negotiation cases, both amongst fisherfolk as with powerfull others.

Both fishers and the government have developed fishery-oriented rules and organisations. Those rules are often directed at regulating access and interaction and are based on knowledge and norms and values of society. The latter will, to a certain extent, be similar given that fishers and government are part of the same society. However, there will also be differences because they are part of different sub-societies. The interaction between fishermen and government organisations is interesting because it is influenced by processes of power, influence and leadership development. However, all too often insufficient attention is paid to the role of power in actual implementation of management practice. The fact that rules and organisations are in place is one thing, but the exact way they work is often not studied in any great detail. This thesis attempts to take that a step further and thereby contribute to both the livelihoods and governance debate by questioning whether heterogeneity within organisations plays a role and to see what the role of leadership is.

Structure of the book

The structure of the book is as follows. Chapter 2 discusses the methods of data collection. Chapters 3-7 answer the first four research sub-questions. Each contains a discussion of the relevant literature and theoretical debates, as a presentation of fieldwork data. Chapters 3 and 4 focus on the livelihood space of the Anlo-Ewe fishermen. Chapter 5 explores the topic of migration and presents a new perspective on how to understand the migration of artisanal fishermen including the Anlo-Ewe. Chapter 6 discusses and presents the multiple governance structures. Chapter 7 presents the management activities at local level in which both the Anlo-Ewe and the government organisations participate. In Chapter 8, I show how the negotiation process works by focusing on two cases. In the last chapter (Chapter 9) the research findings are discussed and the central research question is answered.

2

Methods of data collection

'You are in Africa!'[1]

Introduction

I would like to begin this chapter by describing an interview experience that I had in Woe. It illustrates two things. First it illustrates the disadvantage you may be at as a researcher when you have young and inexperienced students helping you with your research, instead of older, trained and experienced research assistants. At the same time that 'disadvantage' also illustrated the mixture of 'modern' and 'traditional' in the Anlo-Ewe culture, something which might not have become so obvious had I worked solely with older, well trained and experienced research assistants.

The fragment below comes from an interview I conducted with the Chief of Woe in my second fieldwork period in 2005. I visited him with two of my research assistants, John and Sesime. Sesime worked with me in Woe as my research assistant and John, who lived in Woe, happened to be there and joined us. What we see in the interview fragment is an educated traditional town chief who spends more time travelling than being a chief at home. His behaviour is that of a traditional town chief, but he simultaneously switches pragmatically to English for the sake of the interview (instead of speaking in Anlo-Ewe and via a linguist). My research assistants, Sesime and John, behave as young 'locals' who know less (in this case) about how one should behave than the outsider-anthropologist (who has read books about their culture).

> It was seven o'clock in the evening and we had tried to visit the Chief a couple of times (starting in the first fieldwork period!) and today we were finally going to succeed. It was the day that there had been a durbar to raise money for the building of a clinic in Woe. This took place in a period of tension in Anlo state, due to the chieftaincy conflict in relation to the position of the Awomefia, the highest chief of the Anlo-Ewe. The tension had increased to such a level that 'Accra' had sent in extra police.
>
> The door was opened by the sister of the Chief and she told us he would soon be with us, that he was having dinner and she asked us to wait for him on the patio outside. We waited for some ten minutes and then the sister asked us to go to the living room. We entered and saw the Chief sitting there. He invited us in, told us where we could sit and welcomed us.

[1] Quote from Anthony, one of my research assistants, used many times.

I felt slightly insecure about the whole situation since the Chief immediately addressed me directly in English, saying how he had tried to call me, explaining that there had been some mix up between me and one of the volunteers of the local NGO, Cross Cultural Solutions, but that he was now happy to have us here tonight. I thought that we had to greet the Chief in the appropriate way by engaging in the extensive greeting ritual in Ewe and by briefly explaining how happy we were to meet him and offer him our gift of Schnapps. However, this interview started as if I was interviewing any other educated Ghanaian on an important topic, instead of paying a courtesy call to the local town Chief and to try and schedule an interview. I already felt bad about only meeting him now – at the end of my fieldwork period – instead of at the beginning as I should have done in order to request permission to perform research in his town. However, he had been away so often that I had not managed to see him sooner. After he had talked to me a bit about the fundraising held in town earlier that day and after thanking me for the contribution I had made, he turned to Sesime and John.

Figure 2.1 The chief of Woe

Both John and Sesime were also insecure about the whole situation, being there in front of the Chief who had immediately started conversing in English and they had already felt shy about having to do the extensive and formal greeting procedures. That was a big difference between them and, for instance, Patience and Anthony who were both older and more aware of the cultural codes and operated with more confidence.

The Chief of Woe: 'Now let me see with who you are here. Who are the men accompanying you; let me see if you are going with the right men. I want to see if they know how they should go about this. The way they were coming in has not made me hopeful. So let us now see if they know the proper way to come in.'

> I felt a mixture of annoyance and pleasure at the whole situation and the reprimand the boys were getting for their 'cultural misbehaviour'. Although it would have been better for my reputation to work with more professional and sensitive research assistants, I thought it would be a good lesson for them since I had always tried to convince them to act in a more traditional way. It felt a bit awkward for me as an outsider to be telling those on the inside how to behave. Now the Chief was underlining that point! The young men started giggling a bit, insecure about what to do next and who should take the lead. In the meantime the Chief acted as a Chief and looked straight ahead, waiting for one of them to take the floor. One of them did, but it became a bit confusing and messy, with the Chief acting as Chief but at the same time correcting their greeting in Ewe. Then the Chief began and addressed us in Ewe and John started translating as normal. The Chief welcomed us, said he was happy to have us and was also happy that the news had come through that everyone had been safe and that no incidents had occurred on this evening of probable conflict. Then the Chief nodded at John's translation and said in English, 'Now then, let's continue in the language we all master' and asked me what my mission was.

In this chapter I explain when I did my fieldwork and why I chose to study Anlo-Ewe beach seine fishermen, followed by an introduction to the three research sites. I then discuss the units of analysis in this research, the methods I used and end this chapter by explaining more on who I am and my research assistants, John, Anthony, Patience and Sesime are, given that we have been the important 'tools' in this research.

Research periods

I made three fieldwork visits to Ghana spread over three years, a pre-field visit in April 2003, my first and major fieldwork period from October 2003-October 2004 and a second fieldwork period October-December 2005. The reason for a long fieldwork period from 2003-2004 was twofold. First of all I wanted to experience all the seasons in the research areas, which makes sense when studying fishermen or other livelihoods based on the use of natural resources. The Ghanaian fishing season has two peaks, based on two upwelling seasons (a major one in July-September and a minor one in December-February) and a low season (April-June). In the good season fishermen often engage in two fishing operations every day, during which they can expect good catches. The fact that they are also a lot busier means interviewing them is then more difficult. Another reason to perform the fieldwork for a full year was that I was accompanied by my partner and it made more sense (career wise) for him to stay away for a full year. For the same reason we decided to base ourselves in Accra from which I would travel to the research locations. During the second fieldwork period, I went alone and was able to base myself in all three locations and stay in each of them for longer periods of time.

Beach seine fishing

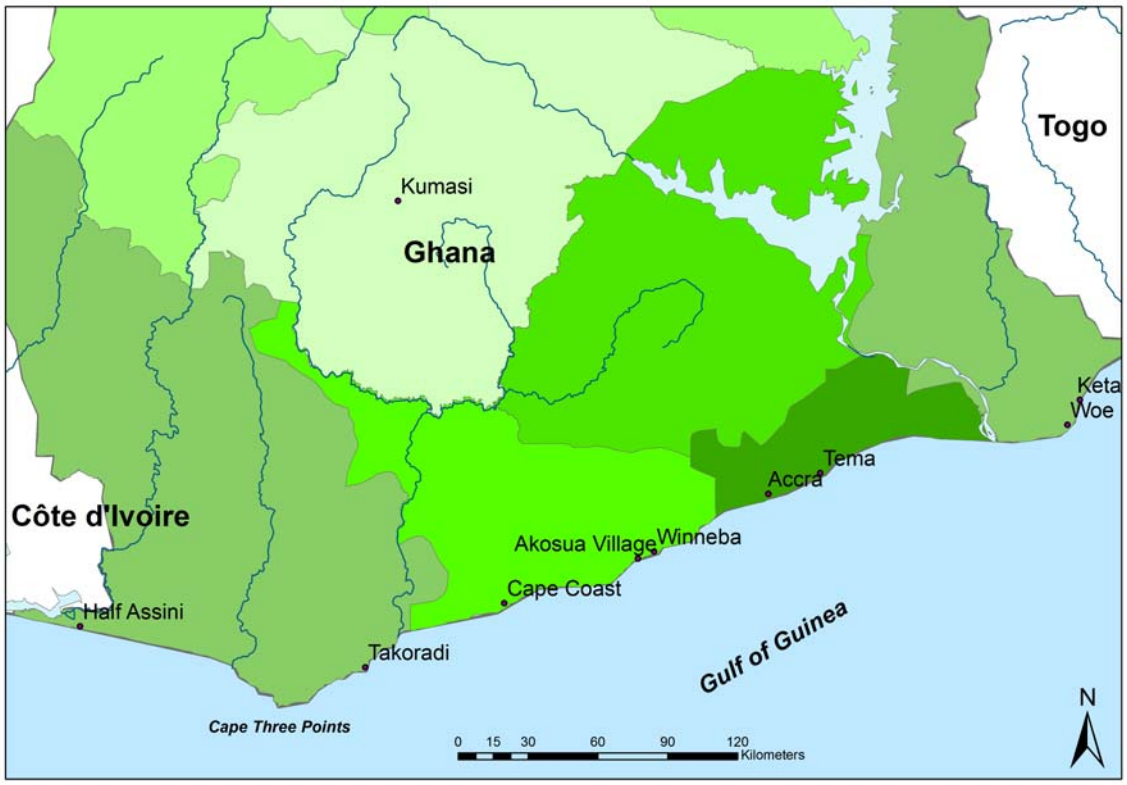
I chose to conduct this research amongst beach seine fishermen because this technique had strong research-technical advantages. The fact that most of the seine fishing takes place from the beach meant it would be a lot easier to participate, observe and establish contact with the fishermen. It meant I would not have to go out to sea for a couple of days (as would have been the case when studying purse seiners or longliners) with all the practical complications of keeping notebooks and cameras dry, sleeping and 'going to the toilet' in a canoe filled with men. The fact that beach seining is a land-based technique would enable me to add some interesting questions about fisheries management (in terms of access). The choice for beach seine fishermen meant that I could also

limit myself to the Anlo-Ewe as the Ghanaian artisanal sector is divided along ethnic-technical lines (see Chapter 1).

Research locations

The research took place in three locations along Ghana's 500 km long coastline (see Figure 2.2). Before I introduce the three locations in more detail, I would like to explain why I have limited my research to Ghana instead of – as I had initially intended – including research sites abroad in Ghana's neighbouring countries. I had thought of Togo and Ivory Coast as these are the two countries where most Anlo-Ewe fisher migrants can be found (see Chapter 5). I travelled with John to Togo in January 2004 to look for possible and appropriate research locations, villages where Ghanaian Anlo-Ewe beach seine fishermen lived and worked. We went to Lomé, Kpeme and Anèho. Locating Ghanaian Anlo-Ewe fishermen along Togo's coast turned out not to be as straightforward as I had thought. It was not easy to define who was a Ghanaian Anlo-Ewe and who was a Togolese Ewe fisherman. Almost all 'Togolese' Ewe fishermen seemed to have 'Ghanaian' ancestors and a lot of 'Ghanaian' Anlo-Ewe fishermen had lived there for so long that they had very much blended in. Although these findings would have interesting implications for migration research in relation to identity, they would also have made it very difficult to make the right choices regarding which locations to choose and which fishing companies to include.

Figure 2.2 Map of Ghana's coast indicating the three research locations



Source: author and the GIS department of AMIDSt.

In April 2004, during the Easter holidays, an opportunity came up to make an informed decision on additional research locations abroad. Woe organised a homecoming party for their migrant population. A week of festivities was arranged with an open forum, welcoming party and a grand durbar. I imagined that it would be a great opportunity to meet a lot of homecoming fishermen. From interviews held in Togo and Akosua Village we knew that migrant fishermen often returned to their home towns at Easter. We therefore planned to use questionnaires to interview returning fishermen in order to gain a good insight into where Woe fishermen went fishing (in Ghana and abroad). We could then use the questionnaires and the acquired contacts to visit their migration locations and do some follow-up work from there. I arranged for Anthony to come over and help us conduct the questionnaire interviews, and John had asked some friends to help us (see Appendix 2).

Figure 2.3 Women in Woe dressed in the home-coming cloth

It turned out to be a major disappointment because most of the returning migrants came from Accra and Kumasi and for instance the United States. There were hardly any returning fishermen to be found in Woe (we were able to conduct only 23 interviews)! It made me realise that, although fishermen intend to return at Easter every year (as expressed in our interviews and in a lot of research reports – see for example Mensah *et al.* 2006), in reality this does not happen (probably because they cannot afford to).

The trip to Togo earlier that year had also made me realise that extending my research over large distances in more than one country and at multiple sites would have implications for the data I could collect. It would take much more time to travel, locate fishermen and gather background data. Conducting research in more than one country means repeating your fieldwork a couple of times. I therefore had to choose between scope or depth. As I felt that I wanted to get to know the people I interviewed and as the information I was after had not been gathered before during previous research, it meant that I would have to stay in the research locations for a longer period of time. During the first few months in Ghana I had noticed how much time it had taken me to adjust, for

the people to get used to me, to get to know a community and the issues at stake and to build up trust. Meeting people also took up a lot of time as they might not show up for a number of reasons. This is not a real problem if you are based in the same village, but doing this from elsewhere would have been frustrating. I had also noticed that answers to my formal questions about certain issues revealed less to me than my observations combined with seemingly casual questions.

The research locations in which I conducted my research in Ghana; Woe, Akosua Village and Half Assini, are discussed in more detail in Chapter 3. However, I have summarised some main features in Table 2.1. I will now discuss why I chose to do my research in these three locations.

Table 2.1 Main features of the research locations

Villages	*Region*	*Traditional state*	*Population size*	*Main fishing groups*	*Characteristics*
Woe	Volta	Anlo-Ewe	8,545	Anlo-Ewe	Rural town mixed agriculture and fisheries nearby Togo
Akosua Village	Central	Effutu	630	Effutu in Winneba, Anlo-Ewe migrants in AV	All Anlo-Ewe migrant fisher settlement, close by Winneba, a major urban town
Half Assini	Western	Nzema	11,734	Fanti and Anlo-Ewe migrants	Capital of the district, quite large with separate neighbourhoods for the migrant fishermen

Woe

The first town I selected was Woe which lies in the Volta Region, the home area of the Anlo Ewe. Woe is one of the larger towns in Keta District and situated on the coast. The first time I arrived in Keta district was after having crossed the Volta River estuary by canoe from Ada. It was a beautiful way to enter the Anlo-Ewe coastal area! It immediately made me aware of the water-rich environment that I had come to, with all its islands, rivers, creeks, mangroves and beaches. The canoe trip lasted more than an hour, with market vendors, women, children and livestock boarding and leaving the canoe during various stops. I eventually arrived at the market place in Anyanui, the most western village of Keta District. I took a trotro[2] in the direction of Keta and stopped off at Woe because it had one of the few guesthouses along the coastal strip.

The Volta Region has two coastal districts, Keta and Ketu. After having spent some time in the coastal area of the Volta Region, I decided to limit my research to Keta district because it was more easily accessible from Accra than Ketu district. This was due to the coastal erosion at Keta which had destroyed the coastal road leading to Ketu district further east. In addition to this practical criterion, Keta district also had Anloga within its borders, which is the traditional capital of the Anlo-Ewe state.

Woe seemed to be a good town as it was not a 'special' town such as Keta (District Capital) or Anloga (traditional capital of the Anlo), yet still was moderately important in terms of facilities, and population (Ghana Census 2000). According to one of my in-

[2] Trotros are mini vans used all over in Ghana as public transport.

formants, an educated town elder and net owner aged about sixty, Woe was a good choice as an example community for my study on fisheries management and migration:

> 'You see, when they talk about the fishing industry in general, [it is] Abutia,[3] where we came from – they were our great grandfathers – who started along the coast. Not only [in] Ghana, [but also in] Freetown, Monrovia, Côte d'Ivoire, Togo, Nigeria and all; it is our grandfathers who started the fishing on the coast. So the migrations for fishing started from Abutia here.' (interview 7, 14-1-2004, Woe)

In Woe I first stayed in the local guest house. After a while I looked for another place to stay as I wanted to have a place of my own and become a bit more embedded in the community. My research assistant John arranged for me to stay on the compound where he lived with other tenants. The compound was nearby the beach area where most marine fishermen lived. As Woe was quite a large and scattered town I had to deal with the disadvantage that not everyone knew me, nor I them. This was especially so due to the more 'visit-based' nature of my research in the first fieldwork period. Being in the community continuously would have made it much easier to meet everyone I wanted to meet, due to the 'Ghanaian style'[4] of dealing with appointments. In the beginning of the first fieldwork period, I travelled by public transport but soon decided that a car would make my life much easier in terms of timing and safety. Especially in Keta District the car saved me a lot of valuable research time since people who I wanted to see lived or worked far apart.

Akosua Village

I wanted to select a migrant village along the Ghanaian coast in addition to the 'home' town Woe. During my pre-field visit in April 2003 I had visited Akosua Village, a small fishing village right next to Winneba. It was an Anlo-Ewe settlement and it seemed appropriate for it to be a second research site. First of all it was a small village of 135 households that made it feasible for me to gather data which covered the whole village. I would also be able to get to know the people quickly and gain an insight into village issues. Secondly it was not too far from Accra where I was based during the main field-work period.

During the first fieldwork period in Akosua Village I stayed in a hotel in Winneba, at five minutes' walking distance to Akosua Village. During the second fieldwork period I and my research assistant Anthony, stayed with Adzo, a woman of about fifty years old and her daughters. Adzo was a processor who was respected in the village for her hard work and lifestyle. She arranged for Anthony and I to use one of the double-room huts on her compound.

Half Assini

Half Assini was added as a control research site for Akosua Village. Akosua Village seemed to be exceptional as regards certain issues (compared to migration villages referred to in the literature) and I felt it was necessary to include a third research location to verify my data. In contrast to Akosua Village, Half Assini was a lively fishing town with active beach seine fishermen who were organised into companies. I opted for Half Assini based on the outcomes of the survey carried out in Woe in April 2003 that had showed that a lot of fishermen from Woe had migrated to Half Assini.

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[3] Abutia is the central part of the town of Woe.

[4] Meeting someone tomorrow at two o'clock, means meeting someone somewhere tomorrow if it is possible, i.e. wait and see.

The fact that a direct bus travels to Half Assini from Woe every Wednesday evening and returns every Saturday evening also indicated the importance of the link between Woe and Half Assini. Adding Half Assini resulted in fieldwork being performed in three places spread evenly along the Ghanaian coast (see Figure 2.2). The time spent in Half Assini would be much shorter than in Woe and Akosua Village as I only started my research there in the last fieldwork period. Although unfortunate, I argued that this may not be a bad thing, given that I knew a lot more about the Anlo-Ewe and beach seining in general and I could focus on specific data gathering.

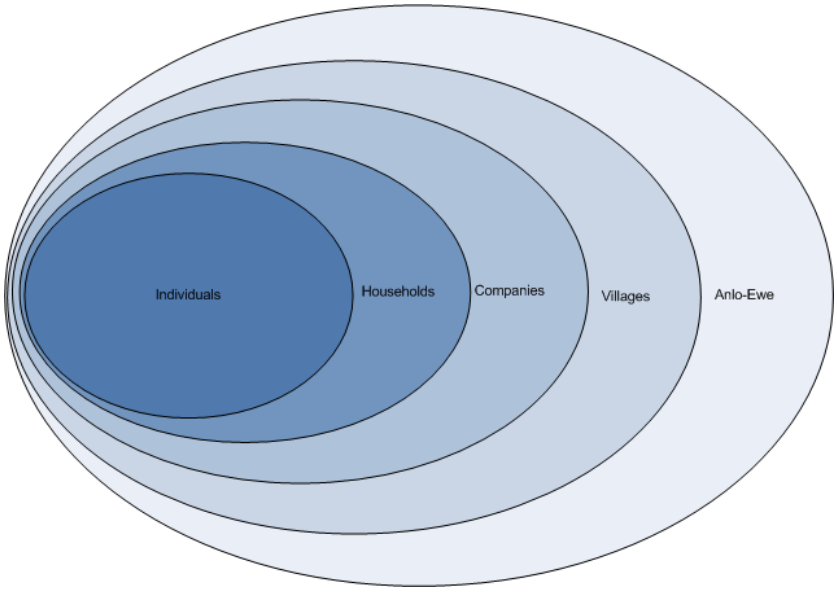
In Half Assini, my research assistant Sesime and I were invited to stay with the son of the chief fisherman. He was a young man with a wife and two small children who was one of the community elders and often acted as chief fishermen when his old father was unable to do so. He re-arranged his house so we could stay and here too I felt welcome and enjoyed sharing in the family meals. As he had a television, I fell asleep every evening to the sound of comments made on the programmes by the many TV-watching neighbours gathered in his compound.

Units of analysis

My research question is directed at Anlo-Ewe beach seine fishermen in Ghana and as such that is 'the unit' about which I make certain knowledge claims. However, I analyzed the Anlo-Ewe as a case unit at different levels: as a collective, but also at the lower levels of its constituent parts and the relationships between those parts (Wartena 2006: 35). My research was oriented around two important questions, namely what makes up the livelihood of Anlo-Ewe beach seine fishermen and how can and do they negotiate their livelihood space (within multiple governance structures). Answering that question means gathering data at lower levels, whereby one keeps an eye open for heterogeneity within the case unit. In my research question I had already made an internal differentiation between fishermen at home, within their own social system, and fishermen on migration, based on the hypotheses that it influences their negotiation practices and outcomes. As a consequence, I differentiated within the case unit at village level – my second unit of analysis. I compare Anlo-Ewe beach seine fishermen who fish from their hometown (Woe) with Anlo-Ewe beach seine fishermen who fish from villages along the Ghanaian coast outside their home area in places they have migrated to (Akosua Village, Half Assini). Gathering data at village level would not, however, provide all the answers I wanted. I had to gather the data at lower levels and then aggregate the data at a higher level (village) so I could answer the main question. The levels at which I had to gather most of the data would create three additional units of analysis: The company level, the household level and the individual level. As such I performed a multiple embedded case study (Yin 1994: 41-45) in three research locations (Woe, Akosua Village, Half Assini) and within the cases through the use of sub sets (companies, households and individuals). Most of the data was collected in Woe and Akosua Village with Half Assini added as a control migration community.

The household-compound level appeared to be an important unit of analysis because it is the economic and social unit within which individuals live, eat, sleep and make decisions. The household survey enabled me to gather data at household level, but also within the households at individual level. It should be mentioned here that the house-

Figure 2.4 The different units of analysis, from individual to group level



Source: author

hold is a contested concept, especially in the African context.[5] It is difficult to define what a household exactly is. Is it a family that lives together or is it the people living together in a compound? The problem then is how to deal with a couple of families or social groups living together on one compound but not sharing the same meals? Determining who belongs to the household is rather difficult (see for example Van der Geest 2004: 34-38). In my fieldwork I wanted to know what access fisher families had to certain facilities (as electricity, water, toilet) and which assets they possessed. I carried out the survey by entering a compound, asking for the head of the household (translated as house owner: *afeto*) and then asking him or her whether he or she could list all the members of the household. If the head of household was unavailable we would talk to the person who was available and would ask him or her who he or she regarded as the head of household to which he or she belonged and take it from there. We asked the respondent to explain the relationship with the head of household of every household member in order to establish the composition of the households.[6] By doing so we allowed the inhabitants of the compounds to decide who made up their household. When we compared our data with other household based research, like that of the Ghana Statistical Services (Census 2000), and other researchers such as Overå 1998, the outcomes were not that different (see Chapter 3).

The unit of the household was insufficient, however, and in the context of Anlo-Ewe fisheries research it is not the most interesting unit to study. A far more interesting and relevant unit of analysis is the fishing company, especially in the case of migration. It is the dominant economic and also social unit for fishermen. It resembles a farming-oriented household unit in which the net owner is the head of the household who takes all the decisions on production, consumption and investment, in which the *bozu*[7] and

[5] Its use often led to wrong gender interpretations, see for instance Leach 1994: 37.

[6] The range of the household size being between one and 25 members, with an average of 5.5 members across the three villages.

[7] *Bozu* is derived from Boss (English).

other executives of the fishing company are similar to elder sons and younger brothers of the household head and in which the wife of the net owner resembles the wife of the household head – with her own business coming out of the company business (compare Van der Geest 2004: 34-35). The fact that the net owner is often addressed as father or uncle and the crew as children (by the net owner) and as brothers (by the crew members) underscores this family or household resemblance. A lot of research questions made a lot more sense (in my focus on fisheries) when directed at companies rather than households. Companies are an important unit especially with regard to migration. Fishermen migrate as a company, live together in houses clustered around and provided by the net owner, often receive food from the net owner and sign contracts which are subject to the rules and norms of the net owner while taking decisions together with the net owner (such as asking permission to leave).

I gathered data at company level but at individual level within the companies as well, just as I did in the case of the households. As regards data from within a company it is highly important, in terms of livelihood, to differentiate between crew members and net owners. So I held a lot of interviews with either crew members (who held a variety of positions at the companies) or net owners. Their assets and access to assets differed considerably.

Research methods

Participant observation

One of the methods I used in this research is that of participant observation. Participant observation is derived from anthropology. Anthropology differs from other social sciences because of the considerable emphasis placed on ethnographic fieldwork as the most important source of new knowledge about society and culture (Eriksen 2001: 24). The idea is that the researcher stays in the field long enough for his or her presence to be considered more or less 'natural' by the permanent residents, although he or she will always to some extent remain a stranger (*Ibid.*: 24). The researcher tries to take part in local life as much as possible, with the aim being to enter as deeply as possible into the social and cultural field one is researching (*Ibid.*: 25-6). The extent to which this method can really be used to come to a subjective understanding of the research population has been discussed a lot.[8] In classic anthropological fieldwork, anthropologists would study relatively isolated communities and would try to develop an overview of the entire social universe. That idea has been abandoned over the years because communities are increasingly less 'isolated' and societies have become increasingly complex. There are hardly any places left on earth that have not been studied before and anthropologists increasingly perform research in urban contexts (where nowadays almost fifty percent of the global population lives). More and more anthropologists perform case study research or focus on a certain topic or single out a small group in a complex society (*Ibid.*: 248). I did not perform such an extensive ethnographic fieldwork, but I did make use of the participant observation method, and spent as much time as possible in the

[8] See for instance Van der Geest (1979, 1980) who suggests that *true* participation is not possible due to huge economic and structural unequalness between researcher and researched. However participant observation is important as it gives understanding of the context in which the research population lives, observing leads to questions, seeing what people *do* enhances understanding of what they have *said*; the researcher participates in the context of the study and by so doing gets closer to it (Van der Geest 1998: 49).

fisher communities. I stayed with fisher families in the second fieldwork period and overall spent many hours on the beaches; observing, participating, chatting and interviewing.

I joined the crews a couple of times when they went out to sea. Apart from being able to see in more detail how they perform and organise their work, this also gave me more of a feel for their work, and I was able to sense the danger, the excitement and the hard work. For instance, during one of the trips I went on in Woe, we were waiting to set off in the canoe and the waves suddenly poured over the side and filled it with water. Once through the surf two men spent at least ten minutes emptying the canoe using buckets. When the net had been set, the canoe went back to the surf where we (the crew) were expected to jump out and swim back because the canoe had to go back to the bunt of the net and doing so would save time and energy. Before we had set off with the canoe they had asked me if I could swim, to which I confidently had said yes. From the shore it seems so easy, but lying in the water I realised what strong swimmers the fishermen were! It took me half an hour to get back due to the fierce undertow and current. The steep coastal slope (as a result of erosion) made it even more difficult to come back onto land. This experience showed me in a more direct way some of the risks faced by these fishermen and it also helped my reputation on the beach in a positive way (besides being the source of a lot of jokes).

As I had expected in the pre-field visit, helping to pull the net in was a great form of participant observation. It also taught me how complicated and strenuous the work actually was. One day my research assistant and I were helping pull in a net when suddenly the rope broke. The whole line of men who were pulling fell back into the sand, and we were the only ones left standing. Once the net had been caught again and reconnected to the rope, the jokes directed at us began; we had not *really* pulled otherwise we would have also fallen in the sand. Yet even after a morning of – apparently not really – pulling I could feel the effects in my arms!

Observing is an ongoing activity for any researcher. It is, however, quite difficult to make sense of everything you see. A lot of things are so different from what you are used to. Particularly in the beginning you quickly get tired due to all the new impressions. I still remember how shocked and fascinated I was the first time I saw how little babies were bathed and massaged by the Anlo-Ewe mothers, so roughly and completely at odds with the way I was taught to deal with babies. So many details do not seem to be important at the first sight, but are actually pointers to a whole new world, which I came to understand in this case when I read Geurts' explanation on the importance of cleanliness and massage in Anlo-Ewe infant care practices (Geurts 2002: 91-97). Observing well is something you need to learn. My research assistant Patience was very good at improving my insight by pointing out the interesting details and by giving me a wealth of information. One day we entered a household where a little girl was playing with a wooden doll. I was fascinated by the little doll and wanted to see it. The mother and Patience asked me if I knew what it was. I answered 'a doll' which made them laugh. Later Patience told me that the girl was one of a twin, but her twin sister had died, so they had made this doll for her. Twins have a special position in Anlo society as they are regarded as supernatural beings (Nukunya 1999: 202) and one of the two dying is (apart from the general grief) considered to be a bad omen (see also Geurts 2002).

'Picture this': Photo and film

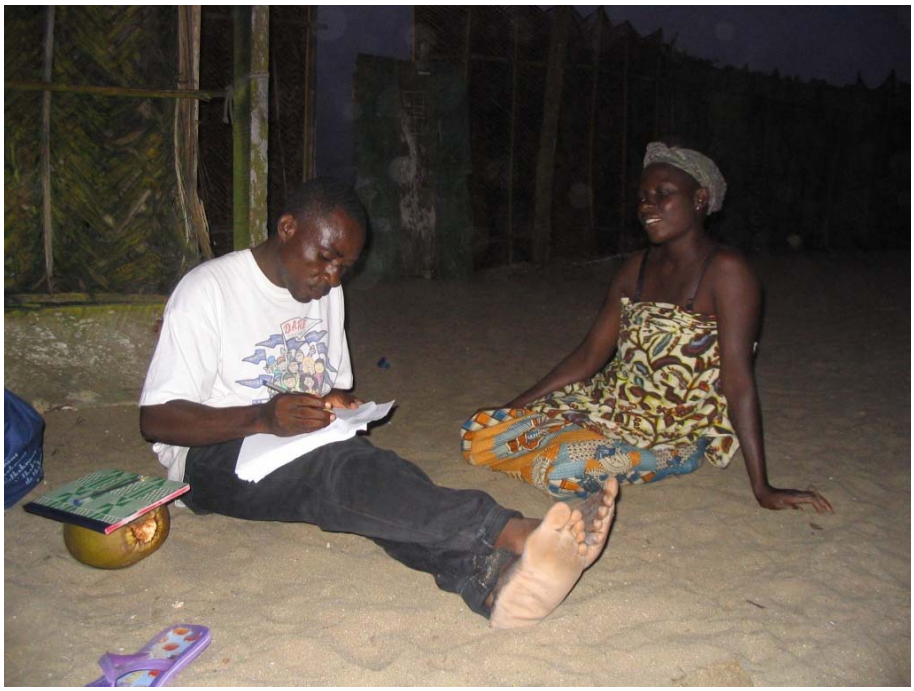
I always took along a camera when carrying out fieldwork. Taking pictures is good for your own memory and a way of collecting data (for instance if you want to know precisely how the net is connected to the rope) and it is also a good way of being able to show some reciprocity because you can give pictures to your respondents. In the beginning people were not so keen on 'whites coming to take their pictures'. Stories are told in the villages in Ghana that tourists earn a lot of money by taking pictures, turning them into postcards and selling them. Sometimes the people are afraid that you will take them home to show them to your friends and laugh (about their 'backwardness'). The fact that a lot of tourists take pictures without asking does not enhance their image. I therefore never took pictures without asking permission. Once I had built up some trust in the villages, taking photos was never a problem. After a while, people even started asking me to take their picture. The concept of digital photography that I used was quite new in 2003 and one of the fishermen called it 'white man's voodoo' when he saw his picture one second after it had been taken.

Figure 2.5 Watching back video footage with fishermen in Akosua Village

In 2005 I decided to take a video camera along during fieldwork to film certain interviews and shoot some footage of the fishing and processing activities. It resulted in a rich source of research material. For instance I was able to film a traditional court case, which gave me the opportunity to study what was said, how and by whom in more detail than would otherwise have been possible (see Chapter 7). The first short film I made showed the whole process of a fishing expedition and I have since used it successfully in education and during presentations (see Appendix 5). The film enabled me to show the audience the fishing technique that is the focus of my research in a much quicker, more interesting and comprehensive manner than by talking. Film (and

photo) is also a nice form of reciprocity. Showing your footage to the people you work with is a great experience. It can be done directly in the field (if you use digital equipment), which gives you the additional advantage of being able to hear some of the comments on what is being shown. However, it is also nice to send people prints of photos or to return with a nice film to show to the people who 'acted' in it. Lastly, I enjoyed using film because I noticed how I had learned to observe with much more precision than I had done before. Filming forces you to make choices and then to focus and thus was a very useful research tool.

Figure 2.6 Anthony interviewing a woman in Akosua Village



Interviews, questionnaires and household surveys[9]

The interviews I held were a combination of informal talks, formal interviews, open interviews, standardised interviews and topical interviews. I began with the more informal open ones and the further I went, and the more trust I had built up, the more I started to develop more standardised interviews. In the beginning I needed to develop a more general knowledge of how things worked and how things were done and organised, and to understand what the important issues were. Once I had more general knowledge and had decided where I would do my fieldwork, I was able to direct my research more and also develop more standardised interviews. I then started to develop questionnaires in order to acquire more bulk data on certain issues. I drew up questionnaires for crew members and net owners. However, I felt I could only do that once I had developed an idea of 'possible answers' since there would be less space and time for detail. The table below categorises the held interviews in three main groups, interviews held with representatives of the Ghanaian government, representatives of traditional

[9] See Appendix 2 for the standardised interviews, questionnaires and household surveys used in this study.

governments and with fisher folk. These three groups have further been subdivided in more subgroups (see Table 2.2). Table 2.4 (see below) shows how many interviews were held in each of the research locations and in what year.

Table 2.2 Interviews subdivided in categories

Government of Ghana organisations				*Traditional organisations*		
			29			22
Local gov[10].	Local FD	Accra FD	Wildlife	CF	Town chief	priest
11	10	4	4	11	8	3

Fisher folk			*Total*
		47	98[11]
Net owners	Crew	Women[12]	
19	14	14	98

FD = Fisheries Department, CF = Chief Fisherman

• Household surveys

The household surveys were developed in the summer of 2004 and served a couple of goals. The first goal was to gather basic data related to assets and access to certain services (such as water and electricity) of fisher households which would give me a better picture of the fisher household's livelihoods. The second goal was to get some idea of the size and composition of households, the demographical composition and the link to fisheries and/or other income deriving activities. However, the household surveys also gave me more of an opportunity to observe (to look behind the fences of the compounds) and to meet people and explain to them why I was there.

In all the research locations we demarcated a certain zone in which we tried to interview all the households. In the event that no one was present to answer our questions, we would proceed to the next household. In Akosua Village we knew that, in total, there were 135 households and we managed to conduct the household survey in 105. In Half Assini, where there were an estimated 90 compounds,[13] we visited 41. We made fifty copies of the interview forms but because the households were so large we often needed more than one survey to include all the household members. Due to time constraints (as Half Assini was only included in the last fieldwork period), we were not able to do more surveys in Half Assini.

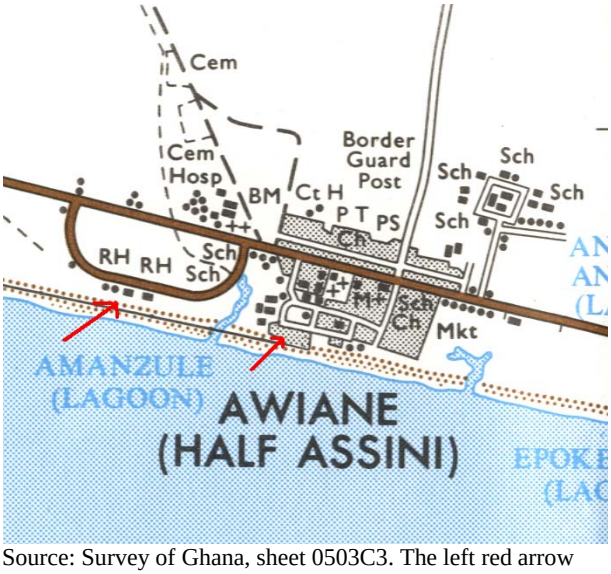
[10] Local government includes: police, the court registrar, assembly men and town council members.

[11] The total number of interviews held in Ghana is 100, including interviews held with informants. In addition to the interviews held in Ghana, I have held seven more in Togo.

[12] Women includes a queen mother, wives of fishermen, processors and traders.

[13] We carried out our research in Half Assini in two neighbourhoods. The first was the small neighbourhood in town (Half Assini proper; also referred to Tsikpo village) near the beach, behind the police station. To the East it was bordered by the Fanti migrant fishermen and to the west only by beach and coconut trees. The second neighbourhood was a five minute stroll away and was the small settlement of 'Bungalow' [named after a huge Bungalow located there used by former president Nukrumah] hidden among the coconut trees. I chose to add 'Bungalow' because I wanted more variation in companies. The Anlo-Ewe living in Half Assini proper almost all fished for the same company, and were closely related. The Bungalow neighbourhood comprised of about forty households and I felt that adding it would diversify the data. I do not differentiate further in the book between Half Assini proper and 'Bungalow' unless necessary. Twelve surveys were taken in 'Bungalow', the rest in Half Assini proper.

Figure 2.7 Detail of map of Half Assini



Source: Survey of Ghana, sheet 0503C3. The left red arrow indicates Bungalow and the right red arrow the Anlo-Ewe fisher neighbourhood.

In Woe – which is quite a large town – it was impossible to cover the whole area with our household survey and difficult to estimate the total number of compounds. We decided to conduct the household survey in the area (see Figure 2.8) where most of the marine fishermen live, namely in Aklorbordzi, Dekpekope and Lighthouse area.

We worked on the basis of a somewhat random sequence. We started at one spot on the Deku road (as shown in Figure 2.8) and walked towards the lighthouse (following the arrow). We tried to interview every household we saw, whenever anyone was present and was willing to be interviewed. We surveyed 107 households. The survey in Woe was carried out in August 2004 and October 2005. As both months are in the high season I do not expect the two time periods to have interfered with the outcomes.

• Focused group discussions

I held four focused group discussions. One interview with a chief, in Half Assini, turned into a focused group discussion. The organised group discussions were with a fishermen group and a group of processors in Akosua Village, with a group of Fanti fishermen in Winneba and with a women's group (organised) of processors in Woe. My experience with focused group discussions was not that positive. I hardly ever managed to create a true discussion, and usually I had to ask questions which were then answered mostly by the same people while others simply agreed. During some discussions I was hardly able to grasp the details of the discussion because my interpreter had to translate four opinions which were all expressed in one minute to me in just half a minute's time. Following the less positive experiences during the first fieldwork period I decided to film a focused group discussion in the second fieldwork period. As a result I was less concerned about information being lost since the discussion would be captured on film. Unfortunately this focused group discussion was organised by the (male) leader of the women's group and he all too often formulated 'the opinion' of the group. As he was an articulate man, he was also good at this but as far as I was concerned this was not bene-

ficial for the result. It was clear that he had another agenda with the focused group discussion than I had. I tried to change this situation but that proved to be difficult.

A spontaneous group discussion took place when I went to the Fanti community in Half Assini, hoping to find and interview the Fanti chief fisherman (*Apofohene*). I found him together with a large number of his people under their community shelter on the beach and he agreed to answer my questions on the spot. We soon had a crowd gathered around us and some of the people present started to interrupt and express opinions on the answers being given. One of them was a teacher who directed a lot of the answers in such a way that the conclusion was that they needed assistance (money). It was a lively interview, and although it was hard work for Sesime, we managed somehow to recall the different inputs when we worked out the notes.

During all of these group interviews it was easy to see that often it was the same people speaking all the time. Most probably these were the people with the highest status, that is the oldest educated males who held a certain position (teacher), or a net owner or someone with most experience (in fishing or processing). The results of these interviews were such that I was able to define the hierarchal division within the group and conclude that the spoken text was the socially accepted version of possible answers (see also Wartena 2006: 113).

Mapping

I tried to obtain maps of all research locations. Although this was not always easy, there was a beautifully detailed map of Woe made by a volunteer from the NGO CCS, which was given to me to use in this research. There was no map of Akosua Village and Half Assini[14] so we made a map of Akosua Village ourselves during the household survey and this also gave us a good insight into the houses we had visited and the ones we had missed. The map of Akosua Village was then digitalised and reduced to normal proportions (our map was stretched over two metres of little pieces of paper) at the UvA Geography Department.[15] Once it had been coupled to the household survey data we were able to create some interesting maps showing the layout of the village related to different topics.

Collection of documents and records

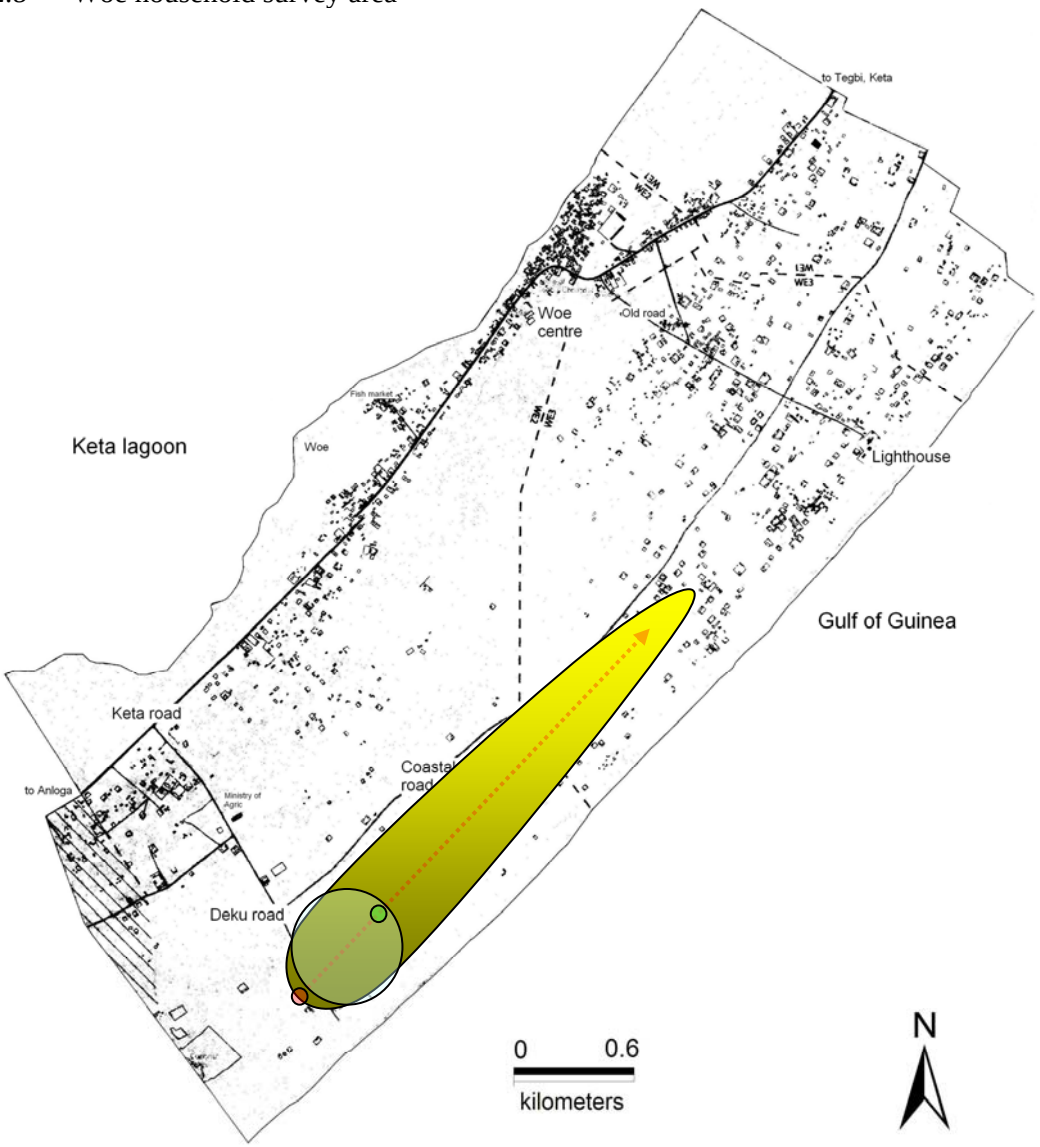
Beach seine fishing companies keep quite detailed records. In most cases there are account books (recording the catches per day or week and the sharing of the catch), sales books (recording the debts of the women buyers) and also fine books (which are used to record the fines that the crew received for misdemeanours), expense books (in which the net owner records all the expenses incurred) and loan books (recording the loans and advances the crew have arranged with the net owner).

In all three research locations we managed to acquire an insight into some of these records (see Table 2.3 below). This information is not easily shared. One of the fishermen told me that they fear government taxes. '*Sometimes they send spies to count the bowls to tax us'* (fieldwork notes 21, 29-11-2005). I tried to get an insight into as much of the bookkeeping information as possible. However, as might have been expected, I was only able to access books, or parts of the books of net owners who I knew a bit

[14] The map I made of Half Assini was not clear or detailed enough and adding the Bungalow settlement also made the scaling difficult.

[15] By Stefan Fritz, Herman Wilken and Els Veldhuizen.

Figure 2.8 Woe household survey area



Yellow: whole area within which the surveys were done. *Light-blue circle*: area of 2004. *Red dot*: start of the survey, walking in direction of red arrow. *Green dot*: starting point of the 2005 survey.
Source: Woe town council, made by a volunteer of the Cross Cultural Solutions Program in Woe. Digitalised by the author and the GIS department of AMIDSt.

better and with whom I had been working for some time. Company records are business information and fishermen, competitive as they are, are not keen on publicising how they are doing financially. As a result, some net owners also became slightly angry when I asked them if I could see their books. I always took the time to explain what I was doing, why I did my research and why I asked certain questions, how I would use the information and how I would deal with it in a careful and responsible way.

Although we managed to get an insight into catch data in all three research locations, the records are not held in standardised forms (some make notes of all fishing expeditions, some only write down good catches, some only record the totals per week and not the totals per catch/day), so it is by no means easy to compare the data.

I also received copies of all the record books of a retired net caretaker in Akosua Village. Even though these books were ten years old (1994-1995) I decided to include them in the analysis because of their value (being highly sensitive data not easily shared). His books were also largely kept in English (which is quite exceptional) and gave me an insight into all the aspects of running a company. He also lent me his fine book showing all the things crew members had been fined for and the amount of the fine. Together with the loan book it provided me with a small insight into the problems crewmembers face and the issues they have to deal with. It also shows what the rules and norms are in a company.

Table 2.3 Data overview of company records

	Woe	*Akosua Village 2005*	*Akosua Village-1994*	*Half Assini*
Catch value	x	x	x	x
Number of fishing expeditions	x	x		
Amount of pans per catch[16]	x	x	x	
Price per pan per catch	x	x		
Sharing of the catch	x	x	x	x
Advances	x		x	x
Loans	x		x	
Sales to women	x		x	
Fines			x	
Expenses of net owner			x	
year 2004	x			x
year 2005	x	x		x
years 1994-5			x	

Other documents that I collected were court cases, company contracts, payment receipts of migrant net owners (relating to the land leased from the Chief) and government documents related to fishing. I visited the libraries and bookshop of Legon University for PhD studies and other documents, and studies carried out by social and natural scientists which were directly or indirectly related to my research. I asked the fisheries department for all the relevant documents related to my study of beach seine fisheries, national management plans directed to artisanal fisheries, canoe frame surveys and catch records. Mr Bannerman was particularly helpful in providing me with the catch data (value, CPUE, gear) of 2000-2004 in digital version – making it easy for me to do my own calculations (see Chapter 1).

Table 2.4 shows an overview of all the data gathered by interviews and questionnaires and where it was collected during the three fieldwork periods. Some other documents are listed such as fishing contracts, court cases, account books and loan records. This table provides some insight into the balance of the data.

[16] Catches are measured by pan and the more pans there are, the larger the catch. The sizes of pans in use do differ, however, thereby making it difficult to compare catches between villages.

Table 2.4 Data overview of fieldwork

	Woe	*Akosua Village*	*Half Assini*	*Togo*	*Accra*	*Total*
Household Surveys (2004 + 2005)	33+75=108 (N=?)	105+0=105 (N=135)	0+41=41 (N=?)	0		254[17]
Net owner questionnaire 2005	19 (N=20)	8 (N=11)	4 (N=5)	0		31
Crew member questionnaire 2005	48	40	28	0		116
Easter Questionnaire 2004	23					23
Interviews 2004+2005	31+13=44	36+4=40	0+11=11	7+0=7	2+3=5	107
Fishing contract	3	-	1			4
Court cases	2		1			3
Account book	2	1	1			4
Loan records	2	-	-			3

Table showing the kind of data, the year that it was collected and where it was collected.

Being young, white and female

The fact that I am a young, white, female researcher naturally affected the research.[18] That is not to say that the outcomes per se would have been totally different if the research had been performed by an elder, black (speaking Anlo-Ewe), male researcher. Being a woman in a male environment had advantages and disadvantages, although I must say that in Ghana this is not such an important issue as it would be in for instance an Islamic Arab country. I just had to deal with the jokes, marriage-related questions, the surprised reactions when people for instance found out that I was already 28 years old and still had no children. Thankfully (in this context) I did not understand everything said to/about me. From the looks of the faces of my research assistants I can tell that not all that was said was above board. Being a *white* female at least meant that I was an exceptional category and that I could ignore certain rules that other women could not as regards going out to sea (on which occasions I was never asked whether I had had sex the night before, or whether I was menstruating). Being white meant being interesting at times, it meant that some doors opened more easily (for instance those of the government organisations) and that other doors remained tightly closed (such as those of shrines) and could only be opened via others.

The poverty of the people in the villages touched me from time to time, for example the children with distended tummies or pale hair due to malnutrition, or mothers offering me their baby because they felt it would be better off with me. I was so often struck

[17] The total number of individuals of which we collected data was 1411.

[18] See Van der Geest (1979, 1980) about how being different as a researcher can affect the fieldwork and should be accounted for by the researchers. Van der Geest discusses the level of unequalness between researcher and the research population and calls it a blind spot of many researchers.

by the combination of the people's obvious poverty and bodily strength, mental happiness and their attitude of taking life as it comes. What I found difficult at times was the mix of continuously 'being amongst people' and feeling lonely. I missed out on a lot of conversations because of my inability to speak and understand Anlo-Ewe and was reminded every day of my 'exceptional' appearance due to being white.

At the end of the first fieldwork period I decided to take some language lessons at the centre of CCS in Woe. Mr Besa took the time to teach me some basic Ewe. It is a tone language, which makes it a difficult language to learn. However, I had started to recognise some words and wanted to be able to engage in small talk in Ewe with the people I met, do some simple shopping and be able to understand and join in the extensive greetings that happened before every meeting and interview. After the first research period I therefore contacted Dr Ameka an Anlo-Ewe professor at the University of Leiden and asked him if I could continue with simple lessons. He introduced me to a talented Dutch language student who spoke good Ewe. As she was fluent in Dutch, she was well able to understand my difficulties and was capable of explaining the different grammar of our languages. When I returned to Ghana, I was happy that I had taken these lessons.

Whereas I was called *yevu*, or *obroni* (meaning 'white' in Ewe and Twi) or *Akosua* in the beginning, I soon was referred to as *Afi*. Afi was my day name (meaning that I was a female born on a Friday). In Ghana if people do not know when you were born they often name you using the word for Sunday which, for women, is *Akosua*. Once I knew this, I often corrected strangers calling me Akosua saying I was Afi instead. Such a comment was always appreciated. Mr Besa of the NGO Cross Cultural Solutions gave me an additional name, as is also customary in Ghana. He named me *Dabasu*, which meant that I was the first daughter of my parents following two sons. The position you take in the sequence of siblings also defines who you are. As a result, a lot of Ghanaians are named for instant 'eldest son' or 'first after twins' etcetera.

Reciprocity

I often ended my interviews with the question 'Do you also have a question for me?' Most of the questions that people asked me were either related to my private life (being married, having children) or to the value of this research for them personally. The first questions were not difficult to answer. People did not really understand why they hardly ever saw my partner and quite a few men also did not, for instance, think that the fact that I was married to someone in far away Accra or the Netherlands should hinder me from marrying again. The second type of question was more difficult to answer. I always took the time to explain what I was doing and why and what the (applied) value of the research was. Nevertheless, I was also aware of the fact that this was unlikely to lead to anything concrete on the short term as far as they were concerned. We took the time to explain the importance of proper management of fish stocks because of the importance of fisheries for people's livelihoods. We added that we also conveyed their questions, experiences and views on the matter to the people 'in Accra', but that we also did not know what they would do with the information. This answer sometimes also frustrated me.

Quite a lot of fishermen did not mind talking to us at all, and indeed made an effort to convince us that we should buy a drink for them. Although I was very careful in suggesting that a link existed between talking to us and getting something in return, I did every now and then buy the occasional drink (and regarded this as being comparable to us being offered a coconut or water to drink every now and then). I felt morally

uneasy about adhering to the custom of bringing a drink (a bottle of Schnapps) to the chiefs and priests with whom I talked (in addition to money in some cases), but refused to buy a shot of *Akpeteshi*[19] for a fisherman. The priest to whom I spoke on a couple of occasions was used to meeting American students who wanted to talk to him about pottery and religion and was also used to asking a fixed price. As my interviews were set up by a friend who had set up the other appointments as well (he was a teacher at the University of Winneba) I had to go along with that kind of deal (see also Wartena 2006: 124-128 on American researchers creating a culture of paying for interviews). I could justify it to myself by reasoning that the priest received money for doing certain things for people. In effect I was a client tapping his mind instead of his religious powers. Yet it always meant me taking account of certain considerations and applying my own moral standards. I explained to my research assistants that I was the one who took the decision whether or not to pay someone or buy something for someone. I always wanted them to translate the requests and not to start dealing without informing me. I must say that some net owners were more persistent than fishermen in their requests – and sometimes their demands[20] for money. All in all however, people were quite willing to help us with our 'schoolwork'.

Dealing with all sorts of financial requests was part of my life in Ghana. I had to learn that asking for gifts from someone from the village who returned from Accra or elsewhere was quite standard and playful and was not necessarily related to me being white and relatively rich. Whenever my research assistant John returned from Cape Coast in Woe, he would also be confronted by such greetings as 'welcome, you are back, what did you bring for me'. The fact that I travelled backwards and forwards a lot during my first fieldwork period meant I was asked quite often what I had brought with me from Accra.[21] I also realised that it was a good idea to bring along and share fruits, tomatoes or bread. I was not expected to return with refrigerators, TVs, toys, and similar goods. Ghana is a gift-giving and receiving culture. It is way of showing reciprocity. Consequently, a certain amount of giving, giving people a lift in my car and handing out prints of my photos just was part of my reciprocal relation with 'my co-villagers'. My problem was that I had so many. At a certain point in time I decided that I would give something back by making some 'handsome' donations during community fund raisings. I did that twice in Woe and I had asked what would be a good (not too large and not too small) donation 'with the right message'. I had to get used to the Ghanaian way of declaring to the assembled people through a microphone who had given what and how much and this practice made me feel quite shy as it is not normal to do this in our culture. However, I did realise that it gave people a feeling that 'I also tried' and in that sense it had a certain usefulness. I felt happy that I was able to contribute to the community. Making a contribution in the hometown meant that word spread to the migrant communities. I also made donations to some funerals I was invited to, given that it was quite normal to do so.

In the first fieldwork period I had a car and it proved to be a valuable asset in terms of reciprocity. It enabled me to give something back by acting as taxi driver from time to time for people I knew. People would often join us on trips from *Dekumoto* in Woe to

[19] Locally brewed strong drink.
[20] In one case a net owner was so persistent on payment and in fact non-cooperative that I decided to not include him in my research.
[21] See also Steegstra 2005: 22.

Keta and it was always a good laugh to bang the roof of the car and shout *'Woe shima – Woe shima'* (Woe market) at the crossing, as the trotros do.

Research assistants

At the start of my research I considered the task of translating between English and Ewe (and occasionally from/to Fanti or Twi) as the main task of a research assistant. I had basically looked for people (students or teachers) who were able to translate properly and lived in the research locations. During the process I realised that research assistants do much more than 'only' translating. As a researcher you have to rely on their translations, knowledge and interpretations. They *can* in fact do much more if they have the right skills. When, at a certain point, John and Anthony had limited time to work with me, I decided to ask my local supervisor, Dr Odotei of the University of Legon, if she could help me find people with research experience to assist me.

Local research assistants, who are from the community in which you do your research, have certain advantages and disadvantages over external ones (from outside the community) and vice versa. They can provide you with access to certain groups within the community. Obviously it is only later that you can assess which groups were more easily accessible than other groups due to the relations of the research assistant.

Apart from the four research assistants, Eric, a school-going student, also helped me in my research by doing some household and crew and net owner surveys in Woe in 2005. Eric was related to Noah Setsesofia, the chair of the town council in Woe at the time of my fieldwork, who I had asked for help in finding someone capable of doing these questionnaires in Woe.

Table 2.5 Research assistants, years and research locations

Research Assistant	*Woe / Keta district*	*Akosua Village*	*Half Assini*	*Year*
John	x			2003-2004
Anthony	x	x		2003-2005
Patience	x			2004
Sesime	x		x	2005

As we can see from Table 2.4 all the research assistants worked with me in Woe. This is no coincidence as Woe was so important in terms of comparison and as 'home' to the Anlo-Ewe fishermen that I thought it to be good for all my research assistants to have been there. All my research assistants are Ewes themselves with Anthony being the only non-*Anlo*-Ewe. John lived in Woe, Anthony alternated during the fieldwork between Winneba, Benin and Hohoe, and Patience and Sesime lived in Accra. I worked with Anthony from the start of my fieldwork until its end, with John during the first months, while Patience took over from John in Woe and Sesime then took over in the second fieldwork period.

John

John was 22 years old when I met him in Woe in 2003. He had taken a year off from his studies (biology at bachelor level) in Cape Coast and had his own little house on a compound, with other tenants, in Woe. He travelled between Takoradi (where he stayed

with other people) and Woe. John is the grandson (father's mother) of a well-known and respected woman in Woe. She lives on a large compound in the centre of town, owns quite a lot of property in Woe and owned fishing nets abroad. Some of the houses she owns, including the houses on the compound where John lived, were let and this provided her with additional income. She was a well-respected woman and was the head of a large extended family. John had helped me with my research right from the start and, after a few weeks, I asked him whether he would work with me on a regular basis. He agreed, liked the idea and was initially eager to learn about the topic.

John was a living example of an Anlo-Ewe with extended family relations in a large number of locations. He had uncles in Benin, his mother lived in Ivory Coast (whom he regularly visited) and he himself lived at two locations. As John was not a professional translator and new to social science research, I had to train him. He was surprised by some of my 'stupid' questions and also with my habit of repeatedly posing the same questions to so many people. He thought I ought to know the answers. In the beginning he would also be tempted to give me the answers himself believing that there was no need to ask the women because he knew better. In time we managed to improve on these issues.

Anthony

I met Anthony on the beach in Winneba during my pre-fieldwork visit in April 2003. He was a forty year old Ewe from Hohoe and a special education student who was studying at Winneba University. When I returned to Winneba in 2004 I met him again and he agreed to help me with my research in Akosua Village in addition to his classes and study requirements. I soon noticed that Anthony was capable of doing more than just translating. He was very eager, interested in the topic, and understood what social science research was about. He had a good 'click' with the people because he was non-assumptive and open-minded. He was also respected for being an older man and a teacher (in training) and had the down-to-earth approach that fishermen like. In interview settings fishermen were sometimes hesitant about talking openly about their belief in traditional religion but Anthony was always good in sensing their shyness and would try to make them relaxed to tell us about it. Anthony and I worked hard. He was really devoted and was clever in multi-tasking in his work for me and schoolwork.

Over time we really became a team, worked together closely and became friends in the process. The quote 'You are in Africa!' at the beginning of this chapter is from Anthony. He could say that laughingly when I looked troubled for one reason or another. Anthony also started to keep his own notebook, wrote down important observations, carried out surveys and questionnaires alone and really built up a good rapport in the village. In the second fieldwork period we stayed in Akosua Village with one of the families and Anthony fulfilled a very valuable role in gathering information during casual meetings and chats.

Patience and Sesime

In the summer of 2004 both John and Anthony became less frequently available or were unavailable. This meant that I needed a new research assistant. Dr Odotei introduced me to Patience, a middle-aged woman who was a social sciences graduate and had research experience in fisheries research. Patience was a great research assistant. She was very knowledgeable, great in making contacts, knew a lot of people in Woe and was respected. With her at my side I had some really good weeks of fieldwork. We conducted

some interviews together and household surveys and Patience was really good in providing additional information and in putting certain reactions from fishermen and women into perspective, and in explaining the traditional religion and customs. Unfortunately Patience was not able to work with me for a long period of time, as she had a fulltime job.

When I returned to Ghana in 2005, for some three more months of fieldwork, I asked Patience if she had time to work with me again. Unfortunately she was unable to join me, but she told me that her nephew would be able to help me since he had just finished his studies at Legon University. Sesime, who was in his twenties and had conducted fieldwork along the Fante coast on the participation of fisher children in education. His experience in conducting research himself convinced me that it would be good to work with him. Sesime and I also built up a good working relationship.

Methods of analysis

Back in the Netherlands I used the following methods to analyse the gathered data. The interviews were listed by name, date and place and categorised by type of interviewee (see Table 2.1 for the basic categorisation). As the number of interviews was not excessive (N=100), I was able to analyse them manually by tagging and highlighting topics in the text (such as: migration, management, religion, technique, income) and rereading per category, topic or village / town.

The survey results (household, crew & net owner surveys) were first digitalised in Excel spreadsheets and then analysed using a statistical quantitative analysis programme (SPSS 14.0). This meant that the data needed to be categorised and coded and quantified if possible (by assigning numbers to given answers). That made it possible to analyse the data by filtering, making totals, calculating percentages and doing cross tabulations. The answers given that could not be quantified were analysed manually. The extra information on the surveys provided by the surveyors was also separately analysed. The results of the Easter questionnaire (N=23) were summarised manually.

Data from the beach seine account books was used to make comparisons between the research locations and facilitated an understanding of the catch share system (Chapter 4). The loan and fine books were analysed by making categorisations so as to gain an insight into the items and issues for which money was borrowed or fines given by net owners (Chapter 7). The film material was used to compile a short film of the beach seine fishing technique showing how the technique works in practice, the dangers of fishing, and the social importance of beach seine fishing in the research locations (see Appendix 5). The court case that was filmed was translated by an Ewe student in the Netherlands and this enabled me to analyse it word for word and discuss the translation with the student in question (to determine exactly what was said and what it meant) (Chapter 7). The maps procured and prepared during fieldwork were used to analyse and present spatial dimensions of the research. The fact that we were able to link the household survey data to the map meant we were able to create specials maps on, for example, water access and village / town parts (Chapters 3 and 8).

In this chapter we have described how and where the research took place and how it was set up. We have discussed the units of analysis, the methods of data collection, introduced the researcher and research assistants and discussed the methods of analysis. The following chapters present the results of this research.

3

Livelihood space, fishing assets and access

Work and happiness[1]

Introduction

From the debate in the introduction we know that fish resources are rapidly declining and that this means improved governance of fishing systems is needed worldwide (FAO 2009, Pauly *et al.* 1998). Up to now, fisheries management studies and policy have focused primarily on fish stocks and the working of the market, based on the dominant bio-economic models of fisheries biologists and economists. Insufficient attention has been paid to the local features and demands of small-scale fisheries and fishermen (Lindqvist & Mölsä 1992: 192). Similarly, not enough attention has been paid to social considerations such as food security and securing livelihoods (see also Sarch & Allison 2000: 1). It has, however, slowly become clear that a thorough understanding of the fisher livelihoods and their behaviour (based on their knowledge, options and alternatives) is crucial for proper management of the resource. After all, the fishers are the ones who form the crucial link between the two sides of existing fisheries studies, that is between the marine environment, resources, and commodifications of its resources. The fishers make a living out of catching fish and selling fish to others. Their methods are based on their knowledge and perception of both the natural system and the social system and on the possibilities open to them (their capabilities and assets). Ultimately their compliance or non-compliance with management measures directed at protecting fish stocks is key.

For some years now, attempts at understanding how people make a living, based on their assets, in the context of certain trends (population growth, resource decline technological innovation, price changes, macro policy) and/or shocks (storms, diseases, war) have been made under the umbrella of the sustainable livelihoods approach (see livelihoods.org). We will use this approach in this and the following chapter to understand the livelihoods of the Anlo-Ewe beach seine fishermen. Chapter 3 will discuss the

[1] Name of a canoe in Ghana.

history of the livelihoods approach, its framework and the elements assets, access and institutions and will emphasise the process-side of livelihoods by discussing what we have called the negotiation of livelihood space. Chapter 4 will continue discussing the activity, the way the catches are divided, the income fishermen derive from fishing, other sources of income, the valuation of the fishing job and the vulnerability context impacting on the activity – all of which in the end again affect the asset base.

Sustainable livelihoods approach

The livelihoods approach was developed as a response to poverty research and focuses on 'what the poor *have* rather then what they do not have' (my italics; Moser 1998: 1: cited in Allison & Ellis 2001: 378). It shifts the earlier focus on financial aspects of poverty to a multi-dimensional and dynamic one' (Lewins in Neiland & Béné 2004: 37). It was built on lessons learnt out of practical experience of NGO's and development organisations and on the theoretical framework for poverty analysis outlined by Scoones (1998) and Chambers & Conway (1992) (Lewins in Neiland & Béné 2004: 37; De Haan & Zoomers 2005: 30). The livelihoods approach soon got its *sustainable* attribute, as it was preceded by the Brundtland Report and the Greening of Aid Conference at the International Institute for Environment and Development in 1987 and by the first Human Development Report in 1990 (De Haan & Zoomers 2005: 30). A livelihood is sustainable when 'it can cope with and recover from stresses and shocks, maintain and enhance it capabilities and assets, both now and in the future, while not undermining the natural resource base' (Carney 1998: 2). It had its origins in 'a literature concerned with understanding the differential capability of rural families to cope with crises' and links to concepts as vulnerability, sustainability, resilience and sensitivity whereby 'the most robust livelihood system is one displaying high resilience and low sensitivity; while the most vulnerable displays low resilience and high sensitivity' (Allison & Ellis 2001: 378).

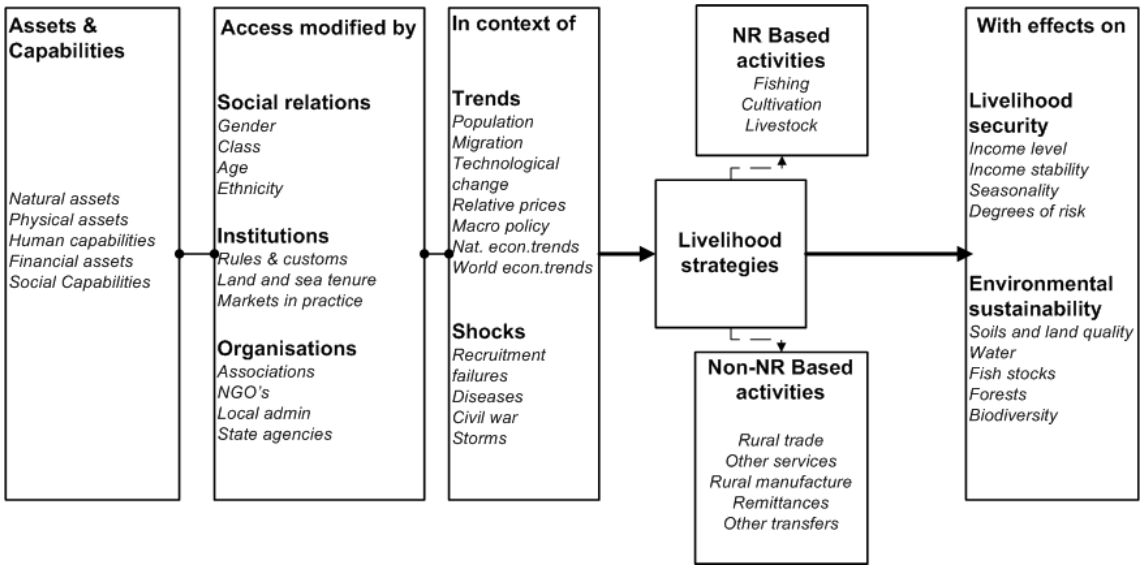
A livelihood (see Figure 3.1 for a schematic representation) has been defined as 'the activities, the assets and the access to these assets mediated by institutions, organisations, and social relations (policy and institutional context) and affected by external factors (trends and shocks), that together determine the living gained by the individual or household with effects on livelihood security and environmental sustainability' (Allison & Ellis 2001: 379).

The framework (with its limitations of a two-dimensional representation of a complex process) starts with and results in the assets owned, controlled and claimed or in other means accessed by the household (Ellis 2000: 31). Access to both assets and activities is enabled by the policy and institutional context and affected by external factors (vulnerability context). Assets permit livelihood strategies to be constructed which are composed of a portfolio of activities which generates outcomes in the fields of livelihood security and environmental sustainability (Allison & Ellis 2001: 379-380).

The usefulness of the livelihood concept for my research lies in the fact that it shows how various assets of the livelihood platform are potentially important. A lot of developmental interventions aimed at rural livelihoods in 'marginal' environments (Bebbington 1999: 2021) and fisheries research often focus heavily on access to the natural resource, despite this not always being a crucial factor as far as fishermen are concerned (see also Chauveau, Jul-Larsen & Chaboud 2000, on what they have called a

paradigm halieutique[2]). Fishermen not only use money, boats and fish to support their livelihood, but also draw on 'their family labour, physical strength, educational and professional skills, political influence, the social services provided by the state, infrastructure funded by taxpayers, and a host of other 'assets' that policy and management interventions potentially support, undermine and redistribute' (Allison & Horemans 2006: 764).

Figure 3.1 Livelihood framework



Source: Based on Allison & Ellis 2001, adapted by author.

Assets

Assets have been defined as: 'stocks of capital that can be utilised directly, or indirectly, to generate the means of survival of the household or to sustain its material well-being at differing levels above survival' (Ellis 2000: 31). In order to arrive at a more holistic vision of livelihoods, assets should not only be seen as a *means* of making a living, but as also giving *meaning* to the person's world. Moreover these assets are 'the basis of agents' power to act and to reproduce, challenge or change the rules that govern the control, use and transformation of resources' (Bebbington 1999: 2022; c.f. Giddens 1979). Most livelihood studies distinguish five basic categories of assets: natural (environmental resources), human (the labour available to the household; its education, skills and health), physical (buildings, irrigation canals, roads, machines, fishing equipment) financial (money; savings and access to credit) and social capital (social claims on which one can draw based on group membership or social relations) (Ellis 2000: 32-37). Some lump financial and physical assets together as one category, namely that of produced capital (Bebbington 1999: 2022). There is ongoing discussion to determine whether one should speak of capitals, assets, resources or capabilities. The use of 'ca-

[2] With their notion of a *paradigm halieutique* the authors wish to show how many discussions related to the African fishing sector take place in a same context, with two basic points of departure: first the resource (fish) and secondly the exploitation of the resource. All other elements that might be of relevance to the study of the fishing sector are forced into this narrow framework and are thereby 'biologised' (De Vries 2003: 10).

pital' is criticised for containing the notion of accumulation and acquisition, as if it is property one has, rather than it being a process of access (see the section *Negotiating access*, p. 63).

Livelihood scholars are engaged in ongoing debates on the inclusion or exclusion of other types of assets, renaming or merging existing ones. Bebbington, for instance, adds cultural capital as a sixth asset. Cultural capital relates to cultural practices[3] which add meaning to livelihoods but which are also enabling and empowering. 'They enable forms of action and resistance that the other four types of capital would not, alone, make possible. They can also be the basis for the maintenance and enhancement of each of the other types of capital' (Bebbington 1999: 2034). I have chosen not to include this in the asset base because I find cultural practices inherently social and as therefore being to some extent included in social capabilities and as being related to structure and culture and as being consequently part of the context (discussed below).

Another 'capital' under discussion that I would like to mention is political capital. Scholars who support the idea of adding political capital want to emphasise vertical claims, and basically want to improve what they see as the political weakness of the livelihoods approach. Adding political capital would improve 'linking PIP [Policy Institutions and Processes] with the local level' and help to 'understand the dynamic interaction between political capital and the other assets (especially concerning issues of access)' (Baumann 2000 in Carney 2002: 42). Including political capital as capital would suggest that one would not *always* need to deal with power (see also comment of Anne Wilde in Carney 2002: 42). By contrast, I believe that the aspect of access is inherently political, hence my decision to talk about *negotiating* access and about power issues always playing a role and about how these should then always be taken into account. This also underscores the idea that creating a livelihood involves a process and is not something one does or does not have. This involves an interface in which negotiations take place. Before we take a closer look at the issue of access we need to understand what is meant by the context (mediating access).

Context

The importance of the cultural and structural context (from micro to macro level) in the process of people's access to natural resources cannot be overemphasised. As we have seen, institutions are standardized ways of doing things, rules, strong norms and a core element of culture. 'Institutions tie us, as individuals, to society' (Jentoft 2004: 138). As became clear in the livelihoods approach, institutions (next to social relations and organisations) mediate the assets and the access to these assets. The concept of institution has many definitions and is widely used in social sciences. In Chapter 1, I defined institutions as standardised ways of doing things, which can be rules but also rights, strong norms, beliefs or procedures and includes the principles or values on which these are based (see also Kooiman & Bavinck 2005: 15-7). It is a key concept in both the livelihoods and the governance debates and I draw on both bodies of literature in the discussion below.

Institutions have elsewhere been narrowly defined as 'rules' of conduct (North 1990), or have been lumped together in a broad description which includes legal, normative and cognitive attributes (Jentoft 2005). Sometimes they are described instead by what they are not (Leach *et al.* 1999: 238). Organisations are often also referred to as

[3] Cultural practices are inherently connected to a certain place, yet they can have global scope – such as language and religion.

institutions (De Jager & Mok 1994: 81). I would like to follow Ellis (and North) in clearly distinguishing between social relations, institutions and organisations. Organisations are 'groups of individuals bound by some common purpose to achieve objectives' (Ellis 2000: 38 based on North 1990: 5) and are basically structures of recognised and accepted roles (Uphoff 1986). Social relations then refer to the social positioning of individuals and groups in society, using factors such as gender, caste, class, age, ethnicity and religion (Ellis 2000: 38). Institutions are then the formal rules, conventions and informal codes of behaviour (Ellis 2000: 38 based on North 1990: 3).

I would, however, like to include norms in the definition of institutions while acknowledging the fact that institutions are not only regulatory but also normative (Jentoft 2005: 148), and also not only formal and written but also informal. Norms are the unwritten rules in societies. Norms are rules of engagement and codes guiding behaviour, and they are based on values – how things ought to be (which is highly contextual). Institutions are values converted into written or unwritten rules with the idea being to achieve certain goals. Giddens defines institutions shortly as 'standardised modes of behaviour' (1979: 96).

Institutions and organisations are closely tied since, if institutions are a system of rules, they are 'intrinsically connected to the existence of a special body – an authority – in charge of enforcement' (Bavinck 2001: 34). Organisations have also been called institutional forms, with players and institutions being the rules of the game (Scoones 1998: 12). Institutions and social relations are also closely tied since institutions are always embedded in social relations which are shaped in society and which become the social and cultural foundations of institutions (Jentoft 2005: 148, see also 'nested systems' of Ostrom 1990 in Jentoft 2004: 141). Social relations, based on gender, age and class, can be found in every society, yet each society has assigned different meaning and content to social categories. Being old is an advantage (respect) in one society and a drawback (not young) in another. 'Without institutions, social actors would not know how to interact and would not know what is expected of them or what they can expect of others' (Jentoft 2005: 147). Institutions provide a 'logic of appropriateness' that comes with rights, routines, roles, responsibilities, agendas, standards, and practices that enable the people confronted with them to distinguish between right and wrong, good and evil, normal and abnormal, and natural and unnatural (…); [and they] come with meanings and interpretations' (*Ibid*.).

Organisations work at different levels in society and are often rooted in culture just as firms are embedded in markets, and markets are part of larger regional, national or global society (Jentoft 2004: 141).

In fisheries management literature, the role of the state and market have received a lot more attention than the role of civil society. 'The community and its institutions are a central governance issue that is largely ignored in the state governance approach to fisheries' (Jentoft 2005: 151, see also Scott 1998 for an understanding of the limited knowledge of society available at state level).

Negotiating access

From the livelihoods framework one might deduce that individuals or households 'have' or 'do not have' certain assets with which they can (not) build a livelihood. However, access to assets is sooner a process than a given fact, and a process that includes the different resources (or assets) but also the opportunities to turn them into sources of livelihood enhancement or to improve those means by making effective use of the

institutional context (Bebbington 1999: 2028). The environmental entitlements approach (Sen 1981) zooms in on this crucial process of access. In the past poverty was understood as being poor people's shortage of assets, with an example being insufficient food for the families in a certain region in India (Sen 1981). Sen demonstrated, however, that hunger in India was not so much about food production as such but rather about distribution, arguing that 'different individuals in society had varying degrees of access or entitlement to resources in times of stress' (Lewins in Neiland & Béné 2004: 37). Poverty has less to do with a shortage of assets than with access problems. Bebbington stresses the importance of social capital and argues that the analytical distinction between access and assets almost breaks down because 'access becomes perhaps the most critical resource of all if people are to build sustainable, poverty alleviating rural livelihoods' (Bebbington 1999: 2022). Whenever poor people were not able to improve their livelihoods or meet their livelihood needs the principal reason was their limited ability to build up, and to draw on, networks and links with state, market and civil society actors that would otherwise have helped them access, defend and capitalise on their assets (*Ibid*.: 2028). This process is not neutral but leads to inclusion and exclusion (De Haan & Zoomers 2005: 34).

Even if households 'have' certain assets, they may still be unable to use or capitalise on them. Leach *et al.* researched this problem and make a distinction between *endowment* – the right in principle one has to the resource – and *entitlement* – what one actually gets by being able to transform it into livelihood activity and outcomes (De Haan & Zoomers 2005: 35; Verrest 2007). Previously in such cases *natural* resources become endowments that people have to gain rights over. This depends on their entitlements (De Haan 2007: 66). Access to natural resources can be arranged by e.g. government permits (in for instance government-reserves) whereby people make use of financial assets to buy a permit to gain access, through community membership (in case of common property land) whereby people make use of social capabilities, or through family membership (in the case of private family property). Lastly, people can negotiate with a land-holding family of farmland using social capabilities and / or financial assets to arrange access. In a situation of legal pluralism (government law plus customary law) these rules can be contested (Leach *et al.* 1999: 235; see also K. von Benda-Beckmann 1981), although this makes the situation more complicated. Besides using certain access arrangements and gathering natural resources, people also need to be able to use labour (human assets) and market their gathered resources (social capabilities). This is negotiated within their households and with, for instance, traders with a view to agreeing reasonable prices. Once the natural resources are collected, they become entitlements. However, how these are used again is subject to negotiation within the household (Leach *et al.* 1999: 235-236). Entitlements are 'the outcome of negotiations among social actors, involving power relationships and debates over meaning, rather than simply being the result of fixed, moral rules encoded in law' (*Ibid*.: 235). Even though some people might have access to certain natural resources, for example through community membership, they may still be unable to transform these endowments into entitlements due to a lack of access to labour (human assets), so that people might not always be able to capitalise their endowments. I regard this as an important added notion in relation to access to resources.

The inclusion of negotiation as a central concept in the process of acquiring access to resources emphasises the political aspect of creating a livelihood. The ability to negotiate itself is also dependent on assets and this underlines the fact that assets are not

'simply resources that people use in building livelihoods: they are assets that give them the capability to be and to act' (Bebbington 1999: 2022). Assets are 'the basis of agents' power to act and to reproduce, challenge or change the rules that govern the control, use and transformation of resources' (*Ibid*.: 2022; cf. Giddens 1979). This negotiating is performed by making use of social capabilities, both amongst fishermen themselves and with governance organisations. Livelihood studies mainly address the horizontal negotiations 'in which reciprocity and solidarity are the norm' (Glavovic *et al.* 2002: 5). 'Vertical links between individuals and groups with varying levels of power and resources, including state and private sector actors, have been overlooked in the SL literature, thus detracting attention away from the potential of poorer people to claim support from the powerful' (Shankland 2000 in Glavovic *et al.* 2002: 5; see also Brons *et al.* 2007).

Livelihood space

One of the critiques of the livelihoods approach is its material bias. 'We need a framework that bridges the more materialist and the more hermeneutic and actor-centred notions of poverty and livelihood' (Bebbington 1999: 2022). Bebbington made the observation in the Andes that where policy was directed at help, rural dwellers stuck in 'nonviable' livelihood activities leave the land and move to urban areas. By contrast, it was demonstrated that residence in these areas meant more to these people than was realised. 'Rural residence and relationship to land constitute important dimensions of their ethnic identity: an identity whose maintenance may, beyond any material measure, be a critical determinant of their sense of being poor or not' (*Ibid*.: 2026). As Wartena (2006: 71) argued, 'non-economic considerations often play a dominant role in people's livelihood choices'. The image of actors acting as an *homo economicus* is still dominant in a lot research, as reflected in the usage of the term capitals (see Chapter 3), and by the fact that some researchers use the concept of livelihood as a synonym for income (see Chapter 4; Wartena 2006: 72).

We will therefore add the concept of space to livelihood to emphasise the fact that these activities are not only linked to their outcomes (e.g. income) but also to the location at which they take place, to the people who engage in them and to the history connecting all of them. As fishermen are linked in many ways to what they do, they will negotiate for their livelihood space and this connects a spatial element to elements of identity, room to manoeuvre and room in which to exist, live and work. As their fishing activity always takes place in a certain location (place) and is linked to it, there is always a certain place-boundedness that needs to be taken into account. Place boundedness should not be understood as a limitation to expanding space (including more places). Instead it highlights the fact that each place, with its cultural, social, economic and spatial characteristics, produces its unique pattern of re-alignment between actors, processes and consequences. The concept livelihood space thereby addresses the need to pay more attention to 'livelihood networks along which remittances, information, ideas, goods and people flow' as well as show how the people operating in those networks (or firms for instance) are located in places, live in the 'space of places' (De Haan 2008: 57). Anlo-Ewe fishermen have expanded their livelihood space by migrating to other places. What I argue is that they have thereby created a livelihood space within which they are able to maintain their livelihood activity thereby being able to maintain their identity as a whole. Livelihood space gives these connotations. Livelihood space refers to three elements:

1. A spatial element:
   - space to work:
     - to fish (the sea)
     - to sell the catch (the market)
   - pace to live safely
   - space where one can make use of facilities and services
2. An economic / sectoral element: space within the fishing sector, by creating a certain niche;
3. A social / cultural element: space where one is accepted, where one finds or has one's place in society, positioning oneself within social relations.

Fishermen need to negotiate these various aspects of their livelihood space. In their search for livelihood space, they may cross geographical boundaries and although this may raise questions for outsiders it is less relevant to the fishers who have other maps on their minds when making such decisions. This study will show that the livelihood space of Anlo-Ewe fishermen bypasses national or ethnic boundaries. The concept of *livelihood space* connects the different places where fishermen live and work and the places between which the fishermen have set up linkages leading to flows of people, goods and ideas. It is linked to the understanding of their migration which, as I will argue in Chapter 5, should be seen in a new perspective which places it in the context of Africa's mobility which is the rule rather than the exception and which uses transnational migration theory combined with an understanding of the logic of the activity. Transnational migration theory has also contributed to new spatial thinking, of which the concept *transnational social space* (Pries 2001) is a good example which is also related to my concept of livelihood space. However, the concept of livelihood space also differs from transnational social space in two ways. Firstly, livelihood space does not refer to the nation and, although it can cross national borders, it does not have to (see the critique I formulated to the concept of trans*national* migration in Chapter 5). Secondly, livelihood space emphasises the link with the livelihood activity (in my case fishing) and is useful for this kind of 'professional migrants' (such as herdsmen as well). I will examine both arguments in more detail in Chapter 5. The concept livelihood space is an important contribution to livelihood studies as 'the spatial dimension of livelihoods is often overlooked (De Haan 2008: 51).

In the next section we take a closer look at the livelihood space of the Anlo-Ewe fishermen. We first analyse where they come from and discuss the location's cultural, social, economic and spatial characteristics. Then we turn our attention to the space the Anlo-Ewe have acquired in the Ghanaian fishing sector which – as we will see – gave them room to migrate. This is accompanied by a brief discussion of their social embedding negotiations, after which we will introduce the three research locations.

Livelihood space of the Anlo-Ewe beach seine fishermen

Place boundedness

The Anlo-Ewe share a common language and a common tradition of origin, and are one of the 120 sub-groups of the Ewe, one of the main ethnic groups in South-Eastern Ghana and Togo (Nukunya 1999: 1). The Anlo-Ewe live in Ghana and Togo and number more than a million people (Geurts 2002: 21). The Anlo are surrounded by

other Ewe; the Tongu, the Ave and the Be, Noefe and other small chiefdoms (Nukunya 1999: 3).

The Anlo-Ewe only moved from the inland of Togo to the coast where they now live in the mid-seventeenth century (Akyeampong 2001). Although they are nowadays known for being sea fishermen, as an originally non-maritime people it took them a long time to develop a maritime tradition (*Ibid*.). After they had arrived they needed to adjust to their water-rich environment. At first they made use of the huge Keta lagoon to build up their new livelihoods. They fished in it and made salt (by evaporation of lagoon water at the fringes of the lagoon). The Anlo's mastered canoeing on the lagoons and creeks (Law 1989), and then started using the lagoon as trade route.

The lagoon was the main source of fish. In 1784 Isert, a Danish physician and traveller, wrote, 'the lagoon is full of delicious fish, crawfish as well as thin oysters about one foot long'. The ocean was left un-exploited, because the surf along the Anlo coast was very rough (see below). The roughness of the sea must have hampered the growth of the fishing industry' (Odotei 2002: 31). Almost ninety years later (1872) two German missionaries, Schiek and Tolch, wrote that the fish in the lagoon 'for the most part, do not get big (…) perhaps because they are caught too early' (Greene 1996: 165). As Keta lagoon soon became overfished, the Anlo-Ewe turned their attention to the sea.

• Origin myth

The origin myth has been told from father to son, and it all starts in Notsie, a town in the middle of present day Togo. In Notsie the Ewe lived under the tyrannical rule of king Agokoli, an untenable situation. Tony, a net owner and one of the respected inhabitants of Woe, said the following about the king: '*He was a wicked king, he let the Anlo make clay pots, out of clay mixed with glass, they had to stamp it, on their bare feet!'* (interview 34, 19-5-2004). The Ewe decided to flee and headed westwards. Legend has it that they managed to flee Notsie by softening the surrounding clay walls by continuously pouring water over them and finally making an opening in them with a sword. As Tony explained, '*The elders gathered the people together. The wall was broken whilst they were drumming, so that nothing could be heard. The old people had to go first. The old people only had to carry small things. The last to go had to walk away backwards*[4]*. The drummers were the last to leave the town, it was then almost four o'clock in the morning*' (interview 34, 19-5-2004). Leading the flight was a small group of hunters who would become the original settlers (Ayeampong 2001: 25). The hunters split up into three groups of which one group went north-west to Hohoe and Peki, one west to Ho while the third group, led by Wenya and Sri, headed south-west to the coast, to Anlo. Tony: '*They ended at Anloga. Anlo[ga] means, "I am tired, I am weak, I have coiled"'* (interview 34, 19-5-2004).[5] Anloga became the new traditional capital.

[4] This walking backwards would puzzle the warriors sent to get the Ewe's back, since the footprints would point towards Notsie (Greene 2002b: 1024).

[5] Geurts (2002) shows how this *nlo*, the coiling up of Whenya, at the grand finale of the migration saga of the Ewe's is central to what it means to be Anlo-Ewe: "When Mr Tamakloe [an informant in Geurts' research] folded into himself, it was an enactment, a presentation of the condition of 'being Anlo' for more than three hundred years. *Nlo* emerges, then, as a trope, an enacted metaphor, for a melancholy sensibility, an embodied consciousness with its obverse: *nlo* as persecution and power; *nlo* as resentment and respect' (Geurts 2002: 130).

Figure 3.2 Map of the Anlo Coast

Showing Keta District and a large part of the traditional Anlo state.
Source: District Assembly Keta. Digitalised by author and the GIS department – AMIDSt.

This migration history of the Anlo's was told to me a couple of times during my fieldwork, and versions of it have even been published (see for instance Kumassah 2005). Greene has convincingly argued that this story has been *created* as *the* history whereby divergences in the origin traditions of the Ewes were ignored. The Anlo-Ewe tradition and dialect have 'unfairly been taken (by scholars, missionaries, and other representatives of the colonial regimes) to represent Ewe culture as a whole' (Geurts 2002: 21). The missionaries of the Bremen mission played an important role in this. They had selected Notsie as the geographical site from which 'all Ewes would be encouraged to believe they originated'. They did this as 'part of their effort to foster a sense of oneness among the Ewe-speaking peoples in the region', a 'oneness that the Mission could then use to delimit the linguistic and territorial limits of their operations' (Greene 2002b: 1022). They published the revamped history of the origin of the Ewe and gave it even more weight. The meanings attached to Notsie did change over time and have been shaped 'by a variety of political, religious and economic agendas' (Greene 2002: 15). Not only the missionaries used the story, but also the Ewe nationalist organisations striving for a united Eweland in the 1930s. More recently the story is used in a more localised fashion, such as by the Anlo in their Hogbetsotso festival, As Greene explains, '[with the festival] emphasis was placed not on a larger Ewe cultural identity, but rather on identifying and taking pride in Anlo culture' (Greene 2002b:

1028).[6] This process of shifting boundaries with regard to what and who is part of a certain group or community and the (re-)creation of a common history is what Anderson has referred to as an 'imagined community'. '[M]embers of even the smallest nation[7] will never know most of their fellow members, meet them or even hear of them, yet in the mind of each lives the image of their communion' (Anderson 2006 [1983]: 6). Its use is very much political. And the chosen or ascribed identification often situational (see also Grillo & Mazzucato 2008: 189-190).

- Structure of society

Every Anlo-Ewe is said to belong to one of the fifteen[8] patrilineal clans[9]. These clans used to be very important as they structured society. Each clan had a different function in the settlements and in the state at large. They owned the land, the palm groves and creeks, legal and ritual powers were vested in their leaders and clan members regularly met to discuss matters of common interest (Nukunya 1999: 22). Clan members were responsible for each other, they were held responsible if a clan member had done something wrong and would help their fellow clansmen when they were asked to do so, based on the belief that members of the same clan had a common ancestor. Membership of a clan implied a variety of distinguishing marks, names, food taboos, avoidances and injunctions and the possession of a clan cult, its own totems, funeral rites and ceremonies (*Ibid.*: 24).

Clan membership and its structuring function still play a role in Anlo. For example, the traditional governance structure of Woe is still founded on the system of clans and lineages. Hence it is important to understand its structure and functions. Local branches of clans are called lineages. Men and women in a lineage are able to trace relationships through the male line to a common ancestor (*Ibid.*: 26). Every lineage is named after its founding ancestor and shares symbols of interest and unity, such as a stool, an ancestral shrine, a lineage cult, a lineage head and common property (*Ibid.*). The head of a lineage is usually the oldest surviving member (in terms of age and generation, whereby the latter comes first). This person administers the common property, deals with all lineage interests, judges disputes and represents the lineage in the ward's governing body. He is also the chief priest of the lineage, believed to be the link between the dead

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[6] The festival was not only used to rally support to reinforce a sense of oneness, but also for development projects: 'the festival also attempted to encourage those who had left the area for greater economic opportunities elsewhere in Ghana to return psychologically, physically and financially so as to contribute to the development needs of the district' (Greene 2002b: 1028-1029). Interestingly enough the local might even become more local, as the town Woe during my fieldwork period organised a Woe homecoming, for which a pamphlet was written on the history of Woe which was intended to entice emigrated Woe inhabitants to come back and contribute to the development of Woe. The festival was held at Easter in 2004 and may have had something to do with the fact that the Hogbetsotso festival had not been held for a couple of years.

[7] Anderson wrote about his 'imagined communities' in his discussion of the concept of nation and nationalism. However, as he himself states, 'In fact, all communities larger than primordial villages where there is face-to-face contact (and perhaps even these) are imagined' (Anderson 2006 [1983]: 6). This also makes it a useful idea when discussing (boundaries and histories of) ethnic groups.

[8] The fifteen clans are: Lafe, Amlade, Adzovia, Bate, Like, Bamee, Klevi, Tovi, Tsiame, Agave, Ame, Dzevi, Vifeme, Xetsofe and Blu. The last clan is the clan of the strangers, they do not share a common ancestor but do share totems, taboos and all other attributes common to clans (Nukunya 1999: 21-22).

[9] Clan is defined by Nukunya as a group of people, both male and female, who are believed to have descended in the male line from a common putative ancestor and who share the same totemic and other observances (Nukunya 1999: 21).

and the living. Ancestors play an important role in the life of the lineage, providing powerful sanctions for accepted social behaviour (*Ibid.*: 26-27). Their role in life can still be seen in the customs of offerings of food and drinks (see also Fiawoo). In interview settings, when I was offered a drink, the first drop was always given to the ancestors.

In the past the lineage was largely a residential unit, being almost always confined to a certain part of the ward. However, not all members could continue living there due to demographic and economic factors. Consequently, at a certain point in time new settlements (*kope*) were started. This can still be seen in Woe, where I for instance lived in *Dekukope*, which is part of the Deku lineage. Every lineage has a relation to land, its right to the land of being that of usufruct (*Ibid.*: 28-30). The land belongs to the dead, the ancestors are called 'the owners of the earth' (*anyigba-towo*) (*Ibid.*: 29). This means that lineage land would not be sold easily. This is an important aspect of change which I will return to later. I would first like to examine the situation one step further down, namely at household level.

The smallest lineage unit is that of the hut, the home of a wife and her young children (*xo*). The huts of the wife (or wives)[10] are clustered on the compound of the husband, called *afe*. These households are usually grouped into larger residential units, so called clusters of families, of brothers and cousins. A family cluster is not static and the composition of households can change continuously. The cluster is led by the elder who is also responsible for the settlement of disputes. It is within this family cluster that social relations are, and always have been, much closer and more intimate than outside it (*Ibid.*: 33).

- 'Traditional Religion'[11]

The majority of the Anlo-Ewe have embraced Christianity and to a much lesser extent Islam, but about forty percent[12] of the Anlo-Ewe are adherents of their 'traditional religion' which is actually much more than simply a belief system. In fact it functions differently to the belief systems we are familiar with such as Christianity or Islam. It is not a fixed system of representations and practices shared by all adherents since there are different greater and lesser Gods (*trõwo*) and a lot of variation with the worship of the *trõwo* being a vital element (Meyer 1995: 61). A narrow understanding of religion as a belief system does not fit in with the reality (see also Rosenthal 2005). The misconception existed right from the start of research into the Anlo-Ewe 'traditional religion' with an emphasis on 'belief' and an underplaying of the importance of religious practices in the form of individual and collective rituals, which the Ewe regarded as also being a matter of bodily action (Meyer 1995: 61). These rituals and creation of

[10] The Anlo practice of polygyny and in the 1960s about 40 percent of the men had more than one wife (Nukunya 1999:31). Almost all net owners I met during fieldwork had more than one wife, one had even nine!

[11] Here too I use the term 'traditional' for want of a better term, and because this is the English term used in Ghana to refer to this / these religion(s), which is/are also referred to as African (traditional) religion. The word 'traditional' implies a false division between modern and traditional. Religion is enclosed in brackets because, as is explained in this section, the 'traditional religion' of the Ewes is more than a belief system, it includes religious practices (rituals) and cannot be separated from daily life and the environment. There is not even a word for 'religion' in Ewe and according to Meyer they prefer to use the word service (*subosubo*) to particular gods with particular names (Meyer 1995: 62).

[12] Forty percent is an average of the percentages of the three districts part of the Anlo-Ewe state: Ketu (46.7 percent), Keta (34.3 percent) and Akatsi (41.9 percent) (Ghana Statistical Service, 2000 Census).

maintenance of god objects (*vodou*) have however intrigued many European travellers, missionaries, colonial administrators and researchers (Rosenthal 2005: 183).

Figure 3.3 Keta lagoon and land use in Woe

Furthermore, religion should not be separated from culture, nature, politics or social relations (clans). Akyeampong has convincingly argued that the Anlo 'perceived the space they lived in as ecological, social and cosmological', the environment was invested with 'social meaning and rendered manipulable through religion and ritual' (Akyeampong 2001: 104). Religious leaders (being part of certain clans) played an important role in political life, kingship in Anlo had a strongly religious nature, and ecological occurrences (such as coastal erosion or floods) were related to the social and cosmological. The water-rich environment in which the Anlo-Ewe lived meant that water 'constituted a powerful spiritual fluid in Anlo religion' (*Ibid.*: 112; see also Greene 2002: 35). Ecological disorder – such as sea erosion – 'also signalled disequilibrium in the social and cosmological realms' (Akyeampong 2001: 104). The sea erosion that started to become serious at the beginning of the twentieth century 'presented a challenge to Anlo moral ecology for it undermined their understanding of their historic survival in the aquatic environment of south-east Ghana' (*Ibid.*: 106). This was even more so because in earlier times the sea had retreated thereby extending the littoral for settlement (600 feet between 1784 and 1907), which the Anlo had believed to be caused by their ancestors in partnership with local deities (see Chapter 8).

- Social changes

Culture is not a static thing, and the structural ordering of Anlo society described above has also been affected by changes. Whereas the structuring function of the clan and its lineages was central in the past with economic life being largely enclosed within the lineage, based on the fact that land and creeks were the only forms of capital and owned by the lineage, this all changed with the emergence of the money economy, Christianity,

education and British rule which led to new economic opportunities being created. It allowed ‘many young men and women to establish more control over their lives than had been the case in the past when they were much more dependent on their elders to generate the resources they needed for marriage and material accumulation’(Greene 2002b: 1034).

Important areas of the subsistence economy were gradually monetised. When cash crops were introduced (such as shallots), land ceased to be inalienable and other forms of work became available outside the lineage on cocoa plantations in Ashanti Region, and also in beach-seine companies in Anlo. People started earning money and with that money they could afford to buy their own plots of land (Nukunya 1999: 164-168). However, the selling of land meant that the lineage ceased to be a unit with a common interest in property and this also resulted in a large number of disagreements on land ownership which in turn led to the authority of the lineage elders being eroded (*Ibid.*: 173).

Education also caused a number of changes in Anlo. At school people learnt about other values, ideals and ways of thinking. Further education and also job opportunities made educated people migrate to commercial and industrial centres such as Accra, Takoradi, Kumasi, and ninety percent of school leavers left Anlo in order to find a job. It meant that lineages lost their educated members since, in their absence, they could not learn about traditional values and customs which was normally done by participating in cultural practices (*Ibid.*: 166-168). These changes also affected the power of the lineage elders since the advice of learned lineage members is now also sought, and family disputes are sometimes brought before them to be solved (*Ibid.*: 170). However, young, well-off members of the clan are starting to increase their influence in the lineage by being economically better off then other (older) members. Moreover, able men can rise to higher positions in the clan based on their ability and professional qualifications, rather than on age and birth (*Ibid.*: 170).

The establishment of formal courts, based on alternative law, provided people with alternative ways of seeking justice and at the same time partly undermined the power of the lineage and clan elders. Elders’ decisions were always regarded as final, backed as they were by the powers of the dead (ancestors). The main goal of the elders had been to restore peace and maintain harmony between lineage members, rather than metering out punishments and stipulating compensation for offences (see also Van Rouveroy van Nieuwaal 1999). More impersonal treatment was expected at magistrates courts (Nukunya 1999: 173).

The emergence of ‘modernity’ was heavily opposed by some in Anlo. The missionaries in Keta were unable to expand their work for about fifty years and in 1903 they had not really progressed beyond the situation that existed in the 1850s. The fact that many missionaries had died on the job was seen by the Anlo as ancestral disapproval. They feared that uncontrolled change would lead to ecological imbalance (Akyeampong 2001: 114). In time environmental disasters started to occur, such as coastal erosion, droughts, fire outbreaks, an earthquake. The feeling was that those who wanted to oppose these new influences used environmental disaster to advance their cause.

These days people are associated in ways other than just clan membership, for example via friendships, the church and professional associations. The nuclear family is slowly gaining importance over the extended family.

Economic context

The Anlo-Ewe are one of the four ethnic groups involved in artisanal fishing in Ghana, alongside the Fante and Effutu (Central Region) and the Ga (Greater Accra Region). Each of these groups are specialised in certain fishing techniques. The Anlo-Ewe are known for their beach seine fishing skills, the Fante and Effutu have specialised in a number of drift, gill and encircling nets far out at sea and the Ga in line fishing.

The Fante have been sea fishermen for a long time,[13] extending back to before, according to some sources, the first Europeans arrived in the area in 1471 (Pereira 1518 by Kimble 1937: 122 quoted in Odotei 1991: 168; Duarte Pacheco Perreira (1506-1508) quoted by De Surgy 1969 in Haakonsen 1992: 75). The Europeans also made use of the Fante's expertise when unloading their boats. The Fante adopted new fishing materials and gear from the Europeans and this resulted in new fishing techniques (Odotei 1991: 169-170). Their expertise was a well-known fact and they passed on their skills to neighbouring communities like the Ga and the Ewe (Overå 2001: 9).

The Ewe first engaged in sea fishing using the adii net,[14] which was introduced to them by the Fanti. However, the surf along the Anlo coast was very rough and 'There was a natural problem which the people on the Adangme and Ewe coast had to contend with. (...) On the area east of the Volta River Bosman[15] observed that there were 'violent burnings[16] which extend from this place (Volta River) to Ardra and further along the whole coast'. The rough nature of the sea must have hampered the growth of the fishing industry during this period' (Odotei 2002: 31) since it only really took off in the late nineteenth century when the beach seine was introduced to their area.

Fishing only really became a widespread activity when the beach seine technique, *yevudor*, was introduced. *Yevudor* means 'white man's net', referring to the fact that the net came from Europe. It was apparently introduced 'some time between 1850 and 1874',[17] by a 'prominent merchant couple' called John Tay and Afedima (Greene 1996: 165). He was a European slave trader (Akyeampong 2001: 58) who maintained close relations both with the Anlo political and military elite and with the European trade partners and later with the British (colonial) forces (Greene 1996: 136). She was 'a wealthy daughter of a prominent man called Anatsi' from Woe (Akyeampong 2001: 73, 133) and was the sister of Togbui Gbodzo[18] of Woe (Greene 1996: 165).[19] As the chief fisherman of Woe explained, 'Mama Afedima went to Europe. She was taken there by a white, they married and she came back and brought the net with her' (interview 32, 6-5-

[13] There has been some debate about this, for instance Law (1989) contests the idea that fishermen were active along the coast before the coming of the Europeans.

[14] The Adii (Fante) net is a sardinella drift net, also known as Ali (Ga Adangme) (Odotei 2002: 40).

[15] Here Odotei quotes William Bosman who was the Chief Factor for the Dutch at the Castle of St. George d'Elmina and who wrote '*A New Accurate and Description of the Gold Coast of Guinea*' (1705: 327-330).

[16] Bosman originally wrote in Dutch in 1700, but the text was quickly translated and circulated throughout Europe (1705). 'Burnings' is a literal translation of the Dutch 'branding' which is better translated as 'surf'.

[17] These dates correspond with the first mention of John Tay in European historical documents dating from the 1860s until his death in 1874 (Greene 1996: 165).

[18] This was the chief of Woe at that time.

[19] Afedima is also mentioned in Greene's book as the wife of Don Jose Mora, a Spanish slave trader: 'Gbodzo's maternal cousin Afedima, "was a wealthy woman … whom the European merchants used to entrust with money to buy slaves for them. She was [also] the first black woman [in Anlo] to befriend a white", and is remembered as the wife of Don Jose Mora'(Greene 1996: 74) (her additions between square brackets).

2004). It soon became the dominant fishing technique used by the Anlo-Ewe. Since then marine fishing is and has been central to their economic life along the coast of the Volta Region. 'In the great majority of towns in this area almost the whole population is engaged in sea-fishing (Nukunya 1999: 6).

The *yevudor* was an expensive net due to its expensive European twine and its considerable size (Akyeampong 2001: 136). Not all Anlo men had access to enough financial resources to buy a *yevudor*, and many therefore chose to work for the wealthier *yevudor* owners (Greene 1996: 166-167). Moreover, a lot of people were needed to handle the large nets and all of these factors led to the formation of fishing companies (Akyeampong 2001: 138, 141). According to Akyeampong, the origin of the term 'company' appears to be 'a conscious emulation of the commercial companies that proliferated in the Gold Coast from the late nineteenth century' and 'reflects the heavy infusion of capital by net owners, who were not necessarily fishermen' (*Ibid*.: 142; see also Overå 2001: 11). Investing in nets became a major capitalist endeavour on the part of clerks, teachers and traders who regarded it as an investment in their future (*Ibid.*: 141). Fishing companies were headed by the net owners as sole investors of capital in the company in which men and women recruited as wage labourers who were paid at the end of the day or at the end of a fishing season (*Ibid.*). Net owners claimed the largest share of the catch based on the capital investments made, with about one third being made before the introduction of the outboard motor and half after its introduction (*Ibid.*: 142). The *yevudor* owners, a new class of accumulators, acquired a reputation for their wealth in Anlo (*Ibid.*: 137).

From the 1920s onwards, some decades after the introduction of the *yevudor*, Anlo-Ewe fishing companies start to migrate along the coast (Nukunya 1975: 61 in Akyeampong 2001: 134). The introduction of the *yevudor*[20] led to fierce opposition in the coastal regions west of the river Volta where other fishing methods had been in use for centuries. The beach seine fishermen were accused of depleting the sea of its fish at the expense of others. De Surgy reasons that the nets were opposed 'because the symbiosis of the economy with the environment was destroyed' (De Surgy 1969: 113 in Vercruijsse 1984: 113). Fishermen, traditional rulers and colonial staff criticised the new nets for catching fish that were too small (at that time these fish were left on the beach to rot or were thrown back into the sea). Curling, Commissioner for the Eastern Province, wrote in 1908, 'On my return from Keta I passed putrefying heaps of tiny fish which had been thrown onto the land as not worth troubling about – there were thousands of fish about an inch long' (quoted in Akyeampong 2001: 140). The chiefs of Accra and Teshie also commented in the nineteen twenties that it was 'a most enormous and alarming construction apt of taking both young and large fish' and the Winneba chief commented that it 'would result in scarcity of fishes in our waters' (Vercruijsse 1984: 115).

Vercruijsse also suggests[21] that the 'the fierce resistance to the adoption of the adii and twuwii [Mfantse for *yevudor*] nets was due to the undermining of existing relations of production by new labour processes which incorporated a higher level of productivity, and to the introduction into canoe fishing of social relations of exploitation that were alien to the petty-commodity mode of production' (Vercruijsse 1984: 114). Although this reads as an explanation based on hindsight – influenced greatly by Vercruijsse's Marxian outlook – it was in fact a properly worked-out idea since it shows

[20] As well as other large expensive nets originating in Europe, such as Adii nets.

[21] After analyzing a Memorandum found in the National archives in Cape Coast (dated around 1923).

how the new large nets signified an important change in production due to fishermen becoming wage-earners instead of owning the tools with which they fished themselves (as with the *tenga* fishing). These nets also 'required less skill in their operation compared with the cast net, opening up the profession of marine fishing' (Akyeampong 2001: 138). Vercruijsse shows how a process of population concentration took place in the larger villages in the Central Region, to which experienced fishermen (from villages where fishing was on the decline) migrated as a 'resultant of the process of capital accumulation and scale enlargement in canoe fishing' (Vercruijsse 1984: 126). The new nets permitted larger catches, left fewer fish for the other fishermen and thereby led to a lowering of the price of fish at the market, due to an overabundance (*Ibid.*: 112-128). Since that time the beach seine has always been somewhat controversial. Even today the net is criticised because it catches too small fish. This is an issue we will return to later when we discuss the net.

In the *fishing sector* the Anlo-Ewe fishermen have specialised in beach seine fishing and have therefore created a niche for themselves within the Ghanaian artisanal fishing sector, which they are still able to exploit successfully. The Ghanaian artisanal fishing sector has an ethnic-technical divide whereby each of the active ethnic groups have specialised in one or more techniques which each demand their own space at sea. This specialisation has created room for migration, since each group uses other marine territories (see Chapter 5).

As we saw above, the Anlo-Ewe fishermen successfully migrated to numerous other places along the 500 km coastline of Ghana and they also managed to become socially embedded in these new locations. Negotiating livelihood space should be seen as an ongoing process, whereby the outcomes are never guaranteed. It has been studied at the three above-mentioned locations on the basis of the fishermen's (access to) assets. In the following section we describe the three research locations, their social structures and the facilities (physical and natural assets) available at village level.

The three cases

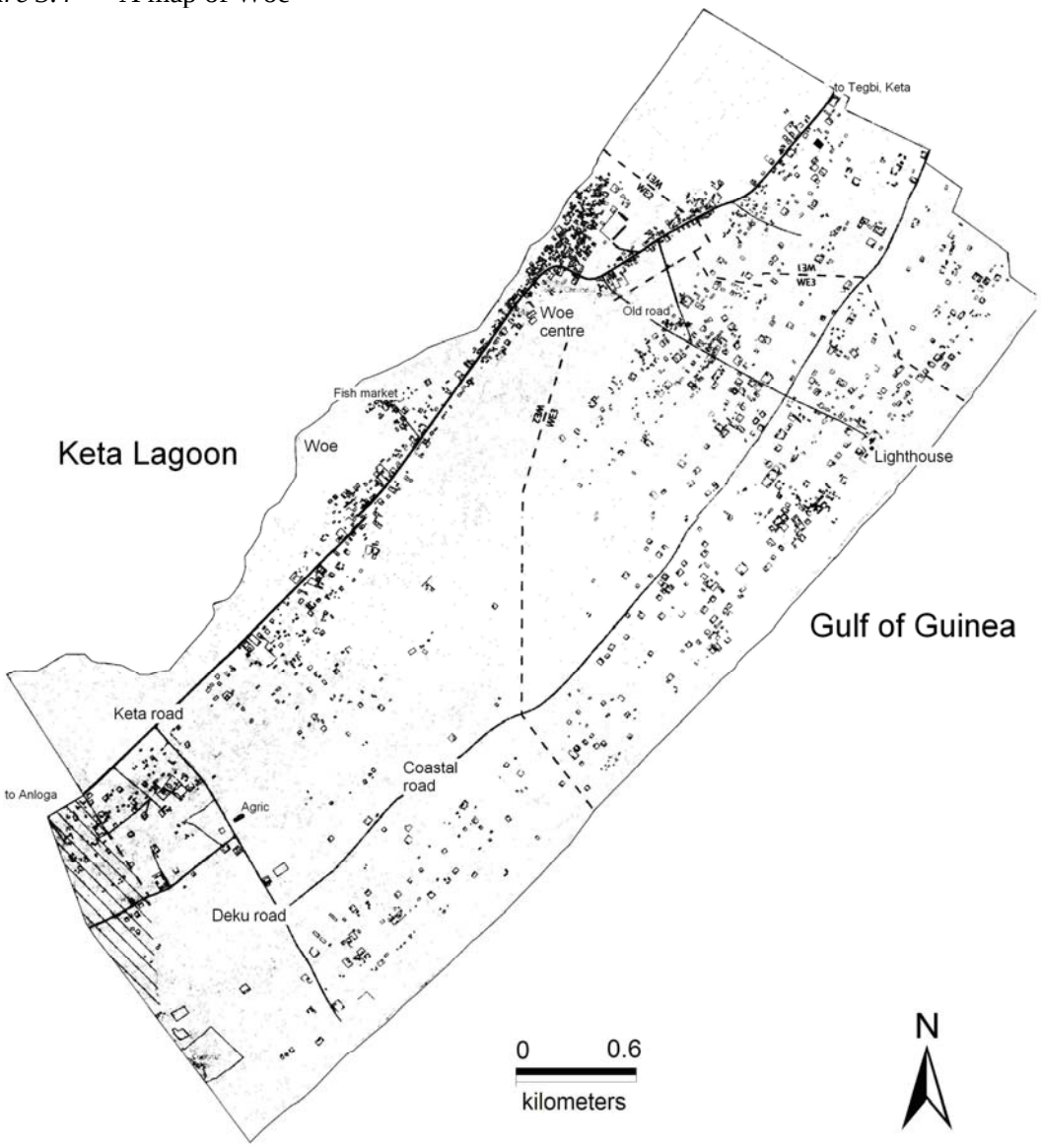
Woe

Woe is in Keta district, one of the two coastal districts of the Volta Region. Keta district[22] is located near the Volta estuary, about 160 kilometres to the east of Accra, the capital of Ghana. Keta District is a water-rich district, and approximately thirty percent of its surface area is covered by water bodies. The largest of these is Keta Lagoon, which is about 12 km at its widest section and 32km long.[23] It is the largest lagoon in Ghana and is a wetland protected area (RAMSAR site).[24] Woe lies at the widest point on the narrow coastal strip between Keta lagoon in the north and the Atlantic Ocean (Gulf of Guinea) in the south (see Figures 3.2 and 3.4).

Woe had a population of 8,545 inhabitants in the year 2000 (Ghana Census 2000), most of whom are actively engaged in fishing (in the lagoon and the sea) and farming. The sandy farmlands are dotted with wells which are used to water the land twice a day.

[22] The longitudes and latitudes for Keta District are: 0.30E and 1.05E and 5.45N and 6.005N respectively (www.ghanadistricts.com -> Volta -> Keta) [Access date: August 2007].
[23] Source: www.ghanadistricts.com -> Volta -> Keta [Access date: August 2007].
[24] Source: www.fcghana.com/eco_tourism/keta.htm [Access date: August 2007].

Figure 3.4 A map of Woe



Source: Woe town council, made by a volunteer of the Cross Cultural Solutions Program in Woe. Digitalised by author and the GIS department of AMIDSt.

The fertilised sand (in the past fish was used as a fertiliser) provides at least two harvests a year of a variety of crops: mostly tomatoes and shallots, but also okra, cassava and pepper. Mango and palm trees grow between the farmlands. In the past other sources of income were copra and coconut oil, but this is less important today because of all the trees that were destroyed in Woe when the Cape St. Paul wilt disease hit the Anlo coast in the 1930s (Akyeampong 2001: 10). The Anlo are also traditional poultry farmers. In 1891 Keta was the poultry market of the Gold Coast (Nukunya 1999: 7) and even today most Anlo-Ewe households keep chicken, turkeys or ducks.

- Geography of Woe

Woe is a large town in spatial terms (see Figure 3.4). Its geography reveals the importance of fishing with the houses being built either at the lagoon side or near the seashore, with the farmland in between. The old centre of town, with the market, is located at the lagoon side and not at the seaside due to the fact that the Anlo-Ewe were not sea fishermen from the outset. Initially the lagoon was more important as a source of their livelihoods'. This is historically confirmed by a Danish physician who visited the Anlo region in the 1780s and recorded that the Anlo towns faced the lagoon with their backs to the sea (Isert 1788 in Akyeampong 2001: 30).

Nowadays, the buildings in Woe are located along three un-tarred roads (Lighthouse road, the coastal road and Deku road) forming a rectangle together with the Keta road which goes through the old part of town. Lighthouse road connects Woe's market with the coast, and is called so because it ends at the lighthouse (Figures 3.4 and 3.5). The typical red-white striped building[25] was erected approximately a hundred years ago to mark Cape St. Paul which is a large extension of the continental shelf and a hazard for sea-traffic.

Figure 3.5 Lighthouse in Woe

Lighthouse road crosses the coastal road, which lies parallel with the beach. Between the coastal road and the beach lies about 200 – 400 metres of sandy land with numerous

[25] This lighthouse was built in 1900 by the Gold Coast Government (Nukunya 1999: 4).

compounds comprising either stone or palm fronted houses. This is where most of the marine fishermen live, and a matter we will return to in more detail later. If you follow the coastal road towards the west for about three kilometres, you arrive on the third road in Woe, namely Deku road, which runs parallel to lighthouse road, from the beach to Keta road. The District office of Agriculture is located along this road (Figure 3.4). Woe is therefore a spatially dispersed town, with houses scattered between areas of vast stretches of land, of which most is used for agriculture.

- Facilities in Woe

The marketplace is the heart of the town and is the location of a few shops, the town council building and the Chief's house. Since 2004, Woe also had a fish market which is located at the lagoon side (Figure 3.4) and which is financed as a HIPC project.[26] It was established in Woe because Keta lagoon never dries up at Woe, not even in the dry season. The same cannot be said of the lagoon near other towns. Woe also has a bird watching platform which was erected by the Wildlife Division because Keta lagoon is a wetland protected area which attracts foreign bird watchers. There is a guesthouse, *Abutia Guesthouse*, and a little restaurant named *Happy Corner*.

Most of the schools can also be found in this area. The first school opened in 1887 and in 2004 there were six schools, of which half have a Christian orientation (Woe Homecoming Pamphlet 2004: 6). Three are primary schools, one offers secondary education (Junior Secondary School – JSS) and two offer a combination of primary and secondary education. For further education Woe children need to go to Anloga or Keta. There is no centre for medical care in Woe and people therefore have to go to the neighbouring towns of Tegbi or Anloga for clinics, or to Keta for the government-run hospital. However, Woe's residents did start raising funds for a clinic in 2005 (data hogbetsotso fund raise).

Woe is dotted with church buildings. There are thirteen churches; such as the EP Church Ghana, the Global Evangelical Church, the Salvation Army, the Roman Catholic Church, the Apostolic Church, the Assemblies of God and the Church of the Lord. Woe was the third town to be Christianised in Anlo, after Keta and Anyako. This happened at the end of the nineteenth century when the Nord Deutsche Bremen Mission came to the town. The Anlo resisted the influence of the Europeans and their missionaries for a long time, or as Nukunya puts it: 'the missionaries met with (…) insurmountable opposition from the traditional rulers' (Nukunya 1999: 162). However, once the initial difficulties had been overcome, rapid progress was made (*Ibid.*: 172) and modernity and missionary education did appeal to some. Reverend David Bensah was one of the Christian Ewe pioneers, who managed to spread Christianity to Anloga, the traditional capital of Anlo. Until 1935, the Bremen Mission was the only denomination in Woe, and Woe Christians were known throughout the Anlo area for being very devout. In the 1960s, forty percent of Woe's inhabitants were Christian (*Ibid.*: 172).

In the 1960s, the majority of the citizens of Woe were adherents of the traditional religion, and worshipped Mawu, the greater god, lesser gods, ancestors and other lesser spirits. Mama Fungor is still the foremost traditional deity of Woe. A few cults are practised of which the Yewe cult, which is said to have been imported from Benin, is the most prominent. The fishermen also perform the main annual fisheries ritual where-

[26] HIPC stands for Heavily Indebted Poor Countries and is a World Bank and IMF initiative from 1996 with the aim of ensuring that no poor country faces a debt burden it cannot manage (http://www.imf.org/external/np/exr/facts/hipc.htm).

by a canoe leaves for the high sea with a cow or a ram[27] on board which is then offered to the gods. That ritual is performed before the main season and if the gods accept the offer (i.e. if the cow is not washed ashore) a bumper catch can be expected. Although the number of followers of the traditional religion is declining, the religion is still important in Woe and, when you walk around Woe, you soon start to notice sacred objects, places for offerings and other ritual markers of the traditional religion at trees, entrances of households and on the beach.

Akosua Village

Akosua Village is a small coastal village of 135 households, built on a strip of land between the sea (Gulf of Guinea) and the Muni lagoon. It is near Winneba, which is the capital town of the Effutu-Senya-Awutu district (Central Region), and it is ninety km to the west of Accra. According to the Ghana 2000 Census, Akosua Village has a total population of 630 people (our survey produced a total of 508[28]), with 305 males and 325 females. The census reported 128 households, with an average household size of 4.9 (we found 4.8) (Ghana Population and Housing Census 2000, Gazetteer, Volume 1). The village is said to be more than a hundred years old.

> 'My mother was Akosua, she had settled at Swedru –coming from Aneho (Togo) – and was selling food items, like *koko* [porridge] and *kaklo* [dough balls]. During her work, she was chatting with other people who told her about Winneba. So she decided to come and see what was going on and to try her trade here. Many people came to work on the beach in Winneba, business was good. So she decided to stay and came to live here. One of the fishermen who came was my father, he was called Aba. He also came to this place – where Hodji currently has his net. There were two coconut trees there, and my father claimed that area and made a shelter. That is how he met my mother. So my mother came there to marry my father. They gave birth to my five brothers and sisters, and I am the last born. They were using *yevudor* at that time, and after them many more came. So I will say that, as for settling here, it was my mother who discovered the place'. (interview 21, 20-2-2004)

Fishing (at sea and in the lagoon) is the main activity for the inhabitants of Akosua Village. Most of the men in the village are beach-seine fishermen who have migrated from their hometown in the Volta Region of Ghana in search of 'greener pastures' or are the children of 1st generation migrants. Even though they have been in this village a long time, they are still seen and still regard themselves as migrants because they are from a different language group (Bennett 2000: 12). The inhabitants of Winneba are mainly Effutu who are also engaged in fishing, although they use different techniques.

- Geography of Akosua Village

Akosua Village is a village of palm fronted houses with thatched roofs in compounds fenced with woven palm leaves which are located between the numerous coconut trees on the sandy beach and along an un-tarred road which ends in the village.

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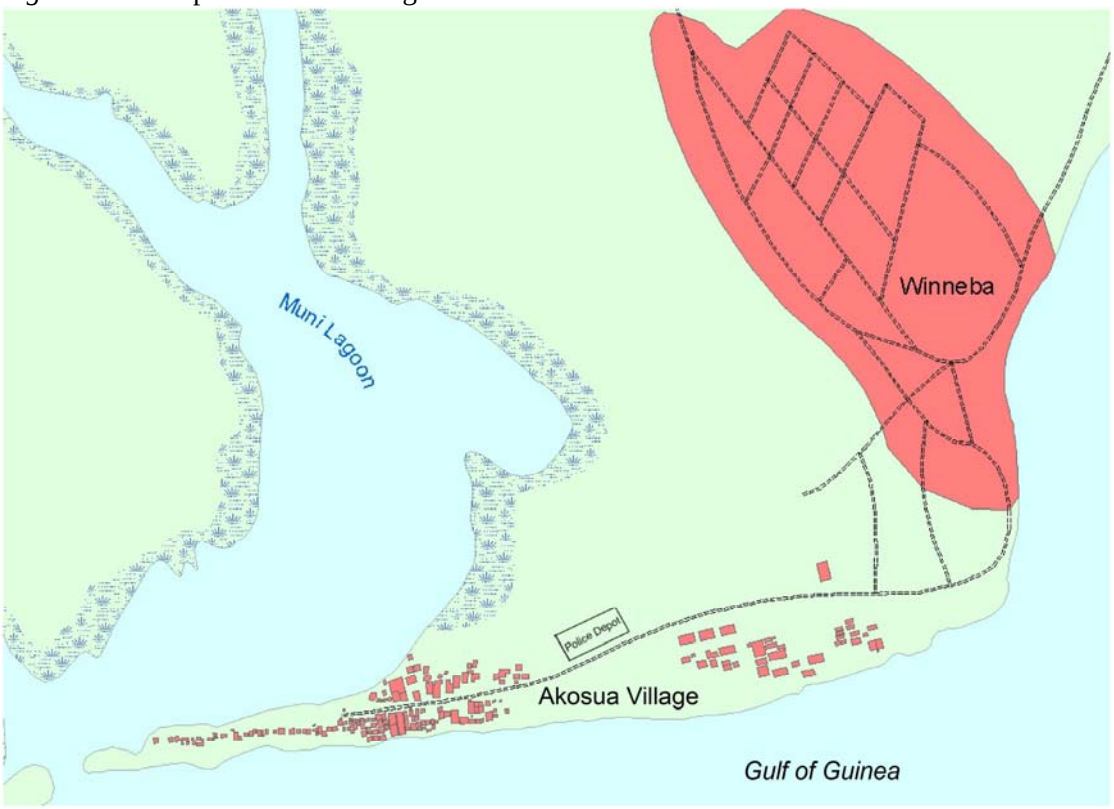
[27] Both the literature and the people spoken to on fieldwork speak alternatively of a ram or a cow. Most likely it is a ram that is sent to sea, since the ritual is called Agbodedefu, which means 'sending a ram to the sea' in Ewe (Akyeampong 2001: 121).

[28] If we add the 30 households we did not survey to the total based on an average of 4.8 per household, then the total population of Akosua Village would be 652.

Figure 3.6 Akosua Village

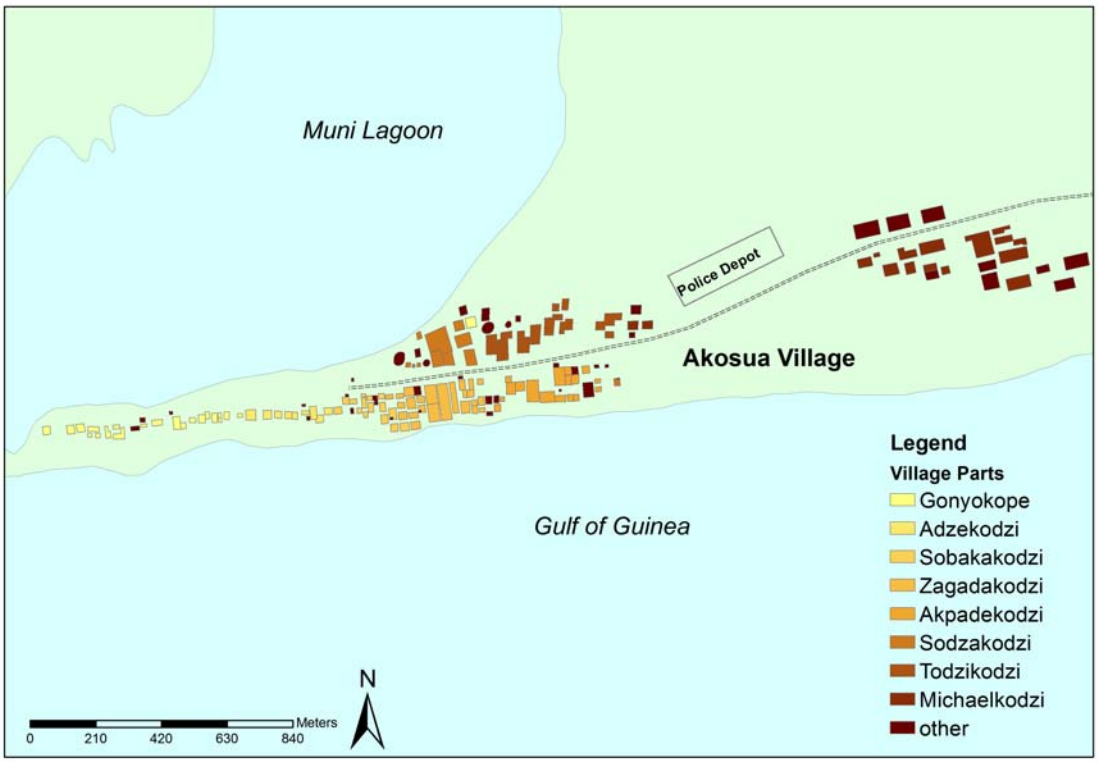
Figure 3.7 Map of Akosua Village



Source: author, digitalised by the GIS department of AMIDSt.

The village stretches almost all the way to the mouth of the lagoon (where it flows into the sea, at the end of the rainy season) to the Sir Charles tourist centre on the outskirts of Winneba. The village is divided into two parts by the Winneba Police Depot[29] (see Figure 3.7). The width of the coastal strip between the lagoon and the sea is between a hundred and 150 metres. The layout of the village is based on the settlement of the net owners and every net owner that started fishing set up a new 'neighbourhood' for his household and his crew's households.

Figure 3.8 Map of Akosua Village showing the village parts



Source: author, digitalised by the GIS department of AMIDSt. Map shows the spatial division according to net owner neighbourhoods.

Although not all the original net owners still fish today, the layout of the village still has the same basis and the village neighbourhoods still bear the net owners' names (see Figure 3.8). We made a map showing in which company the men of the households in Akosua Village work. The map shows that companies still are quite spatially clustered (see Figure 3.9).

The lagoon is situated on the south-western side of Winneba.[30] It is one of the ninety lagoons that can be found along the Ghanaian coast, but one of the six RAMSAR sites in Ghana.[31] The Wildlife Department (WD), responsible for the management of RAMSAR

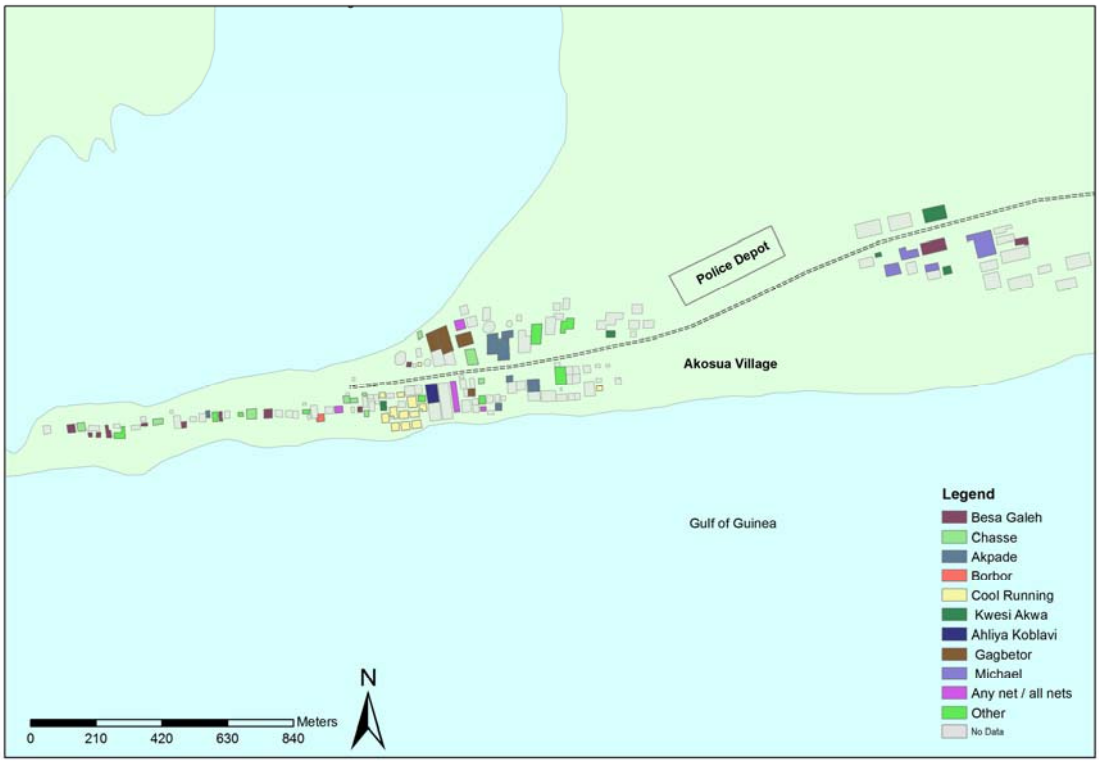
[29] The Police Depot is one of the six Police Training Schools in Ghana (www.ghanapolice.com). It was established in 1970 and trains recruits.

[30] At 05º22'N and 000º40'W (http://www.ramsar.org/profiles_ghana.htm).

[31] Ramsar is the name of a city in Iran where the Convention on Wetlands of International Importance was signed in 1971. It was decided that wetlands are ecosystems of considerable importance, com-

sites in Ghana, has a clear presence in the village since they have a little office at the entrance of the village, have placed signboards around the lagoon bearing nature-protection slogans, have erected a bird-watching platform and constructed public toilets and refuse dumps. The lagoon is about nine hectares in size. It is a closed lagoon, which occasionally opens to the sea and is fed by two rivers, the river Muni and Pratu (Koranteng *et al.* 2000: 487). If you cross the lagoon you come to a natural area with small woodlots and hills where deer are said to live (which are hunted during the annual deer-hunt festival in Winneba). The eastern fringes of the lagoon have a marginal covering of mangroves, and the grasslands bordering the lagoon to the west and north are used for grazing cattle and sheep.[32]. The lagoon is not connected to the sea but, after very heavy rainfall, the lagoon breaks through the sandbar and connects to the sea. The last time this happened was said to be at least five years ago. Whenever it happens, large numbers of fish enter the lagoon from the sea.

Figure 3.9 Map of Akosua Village showing spatial clustering according to companies



Source: author, digitalised by the GIS department of AMIDSt.

- Facilities in Akosua Village

Akosua Village is a small settlement of migrants and there are, therefore, few facilities in the village itself. These include a tailor's, lotto agent, a susu man, drinking bars, food stalls, a small shop and two churches. There are no schools, there is no clinic or doctor, nor any other significant facilities. As is the case in Woe, there is a bird watching platform, erected for tourists, that has hardly ever been used. The people of Akosua Village

parable to forests, rangelands and marine ecosystems.

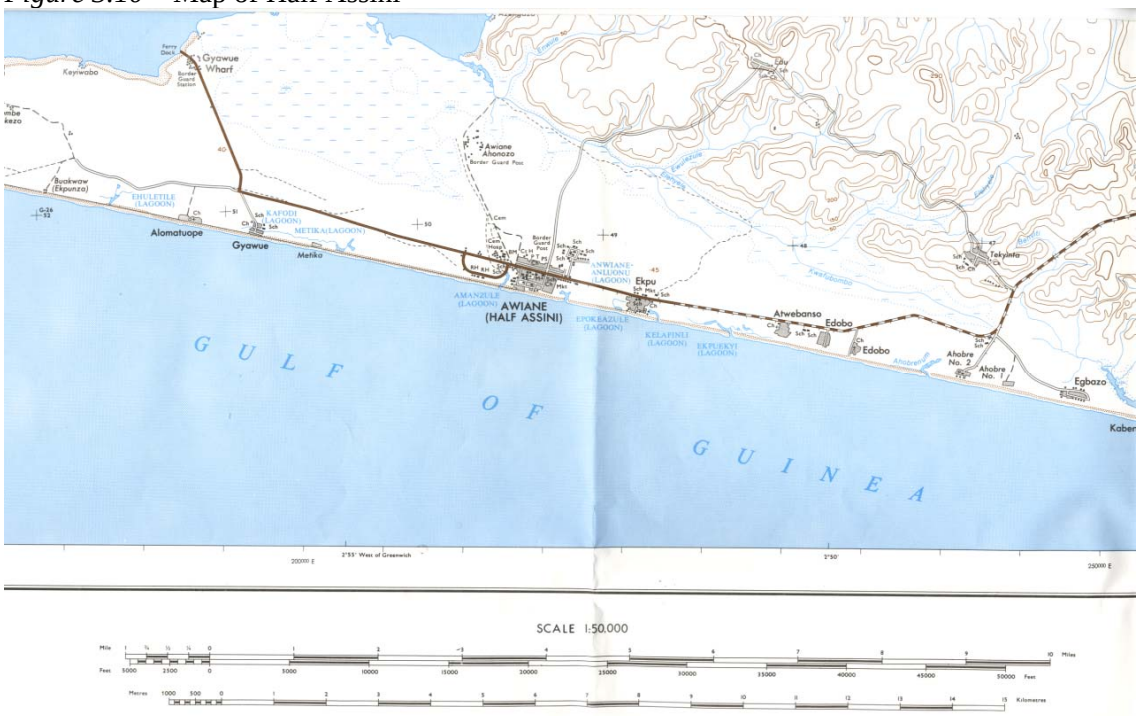
[32] http://www.ramsar.org/profiles_ghana.htm.

use the facilities in Winneba, which is half an hour's walk away and which has a hospital and clinics, pharmacies, banks, schools (from kindergarten up to university[33]), transport facilities, internet and copy shops or food item shops. The road to Accra was recently repaired and this has improved the link with the capital (shortening travel time and safety).

Half Assini

Half Assini is the capital of the Jomoro district, in the Western Region of Ghana. It lies approximately 300 km to the west of the Ghanaian capital of Accra, close to the Ivorian border (see Figure 3.10).

Figure 3.10 Map of Half Assini



Source: Survey of Ghana, sheet 0503C3.

Half Assini had a total population of 11,734 in 2000 (Ghana Census 2005). It takes about seven hours to get there by public transport from Accra. The road to Half Assini leads through numerous palm and rubber plantations via zigzagging roads over rolling hills. It is a completely different landscape to that found in Keta district where the Anlo-Ewe come from and which is flat and dominated by water, grasses and reeds. The Western Region receives most of Ghana's rainfall (1,732 mm annually) and its rainforest is nearest to the Ghanaian coast. Half Assini is a buzzing border town, with all kinds of trades represented. The Anlo-Ewe have been fishing in Half Assini since approximately 1937-1941 when the first 27 fishermen came. They left after some time and returned in 1968 to stay. They were the first fishermen to settle there, and saw the local

[33] The University of Education Winneba was established as a university college in 1992 and became a university in 2004 (www.uew.edu.gh).

Nzema only use the cast net from the beach (Anlo-Ewe chief fisherman, December 2005).

Figure 3.11 Half Assini

- Geography of Half Assini

The Anlo-Ewe live on the coast, in the western part of town (right arrow on map, Figure 3.12). Their neighbourhood is surrounded by open fields which clearly mark out their area. The eastern part of the Ewe neighbourhood, and the beach bordering it, functions as an unclearly demarcated public refuse dump and this has created a rather unhygienic situation. The beach is also used at night as toilet when the public toilet is closed. The western border of the neighbourhood is marked by a small pond-like lagoon which can be passed by walking on the beach. A short walk further brings you to a little settlement named Bungalow (left arrow on map, Figure 3.12),[34] hidden between the coconut groves with rows and rows of coconut trees, waters with mangroves which slowly merge into tropical forest. This is also an Ewe settlement, and such Ewe settlements continue all along the remainder of the Ghanaian coast up to the Ivorian border. The Ewe are not the only migrant-fishing group, however, and there is also a Fanti neighbourhood in the eastern coastal part of town. Only a few Nzema fishers are present in the area. Interestingly enough Jomoro means 'land of fresh fish eaters'. However, the Nzema are mainly engaged in coconut production alongside some other farming activities. Most of the young Nzema boys try to find work in Abidjan as drivers, artisans or in construction (interview 80, 20-10-05).

- Facilities of Half Assini

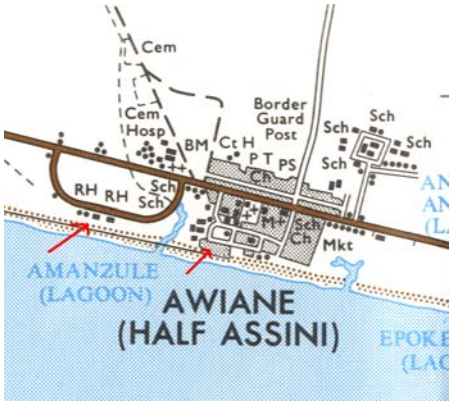
As district capital it has a wide range of facilities such as banks, a hospital, schools up to SSS level, a court, telecommunications and postal services and the national newspapers are also available. Jaway Wharf is nearby and is a busy market with traders from Ivory Coast. There are public transport links with Takoradi and for the Ewe there is a direct bus service with Woe. Tickets cost 100,000 cedis (9 euros) and the journey takes

[34] See Chapter 2.

about nine hours. The bus leaves Woe on Wednesday evening and arrives on Thursday morning. It returns to Woe on Saturday, arriving on Sunday morning. The bus therefore arrives in Woe on the non-fishing days, thereby reflecting the importance of fisheries-related customers for the bus service.

A public toilet is available for the Ewe in Half Assini. It is kept clean by personnel but it is closed at night. Water comes from a pipe and the villagers can buy buckets for 200 cedis (two eurocents) each (between approximately 7 and 19 hours) and from a well. The Ewe also have access to electricity, because their neighbourhood is in the town itself.

Figure 3.12 Detail of map of Half Assini



Source: Survey of Ghana, sheet 0503C3.

Assets and access of fisher households

In the previous sections we were able to outline the natural environment, physical assets at village level and social structures of the three research locations. In this section we examine the human capabilities and physical assets of our research population in more detail. In the next chapter we discuss the financial assets needed for a fishing livelihood in Ghana in beach seine fishing, and also what the fishing activity delivers in terms of financial assets. All this should give us a better idea of the Anlo-Ewe beach seine fishermen's livelihoods.

The aim of this section is, therefore, to gain a better insight into the livelihoods of Anlo-Ewe beach seine fisher households, using a household survey in the three research locations. In Akosua Village (2004) and Half Assini (2005) it was possible to include quite a large percentage of the beach seine fisher households because they live together when on migration. This was more difficult to do in Woe (2004 and 2005) because Woe is much larger and the beach seine fishermen live in different parts of the town in between farmer and other fisher households. As most of the marine fishermen live in the neighbourhoods bordering the Atlantic, the household survey was conducted there

(Aklorbordzi, Dekpekope and Lighthouse area) because that offered the best chance of surveying fisher households.[35]

The survey was not conducted on the basis of a full livelihood analysis. Instead the aim was to obtain additional information at household and individual levels, mainly about human and physical assets. At the household level the survey revealed the composition of the households and their access to electricity, water and toilet facilities, as well as the household ownership of assets such as fishing and processing equipment, fridges, sewing machines, cars and bicycles livestock, radio and TV. At the individual level we enquired about the primary and secondary activity of the household members (jobs, schooling), children's education, their age, marital status and religion.

Woe

Most of the sea fishermen live between the coastal road and the ocean in Aklorbordzi, Dekpekope and Lighthouse area. We conducted a household survey in these areas in order to obtain a better idea of some of the assets of fisher households. In the section above we have already sketched the natural and physical assets at town level. The household survey enabled us to acquire additional information on human and physical assets at household or individual level. Besides this we asked some basic questions to gain a better understanding of our research population (age, marital status, religion) and of the characteristics of people which are used as a basis for socialising and acquiring social capabilities. Gender is one such characteristic and provides a basis for women processors to join a woman's group. Religion is another given that church membership might provide access to a certain savings group.

Forty-eight percent of the population were female and 52 percent male. About 58 percent of the population were single (this corresponds with the high number of people under twenty – 51 percent), and 36 percent were married. Only eight out of 598 were divorced and thirty people were widowed (five percent).

- Research population

The average age of the research population (N=598) in Woe was 26 with the oldest person being 88 years old and the youngest a baby. Figure 3.13 shows the spread in ages of the population used in the sample. Twenty-five percent were between zero and ten years old, 26 percent were between 11 and twenty years old, 17 percent between 21 and thirty years, meaning that 68 percent were younger than thirty.

All the people living in the households were related to each other (partners, children, grandchildren and other kin). None of the households had non-kin members (Figure 3.14).

About two-thirds (64 percent) of the sample population were Christian, while the rest were adherents of the traditional religion (Figure 3.15). If we compare this data with the district data of 2000, we see that the percentage of Christians in Woe is higher than in the district (55 percent). However, the percentage of adherents to the traditional religion was the same (34 percent) (Ghana Statistical Service 2005).

[35] See Chapter 2 for more details on how the surveys were performed and what the possible implications. are.

Figure 3.13 Woe: age groups

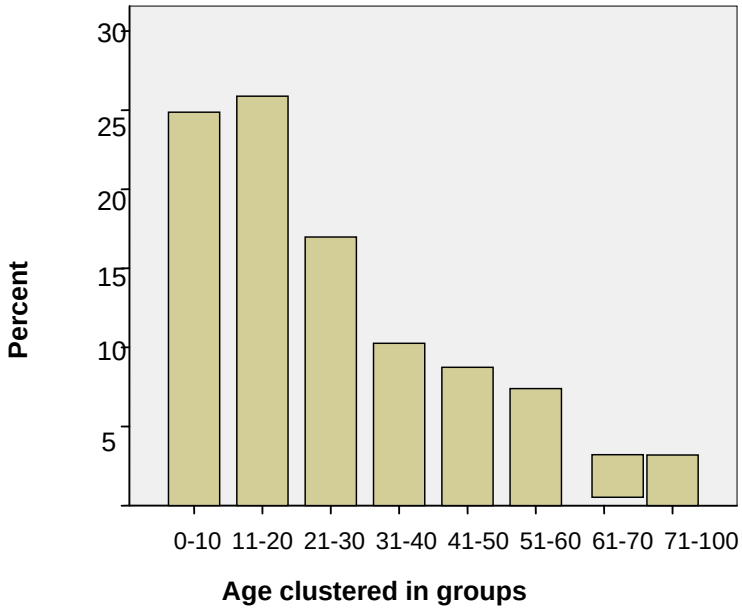


Table 3.1 Woe: marital status

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Single	344	57.5	57.7	57.7
	Married	214	35.8	35.9	93.6
	Divorced	8	1.3	1.3	95
	Widowed	30	5	5	100
	Total	596	99.7	100	
Missing		2	0.3		
Total		598	100		

Figure 3.14 Woe: relation to the household head

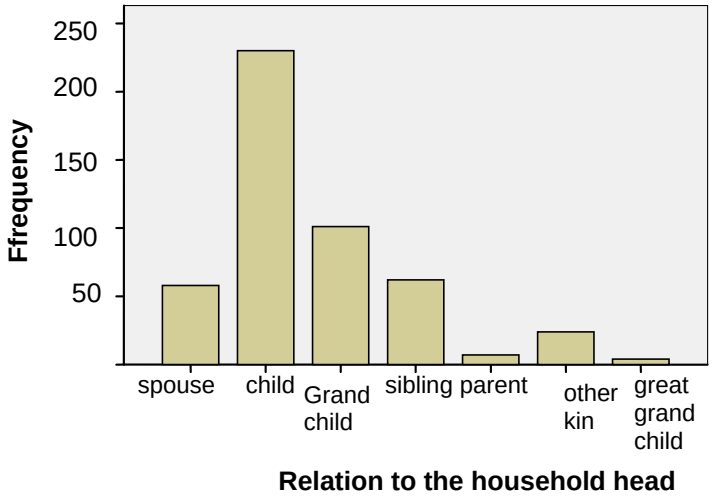
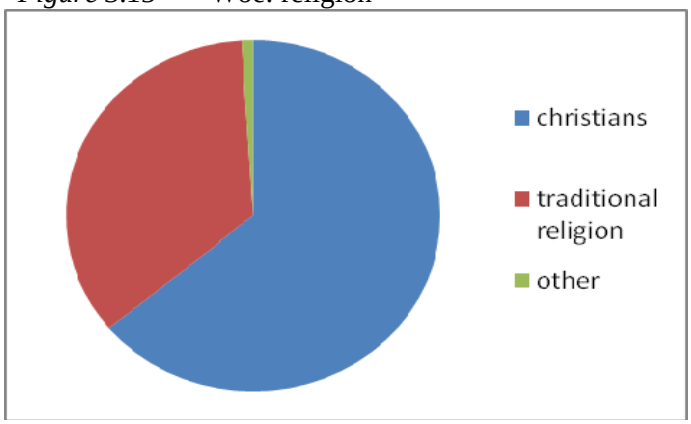


Figure 3.15 Woe: religion



- Human assets of the research population

Sixty-five percent of the research population had not been educated beyond primary school. 27 Percent had not been to school at all (Table 3.2).

Table 3.2 Woe: educational level

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Illiterate	139	23.2	26.8	26.8
	Kindergarten	5	0.8	1	27.8
	Primary school	191	31.9	36.9	64.7
	Junior secondary school	85	14.2	16.4	81.1
	Middle school form	56	9.4	10.8	91.9
	Senior secondary school	34	5.7	6.6	98.5
	Vocational training	3	0.5	0.6	99.1
	University	5	0.8	1	100.1
	Total	518	86.6	100	100
Missing	Not applicable (too young for school)	76	12.7		
	Missing values	4	0.7		
	Total	80	13.4		
Total		598	100		

When asked about their professions, no-one answered to being unemployed (Table 3.3). The respondents were asked to state the profession per household member. If you cross tab age groups and ‘having a job’, we see that twelve people between the 21 and thirty years old did not have a job, most probably because they were still participating in education.

Table 3.3 Woe: age and having a job

Age group	*Frequency*	*Have a job?*
0-10	148	1
11-20	154	25
21-30	101	89
31-40	61	60
41-50	52	51
51-60	44	43
61-70	16	15
71-100	19	19
Total	595	303

Eighty percent of the working male population in our sample were fisherman by profession (Table 3.4), of which only a small percentage were net owners (less than one percent). Of the working female population 84 percent worked as fish processors. Woe has the highest percentage of farmers in our total sample (19 percent).

Table 3.4 Woe: jobs by sex

	Total	*Female*	*Male*
Total	598	292	306
Job	305	157	148
Fisherman	120	4	116
Net owner	3	0	3
Processor	138	132	6
Trade	25	22	3
Entrepreneur	18	10	8
Construction	7	0	7
Agriculture	57	22	35
Administration	7	1	6
Apprentice	6	4	2
Religious	1	0	1
Bar	2	2	0
Other	0	0	0

- Physical assets of the research population

Only two households had electricity (out of the 107!) (1.9 percent). Twenty-two households had a water supply (pipe or well) on their compound (20.6 percent) and eleven households had toilet facilities on their compound (10.3 percent). The households that did not have water on their compound obtained it from outside their compound. In Woe this meant, in most cases, from a well on the neighbouring land (Table 3.5).

The respondents were also asked where they went to the toilet in the event that there were no toilet facilities on the compound. People were able to give more than one answer (bush, beach or Public Toilet [PT]). The vast majority, 71 percent, answered the bush (N=76), a much smaller group answered the beach (N=11; ten percent) and about 21 percent answered that they made use of the PT. This fisher neighbourhood is a relatively long way from the centre of Woe, where facilities are probably better. However, for the whole district, 46 percent said that they had to use the bush as a toilet (Ghana Statistical Service 2005).

Table 3.5 If no water is available in the compound, where do you get your water from?

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Community pipe/well	4	3.7	4.7	4.7
	Outside the house	58	54.2	68.2	72.9
	Neighbours	6	5.6	7.1	80
	Public / community pipe	1	0.9	1.2	81.2
	Shared well	14	13.1	16.5	97.6
	Farm well	2	1.9	2.4	100
	Total	85	79.4	100	
Missing	0	22	20.6		
Total		107	100		

Most of the households in Woe possess poultry with 84 percent owning chickens and 68 percent ducks. About one-third of the households also have some small ruminants like sheep (35 percent) and goats (thirty percent), and about one-third of the households own cats (38 percent) and/or dogs (22 percent).

Only one household possessed a refrigerator, three households had a car, while about a fifth of the households possessed a bike (21 percent).[36] Three-quarters of the households owned a radio (35 percent of which more than one) and eight percent a television.[37] Another twenty percent of the households owned a sewing machine (fourteen percent of which more than one). Two households had a corn mill.

- Fishing gear

Seventeen of the 107 households owned a *yevudor* (sixteen percent), while only three men in the sample gave their profession as being a net owner. This either means that those conducting the survey recorded the net owners as being fishermen or that quite a large number of nets lie dormant.[38] Almost half of the households in our sample (45 percent) owned a Kuekpa net[39] (lobster net), 36 percent owned a sovi net, and thirteen percent a lagoon net and thirteen percent a cast net. Often households owned a number of nets and often kuekpa owners also owned sovi nets. Seventeen households owned a canoe (sixteen percent), and nine also had an outboard engine.

Table 3.6 Woe: fish processing techniques used[40]

	Frequency	*Percentage*
Smoking	60	56
Drying	52	49
Frying	4	4
Salting	53	50
Fresh trading	14	13
	N=107	

[36] Fourteen percent of those bicycle owning households owned more than one bike.

[37] The people who do not have access to electricity – and the majority of this sample did not – use car batteries to run their TVs.

[38] Of five nets comments were made such as: 'broken' (twice), 'taken to Abidjan', 'not yet in use' and 'long ago'.

[39] Kuekpa means something like 'carry your own thing home'; the fishermen aboard the canoe all own their own piece of net (hh survey Woe additional notes 13-8-2004).

[40] In 16 surveys held in Woe I did not enquire about processing techniques.

More than eighty percent of the working female population was actively involved in processing fish. Smoking was the most common technique, followed by salting and drying (Table 3.6). A much smaller percentage sold fresh fish or fried it.

Table 3.7 Woe: ovens used

	Frequency	*Percentage*
Chorkor	11	10
Round mud oven	47	44
Xagbador	55	51
Smoking oven	13	12
	N=107	

Akosua Village

- Research population

Of the 135 households, we managed to survey 105 (almost eighty percent of the village). The households left out of our survey were households where there was repeatedly no one home.

The average age of the research population in Akosua Village was 24.6 years old, the oldest person being 91 years old and the youngest one year old. Figure 3.16 shows the spread in the ages of the sample population. Twenty-five percent were aged between zero and ten, 23 percent were between eleven and twenty, 21 percent were between 21 and thirty, leaving seventy percent who were younger than thirty. Most of the respondents of the survey indicated that they came from Anloga (seventeen), Woe (sixteen), Dzita (forteen) and Tegbi (ten); in total 54 percent. This means that the population is quite mixed as many more hometowns were mentioned, such as Keta, Srogboe, Blekusu, Kedzi, Atiteti, and Vodza. Also remarkable is that respondents from sixteen households answered to come from villages in the Central Region (being Effutu or Fanti).

The composition of the households in Akosua Village is comparable with Woe (Table 3.8, Figure 3.17), except that the number of other kin and non-kin household members is larger (the latter was non-existent in Woe). This relates to the fact that households on migration are more mixed (see the comparison section).

Sixty-four percent of the population[41] were Christian, 33 percent were adherent of traditional religion and two percent were Muslim (Figure 3.18). This two percent represents nine people, eight of which belonging to one household recently moved in from Cape Coast. They were the only Muslims of the total sample.

- Human assets of the research population

Fifty-seven percent of the research population had not participated in education beyond primary school, and 24 percent had not been to school at all (Table 3.9). However, the number of people who had reached JSS level is remarkable, being 21 percent. Another interesting figure is that 36 children of the village were in kindergarten. This might be explained by the fact that the Kindergarten is located nearby the village and was established as a project organised by the Anlo-Ewe assembly member.

[41] This is the valid percentage. The missing value = N 53 (ten percent).

Figure 3.16 Akosua Village: age groups

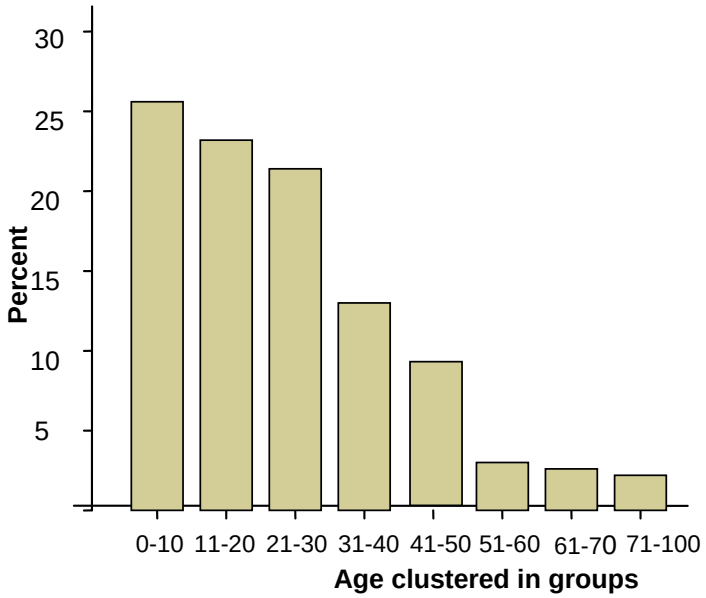


Table 3.8 Akosua Village: marital status

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Single	282	55.5	56	56
	Married	187	36.8	37.1	93.1
	Divorced	23	4.5	4.6	97.6
	Widowed	11	2.2	2.2	99.8
	Other	1	0.2	0.2	100
	Total	504	99.2	100	
Missing	9	4	0.8		
		508	100		

Figure 3.17 Akosua Village: relation to the household head

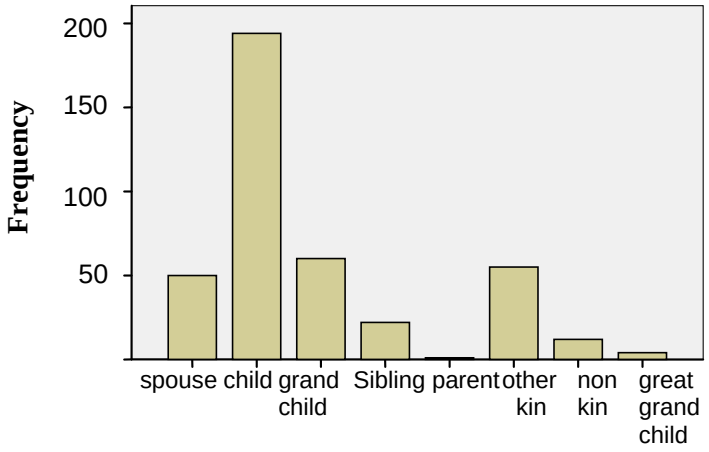


Figure 3.18 Akosua Village: religion

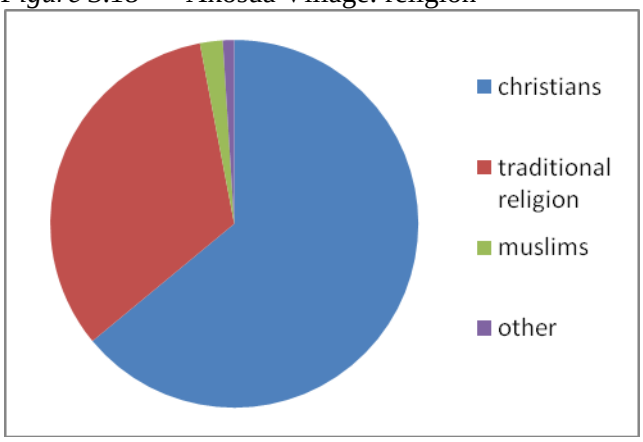


Table 3.9 Akosua Village: educational level

		Frequency	*Percent*	*Valid Percent*	*Cum. Percent*
Valid	Illiterate	106	20.9	23.9	23.9
	Kindergarten	36	7.1	8.1	32
	Primary school	147	28.9	33.1	65.1
	Junior secondary school	95	18.7	21.4	86.5
	Middle school form	41	8.1	9.2	95.7
	Senior secondary school	6	1.2	1.4	97.1
	Vocational training	11	2.2	2.5	99.6
	University	2	0.4	0.5	100.1
	Total	444	87.4	100	
Missing	0 not applicable (too young for school)	55	10.8		
	9	9	1.8		
	Total	64	12.6		
Total		508	100		

Two women answered ‘no job’ when they were asked whether they had a profession, and six of the people in the 21 to thirty age group did not state a job – most probably because they were still attending school (Table 3.10).

Table 3.10 Akosua Village: age and having a job

Age group	*Frequency*	*Have a job?*
0-10	128	3
11-20	116	36
21-30	107	101
31-40	65	64
41-50	45	45
51-60	15	15
61-70	13	13
71-100	11	9
Total	500	286

Almost all (94 percent) of the men with a job in Akosua Village were active fishermen, with nine percent being net owners (Table 3.11). Being a net owner here does not necessarily have to mean you are active as a net owner. Sixty-five percent of the working female population worked as fish processors. Eleven people indicated that they worked as bartenders. This is less than 1 percent of the total but, viewed from another angle one could say that this represents a lot of bars in such a small village. A relatively large number of people (N=17) were learning a trade (as apprentices).

Table 3.11 Akosua Village: jobs by sex

	Total	*Female*	*Male*
Total	508	261	247
Job	290	151	139
Fisherman	121	3	118
Net owner	14	1	13
Processor	102	98	4
Trade	35	32	3
Entrepreneur	29	19	10
Construction	4	0	4
Agriculture	3	2	1
Administration	4	1	3
Apprentice	17	12	5
Religious	0	0	0
Bar	11	9	2
Other	5	0	5

- Physical assets of the research population

Of the 105 households of the survey, two were connected to the electricity supply, these households lay in Winneba and were Fanti households.[42] Five houses had water on their compound, and these houses also sold their water to the other villagers. Figure 3.19 shows that two of these households with water provided water to at least seventy other households. The yellow houses indicate that these households collect their water at waterpoint 1and the orange houses at waterpoint two. The people in 85 percent of the households with no toilet stated that they use the public toilet while the remaining 15 percent used the beach and / or bush.

Almost sixty percent of the households have ducks, 40 percent chicken, 28 percent goats, 32 percent cats and 23 percent dogs.

- Fishing gear

25.7 percent of the households own a *yevudor*, with seven percent of them even owning two *yevudors* (N=2). Seventy-three percent of the owners also use the *yevudors* (N=19). In the household survey we counted thirty-three dragnets which had been made purposely for the lagoon (28.6 percent of the households has at least one; thirty of 105).[43] If you compare that figure with the presence of about fifteen beach-seine nets (used and dormant), it is quite a significant amount.[44] The lagoon dragnet is, however, a

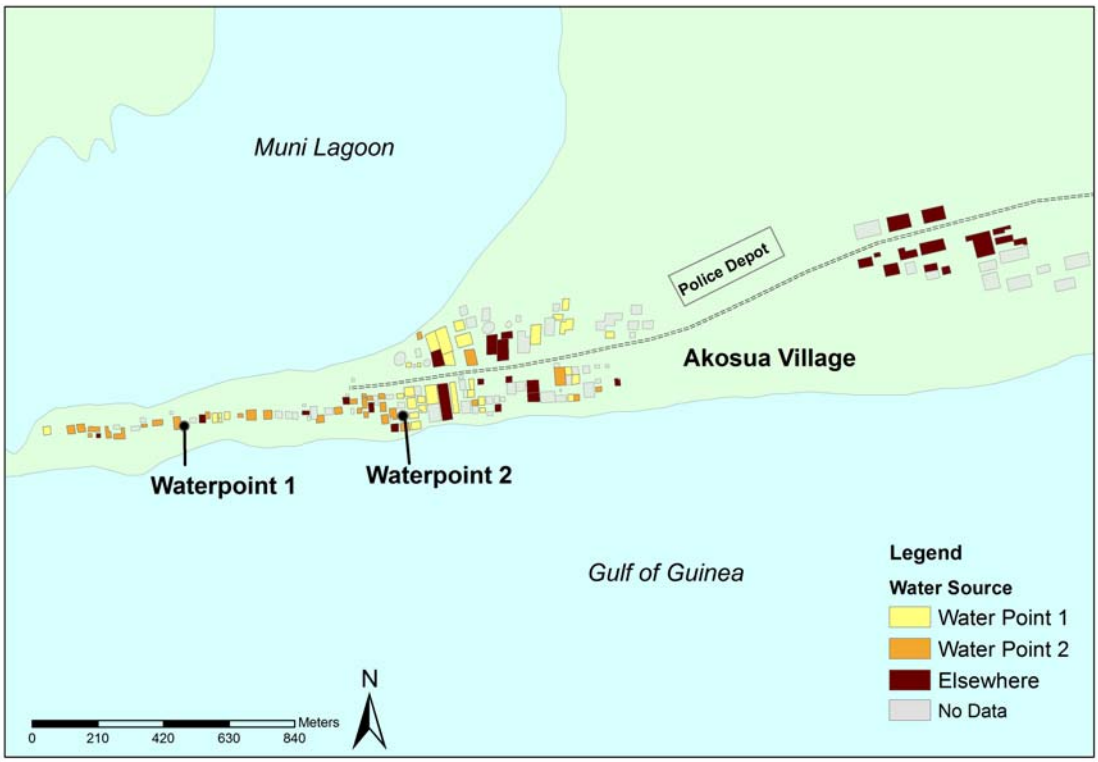
[42] These households were included in our sample as they had fishermen fishing in Akosua Village. One of them was a net owner of a beach Seine in Akosua Village.

[43] Of the 130 households we counted, we interviewed 110 as part of the survey. This means that more than twenty-five percent of the households own a lagoon dragnet.

[44] In 2004 there were ten fishing companies actively working in the village.

much smaller net than the one used at sea. Some fishers started with the lagoon net, which they gradually expanded to become a net for the sea. The use of the lagoon net in Akosua Village is contested by the authorities from Winneba (see Chapter 8).

Figure 3.19 Akosua Village: where do the households collect their water



Source: author, digitalised by the GIS department of AMIDSt.

Three households own a lybia net (two of them are Fanti households, already owning other gear) and twelve households own a cast net. Twenty-two households (21 percent) have a canoe and some households own more than one canoe (N=6; owning two or three canoes), giving a total of 28 canoes. Thirteen households claim to have an out-board motor with 77 percent of these households having one outboard motor and the rest having two or three, giving a total of seventeen outboard motors. There were no other types of fishing gear.

Thirty-three percent of the households have a smoking oven for processing fish (Table 3.12). Some households have more than one and in total there are 96 ovens in the village, resulting in an average of 2.9 ovens per processing household.

Four households have a fridge which they use for private purposes. There are six cars in the village, all used privately and four bicycles. 87 percent of the households have at least one radio and in total there are 107 radios in the village and nine televisions (these often work on car batteries). Twenty percent of the households own a sewing machine (N=20). Seven of these households own more than one sewing machine, bringing the total number of sewing machines to 29. The other assets mentioned were grasscutters, turkeys, papaya trees, a wine tree and bee hives.

Table 3.12 Akosua Village: how many smoking ovens does this household have?

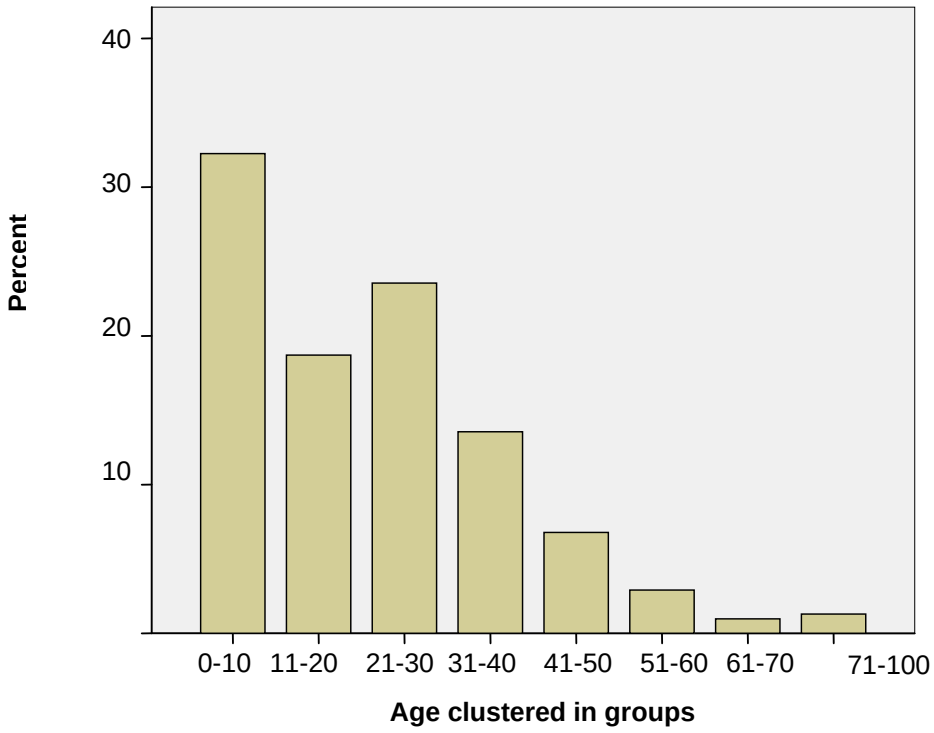
		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	1	7	6.7	21.2	21.2
	2	8	7.6	24.2	45.5
	3	6	5.7	18.2	63.6
	4	9	8.6	27.3	90.9
	5	1	1	3	93.9
	6	1	1	3	97
	8	1	1	3	100
	Total	33	31.4	100	
Missing	0	72	68.6		
Total		105	100		

Half Assini

- Research population

The average age of the research population in Half Assini is 22, with the oldest being eighty years old and the youngest a baby. Figure 3.20 shows the spread in ages of the population. One third of the population is younger than ten years old. This is quite a high percentage. Filling in the household surveys in Half Assini often meant that we needed more than one form because the households comprised more than ten people. Another twenty percent were between eleven and twenty meaning that half of the Ewe

Figure 3.20 Half Assini: age groups



population in our sample in Half Assini were younger than twenty. Seventy-five percent were even younger than thirty meaning that Half Assini has a very young population. Most of the respondents of the household survey came from Tegbi, Blekusu and Woe. Also mentioned were Dzita and Agona.

Fifty-eight percent of the population were female and this too is a considerably larger number than in Woe and Akosua Village (Table 3.13). If we cross tab age group with sex in Half Assini we see that there is a remarkable shortage of boys/men between eleven and twenty years old. The only larger group of men is those aged between 31 and forty. However, the sample total of Half Assini is quite small being 310 (compared to 596 in Woe and 508 in Akosua Village), which may account for these remarkable figures.

Table 3.13 Half Assini: age group by sex

		sex		*Total*
		female	*male*	
Age clustered	0-10	53	47	100
in groups	11-20	42	16	58
	21-30	41	32	73
	31-40	18	24	42
	41-50	11	10	21
	51-60	6	3	9
	61-70	3	0	3
	71-100	4	0	4
Total		178	132	310

If we examine the marital status of people in Half Assini we see that, as might be expected from such a young population, 55 percent of the population are single and the majority of the rest are married (Table 3.14). Only fourteen people are divorced or widowed.

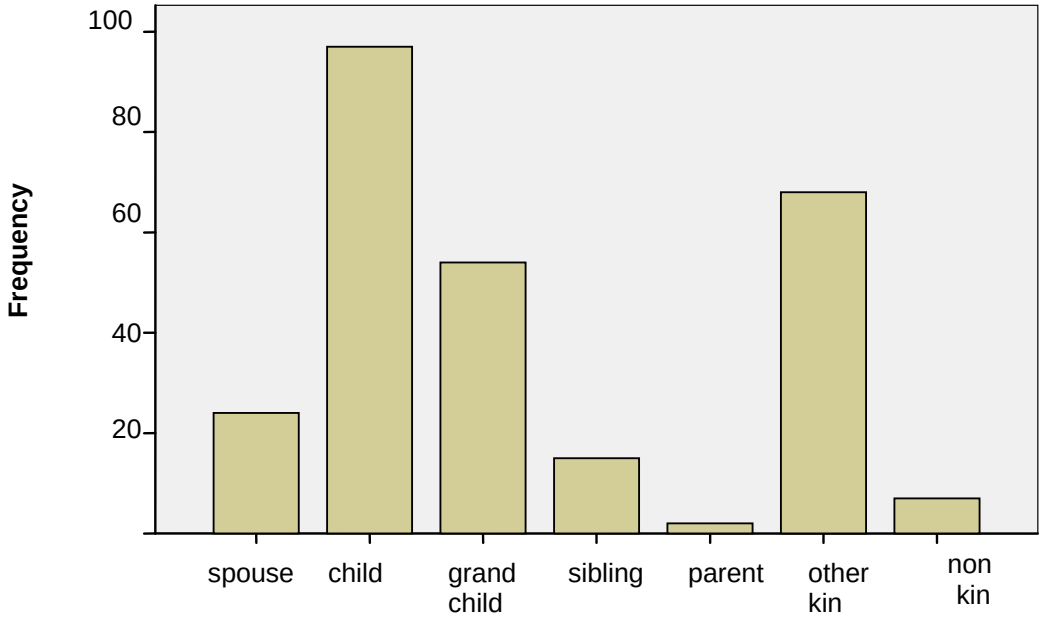
Table 3.14 Half Assini: marital status

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Single	169	53.5	54.9	54.9
	Married	125	39.6	40.6	95.5
	Divorced	7	2.2	2.3	97.7
	Widowed	7	2.2	2.3	100
	Total	308	97.5	100	
Missing	9	6	1.9		
	System	2	0.6		
	Total	8	2.5		
Total		316	100		

Looking at the composition of the households in Half Assini we see that quite a large number of people in the households are members of the extended family (25 percent)

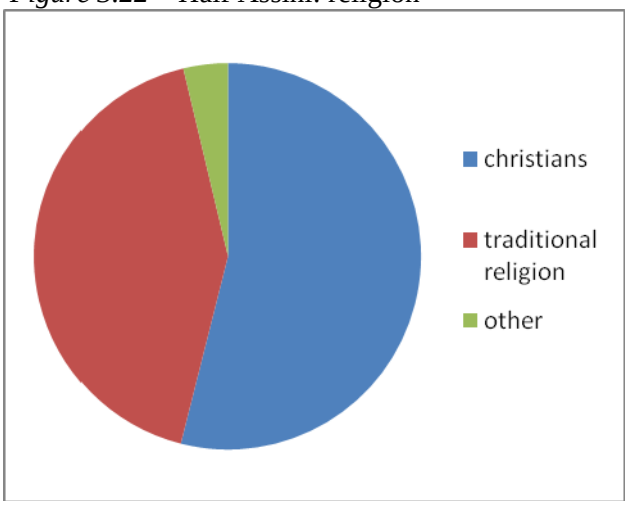
while another three percent are non-kin (Figure 3.21). This means that the households in Half Assini are quite mixed.

Figure 3.21 Half Assini: relation to the household head



As in Woe and Akosua Village the majority of the research population in Half Assini are affiliated to a Christian denomination (Figure 3.22).

Figure 3.22 Half Assini: religion



- Human assets of the research population

Seventy-six percent of the research population had not participated in education beyond primary school, and 32 percent had not been to school at all (Table 3.15). One person had been to university, but that was the only person in the whole sample.

Table 3.15 Half Assini: educational level

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Illiterate	78	24.7	32.0	32
	Kindergarten	2	0.6	.8	32.8
	Primary school	107	33.9	43.9	76.7
	Junior secondary school	30	9.5	12.3	89
	Middle school form	10	3.2	4.1	93.1
	Senior	7	2.2	2.9	96
	Vocational training	9	2.8	3.7	99.7
	University	1	0.3	0.4	100.1
	Total	244	77.2	100	
Missing	Not applicable (too young for school)	61	19.3		
	9	11	3.5		
	Total	72	22.8		
Total		316	100		

Nine women and three men indicated that they do not have a job (Table 3.16). If we look at the cross tabulation of age groups and yes or no job replies, we can see the age groups to which these people belonged. Three of them are younger than twenty and therefore might still engage in further education.

Table 3.16 Half Assini: age and having a job

Age group	*Frequency*	*job= yes*	*job= no*
0-10	100		
11-20	58	26	3
21-30	73	67	5
31-40	42	42	0
41-50	21	19	2
51-60	9	9	0
61-70	3	3	0
71-100	4	4	0
Total	310	170	10

Ninety-two percent of the men with a job were fishermen (N=63) and seven percent were net owners. Eighty-nine percent of the working female population worked as fish processors (Table 3.17). Quite a large number of people participated in additional activities, namely sixteen men and 24 women.

Table 3.17 Half Assini: jobs by sex

	Total	*Female*	*Male*
Total	314	182	132
Job	170	96	74
No job	12	9	3
Fisherman	66	3	63
Net owner	5	0	5
Processor	87	86	1
Trade	19	15	4
Entrepreneur	11	5	6
Construction	1	0	1
Agriculture	17	12	5
Administration	5	0	5
Apprentice	1	1	0
Religious	0	0	0
Bar	1	1	0
Other	0	0	0

- Physical assets of the research population

Forty-nine percent of the households had access to electricity, all of them lying in the Half Assini proper side (and none in Bungalow).[45] None of the households had water on their compounds and all used the community pipe. None had toilet facilities on the compound and seventy percent used the public toilets (N=29), while eleven households stated that they used the bush (ten of which lying in Bungalow) and seven the beach.

Twelve percent of the households owned a fridge (N=5) and some of them owned more than one which meant there were eight fridges in our sample. Three households used the fridge on a commercial basis. One household owned a car which they said they used commercially. Fifty-nine percent of the households had a radio (N=24) and some households owned more than one giving a total of 34 radios. There were seven televisions owned by six households (fifteen percent) and ten sewing machines owned by nine households (22 percent). Of these households, five used the sewing machine commercially. Half Assini had the highest level of commercially used assets.

Eighty-one percent of the households owned chicken, 61 percent owned ducks, 37 percent owned goats, two percent owned sheep, 42 percent owned cats and 54 percent dogs. Other owned assets were pigs and turkeys.

- Fishing gear

Fifteen percent of the households owned a *yevudor* (N=6), although in one case this *yevudor* was not owned by the household head. Four *yevudors* were being used and there were two missing values. Two households own three yevudorvis. Two households (five percent) owned a canoe and one of them owned two canoes giving a total of three canoes in our research sample. None of the households owned an outboard motor. Besides this fishing gear, people also stated that they owned set nets and an Agutsidso net (five in total).

Seventy-eight percent of the households had a smoking oven for processing fish, called *xagbador* in 31 of the households and *togodui* in one, while some households had more than one, giving a total of 102 ovens in the town and an average of 3.2 ovens per

[45] See the methodology chapter to understand this division.

smoking household (Table 3.18). Other processing methods used in Half Assini were drying and salting.

Table 3.18 Half Assini: types of fish processing

	Amount	*Percentage*
Fresh	6	15
Smoking	32	78
Drying	9	22
Salting	1	2

Comparing the three research locations

- Research population

Half Assini has a relatively high number of women (58 percent), especially in the eleven to twenty age group where the difference between the two sexes is substantial. I cannot really explain why this is. It could be that these boys/young men fish with relatives in Abidjan – which is nearby and has had a huge Anlo-Ewe community since the 1930s (Delauney 1992). It could also be that the boys, young men are sent back to the hometowns in the Volta Region to go to school (see below).

The average age is highest in Woe (26 years) while Akosua Village (24.6 years) and Half Assini (22 years) have younger populations. This can be explained by the general perception that people tend to migrate back home in later life. In Woe, ten percent of the population is older than sixty years, in Akosua Village this was five percent and in Half Assini two percent. This is also reflected in the number of widowed people with Woe having the highest number of widowed people (see Figure 3.23).

Woe and Akosua Village have the same percentage of Christians, but in Akosua Village there is a smaller number of adherents to the traditional religion and, instead, with even two percent of the population being Muslim. Half Assini has the largest percentage of adherents to the traditional religion.

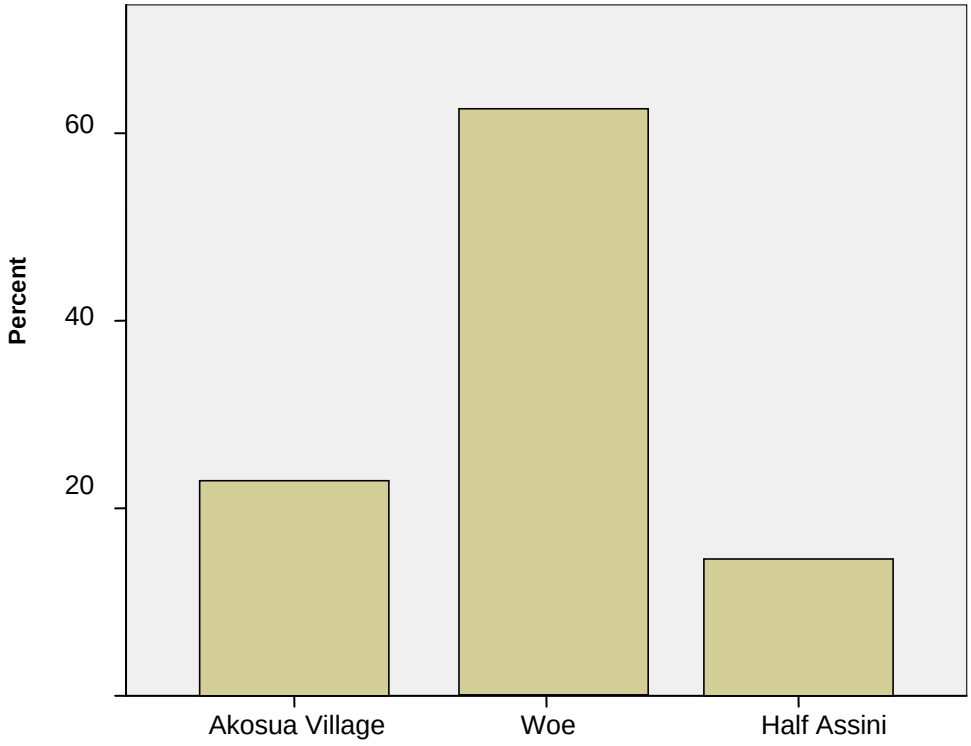
When we check for the hometown of the respondents in the household survey, we see that most of the respondents in Half Assini come from Tegbi, Woe and Blekusu. In Akosua Village most mentioned hometowns are Anloga, Woe and Dzita. In Akosua Village the population seems to be more diverse as many more hometowns were mentioned than these.

- Human assets of the research population

If we compare the educational level of the three research locations we see that Half Assini has the highest percentage of illiterates (32 percent) followed by Woe (27 percent) and Akosua Village (24 percent). Half Assini also has the highest number of people that attended primary school (44 percent) which might be explained by its young population with 75 percent being younger than thirty (compared to 68 percent in Woe and seventy percent in Akosua Village).

If we take a closer look at this comparison we notice that Woe has the highest number of people aged between eleven and twenty and the lowest number of people aged between 21 and thirty years (Table 3.19). This might be confirmation of what we have learned from other studies, namely that children on migration are sent back home to

Figure 3.23 Spread of widowed people of the research population over the three research locations



further their education (mostly this is at JSS and SSS level) and we could consider the low number of people between 21 and thirty as an indication of migration. We might also conclude that a higher number of young people have a job when on migration than 'at home'. If we cross-tab the number of people with a job per age group per research location, we see that 99 percent of the people aged over thirty in the all three research locations work. Table 3.20 shows the percentages for the young age groups aged between eleven and thirty.

Table 3.19 Percentage of age groups by research location

Age groups	*Akosua village*	*Woe*	*Half assini*
0-10	25	25	33
11-20	23	26	20
21-30	21	17	22
Total	70	70	75

Table 3.20 Percentages of age groups 11-20 and 21-30 with a job, by research location

Age group	*Woe Pop/job*	*Percentage*	*Akosua village Pop/job*	*Percentage*	*Half Assini Pop/job*	*Percentage*
11-20	154/25	16	116/36	31	58/26	45
21-30	101/89	88	107/101	94	73/67	92

If we compare the percentage of fishermen (including net owners) who belong to the working male population per research location; we see that the two migrant communities (Akosua Village 94 percent, Half Assini 92 percent) have a higher percentage of fishermen than Woe (eighty percent). As far as the women are concerned, we see that Akosua Village has a relatively small number of women working as processor (65 percent); compared to Woe (84 percent) and Half Assini (89 percent). This can be explained by the fact that fishing in Akosua Village is not so lucrative as in Woe and Half Assini because the people there fish with smaller nets, less regularly and less 'seriously' than in Woe and Half Assini (see Chapter 4). As a result, the women are more active in petty trading hence the higher numbers in the categories of trade, entrepreneur and bar (Table 3.21). Finally, nineteen percent of the working population in Woe is active in agriculture, compared to one percent in Akosua Village and ten percent in Half Assini. That the percentage is much higher than in the migrants' communities makes sense considering the access to land regulations. The ten percent that have access to land in Half Assini is quite remarkable.[46]

Table 3.21 Line of work of the working population of the research population (%)

	Woe	*Akosua Village*	*Half Assini*
Fisherman	39	42	39
Net owner	1	5	3
Processor	45	35	51
Trade	8	12	11
Entrepreneur	6	10	6
Construction	2	1	1
Agriculture	19	1	10
Administration	2	1	3
Apprentice	2	6	1
Religious	1	0	0
Bar	1	4	1
Other	0	2	0

The number of apprentices and bartenders in Akosua Village is also relatively high. In Half Assini 93 percent of the working population is active in fishing, followed by 85 percent in Woe and 82 percent in Akosua Village. In the table above, first and second jobs are combined, meaning that respondents were able to state that they were processors and worked in a bar or were net owners and worked on the land. Thus, if one added all the percentages up together this would not produce a result of a hundred percent. A survey of all the jobs worked by the working population shows that the populations of Woe (126 percent) and Half Assini (126 percent) are more active than the population in Akosua Village (119 percent). This confirms my conclusion of Akosua Village being a village whose glory days were in the past and whose population was just able to make ends meet. In Half Assini there is a much livelier, active, business like atmosphere with large companies (ninety people!).

[46] In an interview with the Anlo-Ewe chief fisherman of Half Assini I heard that a couple of Ewe migrant fisher families had been able to buy land in Half Assini (December 2005).

- Physical assets of the research population

Nine percent of the households had access to electricity and 83 percent of these households were in Half Assini proper (twenty out of 42 households). This can be explained by the fact that these Half Assini households were located in a part of the town connected to the electricity grid. This was not the case in Akosua Village (the two of the 105 households that had electricity lay in Winneba) and Woe (two of the 106 households) [one missing value for the total]. In other words, half of the households in Half Assini were connected to the electricity grid, compared to one percent of the households in Akosua Village and Woe.

In terms of water Woe scores best; 22 out of 106 households had water on the compound (from a pipe or well). In Akosua Village the number was five out of 105, and in Half Assini none of the households had its own water. In Akosua Village the majority of the households used privately owned pipes in the community where they fetched their water and paid for it (72 of the hundred remaining households).[47] In Half Assini the households used a community pipe and they have to pay for the water.

Most of the in-compound toilet facilities can be found in Woe (eleven cases). However, Woe scores poorly as regards PT facilities, with just 25 percent [N=94]. In Akosua Village, 84 percent [N=103] of the households claimed that they used the PT, and in Half Assini this was seventy percent [N=40]. In Woe eighty percent claimed that they used the bush. In all the research locations about sixteen percent of the households admitted to using of the beach as a toilet. I believe that in reality more people use the bush and beach in all research locations than was shown by this survey because it is a sensitive topic.

As regards water, electricity and toilet facilities, one should not forget that Woe is much larger than the Ewe migrant communities Akosua Village and the Anlo-Ewe part in Half Assini. Both the Ewe settlements in Half Assini and in Akosua Village (near Winneba) can use an urban environment which generally offers more facilities. On the other hand, arranging your own facilities is more difficult when on migration than ‘at home’.

- Fishing gear

The number of *yevudors* found in the households is highest in Akosua Village; 27 of the 105 households owned one or more yevudors (26 percent). Because I have done a representative survey [105 out of 135 households] in Akosua Village this is valid indication of the number of net owners in the village. Ninety-two percent of these owners owned one *yevudor*. The rest had two. Seventy percent of the owners were currently using the *yevudor*, in thirty percent of the cases the net was lying dormant.

For Woe sixteen of the households where we did the survey were *yevudor*-owning households. Here a bigger percentage owned more than one *yevudor*; 47 percent (of which the majority owned two). However, only 56 percent of the net-owning-households were currently using the net(s). This could be a higher percentage of dormant nets because it is a hometown, where families keep the family nets that aren’t in use. Migrants often say that nets not used have been ‘sent home’.

[47] Three answered from neighbours and one from community – this probably means the same but put in a different way.

In Half Assini, fourteen percent of the households owned a *yevudor* (none of the households had more than one) and 66 percent of the households claimed to currently use the *yevudor*.

Of these *yevudor* owning households in Akosua Village, 81 percent also owned a canoe, in Woe this was a hundred percent and in Half Assini 33 percent. These canoes were motorised in 59 percent of the cases in Akosua Village, in Woe for 53 percent and in Half Assini none of the canoes were motorised. That none of the canoes in Half Assini were motorised was legitimised to me by the son of the chief fisherman. He said that it was better to use manpower, otherwise you became dependant on the technology. It was better according to him to keep in control and be trained to always be able to go.

Fish are processed in all three research locations mainly by smoking. In Woe eighty percent of the working female population is involved in fish processing, mostly by smoking, followed by salting and drying. In Akosua Village and Half Assini we also counted the number of ovens per household. In Half Assini almost eighty percent of the households owned one or more smoking ovens with an average of 3.2 ovens per smoking household. In Akosua Village this was much lower, with just 33 percent of the households having one or more smoking ovens. This is an average of 2.9 per household.

In the next section we describe the assets needed to fish with a beach seine company, from the perspective of owner and crew.

Fishing assets and access

The most important assets needed in order to fish with a beach seine are the net, a canoe and people. The household survey we had carried out revealed that the net and canoe are not widely owned by the fishers in the households in Woe, Akosua Village and Half Assini. Only twenty percent of the households owned a *yevudor* and not all of these were actually used (between 56 and 70 percent). One of the reasons, as we shall see in this section, is that the nets are very expensive. Other nets were much more commonly held in, for instance, Woe where a mixture of techniques is used, 45 percent of the households owned a different type of net (Kuekpa and Sovi) in comparison to fifteen percent of *yevudor* owners. The fact that not all nets were in use can partly be explained by the fact that you need quite a large crew, of which a number of members have to have special skills. Financial, social and human assets are needed before one can start. Once that is taken care of, you need to gain access to fishing grounds and to the market. Before we can understand how all this is arranged we need to understand the way the activity is organised. However, first of all we need to find out more about each of these fishing assets.

The net

The length and wideness of the netting and cod end can vary considerably. The bigger the net, the more people and time are needed to haul it ashore and the larger the canoe will need to be in order to cast the net. In 1906 the *yevudor* was described as:

> ‘Sixty to a hundred metres long, three to four feet wide and the middle has a sack (voku) that catches large and small fish. The net is held with two strong pieces of rope. On one side of the net are attached little pieces of weights (fifty centimetres from one another) and on the other side are two stakes, kpotiwo. On the stakes are attached 300-400 metres of rope. The net itself is reinforced with cotton anywhere from two to four times.’ (Härtter quoted in Greene 1996: 166)

These first beach seines were much smaller than the ones used in Ghana these days (see the next section). The nets were developed, modified in design and enlarged (both net as sac) to increase their capacity to encircle large quantities of fish (Greene 1996: 166; Akyeampong 2001: 136).

Nowadays there are three sizes of beach seines: small, medium and large (as categorised by the FAO). 'Small nets measure about 150 metres long and six metres deep. Medium size nets may be 280 metres long and nineteen metres deep. Large nets found in the Keta area are up to 1,800 metres long and eighteen to 22 metres deep. The nets in the Keta area have detachable sections, so that a net can be worked at a reduced length'.[48] The nets I came across in the three research locations also differed in size. Generally speaking the nets in Woe and Half Assini were larger than in Akosua Village. On two occasions I had an opportunity to measure the nets because they were spread out lying on the beach for repair purposes. The net in Akosua Village was 490 metres in length[49] (fieldwork data 29-6-2004) (see Figures 3.24 and 3.25). In Half Assini the stretched out net measured only 225 metres but this particular net was owned by some young men who had just started working for themselves, in addition to their work at a company (fieldwork notes 10-12-2005). Smaller nets are also used for fishing in lagoons and in the surf and net owners often begin with a small net, which they enlarge over time.[50] In Woe a net owner explained the cost of a new net to me in 2004. The net in his example measured up to 1,100 metres (see Box 3.1 below) – considerably larger than the net in Akosua Village.

Figures 3.24 & 3.25 Net reconstruction in Akosua Village

The size of the cod end can also vary. If fishermen expect a big catch they can attach one or two extra cod ends to the net. In Woe I saw the fishermen use two cod ends in September – October during the main fishing season (notebook 13, beach walk Mr Dawu). The rear of a cod end is tied together using a closing rope and removing this rope allows another cod end to be attached. In some cases this is done when hauling the

[48] http://www.fao.org/DOCREP/003/R0395E/R0395E00.htm#TOC.
[49] The net lay on the beach with both wings on top of each other, and measured 245 metres.
[50] Fishing with a surf-beach seine was something I only came across in Half Assini.

net in, if the fishermen see that they have such a large catch (when they see an abundance of fish swimming between the two wings) that the cod end will be too small. According to a former net owner in Akosua Village the nets in 'the olden days' were so large that they would not have the sac attached to the net when the net was cast. They would make a knot in the sac extension. A small canoe would then take the sac to the knot and attach it when the net approached the shore (field notes 29-6-2004).

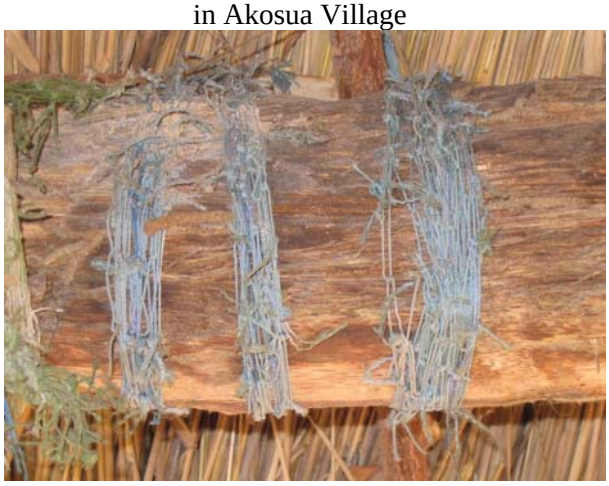
The nets are redone from time to time[51]. Every part of the beach seine will then be checked: the ropes, the cod end, the length of the net, the amount of lead and the position of the floaters. New ropes need to be stretched and this is a job for which you need plenty of manpower (field notes 29-6-2004). Putting the lead and floats back in a balanced position is a very precise job and is often supervised by a company specialist (see Figures 3.26 and 3.27). Amendments can also be made if changes occur on the ocean floor, for instance because of an increase of mud.

Figures 3.26 & 3.27 The specialist redoing the leads and floats

A beach seine net needs a lot of maintenance and these nets are continuously being repaired (after every day's fishing) with sections being replaced as necessary (see the colour differences in Figure 3.24 between the old and new net). Mending the net is one of a fisherman's intrinsic tasks. Small tears in a net can quickly become bigger due to fish passing through the holes if they are not mended immediately. One of the net owners in Akosua Village had the misfortune to tear his net in rocks under water (after his net had been dragged there by a change in current). He immediately went to buy new material in Accra. His net was spread out on the beach, out of his canoe, waiting for him to come back. However, it was laid out in such a way that the damaged part could not be seen otherwise people would have stolen it to use in their roofs (see Figure 3.28) (field notes 27-11-2005).

[51] Some fishermen told me that it was done every year. However, in the one and a half years I spent doing fieldwork I only came across two nets which were being redone.

Figure 3.28 Old net used for roof construction in Akosua Village



Because of their size, beach seines are expensive nets. In Woe a net owner made a list for me to show what it would cost to put together a new net, with detailed information on how much would be needed of each netting material with a particular mesh size, how many ropes, their sizes and how many floats and lead (see Box 3.1). All in all the net would cost (excluding lead and floats) about 8,000 euros. Another 11,000 euros would be needed for lead, floats, ropes, canoe and outboard motor. Beach seines are not always constructed from new and often fishermen inherit the net from their family. If, for instance, a son inherits a net, he will always refer to it as 'my father's net', even though in the course of time no pieces of the old net remain.

Box 3.1 Cost of fishing equipment of a beach seine company in cedis in 2004

NET			
1. 3/8 x 9" net	200 yards	(2 bundles @ 20,000,000)	40,000,000
2. ¾ x 9" net	50 yards	(1/2 bundle)	10,000,000
3. ½ x 9" net	50 yards	(1/2 bundle)	7,000,000
4. 1 x 9" net	200 yards	(2 bundles @ 7,500,000)	15,000,000
5. 1 ½ x 9" net	100 yards	(1 bundle)	7,000,000
6. 2 x 9" net	400 yards	(4 bundles @ 3,00,000)	12,000,000
Subtotal			*91,000,000*
Subtotal in Euro			***8,272 EUROS***
FLOATING	2,000 pieces	(40 sets @ 750,000)	30,000,000
LEADS	1500 pieces	(30 sets @ 250.000)	7,500,000
ROPES			
20 mm	4 coils	@ 600,000 (*kahehe*)	2,400,000
18 mm	30 coils	@ 500,000	15,000,000
14 mm	20 coils	@ 500,000 (*doblaka*)	10,000,000
CANOE			35,000,000
OUTBOARD MOTOR			25,000,000
Total			*215,900,000*
Total in euro			***19,627 EUROS***

Source: author

Figure 3.29 Beach seine in the surf in Half Assini

As we have seen above, a lot of net owners started out with small nets and added to it over time when they had more money to invest. These new net owners often started fishing in a lagoon or in the surf before fishing at sea.[52] You need to act quickly when fishing with a net in the surf and this work is often performed by boys and young men. It is a way for the boys to become acquainted with the principles of *yevudor* fishing (such as encircling fish, making sure the net hangs down properly, diving, pulling and stretching the net in the waves).

- Mesh size

Ghanaian regulations prescribe that nets may not have mesh sizes which are smaller than one inch. However, in practice a lot of nets have mesh sizes of 3/8 inches. 'Across the countries [Ghana, Togo, Benin – mk], the mesh sizes of the cod end of the beach seine nets range between five and 25mm (25mm is rare)' (Yeboah 2002: 20). The reason why beach seine fishermen are not easily convinced to comply is that they are mainly interested in catching anchovy, for which a small mesh size is needed. The SFLP, a programme of the FAO, tried to convince beach seine fishermen (as an experiment) to use a beach seine with a bunt mesh of twenty milimeters (instead of the more regular 10 milimeters). Although the new net gave a higher average monthly income than the old net, it failed to produce enough in the high season (August – December) when sardinella, anchovy and shrimps come *en masse* (Gbaguidi 2003: 33). At least all the fish they catch are used because these fishermen waste nothing.

[52] Once they become big net owners, they stop fishing in the lagoon (field notes Akosua Village 25-11-2005).

The canoe

Beach seines are cast into sea using a canoe, propelled by manpower (with paddles) or by outboard motor. Because of Ghana's rough surf the canoes have to be very solid.[53] They are made from a single piece of wood and are carved out of the soft and large Wawa tree[54] and then planked up at the front (see Figures 3.30 and 3.31).

Figure 3.30 Planked up canoe
Figure 3.31 Wawa tree in the Butterfly Reserve on the way to Kumasi


The black is the single-piece hull while a star and a moon have been painted on the planks.

Due to a high rate of deforestation (two percent per year) the trees needed for canoe-making are getting scarce (Domson & Vlosky 2007: 5). Although there is no legislation yet against its use, it has now become more difficult to find large Wawa trees. Canoe carvers have to move deeper into the forest areas to find suitable trees (Satia & Horemans 1993: 4). Whereas the trees used to grow in the forests near the coast (Brown 1947: 24), carvers now have to go to the areas of southern Brong Ahafo region, northern Western Region and western Ashanti region to spot, buy, fell and carve the trees (Sheeves 1991: 3 in Verrips 2002: 47). The carving work takes about 40 days. After that the canoe is strengthened, waterproofed and planked (Verrips 2002: 48-49).

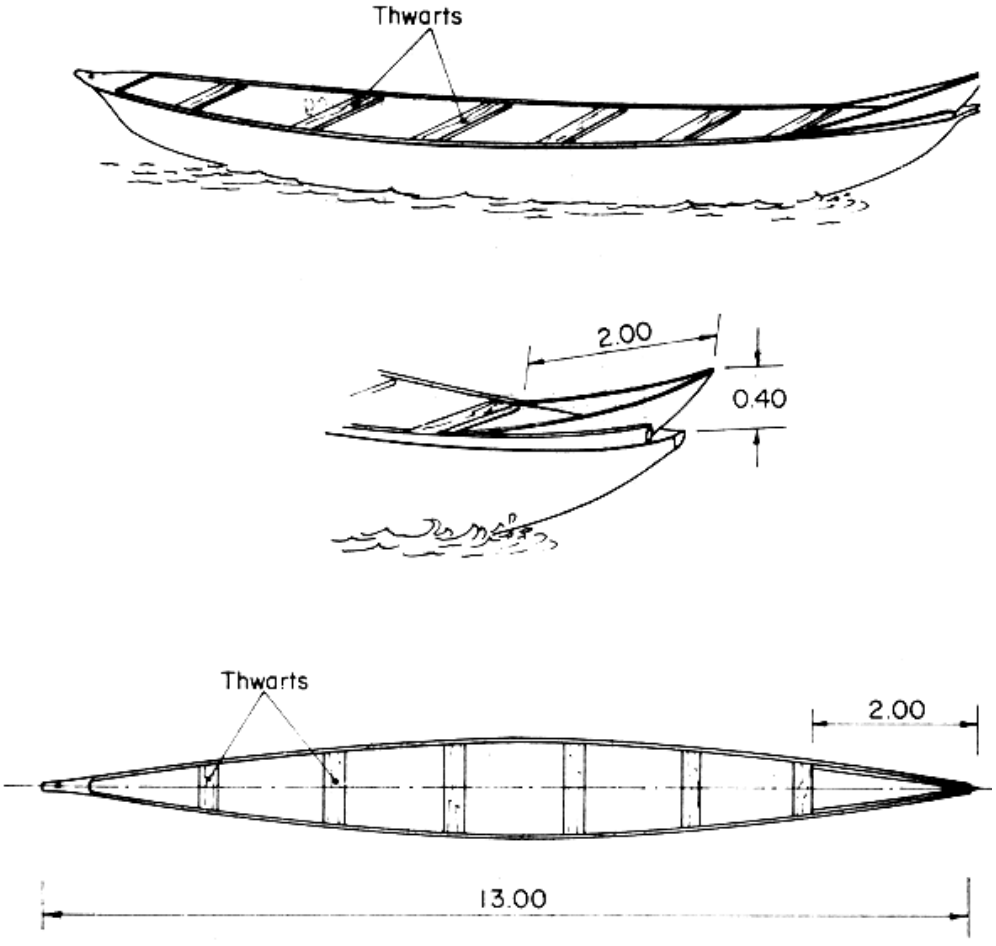
Canoe making is an activity steeped in all kinds of rituals:

> 'A canoe is a tree from the bush, big birds were living on that tree. Before a tree is cut one needs to go to a diviner because a lot of spiritual activity goes on around huge trees. Ask for that animal, that sat on it. The spirit then says what should be given. An owl for example. One needs to know which animals rested on that tree, and which land spirits are in the tree since the tree belongs to the land. Owls stay there. Owls settle there with the prey dead animal. They eat it up on the branches. Spirits of dead animals enter the wood. So that demands a sacrifice. Sometimes owls spiritually eat human beings – they are witches. If this canoe harbours a human spirit, a human being should be sacrificed. However a net owner will not do that. In the past they would have done because that spirit continues to claim human beings. You will see that someone drowns using that canoe every year. Wouldn't the

[53] See the departure of the canoe in the film 'If you do good' (Appendix 5).

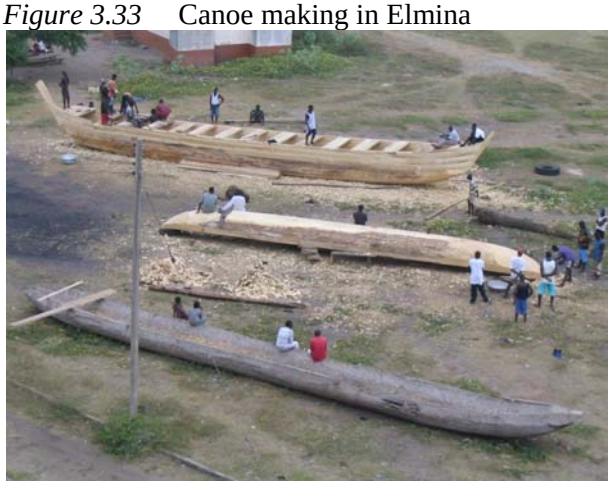
[54] Its Latin name is: Triplochiton schleroxylon. The tree is widely distributed in tropical West Africa; to be found in the transition zone between the humid evergreen and semi deciduous forests. It is a large tree of between 150 and 180 ft in height. (www2.fpl.fs.fed.us/Techsheets/Chudnoff/African/htmlDocs_africa/Triplochitonscleroxylon.html). According to Odotei on the Nzema coast the Silk Cotton tree is also used (Odotei 2002: 45).

Figure 3.32 Large beach seine canoe



Source: FAO catalogue of small-scale fishing gear of Ghana.[55]

Figure 3.33 Canoe making in Elmina



[55] http://www.fao.org/docrep/003/R0395E/R0395E00.HTM [Access date: February 2009].

> crew than desert the canoe? Before you fell a tree, libation is poured and a sacrifice is made. Otherwise an accident can happen or what made of it will be unsuccessful.' (interview 61, Woe, 17-08-2004)

Canoes under construction need to be watched carefully due to the growing pressure on scarce resources: 'The dishonesty on the part of canoe makers and delays in working on orders has necessitated closer monitoring by the purchaser. The carvers sometimes sell a person's ordered canoe to another person. In order to get one's canoe done on time and according to specification, the potential owner needs to be physically present in the forest'(Tetteh 2007: 39). It is also becoming more and more difficult to acquire tree felling permits and there have been cases of 'harassment and seizure of new canoes from the hinterland by security agencies of the Forestry Department (Ministry of Lands and Forestry) [that] plague most fishermen' (Bannerman 1998).

Ghanaian canoes are beautifully decorated. Verrips wrote an intriguing article several years ago which made clear that canoes are not merely fishing assets: 'Fishermen speak about their canoes as male and female beings that are able to talk to them about the right time and place for fishing. (…) According to them male canoes moved differently, were stronger and more powerful. With them the catches were higher' (Verrips 2002: 47-48).The decorations and name are given according to the identity of the canoe, its gender but also its religion; Muslim, Christian or 'heathen'. The taboos that need to be observed differ per canoe as the food that needs to be given to the canoe in repeated rituals.

Figure 3.34 One of the symbols on a canoe

Fishermen carve all kinds of symbols into the hull and paint names, slogans, and images on the gunwale and topsides (Verrips 2002: 50). Verrips divides the pictograms into five categories: 1) Pictograms of things, such as stools, swords, hats, keys, flags, anchors, arrows, and crosses; 2) of (parts) of plants, and trees; 3) of insects, birds, fishes and land animals; 4) of human beings or body parts such as hearts, hands, arms, penises; and 5) pictograms of celestial bodies, such as stars and the moon (*Ibid.*: 51-52). The meaning of the pictograms is not always clear, on the contrary 'they are read in many different ways' which makes Verrips conclude that 'sense is in the eye of the beholder'(*Ibid.*:

55). Besides this there are all sorts of texts such as proverbs, slogans and (biblical) names, abbreviations, numbers and references to passages in the Bible (see Box 3.2).

Box 3.2: Texts on canoes

Sea never dries	God will do it
We are also coming	Except God
Travel and see	There is happiness in the world, but inside the
One man no chop	coffin it is hot
God never sleeps	Money is a gentle man
Let them say	Dear Brother
If there is something in the house it is good	Thy Kingdom come
On character	Work and happiness
It is paining you	Great wonders
Because of tomorrow's case	They act as lovers
Father forgive us	Wonders never end
Think of whatever you do	The truth gives peace
The boys are good	God will do it
Israel	God is the protector of my life
Behind them	Jezus thank you
We are coming, we are going, is that it?	God gives
Think before you say it	They think
	It is not you who is God
	Peace FM 104.3

Source: author

The texts on the canoes are meant 'to express particular identifications, relations or sympathies with clubs, companies, [political] parties, persons, places, religions and worldviews' (Verrips 2002: 58). These texts nowadays function as names by which the canoes are registered by the Government. 'Together with the other decorations they turn the canoe – this crucial means of production on which the existence and lives of the fishermen and their families depend – into a 'speaking' object, an entity with a 'voice', a 'messenger', or a vehicle of meaning with a particular identity' (*Ibid.*: 59), not only communicating to humans but also to the gods (*Ibid.*).

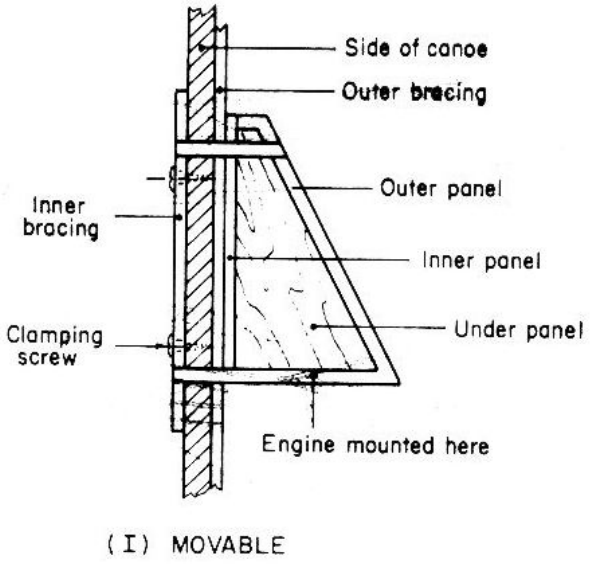
- Outboard motor

If the canoe is motorised, the motor is attached to the right side of the canoe (see Figure 3.35 for the construction). This change came about when the outboard motor was introduced in Ghana in the 1950s. Attaching the motor in this way prevents it being swamped by Ghana's rough surf (Odotei 2002: 63).

The first ten outboard motors were issued in 1959, with the first one being bought by the chief fisherman of Accra. A loan scheme was set up by the Fisheries Department whereby fishermen were required to pay 25 percent up front and the rest the following year (Odotei 2002: 63).

The level of motorisation depends on the size of the canoe (the bigger the canoe the greater the likelihood that it is motorised) and on the gear operated. 'For example the canoes that use purse nets are usually large and almost all of them are motorised' (Ferraris, Koranteng & Samba 1995: 449).

Figure 3.35 Outboard engine movable mounting bracket



Source: FAO catalogue of small-scale fishing gear of Ghana.[56]

Table 3.22 Motorisation in Ghanaian artisanal fisheries

Year	No of canoes	Motorised	Percentage
1941	8,990	-	
1954	8,000	-	
1962	8,956	1,700 / 1,950	19 / 22
1963	10,212	3,122	31
1966	10,359	4,988	48
1967	10,212	5,135	50
1968	10,212	5,916	58
1969	8,728	6,732	77
1973	8,238	-	
1977	8,472	-	
1981	6,938	3,698	53
1986	8,214	4,250	52
1989	8,052 [of which 852 Beach Seine]		
1992	8,688 [775]		
1995	8,641 [790]		
1997	8,610 [769]		
2000			
2001	9,981[813]	5,256	53

Source: Years 1941-1986 (Odotei 2002: 64), 1989-1997 FAO Country Profile,[57] 2001 (MFRD 2001).

When an outboard motor is used with the beach seine the increased speed makes it essential for the net to be properly packed into the canoe so that it can be easily cast without it tearing. Even when a canoe is motorised, a net owner will always send enough men to sea to cast the net so that they can paddle back in the event of motor failure. The beach seine canoes are the least motorised compared to the other fishing gear types. In 1970, the number of motorised canoes was estimated to be between 20

[56] http://www.fao.org/docrep/003/R0395E/R0395E00.HTM [Access date: February 2009].
[57] http://www.fao.org/fishery/countrysector/FI-CP_GH/en [Access date: March 2009].

and 25 percent and in 1989 more than 57 percent of the total canoe fleet had outboard motors (Overå 1995[58]). In 1974, 87 percent of all canoes in Ghana were motorised.[59]

Outboard motors were introduced in 1959. Twenty years later about 87 percent of the canoes were motorised. This amount dropped significantly after that and only 58 percent of canoes were motorised in 1989. 'The decline in the level of motorisation is due largely to the astronomical increases in the price of the outboard motor as well as the cost of maintaining and running it' (Seini 1995: 382). In Senegal and Ghana it is estimated that outboard motors rarely last in an operational state for more than three years.[60] These days one needs to pay at least 25 million cedis (2,273 euro) for an outboard motor. Although this is the subsidised amount, net owners still complain that they have to pay the amount all at once. Another prerequisite is that they have to form a group in order to apply. A net owner in Woe commented on this by saying:

> 'Why do we need to form co-operatives? That does not fit the nature of our work. We already work together, many people live from my canoe. Many head of households earn their family income with me. We employ young men, who otherwise would go out and steel. Kuekpa fishermen can form co-operatives, that fits their working system, but we the yevudor owners – why?'(Net owner Woe, met during household survey 20-8-2004)

People – 'the work is not for one person'

One of the net owners I spoke to in Akosua Village replied, when I asked him why his net was lying dormant, 'the work is not for one person' (household survey notes 2004, number nine). Without labourers (between 20-90 people) a net owner is unable to fish. The more hands a net owner has, the better because the sooner the net comes in, the fewer the fish that can escape. Although most of these hands are needed to do the pulling, some are also needed to perform other tasks, which require some additional skills. You would need paddlers and a helmsman who knew how to set the net, when to go and where to go. One would need experienced swimmers who can guide the net ashore and dive if the net gets stuck. One would need some supervisors who understand the movement of the net in the water, the habits of the fish and the effect of the ocean on the net, and who know when to pull and when not to pull, when to cross, close the net and tie it together. The next section examines in more detail what the fishing operations require in terms of human input.

Getting people to work for and with you requires social capabilities and financial assets. Net owners in Ghana give out advance payments to workers prior to the season. As Mr Dawu in Woe explained to me:

> 'In Ningo the fishermen have to pay to join the boat to go fishing, here rather you get something if you come fishing. Here they pay 300,000 cedis (27 euros) for 1 year of fishing as an advance. That is because there is competition for workers here and you need a lot of people' (Mr Dawu, 18-8-2004, notebook 13).

This has a dual effect since the workers have access to money and having the worker sign a contract gives the net owner the assurance of available workers. Net owners are often more generous in the case of more specialised leading crews. For example, they may repair the roofs of their houses or give them some other gifts to cement the relationship.

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[58] http://www.fou.uib.no/fd/1996/f/712002/index.htm - Introduction.
[59] http://www.fao.org/DOCREP/003/K2415E/k2415e05.htm.
[60] http://www.fao.org/DOCREP/003/K2415E/k2415e05.htm.

Net owners often have crew members working for them that are related to them. However even if they are not related, the relationship between the net owner and the crew is often referred to in terms of ‘children’ or ‘boys’ and ‘master’ or ‘owner’. The oldest members of the crew are referred to as ‘uncle’. These words reflect the expectations associated with the relationship, namely that the ‘sons’ obey the net owner and the net owner takes care of his ‘sons’. Elders in the community are addressed as ‘our father’ and people refer to co-companies as ‘our brothers’.

- The crew’s perspective

All of the required assets referred to above are based on the net owner’s perspective. However, not all fishermen have the ambition, the capability or assets to become net owners. It is also possible to become a crewmember working for a net owner. The assets needed to become a crewmember depend on the role one wants to play. However, basically any man capable of pulling can join a crew. Most of the special skills can be learnt on the job except that of clerk, the one who keeps the company’s records. This person needs to be able to read, write and calculate. These are basic skills taught at primary school. Once part of a company, crew members will often have some access to credit, to food, medicine and shelter. All of this naturally depends on arrangements made by the net owner. Finding a good net owner who will treat you honestly is one of the biggest worries that crew members have. Being able to trust the net owner and others in charge of the company is particularly important for those working under contract. Finding such a net owner depends on one’s social capabilities, who you know and how you relate.

Conclusion

This chapter began with a description of the livelihoods approach which is used for an understanding of how people make a living, based on their assets, in the context of certain trends and/or shocks. We argue that a thorough understanding of fisher livelihoods is crucial for the improved governance of fisheries. The usefulness of the livelihoods approach lies in the fact that it shows how *all* assets and capabilities, and the relationships between them, are potentially important. Whereby assets should not only be seen as means by which people make a living, they also give meaning to a person’s world and give people the power to act. In other words, access to assets is a political (and therefore not neutral) process. This has been given more weight in this research by using the concept of negotiation, which fishermen do amongst themselves as with (powerful) others (such as governing organisations).

Using the entitlements debate clarified that even when people gain access to certain resources they may still be unable to capitalise their endowments by converting them into entitlements due to lack of access to other capitals. One example we observed was that of a net owner with a dormant net in his house which he was unable to use due to the (perceived) inability to find (the right) people to fish with.

The concept of institution is central to the livelihoods debate, for institutions together with social relations and organisations mediate the access to the assets. Institutions lead to regularised practices (or patterns of behaviour) which have persistent and widespread use’ and have both a regulatory and normative nature (Giddens 1979). Institutions thereby provide a logic of appropriateness to behaviour and function at different levels in society, with the local level often being embedded in broader levels.

A critique of the livelihoods framework was its material focus on livelihood activities and outcomes. Such a way of thinking could easily lead policymakers to adopt the idea that alternative livelihood programmes offer a solution to too many people fishing. Instead of fishing, they could also make batiks or bake bread. Whereas in reality a livelihood is more than just a random activity by which people earn their living (see Chapter 4).

This study introduces the concept of livelihood space which reinforces the need to look beyond livelihood activities and outcomes. After all, there is always a certain place-boundedness that needs to be taken into account given that a livelihood is culturally, economically and socially embedded. Fishermen negotiate their livelihood space, that is space to live and work in (spatial) and space within the fishing sector. They create a certain (economic/sectoral) niche. They need to create space in which they are accepted, in which they find or have their place in society within the framework of the social and cultural relations.

We saw how the Anlo-Ewe developed a maritime tradition as a previously non-maritime people and became known and respected as sea fishermen. In the 16th century they migrated from Notsie (Togo) to the Anlo area where they now live. Their story of origin is important for an understanding of how the Anlo relate to other groups in society. Whilst reflecting on this issue it is important to keep Anderson's point of *imagined community* in mind, namely that 'the Anlo-Ewe' is as 'created' as is 'the Ghanaian'. Nevertheless, the story of origin functions as a binding force with the other Ewe. At the same time the word *Nlo* in A*nlo*-Ewe and A*nlo*ga is central to their identity and sets the Anlo-Ewe apart from the other Ewe (see Chapter 5). The story also shows the centrality of migration in their identity (they are new to their land). The organisation of society through clans and lineages is related to political organisation, land ownership, settlement organisation, to the environment and to their traditional religion. The Anlo-Ewe perceive their livelihood space as an ecological, social and cosmological whole. Their traditional religion is more than a belief system and the dichotomy nature-culture makes no sense in Anlo. The fifteen clans, which share a common history, owned the land and waters and had legal and ritual powers vested in their leaders Although this still plays a role in Anlo as a system on which the traditional governance structure is built, under the influence of Christianity, formal education, the money economy and the establishment of formal courts the Anlo traditional authority eroded and changed Anlo society in a number of different ways into what it now has become.

In terms of economical embedding we see that the Anlo managed to create a niche for themselves as *the* beach seine fishermen in the Ghanaian fishing sector. Creating that niche was not self evident since their way of fishing was opposed by the other fishermen when the Ewe started to migrate and use the *yevudor* outside their home area. The *yevudor* was said to be destructive fishing gear and the other gear users feared that the *yevudor* would be detrimental to their livelihoods. The fierce resistance to the *yevudor* by other gear users has been explained by Vercruijsse as undermining existing relations of production, with fishermen becoming wage earners and the sector being opened up to technically less-skilled fishermen. Although the net is still controversial today, seen from another perspective the Anlo-Ewe have successfully negotiated space for their activity.

This research focuses on three fishing communities along the Ghanaian coast, where Anlo-Ewe beach seine fishermen are active. The first is Woe (8545 inhabitants), in the Anlo home area, the second is Akosua Village (630 inhabitants) and the third is Half

Assini (11,000 inhabitants). Both Woe and Akosua Village lie between a RAMSAR site lagoon and the ocean with the sandbar of Akosua Village being only a couple of hundred metres wide. Half Assini is also located in a water-rich environment albeit differently. Half Assini is also an urbanised town, and, although it is a long way away, its inhabitants have more access to certain facilities then those of Akosua Village and Woe. The fishermen in Woe live alongside their fellow Ewe (fishermen and farmers alike). Akosua Village is an all-Anlo-Ewe fishermen village (except for about ten to twenty Fanti). Half Assini is an Nzema town, with a Fanti fishermen neighbourhood in the East and an Ewe fishermen neighbourhood in the West. The Ewe in Akosua Village and Half Assini have more facilities nearby than those in Woe given that Half Assini is the district capital and Akosua Village is close to Winneba, which is also a district capital. Woe's district capital Keta is half an hour away (by public transport). However, Keta can hardly be called urbanised mainly as a result of the detrimental effect of sea erosion (see Chapter 8).

The household survey that we performed in the three research locations mainly revealed information about human and physical assets at household and individual levels. Comparing the three research populations confirms general ideas about migration. First, the young and able men and women migrate and the elderly return home. This results in a higher percentage of elderly at home (Woe) although school-age children are often sent home as well (giving a higher percentage for the 11-20 age group). Households on migration are more mixed than households at home. This confirms the fact that migrants make use of networks. Thirdly, the people who have migrated are fisher migrants, they are active as fishermen (more than 90 percent) and processors (89 percent in Half Assini and a remarkably low percentage in Akosua Village for which reasons have been given). Woe has a much higher percentage of farmers (19 percent) and people on migration have no or less access to land. In terms of access to facilities such as electricity and water we could conclude that the more rural they are, the better their access to water (see Woe) and the more urban they are the better their access to electricity (see Half Assini). The figures on fishing gear produced quite a mixed pattern. It was difficult to come to conclusions because the surveys of Woe and Half Assini could not be 'checked' to see whether the number of net owner households was representative. In Akosua Village we were able to do this since we surveyed almost all households and we found that 25 percent of the households was a net-owning household. 30 percent of the *yevudors* in the survey were lying dormant. If we cross check this information with the number of active companies in Akosua Village we see that the percentage of dormant nets is probably higher. All in all twenty percent of the households owned a *yevudor*, of which not all were actually used (between 56 and 70 percent). The reason why there are not many owned nets is that the nets are expensive. A *yevudor* owner needs an initial capital of about 20,000 euros for a large net, a canoe and outboard motor. This is a considerable amount in Ghana. This explains why new net owners often do not start out in this way, but slowly work on building a net, piece by piece. At a certain point they can start using their net in a lagoon or in the surf to start recouping some of their investment. Soon they need more people to perform the fishing activities. Finding enough, loyal and skilled people is apparently not an easy job and the same holds true for crew members Finding a trustworthy net owner is also important. Once they have really started, they have to continue investing in people, their net, in fuel and in buying a new motor every couple of years. Beach seine fishing is a costly enterprise.

Taking a closer look at the, often beautifully decorated, canoes shows us in another way that fishing is more than just a ‘bread’ earning activity. Fishermen carve all kinds of symbols into the hull and paint names, slogans, and images on the gunwale and topsides and, as a result, the canoes become a reflection of a particular identity (Verrips 2002). This also underscores their view of the livelihood space in which they fish as an ecological, social and cosmological whole, in which the canoe communicates with the sea gods and leads the fishermen to the good catches.

4

The fishing activity and vulnerability

> A net owner in Akosua Village: 'I say: "a cow is chained to a tree". You have fifteen children but no property. How many children can you actually take care of? Now that you are not able to cater for these children – and other people – to your responsibility; if you die, and the children do not come to your funeral, would you like it? Would you blame the children? We at the coast never want our children to go to school. We rather want them to inherit our nets. Most of us fishermen don't think. We spend money just by heart because we think the fish is always at sea.' (Anthony's notes, 22-11-2005)

Introduction

In Chapter 1, I explained how important beach seining is for the Ghanaian fishing sector. In this chapter I discuss in more detail how fishing currently takes place in Ghana. We then look at the catches, the returns and at how that is shared in the research locations. It will become clear that income from fishing is important for Anlo-Ewe beach seine fishermen as they are quite specialised and do not have many other income-generating activities. When discussing fishermen's income it is important to differentiate between net owners and crew. Fishing generates more than only income for fishermen and their communities and this is also examined in more detail. At the end of this chapter we discuss how the vulnerability context impacts, or can impact, on the livelihoods of Anlo-Ewe fishermen. The case of algae abundance in Half Assini, which mostly affects the migrant beach seine fishermen, serves as an example. The link is made with the much cited idea of 'alternative livelihoods' and in this chapter I will discuss how these programmes fail.

The fishing activity

Crossing the surf

A beach seine is called such because it is operated from the shore. However, before it can be hauled in, it has to be cast. Before it can be cast, the canoe has to conquer the surf! That is a true challenge especially if there is no outboard motor.[1] The crew first has to manoeuvre the heavy canoe in the water, which is even more difficult with a heavily eroded beach like the one in Woe where the canoe needs to be tilted over a steep

[1] In 2001, 52 percent of the canoes were motorised (Bannerman, Koranteng & Yeboah 2001).

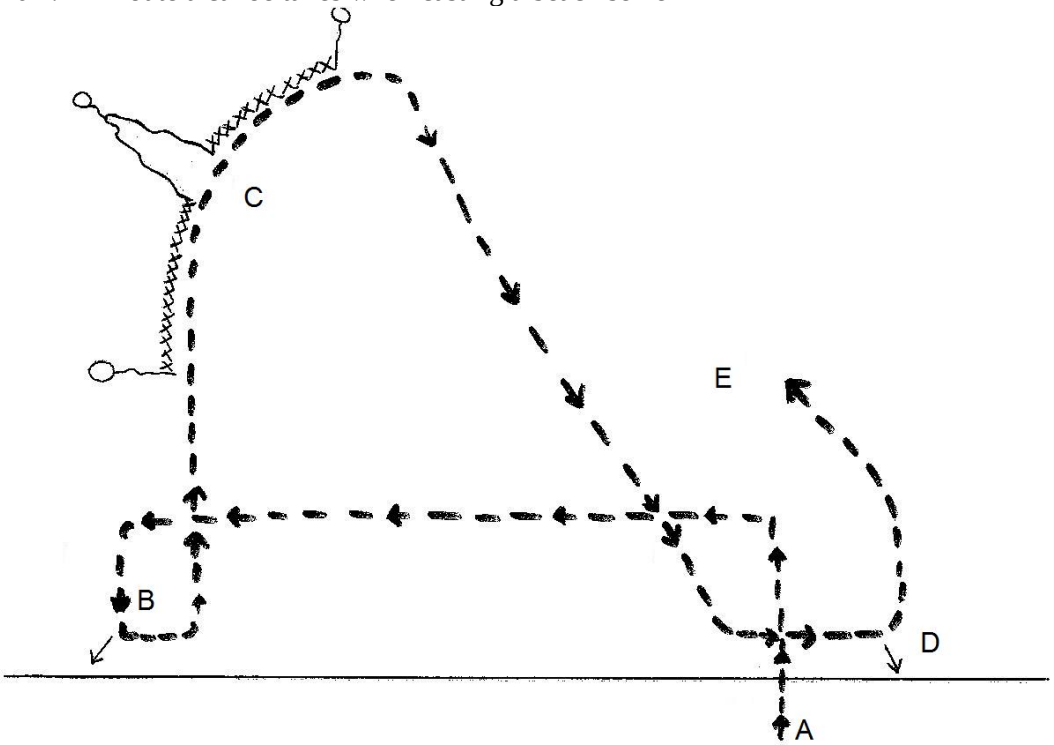
slope. Once in the water (which in Woe is then also quite deep) it is crucial to keep the prow of the canoe facing the waves so that the waves do not cause the canoe to capsize. The crew needs to choose the moment to go carefully (between two major rollers), since the incessant waves constitute a continuous threat as far as capsizing is concerned. On the other hand they must not wait too long once the canoe is in the water. Every wave that hits the canoe will cause it take on water, making it heavier and more difficult to launch. Once the crew has decided to go, people on the beach will keep an eye on them until they have passed the surf. The reading of the surf is a critical skill that crew members need to posses and I have seen more than one canoe capsize because of a misjudgement. A capsizing canoe is dangerous and the crew needs to be able to get out of the way quickly and avoid being hit by the canoe, or being swept under the net. If this happens everyone on the beach comes to its aid and pulls all the men and equipment onto land again. It is an impressive sight to see the paddlers putting every effort into ensuring that the canoe moves forwards, or to hear the roaring sound of the motor, and the canoe being hit again and again by the incoming waves.

Figure 4.1 Crossing the surf with a canoe in Akosua Village

Casting the net

Net casting is the next critical part of the operation. The fishermen will have to 'read the sea' before they can go. If the sea is not too rough, they will need to detect where the current is coming from, from the east (*adau*) or from the west (*afutu*). If the current is coming from the east, the canoe will head eastwards to set the net in such a way that the fish (swimming counter-current wise) will swim into the net (see Figure 4.2). The canoe starts at point A and follows the arrows moving against the current. This is done so that the net is cast in such a way that the fish, also swimming against the current, swim into the net (C). Before the net is cast, the first rope is let out of the boat and brought to the shore by a swimmer (B). After casting, the canoe either returns to the shore with the crew from where the second rope will start to be pulled, or – as depicted in the figure (at D) – all the crew except one or two will jump out of the canoe to swim through the surf to the coast. The boat then returns (E) to the sac of the net.

Figure 4.2 Route a canoe takes when casting a beach seine



The net is cast against the current (coming from the East in this image) whereby the fish, swimming against the current, can swim into the net before it is drawn towards the coast and closed.
Source: author

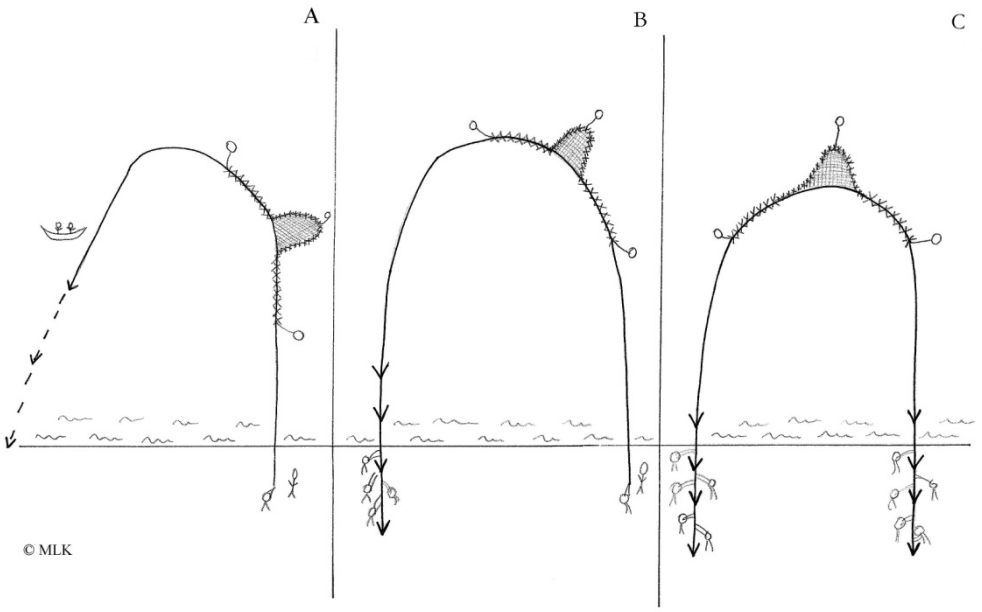
The net is cast in a slightly bent curve (see Figure 4.3) (A) which is arched a little later by first hauling in the left rope (B). Finally, both ropes are pulled simultaneously and sometimes alternately and the net is dragged to the shore (C) leaving the enclosed fish no other option than to swim into the cod end.

Determining where the current comes from is not always easy. If the situation is unclear the fishermen sail out to sea and cast a few metres of net to see how it moves in the water. Once they have determined where the current comes from, they collect the net and go to where they think it should be cast (depending also on their knowledge of the ocean floor).

In some case the current changes after the net has been cast. The net owner will then decide to collect the net from the sea and recast it. This is an awful job because hauling the net back into the canoe is heavy and frustrating work for the fishermen and if an outboard motor is used the costs of the fishing expedition are almost doubled! The alternative is to leave the net in the sea but this will probably lead to a bad catch and cause the net to be dragged to undesirable locations, such as shipwrecks or rocks (such as happened to a net owner in Akosua Village, see Chapter 3). Companies in Woe and elsewhere also tried to figure out how fast the current would bring the net back so that net shoring could take place right in front of the net owner's house.

The ropes of different nets often cross each other with one then being raised to allow the other to pass underneath. This precarious operation (because of the possibility of conflicts if something goes wrong) is always supervised by net owner or *bozu* (18-8-

Figure 4.3 Setting the beach seine and hauling it in



In this figure the net has been set in the opposite direction to that shown in Figure 4.2, with the current coming from the West.
Source: Kraan 2006.

2004, Notebook 13, excursion Mr Dawu). Sometimes more rope is added when the net is in the water. One of the crew members will then swim to the canoe in sea (as it happens in Woe) and will connect the rope there (18-8-2004, Notebook 13, excursion Mr Dawu).

The canoe crew consists of about six paddlers, one to four swimmers and the oarsman. If a canoe is motorised there will also be a motorman. Once the canoe arrives at the spot where the net is to be cast (and the first ropes are already out), the paddlers will allow the net to glide overboard starting at the back of the canoe and moving towards the front. Three buoys are also put in the water, tied to the ends of the net and to the cod end. Once the net has been cast, the canoe will turn back to the coast and feed the second rope into the water. The canoe will bring the second rope back to the shore or alternatively will return near the shore from where all but two crew members will dive overboard bringing the second rope back to the coast. The latter is the way things are often done in Woe, where the canoe returns to the sac and remains there where it can lift the net at the end to prevent it going into the mud (fieldwork data, notebook 13 excursion Mr Dawu). If a canoe is motorised, three men will cast the net. The procedure takes a lot less time than when paddlers are used and it is crucial that the net and ropes are let out smoothly and do not tear or get stuck. The fishermen often sing when they paddle out, which is when they have to paddle the hardest. The song on the way out is more of a rhythmic sound game. When they return the singing is usually beautiful, energetic and in four harmonies!

Dragging

The first rope to be brought shore will often be tied to a coconut tree, whilst everyone waits for the second rope to be brought in. The real pulling begins with the second rope coming ashore. That rope is hauled in with more force so that net becomes arched. The fact that the net moves, from east to west if there is an eastern current, means the crew will move accordingly. Some companies do not have enough men and will switch between the two ropes. Once their sac is almost landed, they have to make sure there are enough helpers to pull the two lines at the same time. One *bozu* of such a company complained to me that his catches would be better if he had more men (Fieldwork notes 7-11-2005). A large net may need almost thirty or forty people pulling on each side.

Figure 4.4 Company at work

The two groups will gradually walk towards each other while pulling. This can take three to seven hours, depending on the number of ropes used (which also depends on the size of the net). A lot of crew members have a piece of cloth that they wind round the (wet) rope to protect their hands. When they pull you see their bodies hanging back as they put their entire weight into the pulling. Sometimes people choose to sit during pulling, either because they are tired or because of the strong pull of the sea. Women also help with pulling, often taking their places towards the back. The people pulling on the beach also sing, sometimes to the accompaniment of whistles or percussion (on a piece of bamboo). There is always a soloist[2] who takes the lead while the rest of the crew sing the chorus. The songs are songs the people already know or sometimes songs

[2] He will also get paid extra for this important task.

that are made up on the spot. I have heard songs being sung about the Ghana Commercial Bank or with lyrics as ‘sing or your mouth will smell’ or ‘*yevudor* – did your mother give birth to me?’ The rhythm of sounds is copied in the rhythm of the bodies. Some crews almost seem to be dancing.

Figure 4.5 Percussion players in Woe

Before the cod end reaches the surf a couple of company members will enter the sea to tie the net to the ropes to make the pulling easier. These men also chase fish that attempt to flee towards the cod end and often lift the net out of the water onto their shoulders to prevent the net from becoming stuck in the sand and to make the pulling easier. Once the net starts coming in, it is spread out in the sand to dry. The fact that companies move over the beach means they leave a track of drying net on the beach. Once the cod end lands, the net will be collected by the crew and brought to the house of the net owner or restacked in the canoe. Sometimes they are kept in little palm front shelters on the beach (seen in Adina, Ketu district, and in Togo and Benin).

Although pulling the rope in seems to be quite a simple and straightforward job, a lot of things can go wrong. The ropes can break or knots between two ropes can loosen, resulting in the pulling crew falling into the sand and in the swimmers immediately diving into the water to find the lose end in the sea and another to bring new rope to attach to it again. A muddy ocean floor can also cause problems if the net sinks and gets stuck. These areas are avoided where possible but sometimes the current is misjudged or changes during the course of the expedition. The net can also be hindered by another company’s net. This is a frequent problem and results in conflicts between the two companies (see Chapter 7).

The last part of the dragging is the crucial part because the net has to hang properly without fish being able to escape. A couple of men will be in the water to make sure this is the case and to move the fish towards the cod end. The two wings also need to cross each other, whereby the left net is moved to the right, thereby crossing the right net which is moved to the left. The two wings will then be put together and hauled in as one. The two groups of people pulling on each side of the net have now come together.

The cod end is dragged up onto the beach where it is left for a bit while the fish die. Some crew will start collecting the net while others, including a lot of women and children, will then empty the cod end and sort the fish and remove the garbage.[3] After that the sharing and selling can start.

Catches, returns and sharing

Beach seine fishing is a business, and seldom done only for subsistence or because of a lack of alternatives (as has been suggested by Jorion 1988). Net owners keep track of incoming and outgoing money flows. In most cases there are accounts books (recording the catches per day or week and how the catch is shared) and sales books (recording the debts of the women buyers) as well as fine books (recording the fines that the crew received for misbehaviour), expense books (in which the net owner records all expenses made) and loan books (recording the loans and advances they have taken with the net owner) are kept.

Net owners who work with a contract system need to maintain these records because the money is shared at the end of the contract period (which can be between nine months and five years). Keeping track of catch values and loans is crucial. However, net owners that share the catch per day also keep records of loans and catches. These net owners regard lending money to their crew and buying medicine for them as normal although it is also used as a way of binding them to their company.

In Akosua Village I was conducting an interview with two net owners when we were interrupted by a crew member who came to collect one of the two net owners. They left together to go to Winneba to buy medicine for an ill crew member. The other net owner explained to me how this worked:

> MK: So he is now going to buy medicine for a crew member?
> Net owner: Yes, the person has to stay in good health, that is our job.
> MK: So the medicine he will buy will not be a loan.
> Net owner: No, but it will be written down. To remember, with the date and what was bought. So that if you do not work properly he can say 'hey remember then you were sick and I bought you this medicine' (Interview 28 with two net owners in Akosua Village, 22-4-2004).

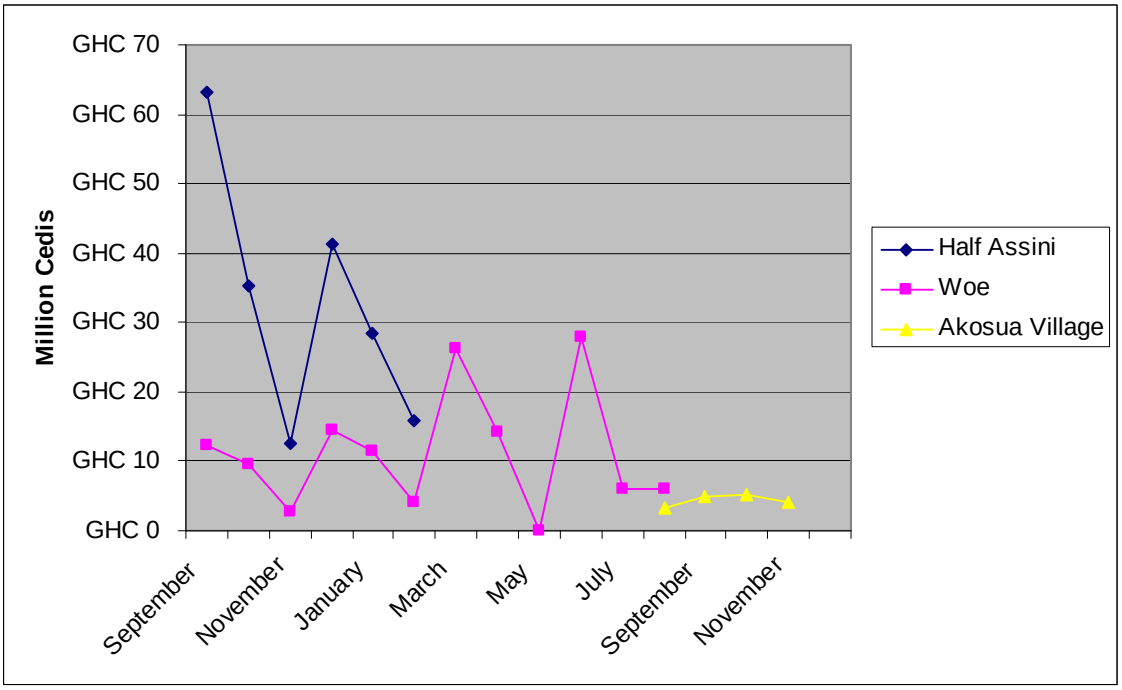
In all three research locations we managed to get an insight into some of these records.[4] It must be understood that, although we have catch data from all three fisher communities, the records are not held in standardised format (some make note of all fishing expeditions, some only write down good catches, some only write the totals per week and not the totals per catch/day), so it is not always easy to compare the data. The catch data I obtained from three companies in the three research locations does at least overlap in time (2004-2005) in such a way that we can combine it in one graph. It shows the variation in catches in Ghana during the same period (Figure 4.6).

However, this catch data might not be representative of the catch data per village, or of the companies over the years (since we do not have data of other years and since the time periods are quite short – especially for Akosua Village and Half Assini). Moreover, the companies differ strongly from each other as regards organisation (operating with or

[3] Beach seine nets catch a lot of plastic bags (both the type used at markets to carry food items and the little sacs with drinking water sold all over Ghana) drifting in the coastal waters.

[4] See the 'Collection of documents and records' section in Chapter 2 for details on the data sources and how the data was obtained.

Figure 4.6 Average value (in cedis) of catches of three example companies (2004-2005)



without motor, with fifteen or sixty people, in a company system or with a daily sharing system) so this limits the extent to which we can really compare their catch records (see Table 4.1).

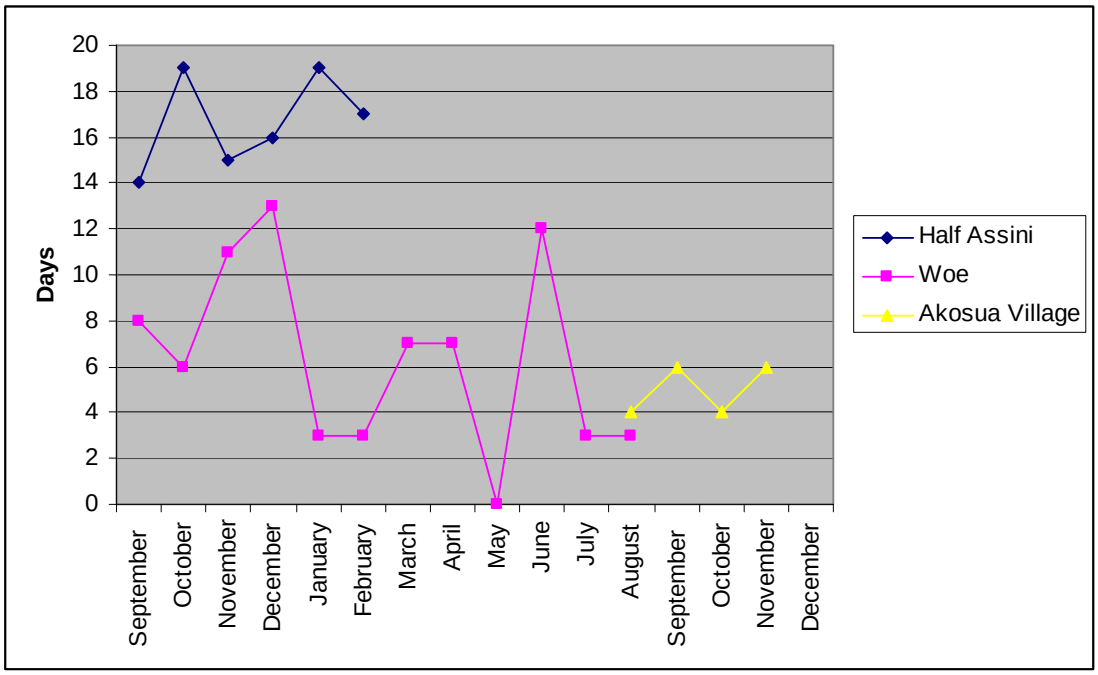
Table 4.1 Comparing the three example companies, operating in 2004-2005

Village/ town	*Woe*	*Akosua Village*	*Half Assini*
Total companies operating	19	10	25
Total companies with year contract	2	0	2
Owner	53 years old, grandparents in fishing	35 years old, grandfather was net owner	42 years old, Grandparents also fishing, father net owner
Size	50 crew	15-20 crew	65 crew
Since when operating	2004	1997	2001 (but taken over from father, company operates longer)
Motorised	Yes	No	No
On contract or daily sharing	Contract (10 months)	Daily sharing	Contract (1 year)
Non-fishing day	Sunday	Tuesday	Thursday

If we compare the 'Value of Catches' graph with the 'Fishing days' graph (the number of fishing days per month; Figure 4.7) we see a similar picture, namely that the company in Half Assini not only catches more but also fishes much more often (on average 16.5 days per month) than the other two companies: in Woe (on average 6.5 days a

month[5]) and Akosua Village (five days a month). The considerable difference in the time spent fishing between the Half Assini company and the other two companies suggests a difference in work approach (more professional), but may also be an indication of better catches and better weather.

Figure 4.7 Average number of fishing days of three example companies (2004-2005)



In the following pages I analyse the data I obtained in its own right, per company and per research location. All in all this will give us a better insight into how beach seine net owners in Ghana run their businesses.

- Woe

In Woe I was able to examine the records of a company that had started a year before, in September 2004. It fished on the basis of a nine-month contract.[6] I asked the net owner why his crew chose to fish with him, using the contract system: *"It is a way of saving money. They prefer it like this. So those who want it like that come to us"* (interview with the net owner of this company, 6-11-2005). The average number of written fishing days is almost seven days per month.[7] This is quite low and does not correspond with my observations on the beach in Woe. I asked the net owner about this:

[5] Average of first period 7.6 of second period 6, May not taken into account.

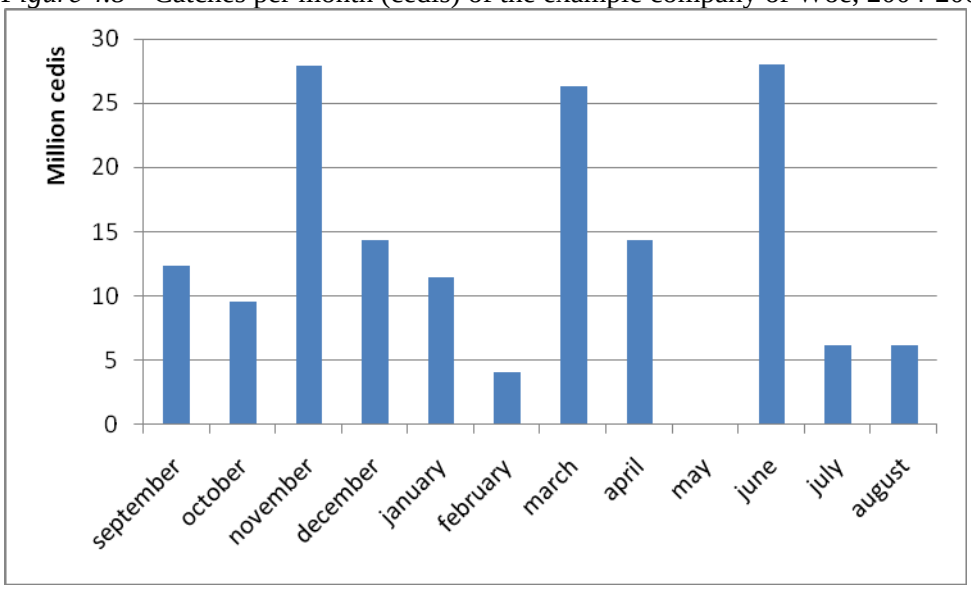
[6] I would have expected them to start on August 15 (ref Fisheries Data Collector Woe, interview 85, 29-10-2005), which would have made it a complete series of nine months. However, the books show that this is not the case. Perhaps they could not start earlier due to certain problems or the catches these two weeks may have been so low that they were not registered.

[7] Based on a calculation of September 2004 - August 2005, excluding May.

> MK: About accounting: if in a week there is nothing written?
> Net owner: Then there was really nothing or we didn't write it down. If there is 100,000 cedis (nine Euro), we use it for expenses, we can't write that down. If I don't get anything, the crew doesn't get anything either. (interview net owner, 6-11-2005)

The graph of catches made by this company (Figure 4.8) shows three peaks: November, March and June. That is not really in accordance with the seasonal data of Ghanaian fisheries. It is important to realise that the total value of the catch consists of a combination of number of pans (size of the catch) and price per pan. In March only 36 pans of fish were caught, compared to 138 in November. However, the average price per pan was more than three times higher in March. Since the company closed the books in April, there was no fishing in May.

Figure 4.8 Catches per month (cedis) of the example company of Woe, 2004-2005



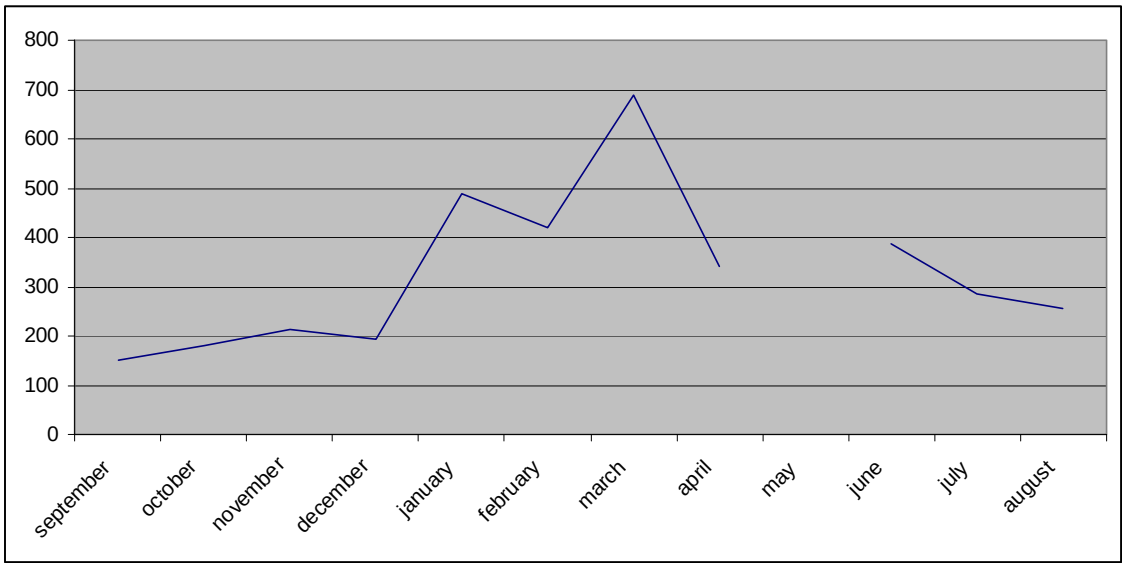
If we look at the average price per pan (Figure 4.9), it roughly shows (although March is the exception with a high catch and a high price) how the price of the fish goes up in times that there is less caught, in accordance with the seasonal catch data.

The price a company receives per pan depends on the species caught, on whether the company comes in first or last and on the other catches made on the beach by the other companies. The larger the catch on the beach the lower the price per pan. In the high season, therefore, the average price per pan is lower than in the lean season. This law is quite nicely reflected in the graph above. I assume that the exception of March could be explained by low catches by other companies, but I cannot prove this because I do not have any additional catch data from other companies.

Accounting

The company had fifty (male) crew members and 16 women attached to the company in the contract period August 2004 – April 2005. The men had each received an advance payment of 300,000 cedis (27 euros), and the women 150,000 cedis (14 euros). In addition to the advance payment, forty crew (men) arranged a loan with the net owner in

Figure 4.9 Average price per pan (in thousands of cedis) of the example company of Woe, 2004-2005



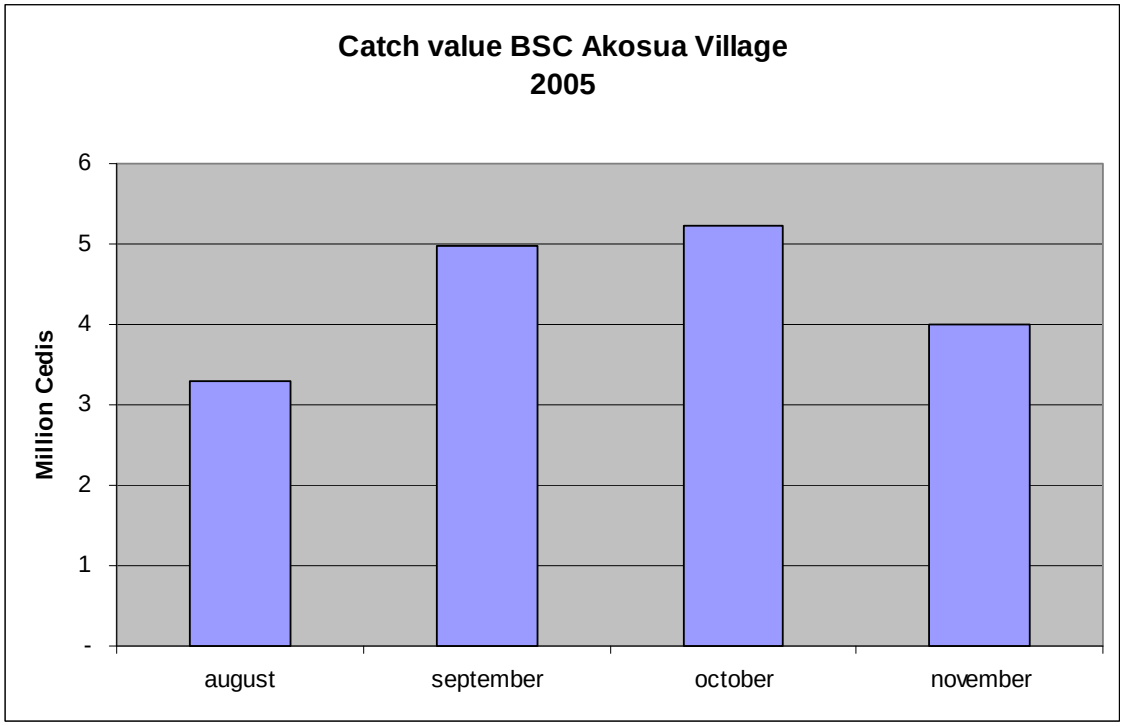
the course of time amounting to an average of 450,000 cedis (41 euros) (the lowest was 20,000 (1.80 euros) and the highest 1,500,000 (136 euros)). After nine months fishing, the crew had earned between 700,000 (64 euros) and 1,800,000 cedis (164 euros) (from which the advance payment of between 63 and 163 euros has to be subtracted), depending on their role in the company. By way of a comparison, the average annual income in Ghana in 1999 was 947 US dollars (Trades Union Congress 2004: 3). The net owner explained the difference between earning 700,000 or 1,800,000 cedis by saying, '*It all depends on the strength and on how hardworking you are'* (interview net owner, 6-11-2005). One crew member remained indebted to the net owner after the contract period, and the rest received the remainder of what they had earned minus their advance payment and loans, which amounted to an average of 550,000 cedis (50 euros).

- Akosua Village

The company in Akosua Village is small with 25 workers, three children and seven women attached to it. These people do not work on a contract basis but share what they catch each day. One of the men is old and receives about 25 percent less (say 15,000 while the others receive 20,000). The women are part of the company, as with other companies, but are only paid in kind, as the net owner explained, *"if we go far, they carry the catch to the market, bring water and give food. They get money to come and bring it. They don't share in the chop money, but do get some fish for their homes"* (fieldwork notes 21, 29-11-2005). Three of the women are related to the net owner (his wife, his mother and an aunt) as are the children. The children collect the ropes and carry them to the home or the boat. They are paid a small amount of about 5,000 or 6,000 cedis (50 eurocents). The catch records I was allowed to examine showed how the catches between August and November 2005 were shared (Figure 4.10). The average number of recorded fishing days was very low (five per month) but the records also showed that they went fishing twice in most cases on those days (an average of 1.75 times per fishing day). It is most likely that this company, as in the case of the company in Woe, only records high catches (see the accounting table below). An average of five

fishing days per month is much lower than what I observed whilst in the village. Moreover, in this village I also saw that if catches were good they would certainly sail out again. Finally it is important to understand that, based on the system of daily fishing, the catch is divided into large fish and small fish. The large fish are shared directly with the crew and the small heaps of fish are sold to the women. The crew is therefore often paid in kind (and they can sell or eat what they receive) and also in money – if the catch was a good one. When I asked them why they share the big fish for themselves and not the small fish, one answered, 'Because we suffer!' [and thus deserve something extra] (fieldwork notes 21, 29-11-2005). The graph of catches (Figure 4.10) shows that September and October were the better months. August is normally a good month in the Ghanaian fishing season, but sometimes it is spoiled by bad weather. The good seasons therefore vary slightly each year.

Figure 4.10 Catches per month in cedis of the example company of Akosua Village, August – November 2005



If we compare the average price per pan graph of Woe with that of Akosua Village (Figure 4.11), it immediately becomes clear that the price per pan is much lower in Akosua Village than in Woe. That is because the pans used in Akosua Village are much smaller than the pans used in Woe. This graph also shows how the price per pan in September and October was lower than in August and November (although the difference is not big).

Accounting

As already mentioned, this company in Akosua Village works on the basis of a daily sharing system by which they share part of the catch amongst themselves (Table 4.2).

The part of the catch that is sold is then used for expenses and is also shared between net owner and crew. Members of the crew with special roles receive extra.

Figure 4.11 Average price per pan (in thousands cedis) of the example company of Akosua Village, August – November 2005

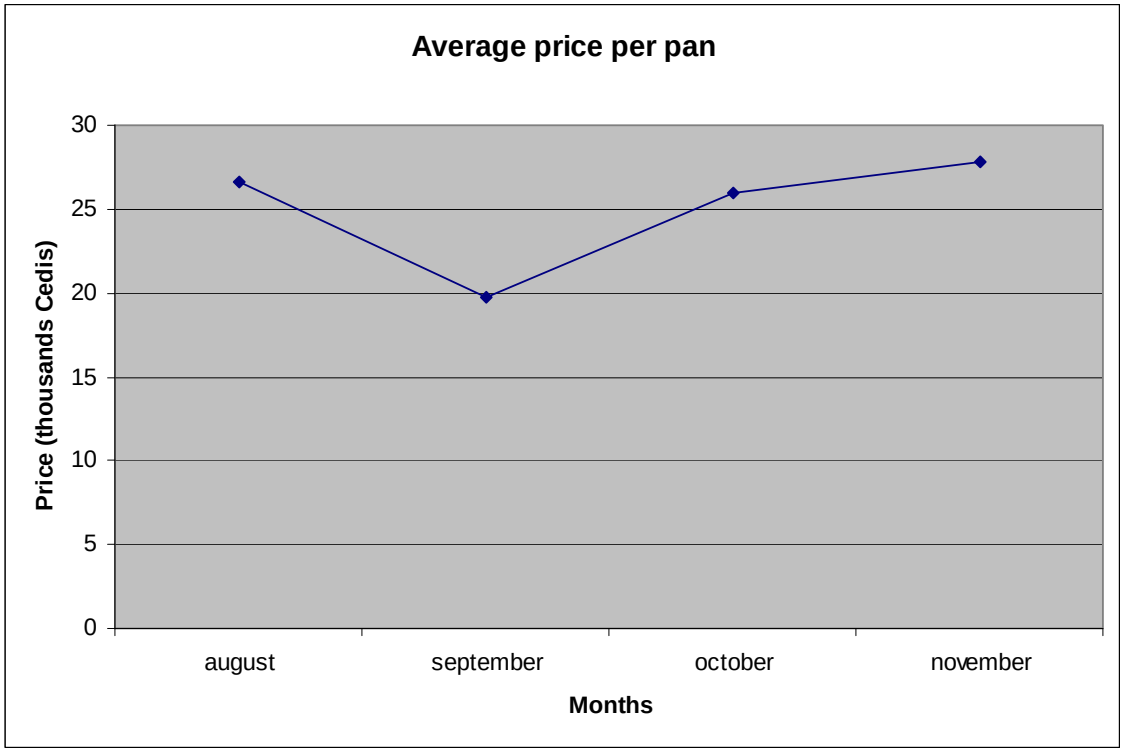


Table 4.2 An example of a day's sharing of the catch by the sample company in Akosua Village (cedis)

Catch on 28-9-2005				Sharing system		
expeditions	*pans*	*Price per pan*	*Totals*	A *Costs*		
First	48	26,000	1,248,000	1	boat paddlers total	170,000
Second	18	24,000	432,000	2	Menders total	85,000
		Total catch	1,680,000	3	Divers total	42,000
		(A) *Total expenses*	339,000	4	Other expenses	42,000
		(B) Total *after* expenses; to be shared to owner and crew	1,341,000		*Final total costs*	339,000
				B *Share*		
				1	company's amount	690,000
				2	net owner	650,000
				Total shared		1,340,000

A typical way of sharing the catch in Akosua Village is reflected in the following example (see Table 4.2). The company fished twice that day. During the first expedition they caught 48 pans and during the second expedition eighteen pans. The pans from the first catch were sold for 26,000 cedis (2.40 euros) per pan, the pans from the second catch were sold for 24,000 cedis. In total their catch was worth 1,680,000 cedis (153 euros). They share the catch as follows. First they deduct the expenses, being the cost of the special roles and the expenses made (such as chop money or drink) (A). They calculate ten percent of the catch value as being 170,000 cedis (15 euros). This is shared with the boat paddlers. The menders get half what the paddlers receive and the divers get half of what the menders receive. Together with *other expenses* amounting to 42,000 cedis (3.80 euros), the total expenses of these two fishing expeditions were 339,000 cedis (31 euros). This is subtracted from the catch value, leaving 1,341,000 cedis (122 euros) to share between crew and net owner (B). They both get about half, but the crew (between fifty and sixty percent) always receive a bit more than the net owner (between forty and fifty percent).[8] If there were seventeen crew members to share the catch, each would earn 40,000 cedis (3.63 euros) (apart from those who receive a little extra due to their role). In Akosua Village, this would be a very good day.

- Half Assini

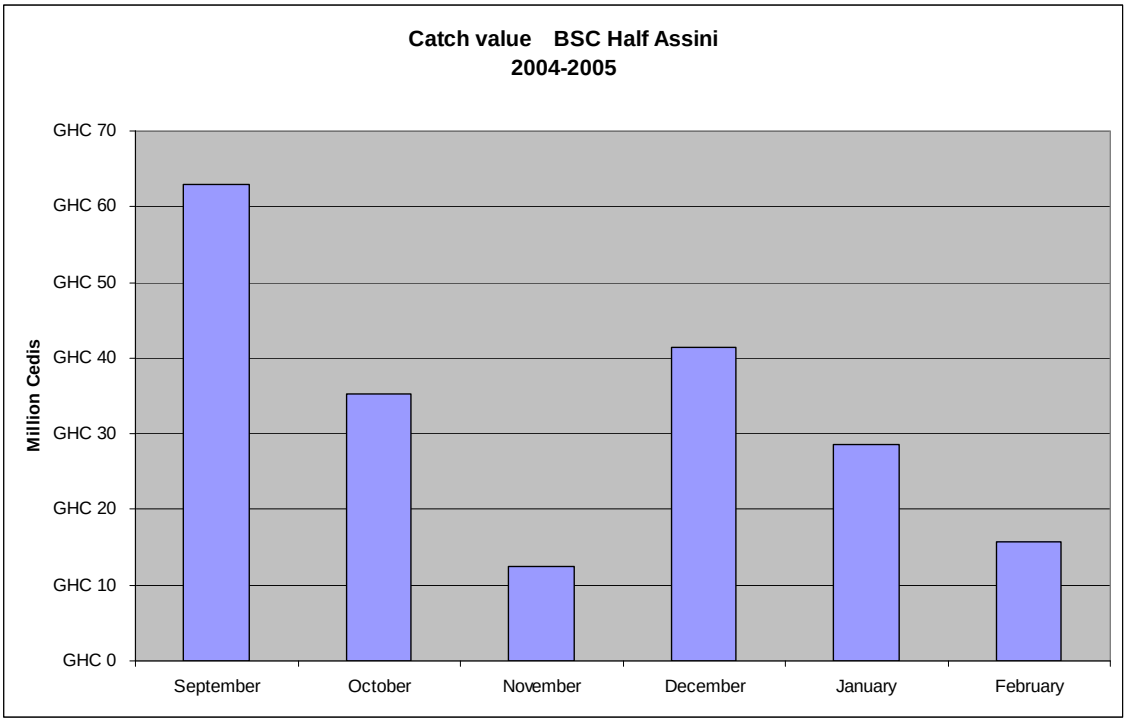
In Half Assini I was able to scrutinise an account book with catch data over a period of seven months, between September 2004 and March 2005. The average number of fishing days had been 3.7 days per week[9] (101 fishing days over 27 weeks). Over the seven months this company caught fish worth 206 million cedis (19,000 euros), which gives an average catch per fishing day of 188 euros. The subtracted costs (special roles, chop money etcetera) total 59 million cedis (5,364 euros). This leaves 147 million cedis (13,366 euros) to share between crew and net owner (after seven months of fishing). Normally this is done after a contract period, which in Half Assini is a year. The amount

Figure 4.12 Sharing the money in Half Assini

[8] This is based on a calculation of all catch data from this company.

[9] Thursday is the non-fishing day in Half Assini. So 3.7 days out of 6, is 61 percent of available fishing time could be used.

Figure 4.13 Value catch of the example company of Half Assini, September 2004 – February 2005



is allocated as follows. First the advances are subtracted, after which the share is divided into ten parts. One part goes to the people with special roles, one part is reserved for expenses, the eight remaining parts are shared in half between net owner and crew. A rough calculation shows that an individual crew member would have earned 900,000 cedis (82 euros) (including the advance payment) in these seven months.

The catch-value data from Half Assini is much higher than in Woe and Akosua Village. This significant difference can be explained by another work ethos or approach but might also reflect better seasons or catches. Unfortunately, I do not have the data to draw conclusions on this issue.

The accounts also show the seasonality of the job. Of these fishing months, September and December produced quite good results, October and January were reasonable, but November and February were poor (Figure 4.13).

Table 4.3 shows that, although the number of days on which fishing was possible was lowest in September, the catch total was the highest during that month.

Table 4.3 Average catch value per fishing day of the example company of Half Assini

Month	*Value total catches (cedis)*	*No. of fishing days*	*Average catch (cedis) / fishing day*
Sep 2004	63,030,000	14	4,502,142
Oct	35,230,000	19	1,854,210
Nov	12,500,000	15	833,333
Dec	41,380,000	16	2,586,250
Jan 2005	28,560,000	19	1,503,157
Feb	15,734,000	17	925,529

- Sharing the catch

The three examples above are of two companies working with a contract and one on the basis of daily sharing. In all cases expenses are deducted first, after which the remainder is shared between net owner and crew. Crew members with special roles earn extra, and that is treated as part of the expenses. When asked about the sharing system I heard a lot of different versions. The proceeds (catch minus expenses) are shared in three parts with one part going into the 'caring advance payments', the second part to the net owner, and the third part to the crew (interview 1, 14-11-2003). A net owner in Woe explained to me that if there is the system of daily sharing, the catch will be divided into five parts with two parts for the net owner (including for the canoe and motor), one part for the leaders and two parts to be divided with the crew (interview 7, 14-1-2004).

In another company in Woe they also share on the basis of five parts and they gave me another example (see Box 4.1). Thus, if you are a strong crew member you will earn 8,000 cedis based on this example and if you also perform a special task you can earn even more. For instance if you carry the outboard motor, you will earn an additional 5,000 cedis (0.45 euro). On average we could conclude that fishermen earn between 5,000 and 40,000 cedis (3.63 euros) per fishing expedition.

The effect of sharing in three or in five parts is that, if shared in five parts, the crew get a relatively larger part (two-fifths is more than one-third). From all sharing systems it can be deducted that the net owners receive a fairly large amount, often with a separate part earmarked for investments in the canoe and net, and always with the cost of the expedition already deducted.

To provide some degree of comparison, research performed in 1999 showed that the average daily income per capita in Ghana was 0.60 US$ per day, with the average daily household income being 2.59 US$ (Trades Union Congress 2004: 3).

Figure 4.14 Sales of a bumper catch in Woe

Box 4.1 Example of how a catch is shared in Woe	
Catch (five pans, each 200,000 cedis)	**1,000,000**
chop money	60,000
transportation fee	10,000
drinks	16,000
outboard motor (petrol)	40,000
carrier of outboard motor	5,000
divers	20,000
carriers of net (on shoulder)	10,000
singers	10,000
tying of the net	20,000
swim to sac	5,000
Total expenses	**196,000**
Income	**804,000**
Miscellaneous	**54,000**
Left	**750,000**
divided in five parts	
one part is net owner's money	**150,000**
one part for the leaders (*bozu*, paddlers, menders)	**150,000**
one part is also for net owner (transport for buying net)	**150,000**
two parts for the company (crew forty people)	**300,000**
thirty strong (all get 8,000)	240,000
three children	15,000
seven women (get half of men)	28,000
Remainder	**17,000**
Source: author	

More than income

In this section we pay some more attention to the financial returns of fishing, whereby it is important to differentiate between net owners and crew. As talking about income is difficult and thus time consuming, we decided to focus on what we really wanted to know, that is whether fisher households have other sources of income besides fishing. Fishing is important because it does more than just generate an income for fishermen and this is what we will address in this section, which we will end by looking into the fishermen's future and ask whether they want their children to become fishermen too?

Fishing as a major source of income

As we saw above, the financial returns are different for net owners and crew members. The net owners get a large part of the catch, but they also have to reinvest part of it in the business. The canoe, net and motor all need to be maintained continuously and crew members should always be able to arrange a loan with net owners, although net owners also use the financial returns as income. In an article by Nukunya[10] dating from 1989 we read that, 'The financial guarantees of the business can be seen in the fact that company owners are easily among the most richest men, not only in Woe but also in all the settlements along the littoral (…)' (Nukunya 1989: 162). However, with regard to the crew members, Nukunya found that, 'Their incomes compare favourably with those of their counterparts in farming and other occupations. The large fish content of their diet means also that they eat better than their counterparts' (*Ibid.*: 166) Furthermore, 'As for the ordinary fishermen the least that can be said about them is that, in terms of achievement, measured in buildings, clothes and food habits, they can hold their own against the average farmer' (*Ibid.*: 170). In an article on coastal lagoons in Ghana we found that fishing in the lagoon (as is done in Akosua Village) is quite lucrative. It was found that with a fishing effort of 3.5 man hours day^{-1}, the average income from the lagoon fisheries during the peak season was three to four times higher than the minimum government wage for an eight hours working day (Ntiamoa-Baidu 1991: 45). Although the article is not very recent, it does indicate that lagoon resources are valuable.

As income is a sensitive topic, we did not ask people to reveal their daily or monthly incomes. In our household survey (see Chapter 3) we did ask whether people engaged in other income-generating activities in addition to their profession of fisherman or processor (in which most of them worked). Moreover, some households were composed of other members doing other than fishing-related jobs. In our fieldwork we had seen women engaging in some small fish processing in addition to running a little bar or making porridge in the morning to sell. In Woe we found that almost one fifth of the households also acquired income from farming. Nevertheless, the majority of the households indicated that their income comes only from fishing-related activities (85 percent in Woe, 82 percent in Akosua Village and 93 percent in Half Assini).

We also used a crew [N=113] and net-owner [N=31] questionnaire which showed that the majority of the net owners from Akosua Village and Half Assini (the migration locations) indicated that they only engaged in fishing. Only one of the twelve (one was missing) said that he had additional work. In the case of Woe, half the net owners were involved in farming. This might be explained by the fact that net owners in Woe have access to land whereas on migration they do not. The crew members in Woe are also more involved in farming (14 percent) than the ones on migration (Akosua Village five percent, Half Assini four percent). However, the fisher crews on migration (Half Assini forteen percent, Akosua Village 17 percent) are more involved in other occupations than the crews in Woe (two percent). In the case of Akosua Village this can be explained by the fact that there is more to do, with a town nearby (Winneba) as for Half Assini which is a district capital.

We also asked the fishermen (both groups) whether their household members were involved in other income-generating activities – to get an idea of the other sources of income in their households apart from fishing. However, only eleven percent of the

[10] Dr Nukunya is a native from Woe.

fishermen answered that members of their households earned incomes from non-fishery related activities. Ten percent answered that their fishing was the household's only source of income.[11]

We also asked about secondary jobs and asked whether the fishermen have other income-generating activities themselves? Thirty percent of the net owners were active in farming (most of them from Woe) and another two percent were active in another income deriving activity, compared to eight percent of the crew members in farming and eleven percent in another income deriving activity. Overall, therefore, fishermen are mainly active as specialised fishermen. The combination of fishing and farming was quite common, as is the combination (in the household) of fishing with petty trading.

It should be kept in mind that income is not only what crew members get in return for their labour or what net owners receive as direct income from their fish business, or what both groups get out other income-generating activities. Income can also be built on returns from savings, either by rent (when kept on a bank account for instance) or by interest one receives when the saved capital is loaned to someone else. The latter is a strategy of female traders in Ghana. Alternatively, they buy fishing equipment to loan to companies (Odotei 2002: 47 and 2003: 81-89). By lending money or equipment to companies, the women are able to claim a certain part of the fish. Although they pay for it as always, the advantage they have is that they have a secured supply of fish and do not need to compete for it with other women (Overå 1998: 99). Income can also consist of 'gifts', that is remittances received from family or friends on migration, pensions, social security payments, 'begging' or 'presents'. I did not ask my respondents about this as it is a sensitive issue and would take up a lot of extra research time.

Nonetheless, I was to observe that these other ways of gaining an income or supplementing ones income do exist. I spoke with net owners who also receive a pension from former jobs with the army, the State Fishing Cooperation[12] and education. From the homecoming party in Woe I learnt that quite a lot of community members had migrated to large cities in Ghana but that some had also migrated overseas to the United States of America or Europe. From other research we know how important these remittances are for local economies (Kabki 2007, Smith 2007), but hardly any of the fishermen (either net owners or crew) I came across mentioned remitting family members. Fishermen and women on migration hardly ever send remittances. As we shall see in Chapter 5 fisher migration is often used as a strategy to avoid having to pay for all sorts of family problems. From a group interview with processors in Woe I did hear, however, that the fact that many had migrated was good for the economy of the town in the sense that there were less resources to share with others. The idea that all migrants would come back and would need to earn a living in Woe was regarded as a threat. Both 'begging' and the giving and receiving of 'presents' are part and parcel of society. However, I have not researched the impact of both on fisher incomes. I did observe that adherents to the Yewe shrine come to the beach to beg for fish, something which net owners often

[11] Thirty-three percent of the fishermen had not answered this question (most probably because they were not asked properly because the question in which this topic was addressed also asked about something else and the assistants did not always ask about both issues. Moreover, fishing and farming are taken as one, meaning that farming was included in the 44 percent answer that another member of the household contributed income earned in fishing.

[12] The State fishing cooperation was instituted in the 1960s as a way to attract national entrepreneurs with the provision of loans. Four companies were started but as the investments were not well managed, large sums of money went lost (Atta-Mills, Alder & Sumaila 2004: 14).

still give in to although some ignore their requests. It still is a norm to comply with the request of someone asking for fish when the fish are landed.

More than a source of income

Jorion stated in a much cited article in 1988 that no-one would ever become a full-time marine fishermen by choice because it is too dangerous and economically risky (Jorion 1988). In his article he writes about the Xwla and the Anlo-Ewe. Nukunya[13] replied in a reaction to this article that the fishermen do chose their profession because of the financial returns and because of their love for it:

> 'One simply has to listen to these fishermen recalling come of their famous exploits at sea, the challenges they faced and the heroism required to meet them, their big catches, the big monies they earned etc. etc. Again during the off season when the appear idle, they look forward to the onset of the next season, no doubt with some financial motive, but also for the joy the activities bring, because fishing is their live.' (Nukunya 1989: 159)

During my fieldwork I also heard a lot of accounts of how beautiful the fishing profession is and how lucrative it can be, for instance when I met the small (twelve people) company in Togo (interview 13, 28-1-2004), who had managed to buy a new boat after one year of fishing. When I saw them in Togo they were painting it in bright colours. Some months later I met them again in Ghana and I could see the result. The canoe was named 'We are also coming' which refers to their successful migration. A former net caretaker in Akosua Village told me a story about one of his biggest catches:

> Once when I fished the sac came up! We could see the fish, the fishes raised the net, it was a miracle! We had cast in the early morning, in 1993, it was full tide, about to go down, we had 2 or 3 sacs. We used 15 or 16 ropes. The *bozu* and all grumbled because the others were getting less fish and we left it in and in and in, my heart was pounding! But when we got it in, we had to shorten sacs, we had a night catch, about 400 bowls! Fanti women came to buy and fry. (interview 17, 17-2-2004)

The singing in the boat and whilst pulling the net, the decorated canoes, the decorated houses of the net owners, the completely new attire and happiness in the community which accompanies the return home of a migrated company (see the quote of the Anlo-Ewe professor in Chapter 5) are also evidence of how fishing is much more than just a job, 'it is a culture, a way of life' (Akyeampong 2004: 180). As Akyeampong showed (see Chapter 3 and 8), the Anlo-Ewe even refused to move away from the coast when they were faced with severe coastal erosion (Akyeampong 2001 and 2004: 180). Fishing is an integral aspect of their lives. The fishermen grew up at the seaside, on a coastal littoral sometimes only a few kilometres wide where they learned to swim and fish as small boys (Nukunya 1989: 158-159) and the sea plays an important role in their religious and ritual life (Akyeampong 2001, see Chapter 3).

The importance of beach seine fishing for the coastal fishing communities also implies more than just being a source of income to individuals since it has communal importance as well. Beach seine companies are often used to earn money for the community. Every now and then the net owners and fishermen are asked by the town council or the traditional council to fish a day extra for the community. In Woe, community fishing often takes place on Saturdays, a day when people often do not fish because of the high number of funerals that take place on that day. One reason why community fishing days are held is, for example, to generate money for school furniture

[13] See also the critique of Jul-Larsen 1994: 13-18.

(interview 15, 28-1-2004). School children often help with the fishing if organised on Saturdays and in the holidays.

Figure 4.15 A good catch in Woe

Nukunya (1989: 159) claims that fishing industry is important to the Anlo-Ewe homeland because it not only has positive effects on the fishermen but also on the whole community:

> '(A)ny visitor to the Anlo Coast can only be impressed by the achievements of the people. The quality of their housing alone is sufficient to tell him he is in an area which is, at least, less poor than most parts of Ghana and Togo. (…) The traditional mud and thatch houses have been completely replaced, all within the last 40 years or so (…). In terms of education the Anlo coast has more than its fair share of facilities (…) most of these schools have been built by local rather than government initiative.

I was able to observe the social importance of beach seines many times in the research locations, given the participation by everyone in pulling in the nets and, in that way, earning some fish. You often see old men and physically or mentally challenged people joining in, usually at the back of the rope, near the women. Members of shrines can also come to the beach and ask for fish and they do not even have to help pull in the net. Their requests are rarely refused and it has become the norm to give fish to these people when they ask for it. They do not even have to ask but just kneel in the sand and clap their hands. These days, some (often Christian) net owners ignore the rule since they do not believe in the power of the shrines. However, a Christian net owner from Woe told me that, in fact, as a Christian net owner you are also expected to give to people who ask for your help. The Regional chief fisherman (of the Volta Region) told me that there had been a case at his court of a Christian net owner not wanting to pay for a ritual (related to the traditional religion). The other non-Christian net owners had been furious. He had told them, jokingly, that they should not be mad, but rather ask their gods to fill their nets with the fish of the Christian net owner who refused to pay. 'Solve it according to your religion'. To the Christian net owner he had said that he had to pay since the money for the ritual was to the benefit of the community. 'Even though you

are a Christian you have to pay since you are a member of the community' (interview 33, 19-5-2004).

One last point needs to be made. Often fishermen in Africa are seen as 'the poorest of the poor' (see Chapter 1) or fishing as a last resort activity. My research counters these ideas. From the net- and crewmember surveys and from most of the fishermen I spoke to, I learnt that most fishermen's parents and grandparents had also been active in fishing. I never met a former farmer coming from the inland – as described by Pauly (2006: 12, 13) – who sought opportunities on the coast. From the literature I know however that Malthusian overfishing (as Pauly has called it) can be recognised in Senegal (Pinnegar & Engelhard 2008: 12; De Vries 2003).

Fishing and the future

To get a better idea of the satisfaction people had with their job I asked them in the crew [N=113] and net-owner [N=31] questionnaire what they wanted in the future for themselves and their children. When asked about the future, we see quite considerable differences between net owners and crew members (Tables 4.4 and 4.5). Eighty percent of the net owners expressed the wish to continue their current activity and/or upgrade or expand their business – compared to 35 percent of the crew! The crew members expressed a preference for switching to another occupation (59 percent).

Table 4.4 Perception own future – net owners; based on questionnaire 2005

		Frequency	*Percent*	*Valid percent*	*Cumulative percent*
Valid	Continue current activity	12	38.7	40	40
	Upgrading / expand business	12	38.7	40	80
	Switch to other occupation	4	12.9	13.3	93.3
	Other	2	6.5	6.7	100
	Total	30	96.8	100	
Missing	Not answered	1	3.2		
Total		31	100		

Table 4.5 Perception own future – crew; based on questionnaire 2005

		Frequency	*Percent*	*Valid percent*	*Cumulative percent*
Valid	Continue current activity	17	15	15.3	15.3
	Upgrading / expand business	22	19.5	19.8	35.1
	Continue schooling	4	3.5	3.6	38.7
	Switch to other occupation	65	57.5	58.6	97.3
	Other	3	2.7	2.7	100
	Total	111	98.2	100	
Missing	Not answered	2	1.8		
Total		113	100		

When asked about what they want for the future of their children, 21 percent of the net owners said they wanted a future in fishing for their children, whereas *none* of the crew gave that answer. The majority of the crew members answered that they wanted their children to complete schooling (62 percent) or find a 'big' job outside fisheries (31 percent). Net owners also expressed completing schooling most often as wish for their children (52 percent) and another 21 percent hoped that their children would find a big job outside fishing.

None of the respondents that wanted another job for themselves (switch to other occupation and other) wanted their children to be in fishing in the future. Fifty-five percent of them wanted them to complete their schooling and forty percent wanted them to have a 'big' job[14] outside fisheries.

When comparing the outcomes of the questionnaire between the three research locations, we see that the crew in Woe is keener on staying in their business than the crew on migration. Fifty percent wish to continue or upgrade the business, compared to fourteen percent in Half Assini and 33 percent in Akosua Village. Crew members on migration are more keen on continuing schooling or switching to another occupation.[15] This might be explained by the fact that the percentage of illiterates amongst the crew in Woe is much higher than the crew on migration (36 percent compared to eight percent in Akosua Village and four percent in Half Assini). Perhaps a crew on migration sees more possibilities/alternatives than a crew that stays at home. The crew in Akosua Village think their children will have a bright future if they complete their schooling (87 percent), as might be explained by the fact that they live nearby Winneba, which is a schooling centre in Ghana.

Figure 4.16 A young girl in Woe

[14] A 'big' job outside fisheries is a code. Often respondents referred to a job with the police, in the army, as civil servant or as teacher, nurse or doctor.

[15] Most of the people who say that they want to switch to another occupation want to devote more time to their secondary job.

This difference between net owner and crew perception of the business might be explained by the way the catch is shared. As expenses are always first covered by whatever is caught, the risk of low catches is disproportionately borne by the crew. More often than not, the net owner is able to recoup his costs, whilst his share in the catch (for income and investment) is considerable. Apparently, fishing is still quite lucrative with only twenty percent of the net owners expressing a wish to move out of fishing and 21 percent even still see a future for their children in fishing.

Our research shows how people engage in fishing not only out of pride and appreciation of the job. As we saw above, quite a number of crew members would prefer to have a different job. It is likely that declining catches are reflected in their appreciation of the job, as they have strong negative effects on the fishermen's returns. A lot of accounts I listened to during my research were coloured by reflections on how good fishing was in the past, and the difficulties the fishermen (net owners and crew alike) now face[16]. Although fishermen now work harder , catches have been declining and fishermen say that their catches include more smaller fish. Life in the fishing villages is quite tough but perhaps similarly tough to life in other rural areas in Ghana. As Béné concluded, fishing communities often reflect a general lack of development of the rural areas in which they exist, (Béné 2004: 76). The following account illustrates these difficulties:

> One day we were interviewing a fisherman in Akosua Village. He works for his brother, one of the net owners of the village. He is 35 years old and has been fishing since he was ten years old. He is married and has three boys of six, three and one year old – the oldest of whom goes to school. His wife trades in (mostly alcoholic) drinks and they own a little bar. It is in the bar, at his house that we sit whilst the company in which he fishes is dragging the net ashore, just in front of the house which stands practically on the beach. It is ok that we interview him, since he had cast his net into the water that morning so he can now have a little rest. Curious crew members come running in from time to time, make jokes in Ewe and go back to work. He explains us what his life looks like as a fisherman, what his roles are in the company, how he makes ends meet. When he is explaining us what the fishermen do when there is a serious fishing conflict, all of a sudden a young girl, of about 15 years old, comes running in crying. He excuses himself, goes away with the girl and we can hear some people shout at each other outside the compound. After some minutes he comes back, but the person he was shouting with follows and for a short while they stay quarrelling together near us. Then the other guy gets sent away and the fisherman explains us what had happened. The crying girl was his little sister and her mother had asked her this morning to stay home from school to sell food in their little food stall. She agreed and had gone to the market to buy fish, since they hadn't caught fish for some time now. She went about selling the food. However, one of the customers had asked for food, had eaten it, but after eating had only wanted to pay half of the required amount. She said 'how can I explain that to my mother, she will be expecting more than that'. The customer however refused to pay more and started beating her. At that point she had run to her brother. (interview 22, 12-3-2004)

Vulnerability

The Anlo-Ewe fish in a vulnerability context, with shocks, trends and seasonality influencing their livelihoods. During my fieldwork I could see how the fishermen at home

[16] It should be kept in mind that this negative view could be a bias in my research. After all, I approached the fishermen as professionals (coming from fishing families – as my surveys proved) with love for their job and did not really question that topic – they need not convince me on that point. Instead my questions dealt with fisheries management problems in the light of clearly declining catches (as also felt by them). In addition, if I had asked them if they were satisfied this might have triggered their discontent, perhaps in the hope that I would be able to do something about it (being white, having contact with the government).

had dealt and still needed to deal with coastal erosion (see Chapter 8). Moreover, throughout all the research locations the fishermen had to deal with the seasonality of the catches (described in more detail in Chapter 8 with regard to Akosua Village). In this chapter we discuss another example that took place in Half Assini, where the fishermen were hindered in their fishing by algal bloom occurring in the coastal waters. These are, therefore, three examples of the external environment impacting on their livelihoods (over which they have no or limited control), three examples of what has been called the vulnerability context in the sustainable livelihoods approach (DfID 1999). Table 4.6 provides examples of these trends, shocks and seasonality threats.

Table 4.6 The three elements of the vulnerability context as set out in the Livelihoods Approach

Trends	*Shocks*	*Seasonality*
• population trends • resource trends (including conflict) • national / international economic trends • trends in governance (including politics) • technological trends	• human health shocks • natural shocks • economic shocks • conflict • crop/livestock shocks	• of prices • of production • of health • of employment opportunities

Source: DfID 1999.

The concept of vulnerability is an important extension of a traditional risk analysis that focused on natural hazards. Recent work on vulnerability 'increasingly emphasises the capacities of different affected groups to anticipate and cope with risks, and the capacities of institutions to build resilience and adapt to change' (UNEP 2007: 304). The understanding had come that a drought or a flood does not necessarily lead to a disaster, a natural hazard only becomes a disaster when it affects vulnerable people (Van der Geest 2004: 8 referring to Blaike *et al.* 1994). The impact of the different factors can be direct or indirect and does not always have to be adverse, for instance diseases can be eradicated or new technologies can be made available with positive results for people's lives and livelihoods. However certain groups in society, such as the poor, generally have inherently fragile livelihoods which make them unable to cope with stresses, and less able to manipulate or exert influence on their environment – making them increasingly vulnerable (DfID 1999). Vulnerability is, therefore, not the same as poverty and the link is on the internal side of vulnerability as being the inability to cope and recover mainly caused by a lack of resources (Van der Geest 2004: 9). We will see that the fact that the Anlo-Ewe fishermen have specialised in one technique makes them additionally vulnerable to adverse trends and shocks.

A way to deal with vulnerability to the above-mentioned stresses is to enhance resilience. Resilience is understood as being the ability of a system to bounce back. Resilience is enhanced by building up the assets of people and, as is frequently stated 'to help ensure that critical institutions and organisations are responsive to the needs' of the people (DfID 1999). Therefore, management that builds resilience can sustain social-ecological systems in the face of unpredictability. In that sense, the diversity of species, of knowledge and of institutions can potentially contribute to sustainability (Folke *et al.* 2002; Begosi 2002: 6). Resilience, a concept derived from the natural

sciences, relates to systems thinking and that is why it is viewed with a certain degree of suspicion from social sciences – where an actor-oriented approach proved to be more appropriate. However, in situations in which social systems are under study in relation to the use of natural resources, the concept of resilience might prove to be useful.

As a reaction to trends such as population growth, the seasonality of fish catches and also shocks like coastal erosion, the Anlo-Ewe fishermen have developed strategies to deal with these, including migration. The fishermen themselves can be found all along the Ghanaian coast but also in other countries in the West African region. Their migration has, however, altered their negotiation power in the new settlements, where they again continuously have to negotiate their livelihood space and deal with shocks and trends. In Chapter 8 we deal extensively with these negotiations and how they can differ between 'at home' and 'on migration'.

The case of 'green green' in Half Assini

When we arrived in Half Assini for the first time in October 2005 and walked to the beach the next day, we were surprised to see broad green strokes on the sand of the beach showing how far the waves had come in. Closer observation showed a spongy flurry substance in bright green spread out over the entire beach and visible in the surf of the sea. We asked some fishermen on the beach what it was and they told us that they thought it to be some kind of cotton by-product from a factory along the coast, being dumped after originally having come from Ivory Coast. I asked others if they thought if it was natural or pollution but they were not too sure. However, it was certainly worrying them and it meant they could not fish because the green substance would fill up the meshes of their net making it too heavy to drag ashore (fieldwork notes 20-10-2005).

When we met the Jomoro District Director of Agriculture we questioned him about it. He explained to us that it was algae, a seasonal bloom. He told us that they were researching whether the bloom occurred as a by-effect of the petrochemical industry. He said fishermen thought it to be cotton because of the colour and texture, because it turns white and looks like cotton if it is left on the beach for a certain period of time (fieldwork notes 20-10-2005).

According to the son of the Ewe chief fisherman in Half Assini it occurred for the first time between 1986 and 1990. In the beginning it was an occasional occurrence and was present for between a couple of months and a year after which it disappeared again. At those times the Ewe had to fish like the others (Fanti) with an outboard motor, hauling the net into the boat at sea. More recently it has appeared to be a seasonal phenomenon, returning every year in October and then slowly disappearing again (it was gone when I returned in December 2005) (fieldwork notes 9-12-2005).

The districts fisheries officer, who has collected the data on the beaches every day for more than 15 years, told me – off the top of his head – that the first time it occurred was 21 November 1994. '*It comes every year. Sometimes it starts in August and stays for the whole year, or till December'*. He explains how 'they' from Accra came to take samples, which they took to their labs and concluded that it was algae. He repeats in his story a couple of times 'They said it was algae' and then:

> 'But it is strange. When it dries up, it becomes white and the structure is like cotton. It also doesn't come seasonally and only in the waves, not in the deep sea (…). After 5 fathoms depth you don't see it anymore' Sometimes it doesn't appear at all. Between August and September we expect it to come. Maybe one year it didn't come.

He suggests that the occurrence may have something to do with the oil that is found. *They are searching for gas – pipeline. The Efasu Manya drilling gas project'*. This is a company which I saw on my beach walk from New Town to Half Assini.[17] Considering the sensitivity of the subject I ask him what he personally thinks that causes the green stuff, '*That it is industrial waste – that is my opinion. A cotton by-product. In Abidjan they produce cloth. It is a problem between the governments'* [of Ghana and Ivory Coast] (interview 100, 13-12-2005). These two suggestions can be heard in Half Assini when you talk to people about the problem. It has either something to do with the oil company or with a factory in Abidjan, which is less than 100 km from Half Assini.

The green stuff seriously affects the fishermen, especially the beach seine fishermen because the green stuff only occurs in the near shore water which is beach seine fishing territory. The officer said the following on how it affects the fishermen:

> 'Fishermen cannot drag in their nets. Then they have to use their net as a purse seine. That is a big problem to them. (…) When algae bloom comes, they shift their attention to the lagoon.' (interview 100, 13-12-2005)

- Biological knowledge

As the district fisheries officer tells us 'they, from Accra' have come down to investigate the green stuff. From the Director of Agriculture I heard who 'they' were, namely the Environmental Protection Agency (EPA). I therefore went to Accra to talk to the people of the EPA. EPA is a government organisation dealing with all sorts of environmental problems in Ghana. In 1995 they wrote a document together with the Institute of Aquatic Biology and the research unit of the Fisheries Department in which they reported on their mission to determine the origin and causes of what they identified as algal bloom:

Figure 4.17 Green green in Half Assini

[17] See the Oxfam America report 'Ghana's big test, Oil's challenge to democratic development' (2009) in which maps show how important Half Assini is for Ghana's (future) oil production with the Tano oil and gas fields.

> 'In November 1993, the appearance was reported of unknown substances, alleged to be toxic wastes, in coastal waters along the East Nzema and Jomoro Districts of the Western Region of Ghana. Physical, chemical and biological analyses in support of field observations at Anokye and Ankobra by the EPA and IAB however revealed the unknown substances to be non-toxic marine green algae (Chlorophyta) in bloom. The principal alga was later identified as Enteromorpha flexuosa by IAB and the Natural History Museum in London.' (EPA 1995: 1)

During the research period of the EPA investigators (February – May 1995) two algal blooms occurred at Newtown and Half Assini, both were restricted to the beach waters less than 1 nautical miles offshore. '*Shore waters were warmer and more enriched with higher nutrient and BOD levels. These conditions may have contributed favourably to algal growth'* (EPA 1995: 5). Sources of enrichment identified was runoff from land activities, disposed waste of coconut oil production and probably other activities – but these still need to be identified (*Ibid.*). Because in the study it was observed that the algal bloom also occurred in the Ivorian waters, an attempt was made to cooperate with the people from Ivory Coast on the study. Unfortunately this did not happen. The researchers do regard that as necessary though,

> 'In order to formulate long term control measures, it is recommended that further studies be initiated with relevant authorities in Côte d'Ivoire and should aim at assessing the actual coverage of the problem (in Côte d'Ivoire) and associated land-use activities.' (EPA 1995: 11)

From a study analyzing green and brown seaweeds (including the Enteromorpha flexuosa) from Ghana's coast we learn that: 'Benthic macroalgae concentrate metal ions from seawater and thus, macrophytic algae, especially green and brown seaweed have been widely used as indicators of trace metal pollution' and – as is the conclusion of the article – that this may also apply in the Ghanaian case (Serfor-Armah *et al*. 1999: 193, 197). According to the study, Ghana's coastline is continually affected by discharge of untreated effluents from mining and smelting operations, manufacturing industries, agricultural run-offs, off-shore mineral and oil explorations and of discharge of waste from oil tankers (*Ibid*.: 193).

Even though the occurrence of seaweed as such is natural (and around the world many seaweed species are highly useful as food and primary material for instance for cosmetic industries), the fact that it is blooming may be due to a plethora of causes whereby natural and social causes are often strongly linked. Ongoing research in Ghana has shown that changes in sea level temperatures, caused by the climate change, have altered the availability of key zooplankton species which are crucial for the biological basis of healthy fisheries (Wiafe *et al.* 2008). The water quality of Ghana's coastal waters is also strongly affected by land based activities such as agriculture, forestry and industrial activities. Hereby a lot has to do with the run off from rivers to the sea. Nutrient levels are generally higher where sweet water flows into salt water, but the discharge due to the above-mentioned activities adds to that. The shipping in and out the ports, in this case the nearby port of Abidjan, also affects the coastal waters – algae travel along with the ballast water of ships. High chemical pressure around harbours can negatively impact the filtering capacity in coastal waters and therefore increases the chances that the algae will multiply and spread. Lastly, intensive fishing activity can also have an effect. In a healthy ecosystem, filter feeders (such as molluscs and oysters) control the algae and gametes (personal communication with Dr Langenberg, Deltares). The picture that emerges from this is that the coastal ecosystem is highly complex and that both natural and anthropogenic influences impact on the system, thereby making it difficult to filter out the causal relations between activities and effects.

- Social impact

In 1996 a second EPA report was published. This time a socio-economic impact assessment of the algal bloom occurrence was performed, together with researchers from the Sociology Department of the University of Ghana. The respondents in the study called the sustenance in the water *green green*. The study, of which the core is a questionnaire undertaken amongst 303 people in five communities in Nzema East and Jomoro districts, clearly shows that most respondents assess the *green green* to have a negative impact on the size of the fish catch (56.8 percent), on the quality of the fish catch (53.8 percent) impacting negatively on fishing income (58.7 percent) and in addition having negative environmental impacts in terms of general pollution and bad odour (43.6 percent). Thirty percent of the respondents thought that the *green green* also had negative impacts on health; such as attributing to diarrhoea, headaches, skin rashes and coughing. These outcomes are already quite convincing in showing the level of concern of the people in response to the algae bloom affecting their coastal waters. The outcome of the study would have been even bigger if the study had been undertaken only in the communities where the blooms actually occur and if it had been undertaken primarily among fishermen. Now, 34 percent of the respondents came from Cape Three Points which had not been affected by the bloom and this strongly affected the answers as the researchers themselves admit. '*it is quite clear that some of the areas had, in fact, not experienced the bloom at all. Consequently, knowledge about it was very scanty in a place such as Cape Three Points*' (EPA 1996: 16). Thus, the fact that 34.4 percent of the respondents answer to having no knowledge or factual information about the algae is influenced heavily by this community's participation in the study. Throughout the whole study, approximately this percentage of respondents answered NS. Therefore, the percentages should actually be corrected for that. In addition only 25.1 percent of the research population was fisherman with an additional 10.2 percent working as fishmonger, yet these are the people primarily affected by the algae. One of the tables in the study is organised by occupation:

Table 4.7 The impact of algal bloom on size of fish catch, by occupation

Impact on fish catch	*NS*	*Fisher**	*Farmer*	*Trader*	*Fishm.*	*Teacher*	*Student*	*Housew.*	*Fitter*	*Unempl.*	*Total*
NS	1	13	61	8	1	14			5	1	104
Decreases catch		50 (16.5)	46	20	23 (7.6)	17	4	2	9	1	172
No catch		13 (4.3)	7	3		2 (0.7)					25
Gives bad smell							1				1
Other							1				1
Total	1	76	114	31	24	33	6	2	14	2	303

* In the original it says fishmonger in this column, but checking the data it must be a typing mistake. Fishm = fishmonger, Housew. = housewife and Unempl. = unemployed
Source: EPA 1996: 20.

From Table 4.7 we can see that only 17 percent of the fishermen answered NS, compared to 54 percent of the farmers, 26 percent of the traders and 42 percent of the

teachers. If the research had included more fisher folk, the outcomes would have been oriented much more strongly towards the negative impact of the phenomenon.

If the respondents had been fisher folk *in majority* the outcomes in terms of ethnicity would also have been different, because in these districts a relative high percentage of fishermen are non-natives which would have resulted in different conclusions. About the ethnicity of the respondents:

> 'Apart from, Buakwaw, the respondents were generally local people. 74.3 percent were born in the Western Region, while 13.2 percent were born in the adjoining Central Region. But it is worthy of note that as much as 7.6 percent were born in the Volta Region, despite the fact that Eastern (1 percent), Asante (0.7 percent), Brong Ahafo (0.3 percent), Northern (0.3 percent) and Upper West (0.3 percent) had fewer representation. This reflects the occupational distribution of our respondents; people from the Volta Region featured prominently in the major, fishing occupation of the area.'

Yet, this 'prominent featuring' of the Ewe is not reflected in the study, which is a pity. No explanation was provided as to how the respondents were found, and whether any stratification had been undertaken beforehand. This is important if one wants to produce a representative study. In a town like Half Assini, for instance, the marine fishermen live in separate neighbourhoods according to ethnicity. If one skips such neighbourhood, a whole ethnic group is left out. The way this influences the study and its conclusions becomes clear when we read the conclusions:

> 'It should be noted that, perhaps apart from Newtown Boakwaw (a fishing community inhabited exclusively by the Ewe), virtually all the coastal communities are characterised by people who do various jobs at the same time. Naturally, deterioration in fishing would cause some problems. But the social structure of such communities is that they quickly switch energy to other occupations. Their experience of the coconut disease is an example. Rural communities are quite dynamic in this regard.' (EPA 1996: 25)

Considering the fact that this study has influenced the standpoint of those in power this is a worrying conclusion in which no responsibility is taken for those fishermen (the majority!) for which alternative livelihood options are closed (such as access to farmland) or at least limited! Even if we were to go along with the report and the way the study was undertaken, the aforementioned conclusion (that coastal people do various jobs at the same time) contrasts with the finding in the same document that, '*Principally, however, the major issue in the research area concerns the increasing number of able-bodied youth without skill, of any kind'* and the *'absence of small scale cottage industries'* (EPA 1996: 26). It should also be noted that, as the general economic situation in these coastal villages is poor, (as is recognised in the report: '*Unfortunately none of the Nzema-Evalue communities, big or small, can be said to be enjoying any economic prosperity presently*' (*Ibid*.: 10)), the rising fish prices due to the algae (p. 26) mean that the food security of the whole community is affected. The algae occurrence is a disaster for these coastal districts and the report fails in its objective by concluding that:

> 'The bloom's occurrence should not be equated with a calamity such as an earthquake. Life still goes on in the affected areas, and the consultant's assessment is that if the education and health care of dependants have been affected, they may have been affected *only marginally as a result of the bloom.'* (EPA 1996: 26; his italics)

The sentence that it 'should not be equated with a calamity such as an earthquake' relates to the old school of disaster studies. From the introduction of this section we know that a natural hazard becomes a disaster when it affects vulnerable people. No matter whether it is algae bloom or an earthquake, it is a disaster if it affects vulnerable

people. From what we have seen, the Anlo-Ewe migrant beach seine fishermen are particularly vulnerable to this natural hazard (whether or not with a mixture of natural and anthropogenic causes).

In the end the recommendation is made that the fishing communities should be offered some '*package of modest, liberal credit facilities to enable them resuscitate and expand their fishing occupation*' (*Ibid*.: 28). From the interviews with officials of Jomorro district it appears that initiatives have been undertaken over the course of time. The districts fisheries officer states that in 2000 the National Disaster Management Organisation (NMDO) gave out some rice which was shared to all dragnets (interview 100, 13-12-2005). The District Director of Agriculture told me that the NDMO also took action in 2003 and that, in 2005, training was given to the fishermen on alternative livelihoods, such as snail rearing, pig rearing and grasscutters. However, not one fishermen made the change:

> 'They have been fishermen since childhood. Investing is a problem, they don't do it. They want you [the government] to give the source of funding. But that is difficult. The government didn't do it. That might change now [with the coming of the Ministry for Fisheries instead of a Department of Fisheries within the Ministry of Agriculture].'

All in all we can conclude that the occurrence of the algae, which started in the 1990s, primarily affects the livelihood of beach seine fishermen (of which a large percentage are Anlo-Ewe) as well as the food security of the communities. To date, the matter has not been addressed effectively considering a newspaper article of July 2007 in which the Mr Ocran, MP for Jomorro District moved a private members motion requesting the government to take appropriate measures to remove the algae (GNA 26-7-2007). He also called upon members of Parliament to support a request by the NMDO to provide relief to fishermen.

> 'According to his statement, 35 percent of the coastal population in Jomorro and the Nzema East districts are "severely affected" by the alga bloom problem, thus deepening poverty in the area.' (The Statesman 05-07-2007)

Although the research of the EPA has showed it to be a natural occurrence, ideas that it is toxic and that it has non-natural causes remain persistent, including amongst government officials:

> 'Mr Saddique Abubakar Boniface, Minister of Manpower, Youth and Employment, said there was the need for investigations to find out whether the algae bloom was toxic since the substance emitted strong offensive odour.' (GNA, 4-7-2007)

In reference to the non-natural cause reference is always made to Ivory Coast: '*He* [Mr Ocran] *said the algae stretched from the waters of Cote d'Ivoire, making it a trans-border problem*' (GNA 30-7-2007) and in the Ghanaian parliament it is requested to retry to discuss the issue with the officials from Ivory Coast.

From this case of algae bloom we can draw a couple of conclusions. The first is that whether or not it is a 'disaster' depends on which of the affected people you look at. The socioeconomic impact assessment failed to focus on the main affected groups, by which the conclusions were quite moderate (not to say misleading) making the occurrence appear to be 'in control'. The algae bloom is a cross-border event affecting multiple stakeholders and with a plethora of natural and anthropogenic causes. It is widely perceived to be a health threat and has socio-economic consequences for the coastal communities affected. Yet the fact that it is a trans-border problem makes it really difficult to address for the Ghanaian government. The case also shows how the Anlo-

Ewe as beach seine fishermen are heavily affected by the algae, whereby they are more vulnerable than other groups in two ways, first of all because they are *specialised* in beach seine fishing and secondly because they are *migrants* with the combination limiting (in this case) their alternatives to deal with the problem.

'Alternative' livelihoods and why it is not a success

In the above example we saw how alternative livelihood programmes were suggested as a way to address a catch reduced due to the algae. These alternative livelihood programmes are also suggested as a way of addressing the problem of declining catches due to other causes, which are often interpreted as necessitating a reduction in fishing effort. A reduction in effort will lead to fewer fishermen being able to live from fisheries or to fishermen earning less, depending on how the reduction is organised, that is in people or time. Ideally, this loss in income is compensated for and in that context alternative livelihood options are often considered. See the following passage in the study of the NCU Ghana of the SFLP programme:

> 'Are there too many people fishing and too many gears in the water? The answer in the marine fishery is clearly yes. (…) Given that more than 500,000 people are involved directly, or indirectly in marine artisanal fisheries the task of limiting access and banning gears will inevitably mean that people will be displaced from the fishery. If this happens, for many the obvious choice will be to do as others have done in the past, and move their seining gear to the Lake [Lake Volta – mk]. This clearly cannot be part of any fisheries rationalisation process and alternatives must be sought. Government will be required to develop and fund a coherent strategy for assisting the transfer of fisheries community members into other income-generating activities, or into different kinds of involvement within the sub-sector. Inherent in such a process would be a policy decision to favour the expansion of artisanal communities into areas of the fishery currently occupied by industrial vessels.' (NCU Ghana 2001: 27)

At local level a few initiatives have been undertaken. In Half Assini we were told by the Director of the Agriculture Department about their experience with these programmes and fishermen:

> Director: We have been training fishermen in alternative livelihoods. Catches are going down, so we trained them how they can go in pig farming or cassava farming. But the fishermen are not used to waiting, so they haven't taken it up. Waiting is a problem, you first have to raise the animal, grow the crop before you can cash it. Also learning something new is difficult for them. Fishing is all they do, all they know. They have been fishing from childhood. No schooling, no alternatives to easily catch up with. You see, I am trained as a veterinarian, but have also then done public health training. Once you have been to school… Like the fulani, they are herdsmen. That is what they do. Without cattle they can't live.
> MK: But then how did you reach them? Were they interested?
> Director: We invited them, first we sensitised them. Then we asked them what they were interested in; they mentioned pigs, grasscutters, small ruminants. Then they came for the training. But since then there has not been any progress.
> MK: How did you train them; by giving them the animals to start with?
> Director: No we showed pictures, invited them to a meeting room like this [the interview was taking place in a meeting room of the DA in Half Assini]. Then visited a farm so they could see, informed them about the costs, the waiting time and when they might expect results.
> MK: Did you give them money, for them to start?
> Director: No we didn't give money. There are no funds and also there was no demand. Nowadays we work on a demand-driven basis. They have to ask for it, they have to apply. Like the coconut farmers, they write letters. (interview 80, 20-10-2005)

In a later conversation we came back to this issue and he then explained to me that these programmes were not such a success with their fishermen since the fishermen were not

willing to invest in the enterprise. So they came to the meetings, they followed the courses but it was not taken any further (interview 104, 17-12-2005).

The question is whether thinking in terms of *alternative* livelihoods a good thing? If yes, what then would be an alternative income deriving activity and would be felt to be as important and good in all aspects as fishing did for fishermen? From the literature we do not get the impression that alternative activities are a great success. Crawford (2002) looked into seaweed farming as an alternative livelihood for small-scale fishers in Asia. He points out that alternative livelihood programmes have been suggested for over two decades now and that they generally have two objectives: first to raise the economic standard of living of fishers and coastal communities and second to reduce fishing effort (Crawford 2002: 4). Three assumptions underlie these programmes: 1) small-scale fishers are poor and this is related to the over-exploited nature of the resources upon which they depend; 2) fishers are willing to give up fishing in favour of more lucrative economic opportunities and; 3) as fishers take up alternative livelihoods, this will reduce pressure on the fisheries (Crawford 2002).

Crawford rightly shows, and we have seen it before (see Béné 2004 in the Introduction and Nukunya 1989, Odotei 2002, Akyeampong 2004) that these assumptions do not always prove to be true. Crawford refers to a study on job satisfaction of Pollnac *et al.* in which they showed that fishermen not always wish to leave fisheries fishers because fishing earns more them more money than other jobs (Pollnac *et al.* 2001). Fishermen are not always the poorest of the poor. It is also important to differentiate between fishermen, in the case of beach seine fishing between net owners and crew. Secondly fishermen are not only interested in fishing because of its economical returns, but also because they are fishermen – it is part of their identity. Many anthropologists have already successfully explained how fishermen see their fishing as more than just what they do for a living, fishing is part of their identity (Acheson 1981, Van Ginkel 2007) whereby they share certain characteristics throughout cultures.

Thus it might be better to think of *supplemental* livelihoods instead of alternative livelihoods. It should, however, be kept in mind that this means that the fishermen are limited as regards space for taking up additional livelihood activities, since they need to be near the fishing grounds. Taking up alternative livelihoods by some fishermen will not automatically lead to a reduction of fishing effort: 'unless livelihood strategies are combined with resources management strategies that address that open access nature of coastal fisheries, progress towards improved fisheries management will be limited' (Crawford 2002: 16). In the end Crawford goes one step further and suggests that economic diversification – and then seen from the household level – might even be a better goal than alternative or supplemental livelihood for fishermen (*Ibid.*: 17-18). Akyeampong suggests that the fishing skills of fishing communities might be utilised in the move to aquaculture (Akyeampong 2004: 180), although aquaculture is related more to farming than to fishing. It requires another way of thinking, of investing, feeding, waiting and then harvesting, than fisheries (Van Ginkel 2007). The suggestion made by the National Coordination Unit of the SFLP programme of the Ghanaian government is indeed important: '*a policy decision* [is inherent in such a process – mk] *to favour the expansion of artisanal communities into areas of the fishery currently occupied by industrial vessels'* (NCU Ghana 2001: 27).[18] The Government would have to make

[18] This viewpoint is shared by the international NGO International Collective in Support of Fishworkers (ICSF) which was erected in 1984 out of concern for too much attention for the commercial, industrial, scientific and fishery resource aspects at the expense of 'the actual real-world, life-and-blood people

some hard choices as to which is preferred in its fishing strategy, a (semi-)industrial sector important for revenue and export earnings or a thriving artisan sector important for livelihoods and food security?

Figure 4.18 Household members in Half Assini

The whole idea of alternative livelihood strategies seems to come from the way the livelihoods approach is used. Wartena's research on styles of making a living (instead of using the term livelihood) indicates that 'non-economic considerations often play a dominant role in people's livelihood choices' (Wartena 2006: 71). She has therefore chosen to use the term styles as a way out because it draws more attention to socio-cultural values which she misses in the way other academics have interpreted livelihood in their research (*Ibid*.: 71-75). The image of actors acting as an *homo economicus* is still dominant in a lot of research, as reflected in the usage of the term capitals (see also Chapter 3), and by the fact that a number of researchers use the concept livelihood as synonym for income (*Ibid*: 72 – see for example Akyeampong 2004: 'marine fishing is more than a livelihood; it is a way of life'.). Researchers are often confused between livelihood activities and livelihood 'outcomes' (Wartena 2006: 72-75). Combined with the idea that livelihood 'outcomes' should be solely understood as income, the idea of *alternative* livelihood activities as a solution to loss of income is easily created.

A recent study on selected successful Marine Protected Areas (MPAs) in South-east Asia showed that many alternative livelihood programmes proved to be unsustainable (Leisure *et al.* 2007). Dropping commodity prices, rising costs of inputs and lower quality of the produced products then of competitors meant that many programmes lasted only shortly. 'Most alternative income-generating activities are better suited for

involved in fishing worldwide fishworkers who are often sections of the population marginalised from mainstream society'.
http://icsf.net/icsf2006/jspFiles/icsfMain/about/english/aboutIcsf.jsp [Access date: January 2009].

offsetting income initially lost due to establishment of no-fishing areas rather than as long-term tools to improve incomes or move people away from fishing' (*Ibid.*: iv). The new job opportunities in tourism, related to the established MPAs turned out to lead to longer-term gains in non-fishing income.

From our study it has become clear that alternative livelihood options are probably limited; the educational level of fisher households is not high, in Woe 63 percent of the fisher population was illiterate or had reached elementary level (one to six years of primary school), in Akosua Village this was 57 percent and in Half Assini 75 percent. The crew and net owners questionnaire underscored these findings; seventy percent of the fishermen were illiterate (nineteen percent) or had reached primary school. Thus, in terms of education, alternatives will not be plentiful since the majority of the fishermen are not well educated. Also from our study it can also be seen that many fisher households have already diversified to a certain level.

One important thing that has become clear from this section is that fisheries cannot be viewed in isolation. Fisheries are an integral aspect of the Ghanaian economy and deserve attention. Changing the rules in relation to the resource will have societal consequences that need to be addressed. The path of alternative livelihood programmes turns out to not be very successful, not in Ghana and not elsewhere. Having an alternative, being able to make choices, is a way out of poverty. Typically the assets of fisher households need to be broadened, in order to really enhance their resilience. The education of the children is an important point to focus on, and points to a more longer term perspective.

Conclusion

In the first section of this chapter we took a closer look at the way beach seine fishing currently takes place in Ghana. Casting the net is a truly skilful job whereby the canoe crew first has to cross Ghana's violent surf and then understand current, wind and other ocean signs whilst making sure that they do not come into conflict with their co fishermen from other companies. The pulling, which on average takes between three to seven hours is performed by crews of between twenty to ninety people and mainly requires strength. The closer the net comes to the shore the more people will help. These people are never refused and are always given some fish for their help. When the net almost lands we again see people doing more skilful work, diving, carrying the net in the water, and deciding when the net should close and how fast it should be pulled. The fish should not be able to escape from the net! This community function and the fact that women and children show up and help, the singing whilst pulling all shows how deeply embedded beach seine fishing is in the community life.

The case of algal bloom in Half Assini showed how vulnerable Anlo-Ewe migrant beach seine fishermen are. Because the algae occur in the near shore waters in such a way that fishermen are unable to drag their nets without tearing them, they are directly affected in their livelihood activity. The Ewe in Half Assini explained how they then either not fish or try to adapt their way of fishing in such a way that they can make a living. The fisheries officer of Half Assini explained how the fishermen would make use of nearby lagoons to get some fish. The EPA socio-economic impact assessment made it clear that a lot of local inhabitants assess or perceive the algae as affecting fish catch and quality. Apart from fishing the algae are also perceived to have negative environmental and health effects. The way people cope with such a stress differs. From the

socio-economic impact assessment we learnt that ‘people do various jobs at the time’ and that ‘they quickly switch energy to other occupations’ (EPA 1996: 25). However in the case of the migrant Anlo-Ewe fishermen we see that their alternatives are limited. The question then is: what do they do? The Nzema are unlike Fanti, Ga and Ewe are not specialised sea fishermen, so for them switching to another activity is more likely than for specialised sea fishermen – even more so in the case of migrants since migrants tend not to have access to farming land. Discussions with the Jomoro district director of agriculture showed us that other job opportunities for these fishermen are even more limited by lack of skills, lack of funds and more importantly by having another mindset. Farming is a longer process than fishing and the activity produces an immediate result.

As we also saw in this chapter, beach seine fishing is a business. Books are kept by net owners and we were able to analyse some of these for our research in order to get a better idea of the financial returns and the seasonality of the job. The data showed a different work approach in the three research locations, with crews fishing on contract or using daily sharing, and varying in size (fifteen to 65). Fishing on the basis of a contract is becoming less and less common in Ghana, due to declining catches. Crews often prefer to be given whatever has been caught the same day. This increases their control over their income although contract-based fishing does have the advantage of being able to make savings. As far as the net owners are concerned, fishing on the basis of contracts has the advantage of enhancing the reliability of labour. The catch data show how prices for the catch vary, depending on how much is caught on the beach (often depending on the season and weather). Crew fishing with a contract often take loans from their net owners. Meticulous records are kept of these loans. Advance payments and loans are then subtracted of the end amount. The two companies fishing under contract generated an average of around one million cedis. This is a large part of their annual income, the other being the fish, and food already shared to them during the year. It is difficult to compare this data with annual national income due to the fact that the fishermen are always also paid in kind. However, if we consider that crew members often earn anything between 5,000 and 40,000 cedis per fishing expedition we can conclude that this is not bad considering the average of 0.60 and 2.59 US dollar a day in 1999.

Declining catches impact on the income of the fishermen. However, crews seem to suffer more from this than net owners (as seen from the job satisfaction answers). This can be explained by how the catch is divided whereby net owners’ costs are always deducted first from whatever is caught, making their entrepreneurial risk much smaller. As their share of the catch is considerable, their earnings are not so much threatened as those of the crew (even though chop fish is often shared). Crew with special skills can take up extra roles and thereby enhance their earnings. From the household survey and the questionnaires we saw that some fishing households have diversified their incomes with other jobs. Fisher households are, however, quite specialised with between 80-90 percent only deriving income from fisheries. Hereby it must be considered that many fisher households have income coming from both men and women (who are active in processing). Having fish as part of their daily diets means fishing households do have highly nutritional diets. Access to other income-generating activities is limited due to the generally low level of education and the lack of access to land whilst on migration.

As we already saw from the discussion on how fishing takes place, fishing is more than just an income-generating activity. Fishing is a way of life, part of the people’s culture and identity. It also has functions and value for the community as a whole, as an

easy source of work, because it offers disadvantaged groups in society the possibility of becoming involved and earning some fish and because of the regular community fishing days. These factors should be included in discussions of alternative livelihood programmes. This chapter has shown that these projects are often based on false assumptions (both in practice as in theory) and have rarely been a success either internationally or in Ghana. It will be much more instructive to think in terms of developing supplementary income options in the fishing research locations since this would also tackle the problem of seasonality of catches. However, such thinking requires a governance perspective that is elevated above the current sector specific sector approach which focuses on day-to-day management. Before we come back to this, we will first focus on the importance and understanding of migration.

5

Migration

We are also coming[1]

Introduction

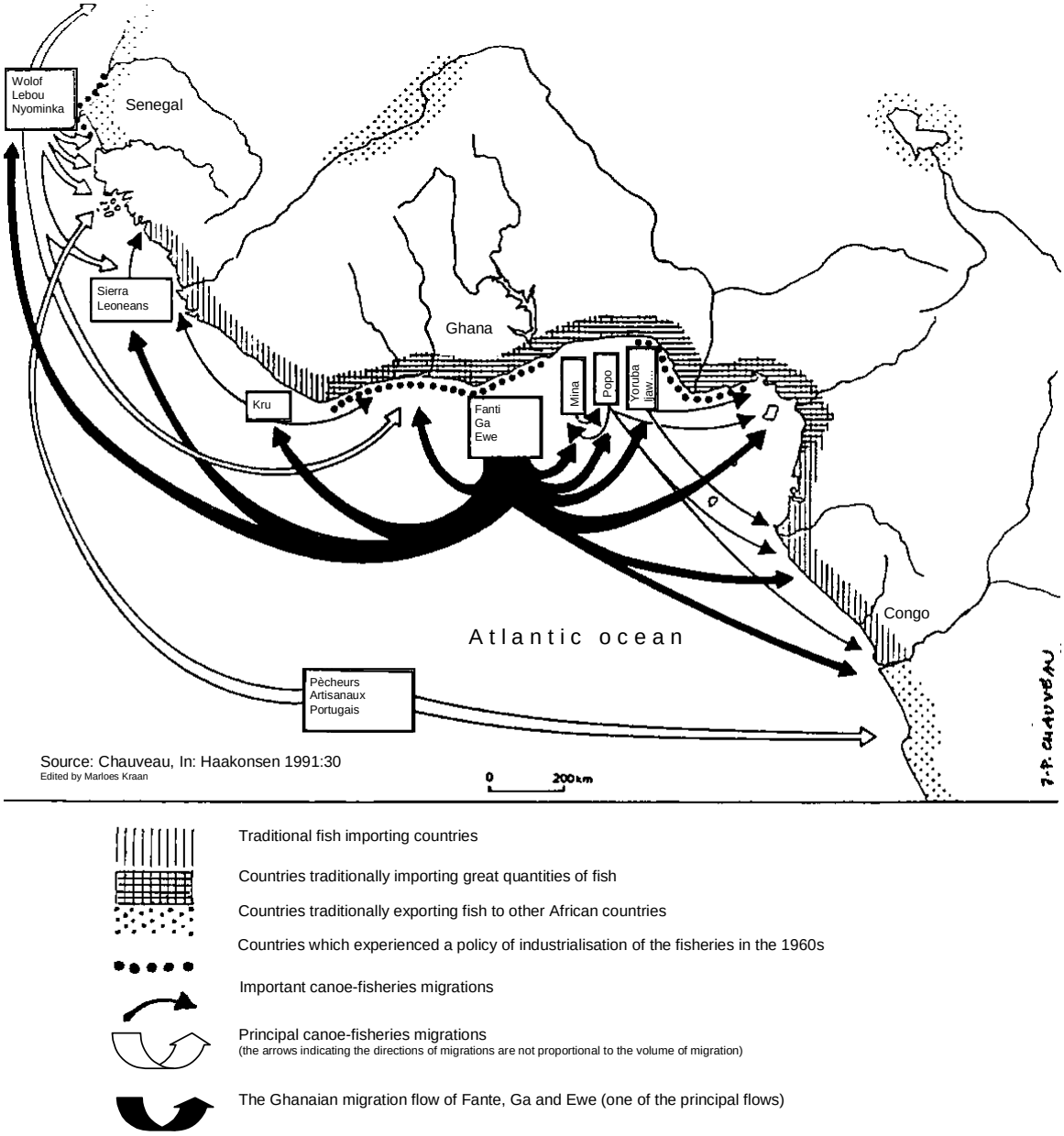
The previous two chapters outlined the livelihood space of the Anlo-Ewe beach seine fishermen. As we saw, the livelihood space of the Anlo-Ewe fishermen is geographically much larger than their home area in the Volta Region. Anlo-Ewe fishermen can be found in many West African countries and all along the Ghanaian coast. This chapter will explain how this mobility of the Ghanaian fishermen, and in particular of the Anlo-Ewe, should be understood and it will also investigate some possible implications of this mobility for the livelihood space of the migrant fishermen and for fisheries governance.

The high mobility of fishermen has been recognised as a remarkable feature of the West African artisanal fisheries arena (Haakonsen & Diaw 1991, Chauveau *et al.* 2000). Ghanaians, an influential group in West African fisheries, play a significant part in this mobility (Lawson & Robinson 1983: 279). 'Ghana is the region's major 'exporter' of fishermen who can be found regularly in at least a dozen countries' (Haakonsen 1991: 3). The Ghanaians are not the only mobile fishing group active in West Africa. The Senegalese are also very mobile (Samba 2006). As a result, the region has in effect been divided into three zones (Chauveau *et al.* 2000). The Senegalese are found predominantly in the waters of their neighbouring countries, in Mauritania and Guinea (Samba 2006), but have in fact migrated as far away as Ivory Coast (Odotei 2002b). The Ghanaians are mainly active in the area between Sierra Leone and Nigeria. A third zone of migration can be found in the south, from Angola to Gabon, although this zone has not become dominated by any particular group (Chauveau 1991: 14). Figure 5.1 shows the migratory flows depicted on a map of West Africa.

The Ghanaian fishermen, when subdivided into ethnic-technical groups, have migrated to different places (Odotei 1995). Using their hook and line technique the Ga are based mainly in harbours (in Ghana mostly from Tema) and have therefore migrated to

[1] Name of a canoe of migrant Anlo-Ewe fishermen in Togo.

Figure 5.1 The migration flows of fishers in the West African Region



other harbours in Ivory Coast or Liberia from which they engage in fishing (see for Côte d'Ivoire: Delaunay 1992: 96, Delaunay 2000, Odotei 2002b: 5; for Liberia: Haakonsen 1992: 82). The Fante are the most mobile fishing group making mainly use of the purse seine technique. They move seasonally during the sardinella season from July to September as well as also for longer periods of time (Odotei 1995, Overå 2001). The Fante keep moving around, even after they have migrated permanently to other locations like the west of Ghana. They can be found in Gambia (Everett 1991: 75, Scheeres: personal communication), Guinea (Solie 2006), Sierra Leone (Wagner 1991), Liberia (Haakonsen 1991) and also in Ivory Coast (Odotei 2002b, observation of my research assistant

John[2]) and Benin (Overå 2001). Their greater mobility has been described as a 'search of profitability and gain' (Delaunay 1991: 161).

The Anlo-Ewe fishermen use their beach seine technique everywhere they go (Mansvelt Beck & Sterkenburg 1976: 14; Akyeampong 2001); in Côte d'Ivoire (observation John in 2004, Delaunay 1992: 98, Odotei 2002), Liberia (Haakonsen 1992: 82), Togo and Benin (Cyriague 2006, Atti-Mama 1991: 243, Odotei 2003 and own observation in 2004) and Nigeria (Ijff 1991: 255). Using this technique makes the Ewe a much more sedentary migrant group than the other Ghanaian fisher groups: 'the Ewe units using beach seines are characterised by their permanence (…) in a limited area' (Delaunay 1991: 161). There are two reasons for this. First of all a beach seine is operated by a fairly large group of men as the net is large. If a net owner migrates he needs to take this whole group along, which makes it a costly venture. It takes more time to earn these costs back. Secondly, beach seining is strongly connected to the land. However, gaining access to land is more difficult than accessing the sea. These two factors together explain why the migration of beach seine companies will always have a more permanent nature.

Figure 5.2 Canoe of migrant Ghanaian fishermen in Togo

Ghanaians are predominantly found in areas from Côte d'Ivoire to Benin. Sixty to seventy percent of the fishers in Togo and 55 percent of the fishers in Benin are Ghanaian (Cyriague 2006: 10, Atti-Mama 1991: 243). In Côte d'Ivoire the marine fisheries are largely dominated by foreign fishermen, most of them (90 percent) coming from Ghana (Odotei 2002: 5, Delaunay 1991: 157). However, Ghanaian fishermen also play an important role in other countries as well. The Ghanaians have an important share in the fish supply of Nigeria. The Ghanaians land most of the sea fish in Lagos State in

[2] My research assistant John conducted a survey [N=66] for me among Anlo-Ewe beach seine fishermen in Ivory Coast in 2004 in the villages Mondoukou, Bassam Beach (12 fishing companies) Azoreti, and along the whole coastal stretch of Jacque-ville (40 fishing companies) all nearby Abidjan (33 fishing companies). This survey is not included in the overview in Chapter 2, as the research material is not used in this thesis.

particular. (IJff 1991: 264). In Liberia – before the war in 1990 – Ghanaian fishermen, mainly Fante, made a very important contribution to the Liberian catches and accounted for 93 percent of artisanal catches, 76 percent of total domestic catch and 44 percent of the total marine fish supply in the country! (Haakonsen 1992: 84). In Sierra Leone a local fishery was developed, but the arrival of the Ghanaian fishermen (Fanti) had a major impact on the development of the sector (Hendrix 1986: 73). They were however forced out of the country in the 1960s by the Sierra Leone government (*Ibid*.: 75).

Previous research on fisher migration

The migratory nature of the West African fisheries has been recognised in a substantial body of research work (see Marquette's 1998 reference list of 520 references), most of which was written after the FAO put the topic of migration on the agenda for the first time in the 1980s. When the FAO started their Integrated Development of Artisanal Fisheries (IDAF) programme, it soon became clear that fishery communities were not as homogeneous as imagined. Many villages along the coast in West Africa harboured 'fishing immigrants', which had implications for the FAO programme. A meeting was held on the issue which resulted in a report that was a compilation of the existing knowledge on fisher migration in the region (Haakonsen & Diaw 1991).

Randall (2005) made a demographic migration typology in terms of scale and time pattern, based on all these and other papers and books[3] written on fisher migrations in the West Africa region (Table 5.1).

Table 5.1 Synthesis of usual categorisations of fishing migrations in West Africa

Scale	*Pattern*	*Description*
Internal	Short-term	One to several weeks not necessarily set seasons. Usually just men.
	Seasonal	Generally following fish movements or production patterns. Fairly regular pattern each year. Some populations men only, others include women and possibly children.
	Longer term circular migration	One or more years. Usually described as contracts with companies.
	Permanent migration	Often not intentional but an outcome of longer-term circular migration.
International	Seasonal	Generally follow fish movements or market opportunities. Some populations men only, others include women and possibly children.
	Long-term contractual migration	Contracts can be between one and eight years. Usually men alone or groups of men. Sometimes women go separately and join them in the destination area.
	Permanent migration	Not clear whether these were always intended to be permanent. History of long-term migrant communities in many countries. A lot of fishermen have been born there – unclear about when groups cease to be migrant.

Source: Randall 2005: 11.

[3] Randall has a reference list of eight pages. Most of the work performed later than 2000 is either on AIDS in fisher communities or on Senegal.

Making such categorisations of fisher migrations has proven to be tricky and Randall also needed to add three complicating factors. First of all there are differences between sub-groups (often ethnic sub-groups), secondly there are combined strategies (permanent migrants who make short-term movements) and thirdly it is difficult to prove permanence as has been shown in an article on population mobility in Africa; 'very few people leave with the intention of leaving for good but in practice, however, many will never return (Van Dijk *et al*. 2001: 12). This also complicates the defining of a migrant – are fishermen, for example, still migrants if they are born in the migrant locality (Randall 2005: 11)?

Another way of understanding fisher migrations is to look at the reasons for leaving 'home' (push) and the reasons for going to the new destination (pull). This has received ample attention in the literature whereby the mobility of fishermen in West Africa has been explained in two ways: marine biologically and socio-economically. In Table 5.2, I present a synthesis of the existing literature, whereby I make some differentiation between the start and the continuation of the migrations. This is done in order to provide a rough indication of the factors recognised as having started the migrations and which still play a role and factors that have contributed to its continuation. In the following sections I will discuss the factors in more detail.

Table 5.2 Synthesis of explanatory factors stimulating fisher migration

	Start of the migrations	*Continuation of the migrations*
Biological factors	Upwelling – follow the fish (pull)	Over fishing of the home shores (and/or lagoons) (push)
	Mobile fish species (pull)	Coastal erosion (push)
		Population pressure: land scarcity (push)
Socio-economic factors	Making use of knowledge of the existing migration networks: catches, markets, access to credit, safety	Possibilities to earn more money: other currency, access to credit, possibility to make savings (pull)
		Adventure (pull)
		Locals value their presence: catching fish, bringing employment, transfer of knowledge
		Access to (cheaper) inputs (pull)
		Status (pull)

Source: author, based on the literature.

Start of the migrations

A first biological explanation of fisher migration is the occurrence of upwelling in Ghana and Senegal's coastal waters (Koranteng 2000). Upwelling is cold nutrient water that mixes with surface water, which attracts large schools of sardinella resulting in an abundance of fish, boosting the development of coastal fishing. Secondly, mobile fish species induced the fishermen to follow the fish, bringing them to areas where the local fishermen were not active at sea but mostly only operated in the in-between areas of estuarine and lagoon systems. The experienced Senegalese and Ghanaian fishers filled in the vacuum. These early fisher migrants (mostly Fanti at first) made use of the already existing migration networks of people connected to the merchant economy, like shopkeepers, boatmen, transporters and workers (Chauveau 1991: 21). Chauveau points out that 'the oldest documented migration spheres also correspond to those zones early involved in 'petty commodity production' as the dominant economic form' (*Ibid.*). This

connection strengthened the position of migrant fishermen in terms of safety, access to credit and markets for their fish but was also valuable for the other migrants: '*réciproquement, des commerçants ont pu améliorer leur position sociale, tant dans leur pays ou région d'origine que dans le pays d'accueil, en associant des pêcheurs à leurs activités*' (Chauveau *et al.* 2000: 52).

Figure 5.3 Elmina castle

The arrival of the Europeans (1482 the Portuguese, followed by the Dutch and British in the seventeenth century) stimulated both the fishing economy and the mobility of fishermen. The slaves, soon the main item of trade, were fed fish, but catches were also stimulated by the growth of coastal towns due to migration to the coast. In addition, the fishermen were actively involved in loading and off-loading ships, necessitated by the absence of harbours (Odotei 2002a: 32-33). 'Canoes and surf-boats formed the essential link between shore and ship, and canoe-men – mostly freemen from Elmina – were held in high esteem' (Van Dantzig 1980: 82), most probably due to their skills in dealing with the rough surf. These 'freemen from Elmina' and their Ghanaian canoes did not only do this work in Ghana but were taken along the Slave Coast (Togo, Benin) by the Europeans (Akyeampong 2001: 37, Van Dantzig 1980: 19). The name Mina of a coastal ethnic group in Anexo (Togo) still echoes their Elmina origin (Jul Larsen 1994).

Continuation of the migrations

The upwelling effect in the ocean and the mobility of fish species form the basis of the fisher migrations in the West African region. The fishermen continue to make use of existing networks and continue to use and create institutions. These social and economic networks are extensive and often ethnically defined (Overå 2001: 5). Most of the fishermen migrate to places where they already know someone (Bortei-Doku Aryeetey 2000: 37) In my research I also found that all the fishermen who I asked why they had moved from their hometown to come fishing at a particular migration destination, replied that they had heard from people that they knew of abundant catches at that locality. The relationships in these networks are well-maintained. In general, Ghanaians return home regularly, to visit family and friends and to attend special happenings (funerals, festivals) thus maintaining their identity. However, this does depend greatly on the financial possibilities, as clearly shown by the answer given by a 38 year old Ghanaian Anlo-Ewe

beach seine fisherman who told in Togo when I asked him if he had been back to Ghana during the last year that they were in Togo:

> Kweku: 'Yes, we all went to a funeral, by car.'
> MK: Did you return for last year's Easter?
> Kweku: "No, we celebrated it here, we didn't go. We had then just arrived and did not have a lot of work so we stayed.' (interview 13, 28-1-2004)

Nevertheless, there are more factors which explain the continuation of fishermen mobility in recent times, such as over-fished home shores (too many fishermen catching lesser amounts of fish) and population pressure in relation with poverty of soils; 'pushing' more people away (Jorion 1988, Nukunya 1989, 1991). This explanation is especially true in relation to the migration of the Anlo-Ewe fishers given that the population pressure in their home areas together with the erosion of beaches resulted in less fishing space (Akyeampong 2001: 138) (see Chapter 8).

Another factor for explaining fisher migration has been the possibility to earn more money elsewhere. Especially after the crises in the beginning of the 1980s, a lot of Ghanaians were attracted to earning money in a currency other than the Ghanaian cedi. In their neighbouring countries, Ghanaians could earn the much stronger CFA (Bortei-Doku Aryeetey 2000). Related to this is the fact that the local 'fish-mammies' in Benin and Togo give loans to acquire fishing equipment due to both (loans and equipment) being difficult to obtain in Ghana (Odotei 1995, 2003), or to obtain inputs at a cheaper rate – such as petrol in Nigeria (Klein 1999 in Overå 2001: 2).

Some explanations for Ghana's out-migration in general – of which the above-mentioned CFA attraction is one – can also explain fisher migration (Bortei-Doku Aryeetey 2000). One of them is the possibility to save money away from home. On migration the social obligations towards family and friends are felt less strongly, giving migrants the opportunity to save some money (Delauney 1991). The saved money is, however, often invested in family-projects, like a house (Odotei 2002b: 12). A 38 year old fisherman I met in Akosua Village was fishing with a company in Abidjan (he was in Akosua to visit some family and friends). He told me, when I asked him what his plans were for the future, that he was building his own house in a new neighbourhood of Woe. So far he had fished in Abidjan for fifteen years with three contracts of five years, and had earned 1,850,000 CFA (2,800 euros), which is a considerable amount of money (interview 29, 22-4-2004). The fact that he was the one who paid for the newly built family house in the home area adds greatly to the respect to be received when coming back.

Investing earned money back at 'home' has been observed in other migration studies such as Eades' observations of Yoruba migrants, who were successful traders in the Gold Coast and who built houses in their poor rural home area (Eades 1993 cited in Andersson 2002: 63) and by Andersson in Zimbabwe. Andersson explains it as reflecting a strong sense of belonging and it should be understood in relation to their socio-cultural disposition (Andersson 2002: 62-64) which is nicely reflected in the title of his book: 'Going places, Staying home'.

Finally it is said that having been abroad strongly enhances your male status in Ghana (Odotei 2002b; see Adhuri & Visser 2007: 139 for the same effect under Indonesian migrant fishermen). As Dr Dovlo, an Anlo-Ewe professor, originating from a fisher community, explained to me:

> 'As a child I remember how the family fishing company returned from migration, in trucks – all of them wearing their new company uniform.[4] We welcome them as heroes! Women ran outside, happy as they were to see their men and sons again. I, as a schoolboy, felt jealous, seeing my age-old nephews returning as men. They then also started treating me as boy instead as someone of the same age. Migration made a man out of a boy.' (interview 52, 12-6-2004)

In addition, during my research a lot of fisher migrants stated, when asked about their reasons to migrate, that they like to travel, to go to other places. The migration of fishermen has therefore become a tradition, it is a possibility and an opportunity and going or not will depend on a range of factors. The social position of the fisherman (as father or son as boat owner or crew member) will influence the decision, as well as the economic and social situation in the hometown, in Ghana and in the country of destination (because it influences the gains and possible losses).

Livelihood space

Ghanaian fishermen have been able to expand their livelihood space by migrating to other places. As we saw from discussing some push factors, such as coastal erosion, population pressure or overfished home shores, in some cases this was necessary. From the pull factors we understand that the expansion of the livelihood space was also positively triggered given that the fishermen saw opportunities which they pursued (see also Overå 2001: 2, 12). Livelihood space refers to three elements: spatial, economic and social/cultural (see Chapter 3). The first being space where one can work (fish and market), live and make use of facilities and services. The second refers to the niche creation and the third to the fact that one also needs to find space to position oneself, somewhere where one is accepted. The first two elements of livelihood space are recognisable in the above discussion of reasons why Ghanaian fishermen have migrated. The fishermen were able to fill in a niche, a means to exploit an unexploited resource, and were often not competitors to local inhabitants given that, in many countries, locals did not fish at sea or not in large numbers.[5]

The third element, of being accepted, is also relevant. In general, literature suggests that migrant fishermen have generally been welcomed by local communities, and the fishermen managed to maintain good or at least neutral relationships with them (Odotei 2002b: 33). They have an important impact on the economic life of the local communities. Often they generate employment for many (in fishing material, ice, fish trade, fish processing, fuel and related services) and they have an important share of the domestic catch, thereby supplying fish for the local consumers. The Director of Agriculture of Jomorro District in Half Assini explained why the migrant fishermen, both Ewe and Fanti, are valuable for the local population:

> 'Ok, there are positive effects. Here they don't know how to fish so the migrants can come to do it. Thereto they pay royalties to the Chief which is used for development programs. Then also they sell their fish to the local women who then also sell it. If they would not stay here, they would come here from – say Mankessim- to fish here and then sell it there. Then Mankessim takes the catch. Now they also profit here from it.' (interview 80, 20-10-2005)

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[4] Fishermen fishing in a company can, for the occasion, all decide to have their clothes made out of the same cloth (print). That is more often the case in Ghana when certain groups wish to show how they belong together, for instance members of a welfare organisation can wear the same clothes at a funeral. Apparently the same happened in the past when a company returned home.

[5] Ghanaian fishermen have also been migrating within Ghana and there too they were able to find space – in the last section of this chapter we will explain why.

The migrant fishermen invested considerably in for instance gear, boats and ovens and the fish that they catch represents a considerable import substitution value. In some countries it was the Ghanaians who taught the locals to fish at sea (Togo, Benin) or improved fishing skills of locals (Sierra Leone). Furthermore, Ghanaians have had a strong technical influence on the fishing sector in West Africa, they have taught many West Africans fishing with their techniques and equipment and nowadays the Ghanaian canoe is used in many countries in West Africa.

However, migrant fishermen have also been confronted with constraints, such as competition for resources with, for instance, industrial fleets (Overå 2001: 3), as well as political conflicts, such as the expulsion of one million Ghanaians from Nigeria in the early 1980s,[6] and the civil wars in Liberia and Sierra Leone in the 1990s (*Ibid*.) and more recently in Côte d'Ivoire. Fisher migrants have also been directly addressed, being blamed for not investing the money they earn locally and for illegally transferring money to their home countries (Nguinguiri 1991: 290-291). At times, Ghanaian migrants have been envisioned as an uncontrollable and suspect population, for instance by making reference to the use of magic (Delauney 1991: 161 – see also Chapter 8). In Liberia the Ghanaians were accused of having kidnapped local children for ritual purposes (Haakonsen 1992: 78). A similar accusation was made in Côte d'Ivoire (de Surgy 1969 in Haakonsen 1992: 78). There have also been violent conflicts between the Ghanaian migrants and locals, as in Sassandra, Côte d'Ivoire (Overå 2001: 26). Such confrontations, with varying degrees of violence, between migrant fishermen and locals (possibly also fishermen) also occur within Ghana (see Chapter 8). These negative confrontations affecting migrant fishermen show that the position of migrants is always subject to negotiation and points to the fact that migrant fishermen are not only active in niche creation but also in niche protection and maintenance (see Chapters 4 and 8).

Do these explanations suffice?

The above classification of fisher migration in West Africa in terms of the geo-administrative level and duration (see Randall 2005) and the range of explanatory factors – historical grounding in bio-environmental and socio-economic conditions that facilitated the migration of the fishermen factors – is not sufficient. It is limited as Tacoli has argued that traditional approaches to migration, focusing on push and pull factors explain the direction of the movement but fail to account for the composition and type of movement, which are determined by culturally-specific and socially-specific factors (Tacoli 2002: 19). Focussing on the movement instead of also on the type and composition prompts the question of why Ghanaian fishermen move to Benin to fish whereas Beninese fishermen migrate to Congo (Nguinguiri 1991: 285). As we will see, the answer partly has to do with which group moves and which technique is used.

Fisher migration as translocal networks

Such different perspective should be built on the basis of three points. First of all, the mobility of fishermen should not be seen in isolation from wider social economic devel-

[6] In the 1970s and 1980s, millions of Ghanaians migrated to Nigeria attracted by the booming oil industry in Nigeria and by the idea of being able to run away from Ghana's struggling economy (due to declining cocoa and mineral exports) (Smith 2007: 9). When the world oil prices collapsed and Nigeria's economy with it – over-reliant as it was on the oil business – the Nigerian government decided to expel all migrants from Nigeria in 1983 and 1985 (Adepoju 2005).

opments. Mobility in Africa is the rule rather than the exception. Secondly, I would like to move beyond the unidirectional push and pull factors and make use of the 'continuous flow' thinking as used in the transnational approach to migration. Thirdly, it is important to link fisher migration to the fishing activity and see it as a livelihood strategy. Making the fishing activity central when studying the migration of fishermen, implies a revaluation of certain concepts, such as territory, borders and space.

Figure 5.4 A canoe leaving for migration to Ivory Coast

Mobility is normal in Africa

The book *Mobile Africa* argues that 'mobility is the normal state' in Africa (De Bruijn *et al.* 2001: 64). West Africans are no exception given that one third of the individuals in West Africa no longer live in their village of birth (ref. De Haan in Black 2004 in Randall 2005: 3). From the colonial period onwards, a start was made to collecting data on migration. However, oral history and anthropological studies have revealed that 'movement for trade, war and for a range of production systems is an ancient and fundamental aspect of West African life' (ref. Cordell *et al.* 1996, Chapman & Rothero 1983 in Randall 2005: 4). The slave trade is a very well-known 'movement' that has shaped and influenced West African societies and 'in complex ways also shaped how localistic (tribal, village) identities interplay with national identities' (Grillo & Mazzucato 2008: 191). Later on, new migration flows started in the colonial period as the result of 'forced migration to work on colonial projects and semi-forced migration as a consequence of the imposition of taxes to be paid in cash' (Randall 2005: 4). The African coastal regions are no exception; 'the African Atlantic coastline has always been subjected to continuous population movements' (Chauveau 1991: 13).

In Ghana alone, many people are used to being part of multiple-location-households. Internal migration is as high as fifty percent in Ghana (Randall 2005: 3). Migration is often an integral part of households' livelihood strategies (see for example Van der Geest 2004 on internal migration from North West Ghana to the south; Arhinfull 2001, Smith 2007 and Kabki 2007 on the social and economic effects of international migration to the Netherlands for Accra and rural Ashanti areas). Children often grow up in different locations to where their parents live and in 1998 fifteen percent of school-children lived somewhere else (Hashim 2005, Van Dijk *et al*. 2001: 13). It has been estimated that at least a million out of twenty million Ghanaians live abroad. Reliable data is, however, difficult to obtain because most of the migrants leave Ghana through informal channels (Smith 2007: 11). Smith, who studied the influence of transnational networks on the economy of Accra, describes five main periods following Ghana's independence in 1957 and the influence of the political-economic situation in Ghana on international out-migration. At first, in Nkrumah's time, Ghana was a migrant-receiving country with a booming economy (mainly in the cocoa sector). However, in the mid-1960s the economy began to decline, leading to the first out-migration of (skilled) Ghanaians. One of the countries the Ghanaians migrated to en masse was Nigeria (2.5 million in 1982), after oil was found there. Most of them were expelled in the 1980s when the oil price declined and there was less work. This came at a bad time for Ghana, which was hit by severe droughts in 1983 resulting in general crop failure and food shortages. At that time, President Rawlings turned to the World Bank and IMF for financial support. The consequences of the Structural Adjustment Programme hit hard on the Ghanaian economy and society. Many more Ghanaians migrated in these years, and the support they provided for the families they left behind was essential and at the same time led to more people seeking better lives abroad. President Kufuor rose to power in 2000 and requested more assistance via the Heavily Indebted Poor Country (HIPC) initiative which gave the government the opportunity to implement a reform agenda reviving welfare provisions, such as a healthcare scheme. The Ghanaian government started to recognise the positive effects on the Ghanaian economy of Ghanaian migrants abroad and tried to ease their connection to Ghana by changing some policies, for example by implementing the Ghana Dual Citizen Regulation Act, organising a Homecoming Summit in 2001 and a National Conference on Migration in 2004 (Smith 2007: 6-11).

In policy and research, however, mobility has long been seen as a rupture, an anomaly to 'normal' sedentary society which needs explanation (see also De Haan 2002: 2,4). It 'has always been regarded as a special and temporary phenomenon' (De Bruijn *et al.* 2001: 64). '[T]he natural state of people and the world was conceived of in terms of stability and coherence' (*Ibid*.). Mobile people – 'nomads and pastoralists (such as Berbers and Bedouins), hunter-gatherers, gypsies, vagrants, homeless people, itinerants, runaway slaves, and serfs – have always been a thorn in the side of states' (Scott 1998: 1). Scott explains in his book how and why states have always worked on simplifying the social and natural world, both have been 'refashioned by state maps of legibility' (*Ibid*.: 3). Getting mobile people sedentarised was one way to achieve simplification.

Usually, migration is defined in terms of crossing a political or administrative boundary (Bilsborrow & United Nations Secretariat 1993 cited in Van Dijk *et al.* 2001: 10). Crossing borders might seem clear in the case of state borders, but at the sub-state level things become more complicated. For instance, district boundaries crossings are less well documented since these movements are less relevant to the state administration.

Migration research was influenced for a long time by the bipolar models of scientists, such as rural-urban, internal-international, modern-traditional, change-continuity.[7] This made certain borders (such as state borders) important in their thinking and worthwhile examining. The question is, however, why moving from the Volta Region to the Central Region in Ghana is not so interesting as a migration phenomenon, whereas crossing between Ghana and Togo is, even though that means that one stays within the community of fellow Ewe but nevertheless becomes an international migrant? (see also Van Dijk *et al.* 2001: 11). Rural-urban migration and trans-continental migration have been the focus of special political interest. Fisher migration does not usually fit these categories and has therefore not received a lot of attention in national sample surveys or in more general demographic African migration literature. The only way fisher migrants can be identified as a special group is through regional, occupational or ethnically focussed studies (Randall 2005: 8), which explains why no major demographic research has yet been undertaken on fisher migration. This is indeed reinforced by the fact that fisher communities in general are marginal, and have therefore been studied less intensively in social science research (Visser 2004: 24).

However, there are more reasons for the lack of attention for fisher migration in demographic research. Fisher migrants resemble pastoral nomads in some ways, and these are also ignored in most demographic studies and, if mentioned at all, are seen as a problem which complicates the collection of data. They cross internal and international borders as part of their production system.

Fisher migrations can also resemble labour migrations in instances in which fishermen migrate because of better markets or favourable exchange rates and in the case of business-oriented fishermen as opposed to those fishing for subsistence or for petty trading (Randall 2005: 7). Nevertheless, the categorisation of fisher migrants as labour migrants does not always fit. It should be remembered that, although economic factors play a significant role in the formation of migration practices, they do not determine them. Economic decision-making is socio-culturally embedded (Granovetter 1985 cited in Andersson 2002: 48). Andersson said the following on Buheran migrants in Zimbabwe: 'rather than being simply economically motivated, individual migrants' participation in these networks is understood as an expression of a socio-cultural pattern in which rural identification and kinship ideology are of major importance' (Andersson 2002: 11).

Previous classifications of mobility and migration do not tie in with real life situations. There is, for example much coherence between the various places involved and this makes it difficult to maintain, for instance, the rural-urban dichotomy. In addition, the picture of migration and mobility is not linear; '[t]here is a whole pattern of rural-urban linkages characterised by, for instance, return migration, circular movements and differentiation within the "migration flows"'(De Bruijn *et al.* 2001: 3). The mobility of many people in Africa has been much more adequately described as multi-spatial livelihoods (Owuor 2006), multi-local livelihoods (Post & Baud 2002: 14), travelling cultures, translocal livelihoods (Andersson 2002) and mobility of forms (De Bruijn *et al.* 2001: 3). Research starts to recognise that '[m]any forms of mobility are part of life

[7] De Haan has called this overemphasis on international migration (from developing countries to industrial countries: 'immigration paranoia', which might be part of the explanation for the overt attention to this type of mobility. 'Most migration, in fact, takes place within regions of the developing world (…)' (De Haan 2008: 57).

and of making a livelihood' (De Bruijn *et al.* 2001: 2; for fisher groups: Adhuri & Visser 2007: 120, Butcher 2004: 7, 10, 21).

Box 5.1: Mobility as a livelihood strategy

In 2004 I spent some time in Togo looking for Ghanaian Anlo-Ewe beach seine fishermen, and met a forty year old Ghanaian Anlo-Ewe man on the beach in Kpeme. His name was Kwame. He told us he earned a lot on money by collecting stones and shells along the beach and seashore and that he has now managed to set up a store. He also fished with hook and line. I asked him when he was last in Togo. Kwame: '*For twenty years now. I have been travelling you know; to Ivory Coast, Liberia*'. 'Why did you go to those countries?', I asked him. Kwame: '*I went to Liberia looking for a job on a fishing trawler. I worked as a mason, went to the port and tried to find a job, but I was not successful*'. 'And Ivory Coast?', I asked him. Kwame: '*We took the net from Sarakawa (Lomé) to Abidjan to fish for two years before coming back. When we came back, I had 600.000 CFA*[8] *and I got the roof we sit under at the moment".* We were sitting outside on his compound, under a corrugated roof. He continued: *"It was a good season, we painted the canoe and all wore the same uniform. We shared the money at the net owners home. It was a good season. If there is no season, you only get small money. When the season is there, you can make millions of money a day!*'

Translocal perspective

The concept of transnationalism emerged as an alternative to the dominant approach in migration studies in the 1970s and 1980s which narrowly conceptualised the migrant as a labour migrant and moved away from conceiving migration in terms of one or a few discrete moves. Transnationalism is a 'continuous flow of people, goods, money and ideas that transgress national boundaries and thereby connect different physical, social, economic and political spaces' (Mazzucato *et al.* 2004: 131).

Transnational research at first emphasised new forms of human mobility. However, there has been criticism of the use of transnationalism as referring to a new phenomenon. Since then a more historical perspective has been adopted whereby 'transnationalism is used to investigate whether indeed new dynamics are set in place by these flows that somehow alter relationships between people and the way groups can lay claims to resources and whether and how new institutions are formed and whether and how nation states play a role in regulating people's activities or defining their identities' (Mazzucato *et al.* 2004: 132). Even though the approach may not be entirely new, the concept of transnationalism has produced novel ideas about space and units of analysis. Pries highlights the 'greater disassociation of geographic and social spaces' that have become apparent and describes what he calls the emergence of transnational social spaces (Pries 2001: 58). Thus also for older forms of human mobility – such as the migration of Ghanaian fishermen- transnationalism might prove to be useful.

The advantage of the transnational perspective, apart from the two above-mentioned improvements, is that it recognises that migration is not only about a flow of people and money, but also about a flow of ideas (norms, values, rules, knowledge[9]). It emphasises the institutions that migrants – operating in two or more countries – create and it 'forces us out of the false assumption that sedentary lives are the natural state of society. Trans-

[8] 600,000 CFA equals 923 euros (1 euro being 650 CFA).

[9] See for instance Odotei (2002b) who explains how via migration the Ghanaian fishermen learnt the Lagas fishing technology from Senegalese fishermen whom they met in Ivory Coast (p. 96).

nationalism studies focus on *how* people create livelihoods in a context of mobility rather than on why they move' (Mazzucato *et al.* 2004: 136).

A similar perspective is used in the book '*Les pêches piroguières en Afrique de l'Ouest*', a second major work on fisher migration in the region with a much more analytical body than the FAO publication of 1991 (Chauveau *et al.* 2000). In this book the migrations are seen as an integral part of life for each group and an institutional perspective is used 'focusing on inter-community relations and modes of integration and conflict resolution between different communities, the social and economic organisation of fishing crews and their canoes alongside a consideration of issues of fluid identities' (Randall 2005: 3)

Transnationalism not only improves migration research but also questions the social-science perceptions on the relationship between nationalism and identity; the idea of conceiving a nation and a national identity as one. In short, identity creation can transcend national boundaries (Mazzucato *et al.* 2004: 140). This debate has been fed by an anthropology criticising the notion of bounded cultural wholes, of which Anderson's *Imagined Communities* (1983) was the start. It was further developed by Gupta and Ferguson questioning (in 1997) the so-called *people-power-place paradigm* that tended to tie specific cultural formations to a certain people inhabiting a particular locality (refered to in Mazzucato *et al.* 2004: 140). Attachment to a place should be understood as a specific historical condition which is the outcome of processes labelled by Appadurai (1995) as the 'production of locality'. This production of locality is always historically grounded and thus contextual with this context being ecological, social and cosmological (Akyeampong 2001: 18). In addition, the 'localness' of a culture should be understood as the outcome of its interaction with a wider world, recognising that 'cultural identities can produce connections over wide geographical distances' (Mazzucato *et al.* 2004: 140). Finally, culture came to be seen not as 'a primordial, genetic given, but rather as a performative aspect of agency and self-realisation' (*Ibid*.).

Geurts (2002) writes what she feels is a counter-stream book on Anlo-Ewe culture and identity, recognising: '[E]ssentialising a cultural group is probably the greatest faux pas one can commit in anthropology these days' (Geurts 2002: 16). '[P]resently it is more popular to focus on cultural and transnational flows, on the blurred boundaries between (and the internal diversity within) previously deemed homogeneous 'cultures' and on the pitfalls for searching for 'essences' that definitely identify (perhaps stereotype) a specific cultural group' (*Ibid*.). While she recognises the importance of questioning assumptions about the uniformity of a group,[10] she is worried about the 'all too easy deconstruction of culture' (*Ibid.*). Interestingly enough though in her research effort to 'essentialise' the Anlo-Ewe, she breaks with the *people-power-place paradigm* when she discovers the importance of mobility and decides to do her research not only in the village but also in Accra. '[G]radually I began to realise that this back and forth between the village and Accra, going from one relative's house to another, attending to family obligations and reciprocating the visits of people who had travelled to see us in the village, was an integral part of *being a person in Anlo ways'* (*Ibid*.: 31). 'A network of Anlo speakers in and around Accra, then, became as significant to my research as were the people living in the homeland' (*Ibid.*). She recognised what Rosenthal had called 'Ewe personhood is a travel narrative' (Rosenthal 1998: 27 in Geurts 2002: 32). Trans-

[10] Language and common traditions of origin are a central aspect of Anlo identity but still there is a great deal of intercultural variation; 'the Anlo' are not a monolithic homogeneous group (Geurts 2002: 24).

nationalism shows that group boundaries can transcend the local, something Geurts so nicely showed in her multi-locational research.

However, a point of critique emerges at this point as the study of transnationalism continues to lay emphasis on state borders. Although in the definitions the adjective *national* can be left out (leaving only 'transnationalism implies a crossing or transcending of boundaries), the concept itself refers to the nation state. While the wish is to emphasise that the nation state and national borders are not crucially important and that relationships are established between people in different places, with state boundaries being crossed (regardless of, or beyond the power of the nation state), the term still reflects the implicit importance of the national element. This leaves open the question we asked earlier, namely 'is international migration more interesting than intra-national migration'. Yet it is my conviction that this emphasis on state boundaries is much less interesting in the African context where state boundaries were often imposed on a territory with other boundaries such as pre-colonial trade routes, political sovereignties and cultures. I would therefore like to suggest using the concept of translocal networks (Andersson 2002) when discussing migrant fishermen. Historical boundaries between ethnic groups have been more influential than relatively recent state boundaries. '[P]eople's local, village or ethnic citizenship (…) may be more important than their state law citizenship rights, as many internal migrants in African states (…) have experienced' (Von Benda-Beckmann *et al.* 2005: 3, Wartena 2006). The Ewe are an example of a group that has been split by state boundaries: 'Though the present boundaries [of Ghana, Togo and Benin] cut through this ethnic group, i.e. the Ewe, their linguistic identity and other cultural similarities transcend state boundaries. For these reasons the Ewe are able to move from one country to the other, settle and mix freely with the inhabitants without feeling like aliens' (Odotei 2003: 2; [my addition]). One should however be careful not to fix – as a consequence – the boundaries of these ethnic groups, for instance 'the Ewe' or 'the Anlo-Ewe', for these as well have been fluid and changed over the years. Nugent (2002) contests 'much of the conventional wisdom about African boundaries' and found that local populations were actively engaged in the creation of the Ghanaian-Togolese border. According to him, ethnic identities were actually the product of the border – rather than existing prior to the division. Nugent's contestation underlines why one should also be careful with the boundaries of ethnic groups. Nugent also found that the Ewe in Ghana do identify with some kind of Ghanaian identity and they do consider Togo to be a foreign country, where 'unpredictable (and often unpalatable) things were likely to happen' (Nugent 2002: 7). I believe however that people's identities are layered; or as Sen calls it: 'identities are robustly plural' (Sen 2006: 19). One is Ewe and Ghanaian, and depending on the situation people can shift in the emphasis put on one or the other, depending also on the goals they want to reach. This is shown in my research when fisher migrants when asked about their access to the sea reply with 'Aren't we all Ghanaians?' whereas in other contexts they would fiercely set themselves apart as Anlo-Ewe (see Chapter 3)

Fishing and boundaries, territories and space

Questioning the importance of state boundaries is also relevant in fisheries research. First of all the fishing business itself is highly transnational; 'trade networks and product chains based on coastal resources stretch far beyond a predefined geomorphological or ecological coastal 'zone'' (Visser 2004: 35). However, the coastal resources are also part of ecosystems that do not stop and begin at state boundaries. Neither do the

people, as we know. Yet '[g]overnment officials often still regard users of coastal resources as sedentary people who live in territorially fixed settlements, because this suits the governmental 'tunnel vision' that enables development policy and politico-administrative control to be standardised. This governmental view contrasts with present day and historical evidence' (Visser 2004: 35, Scott 1998). '[B]orders, hence territory, are not necessarily biophysical or ecological divides, but conceptual tools of state formation imposed on a physical environment' (Visser 2004: 36). '(...) Terms [such as illegal, transborder or transboundary] are related to political, economic or geographical discourses that assign a dominant role to physical space and the political-economic process of demarcation' (Adhuri & Visser 2007: 119).

Management plans are based on national units – every national government prepares plans for their own fisher population and fish stocks. International fisheries agreements are built upon the assumption that there is a national usage of the fish stocks, resulting in a *surplus* of fish within the boundaries of the EEZ (Exclusive Economical Zone), which the African countries can sell to bidders from other countries. This has more negative than positive effects on the ecosystem and the social system (see www.seaaroundus.org/Dakar, notably Christensen *et al.* 2004, Kaczynski & Fluharty 2002, Atta-Mills *et al.* 2004).

Fisheries research (and policy) demands a different perspective that follows the logic of the activity. Fishing is done in a certain space; fishing techniques are applicable to certain spaces and fish species are found in certain spaces. Fishermen map their environment in certain ways and these maps have relevant boundaries. This is often completely different from the kind of mapping done by governments in coastal zones due to technical and institutional needs for fixed boundaries. The 'fluid' qualification of the 'coastal zone' doesn't seem to match with fixed concepts and ideas (often derived from the more fixed land environment) (Visser 2004). The transnational migration approach leaves much more space to this flow and fluidity.

The migration of fishermen has a logic of its own which is related to the nature of the fishing practice (such as upwelling and mobile resources) and to for instance the market. Migration has a lot to do with space. Migrant fishermen need to find space to fish and space to live. The importance of this space concept becomes clear when we look at the internal migration of Ghanaian fishers. One might not expect the internal mobility to happen in a country where a lot of people along the coast are heavily involved in fishing. Why would the Fanti in the Central Region allow Anlo-Ewe fishermen to come and fish in their waters? Why have more competitors, even 'strangers' come looking for the same fish? I believe that the ethnic specialisation of fishing techniques allows for this internal migration. The existence of the Dangbe's and some Ga's exercise hook and line fishing, the Fanti and Ga's drifting gill net and purse seine fishing and the Anlo-Ewe beach seine fishing (Mensah *et al.* 2006: 37) clearly shows that the sea has been divided into different spaces. In the Volta Region most local fishermen are active in the first couple of miles of sea. Generally speaking they do not venture any further. In the Greater Accra Region and in the Central Region the near-coast area is hardly used, leaving space for the Anlo-Ewe fishermen to come and fish there. Then the fishing grounds are also quite well divided between the Dangbe and Ga using hook and line and Ga and Fanti using encircling and drifting gill nets. The hook and line fishermen will prefer a rocky seabed which the others like to avoid. This idea is supported by the chief fishermen I spoke to in the research locations who explained to me that most conflicts occur between users of the same gear (interview 32, chief fisherman of Woe, 6-5-2004;

interview 23, with the chief of Akosua Village, 14-3-2004; interview 79, with the son of the chief fisherman of the Ewe in Half Assini; interview 81, with the chief fisherman of the Fante in Half Assini, both held on 20-10-2005) (see also Chapter 7).

Another aspect of fisher migration based on the logic of the fishing activity relates to type and duration. The migration of the Fante is very different to that of the Anlo-Ewe. The Fante are much more flexible and their migration seems mainly to be seasonal: they move to a certain location for a fishing season and move back at the end of the season. The Anlo-Ewe are much more sedentarised. This is because of the different types of gear used. A beach seine implies having access to a beach and thus, to a certain extent, to a community and their market whereas the Fanti can catch fish in one location and land it somewhere else (including at home) since their large canoes and ice boxes allow them to stay away for considerable periods of time (the same holds true for the Ga). Fanti are also said to have followed the fish along the coast, and therefore track and chase the fish more, like hunters following their prey.

Conclusion

This chapter highlighted the mobility of the artisanal fishing sector in West Africa. We focused in particular on the Ghanaians, who migrated from Gambia to the Congo, but who are especially dominant in the zone from Côte d'Ivoire to Benin. We assessed the existing literature with a view to finding explanations for this widespread migration. Most of the research on fisher migration has been empirical and has discussed push and pull factors of either a biological or socio-economic nature.

The start of the migrations has been explained by the occurrence of upwelling, the mobility of fish species and the availability of existing migrant networks. The continuation thereof has been explained by coastal erosion, overfishing of home shores, population pressure and by a variety of economic pulls such as the stronger CFA in neighbouring countries, being able to save money away from family and migration as being an adventure with the experience adding to one's status.

It has been observed that Ghanaian fisher migrants have, in general, been welcomed at their migration destinations with the fishermen contributing considerably to local and national economies. On some occasions, however, the arrival of the Ghanaian fishermen also led to hostilities. These negative confrontations underscore the insecurity of a migrant's position and highlight the fact that migrant fishermen are not only active in niche creation but also in niche protection and maintenance.

These previous studies have provided us with a lot of information on why fishers have migrated, but all in all they do not give us sufficient understanding. We therefore contextualised the fisher migrations as part of West African mobility, we used another migration perspective to emphasise the fishing activity and shed new light on concepts as border, territory and space.

In West Africa in general, and Ghana in particular, migration is not an exceptional phenomenon and it is often an integral part of a family's livelihood strategies. In policy and research, however, migration has long been seen as an anomaly to normal sedentary life. Fisher migration has been largely omitted from migration research.

A translocal perspective to fisher migration gives us a greater understanding. Migration is then seen as 'a continuous flow of people, goods, money and ideas that transgress state boundaries and thereby connect different physical, social, economic and political spaces' (Mazzucato *et al.* 2004: 131).

If we reason on the basis of the fishing activity and the fish chain, we see that state boundaries are less relevant. First of all fishing is a transnational business and secondly marine ecosystems transcend state boundaries. Fisher migration means looking for livelihood space. First of all space in which you can fish, live, sell your fish and in which the locals accept you. This space finding is crucial and is a process – the negotiation is never finished. Taking account of this spatial perspective based on the fishing activity allows us to understand why internal fisher migration takes place in Ghana, namely because there is space as a result of the ethnic-technical divide.

6

Ghana's multiple governing structure

Introduction

In Chapter 3 we indicated that it is crucial to have a thorough understanding of fisher livelihoods and their behaviour before we can understand governance arrangements in fisheries. Fishermen are not the only actors, and they do not operate in a vacuum. They live in communities where they participate in social activities and do their fishing. They are part of a wider society, which is organised, structured and governed in a certain way. They act within (or despite of) and react to an enabling – or a restrictive environment. Within these structures they negotiate livelihood space at home and – through migrations – in other places (Chapter 5). In order to understand their negotiations for livelihood space we need to understand the interface and find out *with whom* they negotiate. After all, structures are always implemented by individuals representing agencies, one of which is the state government.

This chapter has two goals. Firstly, it examines the fisheries governance debate and establishes what it is about and how it differs from the management approach to fisheries.[1] Then it explains that government is only one of the actors in fisheries governance, given that there are also 'traditional' governing bodies in Ghana. The conceptual framework (see Chapter 1) therefore uses the term *multiple* governing structure. The meaning of this term will become clear when we focus on the local governance structure of an ideal-type coastal village or town.

Governance

In recent years the term governance has become a key concept in academic debates. It became popular when the World Bank introduced the term *good* governance to international development at the beginning of the 1990s (Kooiman & Bavinck 2005: 14). The exact meaning of governance is, however, unclear partly because a lot of studies fail to define governance and partly because there are so many definitions in use in a variety of disciplines such as: development studies, political geography, legal anthropology, international relations, public administration, political science, comparative politics, organisational studies and institutional economics (Hyden *et al.* 2004, Kooiman

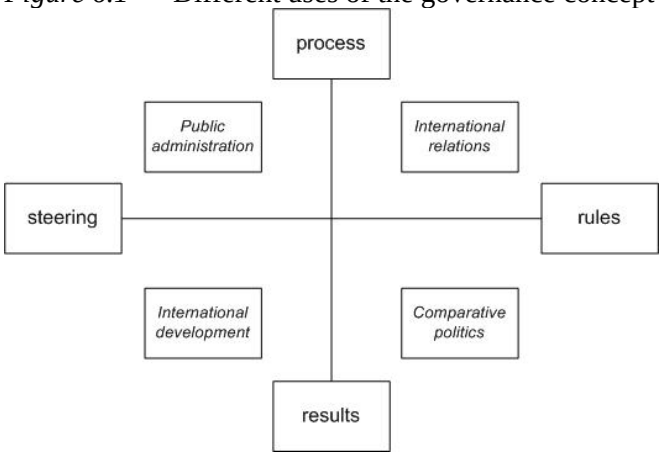
[1] Compare Post & Baud (2002) for a same shift in urban governance (p. 10).

1999, Nuijten 2004). The definitions used differ from each other in terms of their (implicit) views on the state, civil society, power and the role of policymakers. They also refer differentially to formal, or indeed to informal or even illegal arrangements and either to government administration alone or also to organisations within civil society (Nuijten 2004: 103-104). Nevertheless, governance approaches share a focus on 'the interaction between the state, the market and civil society' (Kooiman 1999: 68).

Especially in developing countries the term governance is used interchangeably with government (see for instance the UNECA Governance Profile of Ghana 2004[2]). At the same time others, often those who produce academic literature, stress the importance of other actors than government when using the term governance (Kooiman & Bavinck 2005: 14; Post & Baud 2002: 10). The problem with the many definitions of governance is that it has become a catchall concept which fails to make distinctions that are important for understanding what it means (Hyden *et al.* 2004: 16). This blurriness of the governance concept might also explain its popularity: 'It is no coincidence (...) that the international community, especially the World Bank and the IMF, has taken *refuge* in the concept of governance (...) when referring to things political' (Hyden *et al.* 2004: 11-12 – my emphasis). 'The highly attractive and seemingly neutral concept of governance easily conceals inequalities and power relations' (Nuijten 2004: 124).

Hyden *et al.* have generated a scheme (Figure 6.1) that compares four academic disciplines and distinguishes four key understandings of the governance concept.

Figure 6.1 Different uses of the governance concept



Source: Adapted from Hyden *et al.* 2004: 13.

Hyden *et al.* state the following on governance: 'Governance refers to the formulation and stewardship of the formal and informal rules that regulate the public realm, the arena in which state as well as economic and societal actors interact to make decisions' (Hyden *et al.* 2004: 16). The authors understand governance as focusing on rules rather than on results, as examining processes and not performance and as being about both activity and process. They see governance 'as reflective of human intention and agency but [it] is itself a process that sets the parameters for how policy is made and implemented'. They believe, therefore, that governance should be seen as a meta activity

[2] UNECA is the Economic Commission for Africa of the United Nations. For the report see: www.uneca.org/dpmd/publications/countryprofiles/Ghana-Final.pdf [Access date: March 2008].

(Hyden *et al.* 2004: 16). Governance is about 'Who sets what rules, when and how?' instead of the classical political economic question 'Who gets what, when, and how' (*Ibid.*: 17). This way of understanding governance ties in nicely with the importance of the entitlement approach in the livelihoods debate (Chapter 3) whereby understanding poverty has less to do with a shortage of assets and more with problems of access.

Kooiman *et al.* define governance as 'the whole of public as well as private interactions taken to solve societal problems and create societal opportunities. It includes the formulation and application of principles guiding those interactions and care for institutions that enable them' (Kooiman *et al.* 2005: 17).

Roughly speaking, governance perspectives have three common features: the conviction that 'governing' (decision making or solving problems and creating opportunities) is a matter of public as well as private actors; that the dividing lines between public and private actors are blurred so that interests cannot be classified as being public or private but as being frequently shared and finally that the basis for governance is in societal developments and that it constitutes a reflection hereof (Kooiman & Bavinck 2005: 15-16). The difference between the definition of Kooiman *et al.* and that of Hyden *et al.* is that the latter have a narrow definition focusing on rules whereas the former interpret it more broadly as institutions (including rules, but also rights, norms, beliefs, procedures, organisations) and includes the principles (rationality, responsiveness and performance) on which these are based.

What I find valuable as regards the governance perspective is that, when it comes to governing, it recognises the fact that more actors play a role than just the government and that the process is participated in by others such as fishermen and their organisations, NGOs and international bodies. Secondly, besides the state government Ghana also has is a multiplicity of 'traditional' governments which have a constitutional basis (under the Chieftaincy Act[3]). All the fisher communities along the Ghanaian coast fall under a traditional authority. In the case of the research locations these are respectively the Anlo traditional state (Woe), the Effutu traditional state (Akosua Village) and the Nzema traditional state (Half Assini). The governance structure in these locations is, therefore, inherently multiple-actor.

Another reason why I want to use the governance perspective is that it is longer term (in time) and broader (looking beyond the national fishing sector when assessing fisheries) than the management perspective. In line with Kooiman *et al.*, I also believe that governance is about more than just the rules, but also rights, norms, beliefs, procedures and organisations and that these are embedded on the basis of distinct world views.

Analytical versus normative and instrumental approaches

Besides its analytical perspective, governance also has a normative perspective. As Kooiman & Bavinck put it, 'Governance is both what it is and what it should be' (2005: 16). This normative perspective on governance was most strongly brought to the fore by the World Bank with its good governance concept. However, it is extremely difficult to decide what *good* governance exactly is, given that, 'any attempt to measure governance is fraught with controversy over which norms should prevail' (Hyden *et al.* 2004: 23). In international development circles there is the tendency to use governance as a synonym for liberal democracy: 'In other words, features found in the political systems

[3] http://www.state.gov/g/drl/rls/hrrpt/2007/100484.htm [Access date: April 2008].

of Western societies have been elevated by the dominant agencies in the international development community to the level of being universally desirable' (Hyden *et al.* 2004: 23). This is then viewed by leaders as well as citizens in non-Western countries as a cover for extending Western influence in the global arena (*Ibid.*, Post & Baud 2002: 3).

Instrumentalist approaches like of the World Bank are closely related to the normative approach like that of Kooiman *et al.* in that it sets common goals for the steering process. From an analytical perspective, however, the notion of common goals is problematic because it is unclear who defines them and whose worldview prevails. The problem with instrumental approaches is that focusing on collective objectives and defining governance problems in technical terms can de-politicise socio-political issues (Nuijten 2004: 109). In instrumentalist governance approaches culture can be treated as just another variable that can be adjusted according to certain political objectives or as another raw material part of the institutional resource bank.

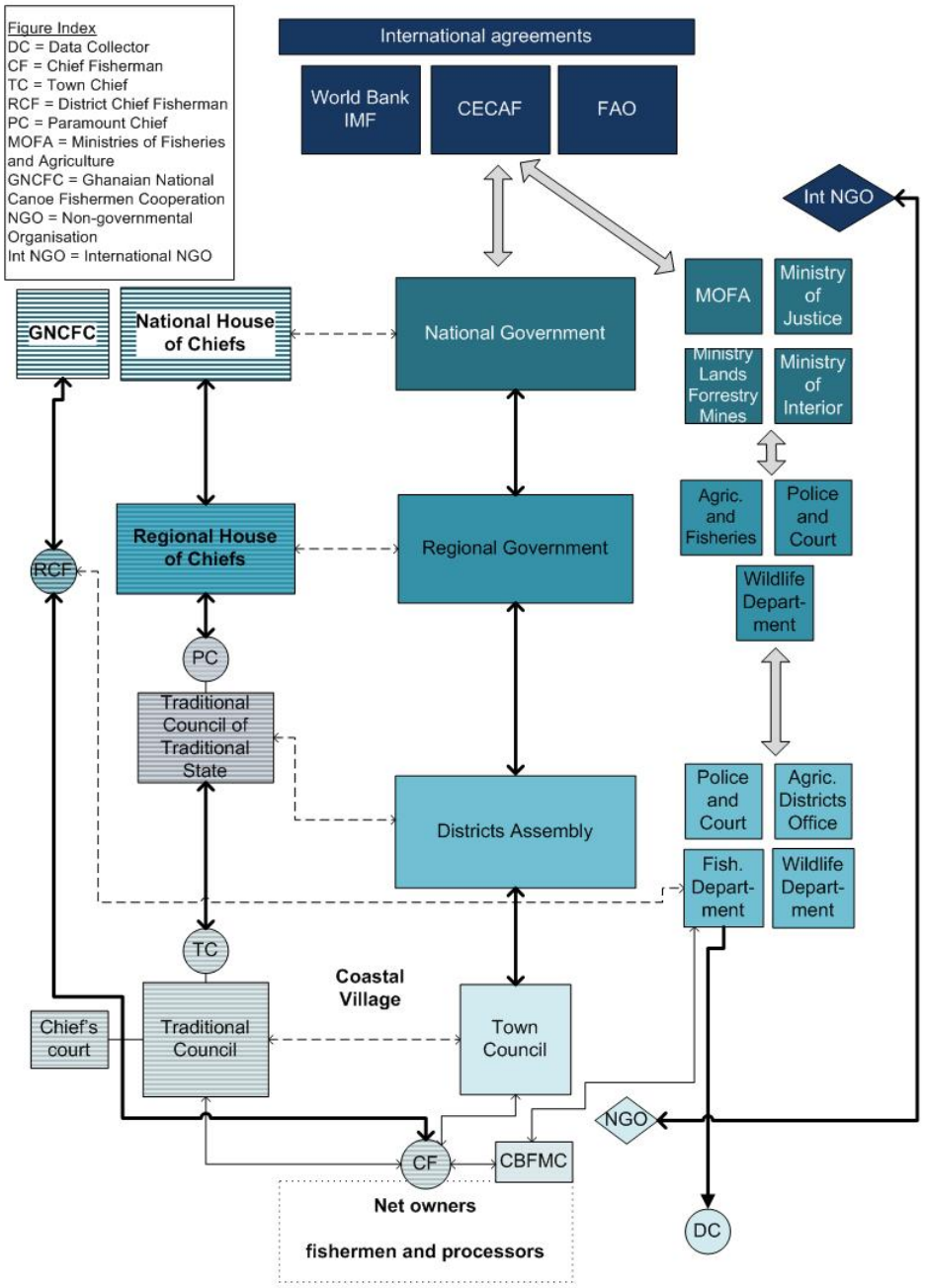
Hyden *et al.* use the human rights arena (as the arena in which officially the broadest consensus is to be found on universally acceptable principles of rule) as a way to measure governance. Kooiman & Bavinck do two things. They explain what the current principles are that guide the international governance of fisheries today (Kooiman *et al.* 2005: 245-263) and in a later chapter they discuss what they have called meta-principles, principles that *should* guide fisheries governance at the meta level (*Ibid.*: 265-283). Decision makers in fisheries governance are continuously confronted with dilemmas; concerns, principles and goals which are not easily reconciled and which therefore require difficult choices to be made. What is important to understand is that governance is eventually about making these hard choices and that this decision-making is not only based on knowledge but also on values.

It is important to differentiate between an analytical, normative or instrumentalist perspective on governance. In this research I use the analytical governance concept because I want to study how things 'are' rather than how they 'should be'.

Multiple governance structures in Ghana

Figure 6.2 is an ideal typical sketch of the governance structure focussing on fisheries, in a Ghanaian setting based on my research locations. I use this structure to explain how the governance structure in Ghana functions at village level. As we can see there are shaded and non-shaded elements; round forms, triangular shapes and square blocks. The shaded figures are traditional or hybrid (a mixture of Government of Ghana and traditional) organisations and the non-shaded figures are organisations related to the Government of Ghana (GoG) – with the exception of the triangular shapes which represent non-governmental organisations (NGOs). The round figures represent social roles, that is agencies comprising an individual such as a chief fisherman. The square blocks are organisations such as councils, departments and ministries. The colour difference shows at which level the organisation operates and the darker the colour, the higher the level. There are seven levels: sub-village level, village level, district level, traditional state level, regional level, national level and finally the international level (see Figure 6.3a). The arrows show the main connections and lines of contact (there are numerous other connections but showing all of these would not be conducive to the clarity of the scheme). There are three levels of thickness used for the arrows in the scheme. The thickest grey arrow is used to show a cluster of connections between levels. The black

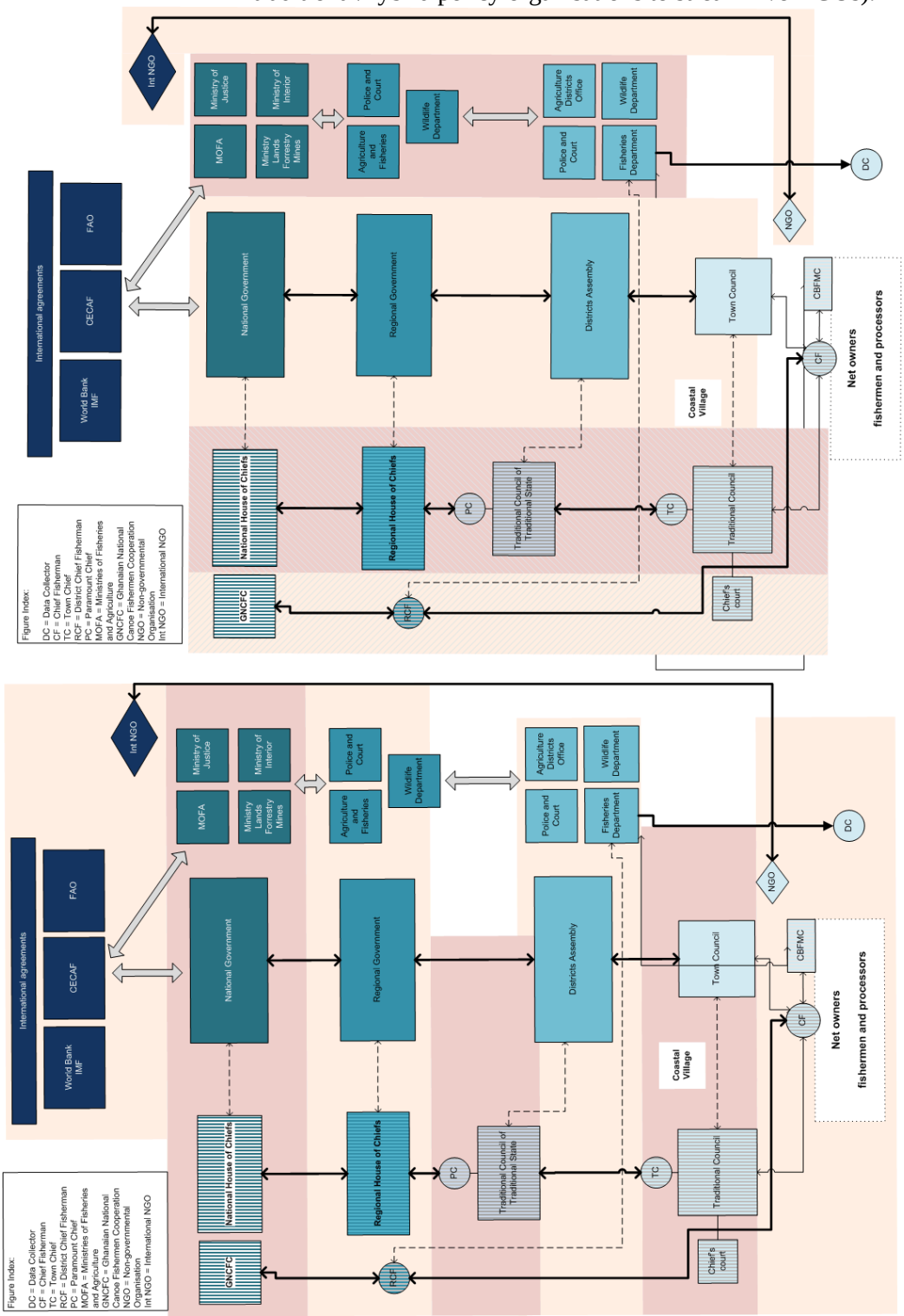
Figure 6.2 Governance structure of an ideal type coastal village in Ghana



The local level is at the bottom of the figure, the darker the colour of the organisation, the higher the role it has. The shaded figures are traditional or hybrid organisations or roles.[4] The scheme does not show all organisations and roles present in a village and excludes, for example, churches and traditional priests or sport and funeral organisations. I have focused on showing those organisations and roles that are of direct relevance for governance in a coastal village – so also those organisations and roles with special relevance for fisheries.
Source: author.

[4] As I have explained in the Introduction some institutions / organisations can be hybrid, as they are a mixture between the Government of Ghana and the traditional governance system. As the hybrid connotation can differ from area to area (such as with the chief fisherman institution) and as this is a ideal typical scheme, I have taken these (hybrid and traditional) together.

Figure 6.3a & 6.3b The seven levels from below to top (level one sub-village to level seven international) and the five streams from left to right (stream one traditional/hybrid policy organisations to stream five NGOs).



arrow is used when organisations at different levels can be connected directly. The thin dashed arrows are used to show relevant horizontal connections. The thin lines are used to connect a certain organisation or role to another, and the thin arrows are used to connect an organisation or role to a relevant other organisation or role.

Figure 6.2 can be divided into five streams from top to bottom (see Figure 6.3b). The two left streams (1 and 2) in the figure are traditional organisations, the middle stream (3) and the stream to its right (4) with organisations linked to the GoG and the stream most right (5) with NGOs. Streams 2 and 3 (with rectangle organisations) comprise steering organisations such as parliament, district assembly and traditional councils. On the left and right side of these organisations are the more policy-oriented organisations (the ministries and departments on the right and the canoe fishermen organisations on the left) and on the far right there is the NGO stream. Here we see the interesting phenomenon that has been referred to as *bypassing the state*, where the NGO operating at the international level connects directly with its local (village) level organisation (Ferguson 1998). Ferguson questions the traditional opposition between 'the state' and 'civil society', and calls into question the vertical topography of power as he calls this thinking in analytical levels of local, national and global (*Ibid.*: 45-46). His article refers to numerous examples of political entities that can be understood as integral parts of a new, transnational apparatus of governmentality, not replacing the older system of nation-states but overlaying it and coexisting with it (*Ibid.*: 58-59). This research, which examines plural governance, in fact points to the same fact, namely that governing is a task not only performed by state actors, that state boundaries are much less relevant than is often thought (see Chapter 5) and hence are easily surpassed (by phenomena) or by-passed (for instance by NGOs).

As we can see, there are linkages between the traditional/hybrid organisations and those of the GoG. In the more detailed discussion of the organisations below we show how these linkages work. We focus on those organisations relevant to this study (local level and related to fisheries) and use examples from the research locations. We try to show what the implications are of this dual but linked structure of traditional and GoG organisations.

International level

At international level a couple of agreements and organisations play a role in fisheries governance in Ghana. International agreements to which Ghana is a signatory member include RAMSAR (1988) and the United Nations Convention on Law of the Sea (UNCLOS) (1983). The FAO is a United Nations organisation and acts as a neutral forum in which all nation states are able to meet to negotiate agreements and debate international policy. The FAO is also a source of knowledge and information and its mission is to help developing countries and countries in transition to improve agriculture, forestry and fisheries practices and ensure good nutrition for all.[5] The SFLP and IDAF programmes are both, amongst others, FAO programmes that play an important role in relation to Ghanaian artisanal fisheries policy. The FAO has based its Regional Office for Africa in Accra. The FAO established the Fishery Committee for the Eastern Central Atlantic (CECAF) in 1967.[6] The CECAF's central body is the committee participated in by all countries active (including countries fishing under agreement) in the region (from Morocco to Congo). There is also a scientific sub-committee and various

[5] www.fao.org [Access date: February 2009].

[6] http://www.fao.org/fishery/rfb/cecaf/1/en [Access date: February 2009].

working groups (for instance on artisanal fisheries). The purpose of the committee is to promote sustainable utilization of the living marine resources of the region. The World Bank and IMF are important financers of (fisheries) projects of the Ghanaian government.

The GoG governance structure

- Steering organisations[7]

Ghana is administratively subdivided into ten regions and 138 districts. The coastal regions are (from East to West) the Volta region, the Greater Accra Region, Central Region and Western region. These regions are subdivided into districts and these are in turn subdivided into areas. Regions are run by the Regional Coordinating Councils with the Presiding Member, Regional Minister and his deputies, two chiefs from the regional house of chiefs, and the regional heads of the decentralised ministries.[8] Districts are controlled by District Assemblies (DA) as prescribed in the Local Government Law of 1988 (PNDC Law 207), Chapter twenty of the 1992 Constitution and the Local Government Act of 1993 (Article 462) (Mensah *et al.* 2006: 47). The people in charge of the districts are the District Chief Executives (DCE) who are the main representatives of the Central Government in the district.[9] The DA consists of the assemblymen of which two-thirds are directly elected and one third appointed by the President in consultation with the chiefs and interest groups in the district. The presiding member of the DA is chosen from the assembly members by a two-thirds majority (*Ibid.*). The DA has deliberative, legislative and executive powers and offers services to the communities via the decentralised departments at district level (such as the Ministry of Health, MOFA and Education). It may also have its own developmental programs organised via collected revenues (such as market tolls, basic tax and district border tax) (Mensah *et al.* 2006: 48).

The coastal villages and towns are represented in the DA by their assemblymen. In Woe for instance there are three assemblymen and each of them represents an electoral area (Bawe, Afidome and Light House) in Woe. These assemblymen also hold a position in the town council of the villages and towns. The town council is the lowest level governance organisation of the decentralised Ghanaian state. Apart from the assemblymen and chair, the town council has chosen unit representatives (the earlier mentioned areas are subdivided in units), government appointees and extra representatives; of the chief (as a link to the traditional governance structure) and of important economic groups (such as fishermen or farmers). Some members of the town council are chosen and others are appointed.

- Executive organisations[10]

- Ministry of Fisheries and Agriculture[11]

As far as fisheries are concerned the Directorate of Fisheries of the Ministry of Fisheries and Agriculture (MoFA) (at the national level) was the most important governmental

[7] Figure 6.3b, stream 3.
[8] http://www.ghanaweb.com/GhanaHomePage/republic/constitution.php?id=Gconst20.html [Access date: April 2008].
[9] http://www.ghanaweb.com/GhanaHomePage/republic/constitution.php?id=Gconst20.html [Access date: April 2008].
[10] Figure 6.3b, stream 4.
[11] However, a separate Ministry of Fisheries was established in 2006.

organisation in the period of this research. The legal framework is embodied in the Fisheries Law of 1991 (PNDCL 256) together with the Fisheries Commission Act 457 of 1993, and with the in 2002 updated Fisheries Act (Act 625, 2002).

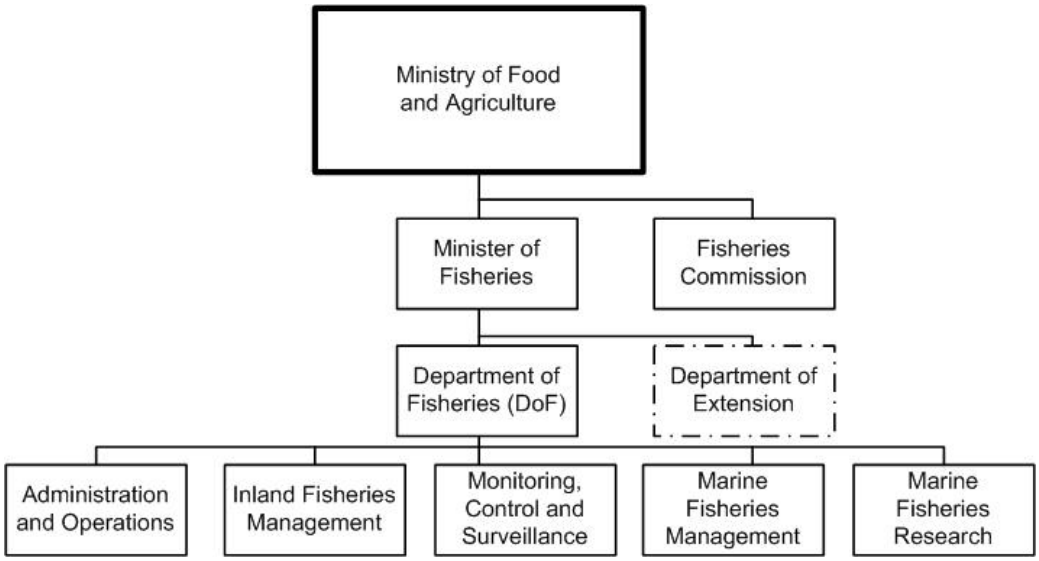
Figure 6.4 District Assembly in Half Assini

The Department of Fisheries was merged into the Ministry of Agriculture and Fisheries at the same time that the process of decentralisation started. It therefore became part of a wider agricultural unit while, at the same time, its tasks were shifted from being a general authority in fisheries to offering technical support to decentralised organisations (Lenselink & Cacaud 2001: 24). One of the problems is the usage of funds. The sources of income (levies, fees and fines) derived from the fishing industry flow back to the general ministry funds and wider national funds (NCU Ghana 2001: 12). The Fisheries Commission was created in parallel with other commissions that are responsible for natural resources, such as that of forestry. The division of tasks between the fisheries commission and the Department of Fisheries was not completely clear (Lenselink & Cacaud 2001: 24). In September 2001 a new position was created, namely a Minister of Fisheries. After my fieldwork period, in the year 2006, this Minister acquired her own Ministry of Fisheries, thereby separating fisheries from agriculture. This shows that the Ghanaian government is focusing more and more on fisheries. Figure 6.2 and the following is however based on the situation during the period between 2003 and 2005.

The regional level in Ghana is a relatively powerless link between national and district levels:

> 'The region does not make policy, but passes policy down to the district and passes comment and problems from the districts to the centre. The region adds value via co-ordination where districts share problems or perspectives, and provides a level of technical expertise not available at the decentralised district level. The region also acts as a watchdog for both government and communities, in that it monitors performance against preset targets for district development. The region removes from central government the need to deal directly with 110 districts across the nation' (NCU Ghana 2001: 15-16).

Figure 6.5 Structure of Ghana's fisheries administration



In the decentralisation process the role of the organisations at regional level has been seriously diminished. There is hardly any budget – activities carried out by regional experts have to be requested and paid for by the districts. As a result, they cannot really make their own plans: 'Morale at the regional level is also being undermined by evolving decentralisation. There is a sense that technical staff feel they are unappreciated and unwanted' (NCU Ghana 2001: 16).

The MoFA is represented as the fisheries department at the district level in coastal communities. It falls under the Agricultural Districts Office and was set up as a consequence of national decentralisation policy (Bannerman 1998). The employees of the fisheries departments at district level are mainly involved in collecting a variety of statistics:

> MK: What are your tasks as districts FD?
> Fisheries officer: We gather hydrographic data for the Marine Fisheries Research Division in Tema. The temperature of the sea, we collect water samples to check the salinity. We collect fish catch data of canoe fishermen. We have 5 sampling stations in the district.[12] Here we compile the data and then the research division people come to take it along. We do the Canoe Frame Survey every two to three years. (interview 36, 21-5-2004)

Mensah *et al.* report that there is a weak linkage in feedback from the communities to higher level MoFA organisations (Mensah *et al.* 2006: 49, see also Bamfo 2003: 26). Lenselink & Cacaud conclude that the decentralisation of responsibilities was not accompanied by the provision of sufficient funds and staff at local levels (2001: 25; see also NCU Ghana 2001: 15).

As can be seen in Figure 6.2, the fisheries department has a data collector working at village level. In Woe I met this man and spoke to him a couple of times. He would be on the beach every day to: '[*Check on] their catches, the kind of fish they catch, the amount they sell it for, the price. There are many species, we sample them, we know*

[12] In a later interview the officer tells me that only three out of the five sampling stations in the district are actually functioning. The one in Woe is one of those and the operator of Woe also collects data for another station. (interview 65, 16-7-2004)

their weight. I go there every day' (interview 61, 17-08-2004). He has been doing this work since 1975. He is, in fact, the lowest ranking representative of the MoFA.

- Other relevant government organisations

Another important department at district level is the Wildlife Department which is part of the Forestry Commission of the Ministry of Lands, Forestry and Mines. The Wildlife Departments play an important role along the coast in Ghana as the managers of the coastal wetlands of which six have been declared RAMSAR sites.[13] Wetland issues have been integrated into the National Land Use Policy but in 1999 there was still no clear government policy on wetlands.[14] However, the consolidated Wildlife Laws of Ghana do exist (Act 43 plus all the subsidiary legislations, 2002) including the Wetland Management Regulations of 1999. In Akosua Village the Wildlife Department was quite visibly present with their little green office located at the main access point to the village, often manned by staff wearing green army-like outdoor attire. Furthermore there were signs around the RAMSAR protected lagoon with nature-protection slogans and public toilets, the bird-watching platform and refuse dumps which had been constructed by the Wildlife Department.

The last two ministries of importance as far as fishing is concerned is the Ministry of Justice which controls the courts and the Ministry of the Interior which controls the police. These organisations play a role in law enforcement at local level. The police become involved in fishing conflicts in cases of damage to property and assault. The police is regulated under the Police Service Act, 1970 (Act 350) and Article 200 (3) of the 1992 Constitution (Aning 2006: 11, 25). There are a number of courts in Ghana and these can be divided in two clusters: the lower (inferior) courts and the superior courts. The lower courts are the circuit and district courts, which serve as juvenile courts and family tribunals. The lower courts deal with smaller civil cases involving limited costs (5,000 US$ or less) rather than serious criminal cases with limited prison sentences. The superior courts are the Supreme Court, the Appeals Court, the High Court, the Commercial Court, regional tribunals and fast-track Courts.[15] The traditional courts (see below) are officially accepted and regulated under the Chieftaincy Act and they have 'the power to mediate local matters and enforce customary tribal laws dealing with such matters as divorce, child custody, and property disputes'.[16]

Community based fisheries management committees

The government of Ghana requested support from the International Development Association (IDA) and the World Bank in 1995 which resulted in an eight million US dollar Fisheries Sub-sector Capacity Building Project.[17] Besides strengthening the capacity of the Directorate of Fisheries and improving the management system, this led to the instalment of a Monitoring Control and Surveillance (MSC) division and – later – to the development of Community Based Fisheries Management Committees (CBFMCs) all

[13] Ramsar is the name of a city in Iran where the Convention on Wetlands of International Importance was signed in 1971. It was decided that wetlands are ecosystems of considerable importance, comparable to forests, rangelands and marine ecosystems. Ghana became a member in 1988 (interview 56).

[14] www.ramsar.org/wurc/wurc_policy_ghana.htm [Access date: April 2008]. and www.birdlife.org/datazone/sites/index.html?action=SitHTMDetails.asp&sid=6343&m=0 [Access date: April 2008].

[15] http://www.state.gov/g/drl/rls/hrrpt/2007/100484.htm [Access date: April 2008].

[16] http://www.state.gov/g/drl/rls/hrrpt/2007/100484.htm [Access date: April 2008].

[17] World Bank 2003.

along the coast and inland round Lake Volta (MoFA 1997). The aim of the CBFMC is to manage the fisheries resources to ensure sustainable exploitation, mainly by checking whether the fishing gear and methods used comply with the rules. The committees work according to the fisheries law but can also formulate their own bylaws which have to be ratified by the DAs. The chief fishermen chair these committees whose additional members are representatives of all ethnic groups involved in fishing in a village,[18] leaders or representatives of fish processors, a representative of the Ghana National Canoe Fisherman council and two representatives of Unit Committees of DAs – one being a woman (Bannerman 1998 – section 5.5).

Woe was one of the communities that participated in a pilot project. However, in 2005 the CBFMC had ceased functioning. The chair of the town council, a lobster fisherman and one of the elders of the chief fisherman's committee of elders, was a member of the CBFMC. According to the latter it is the government that caused the work to be terminated: 'But since this [the pilot project] is gone, then, we have been hearing nothing at all. We made a proposal for the former minister of Food and Agriculture. But now he also is no more here (…). The government should invest in it – or else, for the time it will start, decline, decline, decline' (interview 89, 1-11-2005). Mumford (where the idea of CBFMC started[19]) and Cape Coast are always referred to by the ministry as good examples of properly functioning committees. However, committees fail to get off the ground in most communities. The Assistant Director of the Fisheries Department in Accra, Ms. Yeboah, referred to the unwillingness of the chief fishermen to cooperate and how strange she considered that to be given that most of them are or have been fishermen themselves. The districts fisheries department officer in Keta shares the same view: 'These committees were formed, but the chief fishermen did their own thing. You see they are not literate. Some other members of the committee were literate. But you can't remove the chief. New people were brought in and that was a problem. It has not been operating properly. Last year there was an evaluation of the committees and they concluded that it was not working'. And later on more on the role of the chiefs: 'They get respect from the community, it didn't work because most are illiterate, they are not transparent enough. They feel they are challenged in their authority, they have to go into too many details. They are not used to transparency' (interview 36, 21-5-2004). However, Yeboah also points to the fact that the committees have not been successful because there was no balance between protecting the resource and supporting the people (interview 78, Yeboah, 14-10-2005). Woe was certainly not the only coastal town in which the CBFMC failed to function. In 2007, 76 percent[20] of the fishing communities had a CBFMC and these committees were, to quote the ministry, 'at various stages of operation'. Fourteen out of the seventeen coastal districts had also passed fishing related bylaws. However, only three districts had also published the bylaws in the gazette, which is a necessary step before they are put into force.[21] In the last section of this chapter we review this as one of the difficulties related to the

[18] This again shows the extent to which Ghana's artisanal fishing sector is organised along ethnic-technical lines. It would have been more appropriate to have all additional members act as representatives of the different fishing techniques used in a village. However, in Ghana's case, organising it this way almost has the same result.

[19] See The Fisheries Sub-Sector Capacity Building Project Handbook on Social Mobilisation for CBFMC (1998: 8-10).

[20] 133 of the 173 committees. Source: www.ghana.gov.gh/ministry_of_fisheries [Access date: July 2007].

[21] www.ghana.gov.gh/ministry_of_fisheries [Access date: July 2007].

CBFMC. First of all we discuss the organisations related to the traditional governance structure.

The traditional governance structure

- Steering organisations[22]

The indigenous states in Ghana (such as the Ashanti, Ewe, Effutu) date back to pre-colonial times. With the British system of indirect rule, the institutions of chieftaincy were able to survive (Odotei & Awedoba 2006). The colonial state stripped many aspects of sovereignty from the pre-colonial states, turning them into chieftaincies (Ray 1995: 49). They are headed by a paramount chief under whom chiefs and sub-chiefs govern the settlements.

These chiefs come from the chief making clans or royal families living in the communities. In some traditional areas, although the chief rules the area by custom, the high priest or the land priest is regarded as the owner of the land. The fact that chiefs in Ghana play governing roles is inherent in the concept of chieftaincy – chiefs have executive, legislative and judicial powers in their communities according to traditional law. The chiefs are seen as the natural custodian of the customs and traditions of their people, maintain a link between their people and the ancestors directly linked with the founder of the state (through the royal lineages), are responsible for the overall welfare of their states and for maintaining law and order and for protecting their people from neighbours and enemies (Abotchie 2002: 49-50, Nukunya 2003: 70).

The institution of chieftaincy is built up through a series of hierarchical levels of authority (from household, compound, lineage, village, town, division to paramountcy) with a recognised head at each level, based on kinship with each lineage represented through its head on higher councils with clear procedures for linkage to higher, more powerful levels (Nukunya 2003: 68).

Since colonial times chieftaincy has been linked to the politics of Ghana (the Gold Coast at first) whereby various governments tried to influence the role of chiefs in political affairs (Boafo-Arthur 2001, Odotei & Awedoba 2006). It was mainly during the first republic of President Nkrumah that the power of the chiefs was seriously curtailed mainly by eroding their economic base – their stool lands. However, the chiefs were also under attack and seen as part of vested societal elites during the reign of President Rawlings (Boafo-Arthur 2001: 8). The relationship between the chiefs and the state in West Africa have been analysed as interdependent, with the state depending on the chief to implement its policies and to obtain specific information on the local community. On the other hand the chief depends on the state for its support to legitimate its power and obtain economic favours to distribute to his people (Van Rouveroy van Nieuwaal 1992: 21; see also Van Rouveroy van Nieuwaal 1999). Yet the institution chieftaincy managed to stay and has proven to be resilient. 'Its resilience could, therefore, be attributed, in part, to the overwhelming support for the institution by the generality of the people as well as its ability to adapt to changing situations'(Boafo-Arthur 2001: 12; see also Odotei & Awedoba 2006).

All traditional states within the Ghanaian state are represented in the Regional Houses of Chiefs and the National House of Chiefs. This again is an organisation where the two parts of Ghana's governance structure meet. The Paramount Chiefs meet each

[22] Figure 6.3b, stream 2.

other here a couple of times a year to discuss chieftaincy matters and fulfil an advisory role for the President.

Figure 6.6 The chief and sub-chiefs of Half Assini

Many coastal villages are headed by a chief, who is supported by a number of sub-chiefs and elders representing area groups (wards) in the villages. The following description is based on the Anlo-Ewe traditional governance village structure. Every ward is a residential group, occupying a portion of the town, of which the core usually consists of members of a single lineage, being the descendants of the first settler of that section. The wards are often headed by the head of the dominant lineage, helped by the heads of the various other lineages (Nukunya 1999: 14). The chief meets the ward heads on a regular basis in the traditional council. Besides this council, the elders of the royal lineage also have important functions in the local government as the main advisors to the chief (Nukunya 1999: 13). The latter are also responsible as the judiciary. The chief's court is the highest in the village and deals with the settlement of disputes between the inhabitants, if they cannot be solved at lower levels (see also Overå 2001: 14). Cases such as murder, stealing and adultery are always dealt with at the level of the chief's court (Abotchie 2002: 51). Ewe traditional court rulings are based on oral traditions expressed in proverbs, aphorisms, axioms and examples (Abotchie 2002: 52) of which its political norms are derived from the supernatural (Abotchie 2002: 54). The working of the court is therefore based on the belief which both the chief as his subordinates share in their common accountability to supernatural forces (Abotchie 2002: 55). Above the village chief's court, there are the courts of the divisional chiefs and the finally of the paramount chief or *Awoamefia* in Anlo-Ewe (Nukunya 1999: 13).

The traditional council and the town council (and the DA) work together. All policies spoken of at the traditional council are communicated to the assemblymen, who then communicate it to the DA, and vice versa. Any ideas for projects that citizens come up

with are brought to their unit committees. The unit representatives bring it to the town council and from there the assemblymen take it to the DA. The assemblymen play an important role in the communication between town and district levels (interview 35, DA member Woe, 19-05-2004).

- Executive organisations[23]

The chief fisherman is one of the sub-chiefs of the village chief. He chairs the fisheries committee which advises the chief on fisheries matters. All fisheries matters are first handled by the chief fisherman. The institution of chief fisherman is an important institution in Ghanaian fisheries. As one can see from Figure 6.2, the chief fisherman fulfils a liaising role between the fishermen and higher level organisations. It is also an old institution in the Central Region, with the chief fisherman from Winneba claiming to belong to the line of chief fishermen extending back to 1600 (interview 104, 19-12-05). In those coastal villages where fishermen have been fishing for centuries (mostly in Fante and Effutu coastal communities) a chief fisherman assisted the chief with the settling of all fisheries matters. In these communities this is a hereditary function. 'However, the person is elected by the fishermen and must be an exceptionally experienced, wise and respected fisherman' (Overå 2001: 15). When I asked the chief fisherman of Woe who can be chosen as chief fishermen, he explained that you need to be a net owner, an older person, and you need to have proven to have the ability to solve problems (interview 32, 6-5-2004). In the other coastal regions the institution of chief fisherman was introduced later.

It is probably the Fanti who exported the institution of the chief fisherman to other coastal communities with whom they came into contact via their migrations (see Chapter 5). When exactly this institution came into being in the other coastal communities is unclear. In the event that there was no chief fisherman, the village chief would be in charge of the fisheries affairs – as he is for other community matters (Odotei 2002: 26). According to the chief fisherman of Winneba, ninety percent of the chief fishermen in Ghana are appointed by the community and not on a hereditary basis (interview 104, 19-12-05). I also asked the fisheries officer of the Keta District how long the institution of chief fishermen had existed in Ghana, and he answered: 'Since 1984 or so, then the creation started that all communities must have a chief fisherman, as head of the fishing communities' (interview 65, 16-7-2004).

The chief fisherman works with a council of elders and they settle disputes between fishermen, between processors and fish traders and between those groups, and advice fishermen. He coordinates rescue operations in the event of accidents at sea (Bannerman 1998 – part 5) and collects revenue from fines of fishermen breaking rules and receives token fees of fisher migrants who come to fish on his beach. As with other traditional institutions religious aspects are intrinsically part of it. In the case of the Fanti the chief fisherman (*Apofohene*) is also the fishermen's religious leader: 'together with the priests of the Sea God (*Bosompo*) and of other gods that are relevant in the field of fisheries, he performs rituals to ensure good fishing' (Overå 2001: 15). In the case of the Ewe, the chief fisherman is also involved in religious rituals related to fisheries. Odotei, who writes about the history of artisanal fisheries in Ghana, has this to say: 'The religious aspect of the fishing industry was a phenomenon which was crucial to the artisanal

[23] Figure 6.3b, stream 1

marine fisheries. In the past, the whole fishing industry revolved round a religious core' (Odotei 2002: 26). We will examine this in more detail in the next chapter.

Figure 6.7 Chief fisherman of the Fanti fishermen in Half Assini

The chief fishermen often play an important role in the communities. The chief fisherman of Winneba is a senior divisional chief and replaces the paramount chief of Winneba when he is away (interview 104, 19-12-05) and the chief fisherman in Woe is one of the elders in the traditional council of the village chief (field data). However, they also play an important role in relation to the GoG structure. As Ms Yeboah of the Directorate of Fisheries in Accra says: 'So they are in charge of the fishing area, they show law and order, they perform the traditional rights. They act as a liaison between government and their people' (interview 78, 14-10-2005). He also negotiates with government organisations about benefits, credit and inputs for the fishermen (Overå 2001: 16). 'In the periods when 'premix' for the outboard motors have been subsidised, the chief fisherman had the authority to issue licences to the beneficiaries and to distributors of the subsidised fuel' (*Ibid*.: 15). In fishing villages where fishing is the major industry this makes the chief fishermen more important than the chief in terms of being a link to external sources (*Ibid*: 16).

A couple of times a year the chief fishermen of Ghana gather at national level in the Ghanaian National Canoe Fishermen's Council. This is the main Canoe Fishermen organisation in Ghana and membership (of chief fishermen) is automatic.[24] There are also other direct lines between the fishermen and governance organisations, such as the fisheries representative in the town council.

[24] http://www.fao.org/docrep/005/y4281e/y4281e04.htm [Access date: April 2008].

Implications of migration

The plural governance situation as described above, with organisations related to the Government of Ghana and to traditional governance at local level, becomes even more plural in a situation of migration. Anlo-Ewe beach seine fishermen migrating from their home area to other villages in Ghana will be confronted with another setting of Government of Ghana organisations and traditional government organisations, combined with organisations and institutions related to their Anlo-Ewe traditional government, at their migration destination. They will therefore need to operate in a governance setting with three sources.

Anlo-Ewe fishermen in Half Assini explained to me what they need to do when they arrive in Half Assini and want to fish there. You should first go to the landlord, the owner of the land, then to the town chief and then to the Anlo-Ewe chief (fisherman) and ask each of these men permission (interview 79, with the son of the chief fisherman, 20-10-2005). Migrant fishermen are apparently never refused. The Jomorro District Director of Agriculture in Half Assini explained to me why migrant fishermen cannot be refused permission to come and fish: 'In Ghana here there is the policy that a Ghanaian can come to fish everywhere. That is not restricted' (interview 80, 20-10-2005). In fact local traditional leaders have to abide by national law and this shows how the governance system is mixed.

Akosua Village falls under the jurisdiction of Winneba and the fishermen living in Akosua Village need to ask permission from, and pay royalties for their land to, the Effutu traditional ruler in Winneba (see Appendix 3). As fishermen they first fall under their own chief (fisherman) but if he is unable to solve the issue, or if Effutu fishermen are involved in the conflict, the chief fisherman of Winneba gets involved. He also happens to be the chief fisherman representative of the whole Central Region. The chief fisherman of Winneba explained how he is a real chief, not an appointed one as is mostly the case, but a hereditary chief:

> 'We have traditional chief fishermen and non-traditional ones. My position as chief fisherman is hereditary, my great grandfathers, grandfathers, my fathers and brothers were all chief fishermen. So it is a heritage. I am a traditional ruler, I am a gazetted chief. We are called Apofohene. But some chief fishermen are non-traditional, they are chosen.' (interview 106, 19-12-2005)

The Anlo-Ewe fishermen are also represented in the CBFMC of Winneba, with two members. The Anlo-Ewe fishermen also have their own district assemblyman, an Ewe who represents them in the district assembly. In Chapter 8 two cases will be discussed, one in Akosua Village and one in the home area of the Anlo-Ewe beach seine fishermen, both cases in which the interplay of multiple governance structures and interaction with the fishermen will be set out.

Fisheries governance and management

In fisheries literature shifts have been made from top-down management approaches via co-management (Wilson *et al.* 2003) or no-management (Jul-Larsen *et al.* 2003) to governance approaches (Kooiman *et al.* 2005*)*. The growing realisation of the need for increased participation by resource users in fisheries management (co-management) can be seen in a wide range of policies and programmes worldwide (Pomeroy & Berkes 1997: 465) as we saw above.

Fisheries crises are sometimes called complicated as there is not only disagreement about solutions but also about the nature of problems (Mason & Mitroff 1981). The fisheries sector is characterised by uncertainty, diversity, complexity and dynamics (Kooiman & Bavinck 2005: 13). The consequence of this is that traditional methods of dealing with problems (i.e., where complex issues are often considered an intellectual design question and are approached by giving research and science a central role) no longer suffice (Witteveen & Enserink 2007: 278). Moreover, Beck's *Risk Society* (1992) in fact suggests that a growing number of societal problems are so complicated and can only be solved with a new interplay of actors next to the state, such as the industry and science. The interactive governance approach was developed because the proponents believed that the current crisis in the fisheries sector cannot be solved by conventional methods (Kooiman & Bavinck 2005: 12).

An interactive governance approach to fisheries is more inclusive than the management approach and is more capable of addressing the diversity, complexity and dynamics of the sector. It goes beyond the direct problems at hand, looks further than only the fisheries sector and considers long-term societal trends and needs (Kooiman & Bavinck 2005: 16). An interactive governance approach is principle-based and this is needed to address the major concerns of ecosystem health, social justice, livelihoods and employment, food security and food safety (Bavinck *et al.* 2005: 9). 'Governance is the broader concept, which invites a more reflexive, deliberative and value-rational methodology than the instrumental, means-end oriented management concept' (Jentoft 2006: 671). The governance concept, as discussed above, provides the conceptual framework for this thesis.

I will however also use the term management, and it is understood in this thesis to be: all kinds of activities people purposely undertake on a collective level to regulate fisheries (by making rules or developing norms based on existing – or new – values). Management is all activities people undertake to structure the usage of the resource, whereby they not only address the organisational aspect of the activity related to access, interaction, extraction and marketing but also (in doing so) create or base themselves on a normative order. My definition of management corresponds to what Kooiman and Bavinck have called the first order governance. Thus it is about the day-to-day affairs and means 'solving the constant stream of problems which surface in the fish chain – problems of supply, price, market, employment, work-satisfaction, etc.' (Kooiman & Bavinck 2005: 19). However, management as I see it also relates to what Kooiman & Bavinck have called second order governance, namely the institutional arrangements within which first order governing takes place and the 'reconsideration and adaptation' of it (*Ibid.*: 20). I see making new rules directly related to the fishing activity as a management task. Yet making a new rule based on, for instance, a principle that relates to more than only the fishing activity, is more an act of governance.

In Chapter 7 we focus on the regulating activities that the Anlo-Ewe beach seine fishermen have undertaken (next to and in relation to the government). First, however, we need to address the notion of property rights. The property rights discussion has proven to be quite central to discussions on fisheries management, governance and natural resource management in general. The outcome of the debate is crucial for understanding who the players actually are – who has the right to manage and thus who sets the rules – and it is therefore a matter of governance. The logic of answering the questions has, however, been strongly biased. Understanding this is important in order

to understand the whole idea of actors in governance having highly different world-views.

Property rights

Fisheries management is a form of natural resource management. Having the right to manage a resource means that one has a say about the resource. This means that either one is the owner or the owner(s) has/have appointed you in his/their name. Once we talk about ownership, we enter the field of property rights. The debate on ownership and property rights has for a long time been a dominating feature of natural resource management debates. Schlager and Ostrom distinguish four types of property rights holders: the owner, the proprietor, the claimant and the authorised user. They distinguish between an operational level of access to and use of a resource (see Chapters 1 and 3 for the access to and usage of the resource with the entitlements debate as also discussed by Dietz 1996 and Sen 1981) and a collective choice level consisting of management, exclusion and alienation rights (Schlager & Ostrom 1992: 16-19). The difference between rights at the operational level and the collective choice level is crucial since holders at the latter level have the authority to devise future operational-level rights (*Ibid.*: 15). The right of alienation, which the owner holds, is often believed to be crucial for the efficient use of the resource. Having the authority to alienate, exclude and manage and exploit property is 'one of the most salient elements of power through which people can be subordinated at all levels of socio-political organisation' (Von Benda Beckman 1995: 318). As Jentoft also states, fisheries management is inevitably political (Jentoft 2000: 58). Hardin (1968) suggests that private or state ownership is the only solution to prevent overexploitation. His vision (Tragedy of the Commons) has been very influential for many fisheries and coastal managers have since then assumed that, in the absence of state interference, no regulation occurs and that, consequently, chaos is inevitable (Jentoft *et al.* 2005). However as Schlager & Ostrom state: 'ownership, however, does not guarantee the survival of a resource' (1992: 21). Absence of ownership has been called open access, ownership by private people or firms has been called private property, ownership by communities has been called communal property and ownership by the state has been called state property (Berkes *et al.* 1989 in Symes 1998: 5). These have been called property regimes. These property regimes can be de facto or de jure or a mixture. In a de jure open access situation, there can be a de facto communal property regime.

Broadening the perspective

This property rights approach in which there is a differentiation between different rights holders is useful, but it has also been criticised. Symes, for instance, writes that the concept of property rights is used incorrectly. Not the concept of property should be used but usufruct: 'the right to use and derive profit from a piece of property belonging to another, provided the property itself remains undiminished and uninjured in any way' (Symes 1998: 4) in fisheries. We can talk about property only once the fish has been caught; a crucial difference when talking about sea in comparison to land. Only the owner has direct rights over the resource, while the others have indirect rights, or property related rights. Von Benda-Beckman (1995) emphasises in this light the fact that property rights are more a sanctioned social relationship between people than between persons and things. Moreover, Berry (2004: 89) sees property as a social process.

Gordon (2006) has used these insights to write about the fisheries sector in Central Africa and explores how 'societal groups like patronage networks, clans, families, religious congregations, and ethnic and national communities are mobilised to challenge or to secure and strengthen resource claims' (p. 8). From his work we understand that the academic property rights discussion does not necessarily fit the African context. We can understand why this is so if we look at the property relations of pre-colonial Africa, in which the concept 'owner' crucially means something else altogether. First of all, ownership in pre-colonial Africa was orally grounded (via stories, told histories) and not via written documents. Secondly the ownership was legitimised by the relationship between the owner and ancestral spirits and thirdly owners were often subordinated to 'new' rulers who at some point had conquered 'the land' (read: the people) but still recognised the first rulers as owners of the land via their relationship with the spirits (Gordon 2006: 10). Rights were therefore reconfirmed and challenged via the retention and retelling of the oral narratives (*Ibid.*: 11). In his book Gordon shows how colonial arrangements superimposed over pre-colonial arrangements, which implied a redefinition of the way people and resources were perceived and ruled. The most influential colonial idea was that of communal property that became administered by colonial 'traditional' chiefs on behalf of their 'tribal' subjects (*Ibid.*: 16). The functioning of (post-)colonial states resting on 'traditional' rulers resulted in a 'confusing array of formal and informal mechanisms, which were enmeshed in both modern and traditional rationales' that 'arose to define, legitimise, and enforce access to resources' (Gordon 2006: 17). This 'confusing array' can be recognised in many African settings, including in Ghana with its dual governance structure. Understanding such constructions and how they function in practice – as beautifully described by Gordon for the Mweru-Luapula area in Congo and Zambia – is key to understanding how natural resources in Africa are managed in practice.

Legal pluralism and institutional bricolage

The dual governance structure that exists in Ghana has elsewhere been called legal pluralism. Legal pluralism is 'a situation in which two or more legal systems coexist in the same social field' (Merry 1988: 870 cited in Bavinck 2001: 35). It assumes that the state is not the only legislator and that 'traditional law' exists in the absence of, or in addition to, state law (Jentoft *et al.* 2005). This situation means that different rules can be applicable to the same situation, and therefore are redundant or in conflict -whereby individuals risk breaking one rule while adhering to another- while also giving individuals room to manoeuvre (Jentoft *et al.* 2005, K. von Benda-Beckmann 1981). Bavinck (2001) has described this for the Indian state of Tamil Nadu where management systems existed of artisanal fishermen, mechanised boat fishermen and the state alongside each other. Legal pluralism is an important concept especially for understanding resource-related conflicts. Law is then understood as a normative order, a set of rules structuring human conduct, whereby in the field of legal pluralism it is understood that there is a multiplicity of law sources in any given society (Bavinck 2005). A legal system is more than only law, for 'rules are backed up by organisational structures and by authorities, who possess instruments, including sanctions, for design and enforcement, as well as for the mediation of disputes' (Bavinck 2005: 811). With a legal pluralist perspective to fisheries conflicts in the South:

> 'conflict[s] becomes almost unavoidable when industrialised fishers, and governments, make use of the same sea spaces that older fishing populations do, though according to very different sets of rules and perspectives' (Bavinck 2005: 817).

The advantage of this perspective is that it points out that parties in such conflicts fundamentally disagree about what belongs to whom, and why, and who decides, because they reason from a different legal system (*Ibid.*).

Pluralism of institutions gives room for manoeuvring but also for institutional bricolage: gathering, borrowing and applying mechanisms already part of existing institutions, styles of thinking and sanctioned social relationships (Cleaver 2002: 15-16). Cleaver questions how likely it is that institutional crafting, i.e. new institutions, established with a strong focus on formalisation, transparency, representation, regulation and rights, provide the answer to collective resource management (*Ibid*.: 13). Using data from Tanzania she shows that it is important to understand that resource users have multiple identities despite the fact that often only productive identities (such pastoralist or agriculturalist) and a limited number of social roles (such as leaders or women) are emphasised. Having multiple identities and therefore diverse cultural and social networks means that people relate to a variety of norms and practices; which can be negotiated (*Ibid*.: 17-21). This non-systemic, ad-hoc action makes resource users into bricoleurs (Levi Strauss 1962, Cleaver 2002). The bricoleurs borrow from each other's cultures in their institutional bricolage – which has also been described as leakage of cultural rules and meanings across societal divides. Institutions are preferably multipurpose – Cleaver gives an example of church choirs joining to sing in church, but also functioning as credit groups, collective labour groups and acting as singers in 'traditional' ceremonies (Cleaver 2002: 21-25).[25] Cleaver distinguishes between what she calls bureaucratic institutions and socially embedded ones whereby they are not always easily distinguishable from each other since through bricolage bureaucratic institutions may become socially embedded and social arrangements bureaucratised (*Ibid*.: 13-14). She has noticed that in the institutions formed through bricolage in her research area in Tanzania, it is common to actively embed relations of co-operation in cultural and social life and to emphasise inclusive relations. Norms of conflict avoidance are common to all resource user groups and there is a strong desire to solve conflicts at the lowest level possible, whereby conflicts are not seldom minimised or turned towards co-operation and if fines are levied the proceeds are used to 'celebrate forgiveness' as a communal activity. Cleaver does not avoid addressing accounts of mistrust and social stratification impacting negatively on some in the community – but she aims to show that literature on institutional design and policy documents by contrast have other norms prevailing in dealing with conflict, emphasising confrontation and punishment rather than compromising and reconciliation (*Ibid*.: 25-27).

Power connected to different government structures

As we saw, rules are only meaningful if they are backed by organisational structures and by authorities to enforce them, to impose sanctions if needed and also to mediate in the event of conflicts (Bavinck 2005). The people who can decide, enforce, and implement management decisions are people with power. However, fisheries management may also provoke resistance thereby making it less potent (Jentoft 2005: 6). Power is a slippery concept, with social scientists often disagreeing on what it is (Jentoft 2006:

[25] This also nicely shows how all people's assets can be potentially meaningful for people's livelihoods (Chapter 3).

672). Jentoft introduces power to the agenda of fisheries researchers and puts forward four propositions relating to power and distribution in fisheries management:

1. Fisheries management systems always produce winners and losers.
2. Winners support the existing management system, whereas losers oppose it.
3. Winners always try, and in most cases are able, to block any management reform that would not be in their interest.
4. Winners have the power to reinforce the management system and ensure that it sustains their benefits (Jentoft 2006: 675).

These four propositions serve as hypotheses that can 'guide research in the direction of powerful actors, but also encourage research into the actual practice of power, i.e. how power is exercised in real situations, and who is doing what to whom' (Jentoft 2006: 675). One might assume that the power lies with certain groups and is connected to certain roles – but it is only in practice that one can see where power is. The best way to understand what power is and how it works is to study it in particular situations as Flyvbjerg (2001) argues. 'Understanding how power works is the first prerequisite for action, because action is the exercise of power. And such understanding can best be achieved by focusing on the concrete' (Flyvbjerg 2001: 107 quoted by Jentoft 2006) Analysing concrete situations will reveal where power is and how it plays a role. To understand power in practice Nuijten (2005) advises to focus on conflicts, public events and on interactions between officials and peasants (or other social groups) (referring to Long 1989). Conflicts are more often mentioned as good 'food' for analysis and function quite centrally in natural resource management studies (Bennett 2000, Homer Dixon 1999, Adano & Witsenburg 2004); Nuijten (2005: 9): 'conflictive situations give insight into the central issues at stake, and the power struggles and practices which develop around them'. One might however wonder if focusing on conflicts will not give a certain bias while also somehow implying that if there is no conflict there is no power at work. Whereas one could also reason that conflict is a positive sign – actors take the risk to challenge power.

Power is a crucial concept in fisheries management – being an inevitable political activity or process (Jentoft 2000: 58) – and power differences have often been neglected or inadequately addressed in co-management studies. That has to do with a different blind spot in many of these studies – the heterogeneity of communities. Moreover, if heterogeneity is addressed in studies it is argued that heterogeneity works against collective action – Vedeld has studied the commonly-held view that 'the smaller and more homogeneous the group the stronger its ability to perform collectively' – which he found not necessarily to be true (Vedeld 2000: 1, 12). First of all, it is also often not clear what is meant by heterogeneity. As Vedeld argues, '[i]t may be particularly important to distinguish between political heterogeneity (disagreement about the authority structure), heterogeneity in endowments, entitlements (wealth) and in economic interests' in use of natural resources (*Ibid*.: 11-12). He found that it is often more important to focus on heterogeneity amongst leadership groups than between groups in a community as such (*Ibid*.: 17). Assessing power and heterogeneity means understanding that stakeholders in a process do not hold a same level of power. It is also important to view heterogeneity not as a static given but as a dynamic process, in reaction and relation to certain processes; 'the heterogeneity issue should be contextualised and studied in a historical perspective' (*Ibid*.: 13, 18). Last but not least the encounters at the interface

between local and external agents and arrangements are also important (*Ibid*.: 17 and refers to Long 1989).

Tying the threads together

In NRM thinking, property rights have played and still play a central role; for one has the right to manage if one has a say about the resource. However, ownership in the African context differs from the western ideas on which the theoretical debate is based. These discrepancies themselves already point to what has been called legal pluralism in which locally held ideas on ownership can differ from the ideas held by the international organisations that inform postcolonial African governments as well as, for instance, the World Bank, IMF and FAO. Furthermore, in studies focusing on institutions in NRM it is often not acknowledged that resource users have multiple identities and thus relate to multiple norm systems. Furthermore the institutions to which they relate also become mixed (institutional bricolage) which also makes them more durable. Institutional crafting as *the* solution to natural resource crises becomes less likely to be successful if crafters lack sufficient local knowledge. It is also important to understand the heterogeneity of communities for power differences play a role – the oft-used term 'stakeholders' somehow mystifies that stakeholders in a process do not hold the same level of power.

In the next section we provide an example of a regulation initiative by the Community Based Fisheries Management Committee. Earlier we saw how these committees have not yet been very successful, with one of the problems being the fact that the institutional framework needed for the committees to function, the bylaws, are difficult to implement. In the case discussed below we get a better understanding of why this is the case in Keta district. Its introduction is in fact a nice example of institutional crafting, which will almost certainly fail if it is not properly embedded in local dynamics.

Case in Keta District

A substantial number of CBFMCs are not able to implement their bylaws, a situation which seriously undermines their functionality, since being able to enforce the bylaws generates revenues necessary for the adequate functioning of the committees. The fisheries officer of Keta District explained this to me, when I ask about the CBFMC in Woe: 'It is inaugurated, but I think it is not operating as expected. One of the reasons is that the bylaws are not gazetted yet. The DA has ratified them however, but the fact that they are not gazetted yet means they aren't laws yet' (interview 65, 16-7-2004). In the ministry document on the CBFMCs it is stated that the role of the DCEs and DA is central to the formation and empowerment of CBFMCs (MoFA 1997: 6). The question is why it takes so long for the DAs to get the bylaws gazetted? That question is a highly sensitive issue in Keta District and I had also posed the same question a couple of times at the District Fisheries Department.

In 2004:

> MK: Are the bylaws made official now by the DA?
> Fisheries officer: The bylaws are put together of all groups, some laws were added to it. The DA was supposed to ratify them, but that also was a problem. They were submitted in 1998, last year (2003) they were ratified, but now they have to be gazetted. And that is a problem. (interview 65, 16-7-2004)

Later in 2004:

> MK: But how about the bylaws then, wouldn't it be better manageable when the bylaws get gazetted?

Fisheries officer: Yes! But we started in 1998, it took them five years to get them ratified! (interview 76, 27-8-2004)

In 2005:

MK: Have the bylaws been gazetted yet?
Fisheries officer: No I don't know what is going on but they have not been gazetted yet. (interview 88, 31-10-2005)

Some weeks later in 2005, I returned to Keta district to talk to the DCE. I managed to meet him after having tried to meet Mr Lotsor of the Fisheries Department again and the Presiding Member of the Keta DA. I asked the DCE about the bylaws:

MK: I have understood that they have ratified the bylaws, some years ago but that they have not been gazetted yet. And one of the questions I have is, 'How come?' What is delaying the gazetting of the bylaws, do you know or are you not working with fisheries yourself?
DCE: Yes, we have the fisheries laws, which are in force, that one at the national level has been gazetted. At our level, we are now trying to put in place the district assemblies bylaws, which we hope to put in place before this year ends.

After having talked to him for some ten minutes, two men walked in and sat on either side of me. It is only when they were seated that I recognised the districts fishery officer. The other man turned out to be the presiding member of the DA – about whom I had been asking before I came to the DCE! What a coincidence! Apparently word had spread that I was there to talk to the DCE about fisheries. Although I did not know whose initiative it had been, I did sense that what I was talking about was important. So I tried again and asked the three men:

MK: One of the main questions I have is the bylaws. Because I understood that they have been ratified some years ago and that they have not been gazetted yet. So I was wondering why is it taking so long?
PM: In fact even this morning [during the interview it is around 10 o'clock in the morning] – I didn't even inform him [nodding towards the DCE] before. I went to the house of the lawyer, of our solicitor or so, to ask him, because he said that he was not having sufficient time to finish it up for us. I provided him with the necessary documents which would give him the helping hand, and I have been able to provide him a room. So now since people have been started in chambers, we have located a room here, room ten for him to come and hide there and complete it for us. But yet up till now, he has not been able to so, so I want to find out why, but unfortunately he has left for court, he is in a meeting this morning. However in the evening I will go back again and I am sure in space of time it will be in order, it will be in place. I don't know if I differ from what my DCE says?
MK: No.
PM: Do I differ?
MK: No, your DCE said by this years ending it should be done.
PM: Ok

In earlier conversations the districts fisheries officer had explained to me why he thought it was so difficult to get the bylaws issued:

MK: Why is it a problem to get them gazetted?
Fisheries officer: It is political! The difficulty is enforcing the laws since it will throw the fishermen out of work. You see anchovy is the major species caught here, they depend on it. The nets in Ghana should be above 1 inch mesh size, but nets are 3/8 of an inch. And that is the problem. Without those nets they can't be caught. They are afraid of enforcing it. (interview 65, 16-7-2004)

And:

MK: Why does it take so long?
Fisheries officer: I don't know, the government doesn't want to be made unpopular. They are afraid. We know how to enforce laws. In the law it is said no mesh size under 1 inch. The beach seine even has 3/8!! That is the peculiar nature of this area. If you ban it, there is no more fish caught here. They

> all want the anchovy, but the large size is not larger than this [shows his pink to me]. (interview 76, 27-8-2004)

That this is the blocking issue is reflected in the conversation I had with the DCE after he had assured me that the bylaws would be gazetted that same year. He explained to me that because the bylaws were not in place, they could not solve certain issues in court. I asked him to give me an example of the kind of things that the court could not settle because the bylaws had not yet been gazetted:

> DCE: For example the use of some mesh size. You know over here June, July, August is the season for the anchovy. The anchovies they are small and any fisherman that uses that net size, that mesh size is naturally going against the fisheries law, do you get it. And such a person how do you prosecute him?
> MK: So, but the bylaws, what do they state about that then?
> It is not yet out. The bylaw is not yet out. So maybe, what I believe is eh… during the anchovy season, fine maybe you allow them to use the lower mesh size, then soon after the anchovies season, you will have to use the required mesh size.
> MK: Ok, so and that will be in the bylaw?
> Yes, it will be in the bylaw.
> MK: Ok so, apparently within this district you want to make a division between the season in which they can use this net and out of season they cannot?
> DCE: Yes.

The Keta bylaws stated the following on this issue:

Use of prescribed net	The use of beach seines and nets with mesh size less than 25 mm or 1 inch is forbidden. Offenders will be prosecuted at court.

Interestingly it was not stated in the bylaws what the fine would be, whereas in most other cases this is clearly prescribed (pay 100,000 cedis for example). The idea that I got about this whole exercise is that the DA in Keta District is unwilling to pass these bylaws and wants to change them by adding the possibility of using a smaller mesh size in the anchovy season and a larger one out of season. Only when they have managed to arrange that, will they be willing to pass the laws. It is a highly political issue in a district where most of the fishermen fish with the beach seine, which would be illegal once the bylaw is gazetted.

An evaluation of the Fisheries Sub-Sector Capacity Building Project of the World Bank (2003) states about the committees that: ‘CBFMCs are now empowered and capable of monitoring their fisheries resources, as well as generating funds through imposing fines to maintain their operations’ (World Bank 2003: 10). From the above we can at least doubt the validity of this statement. Overall the evaluation of the Bank is quite negative in terms of expected sustainability of the effects: ‘However sustainability is rated as unlikely under the current circumstances. A lack of political will to enforce regulations and remedial measures, the weak leadership provided by the DoF, and the problems of collaboration, unless resolved, will continue to hamper reforms and limit achievements of future operations’ (World Bank 2003: 12)

In an organisational assessment of two CBFMCs in the beach seine communities of Adina (Volta Region) and Katech (Central Region) it was concluded that the CBFMCs were still functioning but mainly performed well in conflict resolution situations (Bamfo 2003). One might have expected the committees to have strengthened the relationship with GoG structures such as the DA and MoFA – but from this study it became clear that that was not the case: ‘The DA is perceived as far away from the community and the community based organisations’ and ‘The MoFA also failed to

follow up and provide the necessary backstopping to the CBFMC' (*Ibid*.: 26). Bamfo advises the strengthening of the capacity of the members of the committees and the institutional linkages (*Ibid*.: 26-28).

Conclusion

In this chapter, I discussed the governance concept, highlighted some important elements from the fisheries governance debate and presented the structure of the multiple governance framework in Ghana. For our understanding of governance it is important to recognise that the fisheries sector is characterised by diversity, complexity, dynamics and uncertainty leading to incomplete information. The crisis in world fisheries is a complicated problem, with issues spilling over from one realm to another. A governance approach recognises that public and private actors are involved with different legal systems and power differentials. It is important to differentiate between analytic and normative approaches in governance. A normative approach stresses that governance is and should be about making hard choices based on principles. In this chapter we used an analytic governance approach and sketched the complexity, diversity and dynamics of the Ghanaian setting in which fisheries governance takes place.

In a nutshell governance is about who sets what rules, when and how. We also read in this chapter that it is interesting to add one question to this series – namely why was this rule set, and based on which knowledge or worldview. Answering these questions reveals that there are more actors involved in governance. Rules in fishing at local level might even be primarily set by other actors than the Ghanaian government. One of the key institutions in Ghanaian artisanal fisheries is that of the chief fisherman. It originates out of the traditional governance system. This chapter has shown that the traditional governing system and that of the government of Ghana have multiple linkages as well as several hybrid organisations, such as that of the Regional Chief Fisherman, the GNCFC and the Regional and National houses of Chiefs. Their functioning is grounded in Ghana's constitution and regulations (Chieftaincy act). The multi-actor characteristic of the Ghanaian governance situation fits well with the notion of governance, and the understanding that both systems are based on different value orientations is recognised in the attention given in the interactive governance debate as formulated by Kooiman *et al.* (2005) that we follow here, to the meta level of guiding principles.

In our discussion of the property rights debate that has had a major influence on natural resource management literature, we realised that in the African context this works differently in practice. The notion of ownership is understood differently – something we will see in the next chapter when we discuss the local knowledge of the Anlo-Ewe beach seine fishermen and when we contextualise the activities they have undertaken to regulate their fisheries. African resource contexts are by definition pluralistic – because of the traditional and colonial influences which have fed the current situation of plurality in norms, ideas and knowledge. We also learned from the institutional bricolage literature (in the African context) that the resource users also have multiple identities and relate to a variety of norms. These are anchored in various governance structures. Finally we learned from the literature on political power that power differentials play a role in deciding the impact of various governance activities as we have seen in the bylaws case in Keta.

7

The institutions of local fisheries management

'The government cannot make the fish lay eggs'[1]

Introduction

Beach seine fishing in Ghana is a regulated activity. These rules are largely set by the fishermen themselves and for a large part deal with the fact that fishing companies seldom operate alone in a certain territory. This regulating of the activity I call fisheries management, and is defined as: *all kinds of activities people purposely undertake to regulate fisheries on a collective level (by making rules or developing norms based on existing – or new – values).* Management covers all activities people undertake to structure the usage of the resource, whereby they not only address the organisational aspect of the activity related to access, interaction, extraction and marketing but also (in doing so) create or base themselves on new institutions (see Chapter 6). In this chapter we take a closer look at the institutions of fisheries management at local level, focusing on what the Anlo-Ewe beach seine fishermen undertake collectively and also on the regulating activities undertaken by the government in relation to the artisanal fisheries sector at beach level. By doing so we differentiate ourselves from many livelihood studies that 'refrain from analysing societal processes at the collective level'(Brons *et al.* 2007: 10).

Both the fishermen and the government base themselves on certain norms and values which can be traced back to what Kooiman *et al.* have called principles. Core principles feed, bind and evaluate the governing exercise (of which management is part) (Kooiman & Bavinck 2005: 20). Rationality, responsiveness and performance are examples of such core principles. The value of the work of Kooiman *et al.* is that they analytically separate the three orders of governance, and descibe each order in detail. The difficulty, however, is that although they distinguish between different levels – local, national and international – when discussing the institutions of governance, they speak of 'governers' or 'decision makers' as if it is a group you can see, gather and get together when discussing the meta-principles of fisheries governance. This chapter shows how complex

[1] Quote from a group interview with fishermen in Akosua Village (June 2004).

fisheries institutions already are at local level – namely the beach in Ghana – with a focus on one fishing technique: beach seine fishing. Managing actors are not a homogeneous group and also base their institutions on different normative orders that play a role at the same time. As a result, the underlying principles differ. By their analytical simplification one might be led to believe that principles have a one-on-one impact on management: 'A rational approach to fisheries governance would insist that the order of attention should be as follows: 1) values, 2) concerns, 3) principles, 4) goals and 5) means' (Kooiman & Jentoft 2005: 298). However, this research shows us that there is no such thing as one rationality, since even rationality is plural. To make things even more complicated, all this is indeed reasoned without considering the negotiation interface, as discussed in the next chapter. We begin this chapter by discussing the concept of fisheries management in relation to collective action.

Fisheries management

Fishermen have developed many institutions to regulate and organise their fishing business. Institutions are values converted into written or unwritten rules applicable to certain situations with the idea being to achieve certain goals. In this chapter I use the word 'rules' but it should be kept in mind that I then refer (following Kooiman & Bavinck 2005: 15-17) to both written and unwritten rules and norms and also to rights and procedures, while also including the principles or values on which these are based. I assume that fishermen regulate their fishing activities if there is a reason to do so. From a functionalistic point of view, rules are set to solve a certain problem. Such rules are not set just like that, out of the blue. For instance, in Ghana there is a rule that fish carriers and fish mongers are not allowed to meet a canoe at sea on its way to the shore in an attempt to transact business (Keta District Bylaws 5: i). This rule is intended to prevent conflicts between fishermen and fish dealers, or amongst fish dealers. However, rules can also result from a certain understanding of the world. For instance, the non-fishing days along the Ghanaian coast have been set based on the idea that that day is the sacred day of the sea god (Sarfo-Mensah & Oduro 2007: 7). Thus all the rules that fishermen have set have a certain logic and are based on their world view or are the result of the wish to solve certain problems. This is also true for fisheries management regulations of the government.

One could argue that an overall goal of fisheries management is to make sure that the fishermen are and continue to be capable of catching fish in order to make a living. In order to do that the sector needs rules and regulations, since just letting everyone carry on causes problems such as conflicts between fishermen, stock depletion or poverty. The idea is also that for management measures to be effective it is crucial to be able to have compliance and/or control. Compliance with the law has long been understood using rational models which assume that fishermen calculate the costs and benefits of their actions (such as reward and punishment). More recently normative models provided input for the debate by arguing that fishermen are also influenced by norms, morality and legitimacy. Hauck asserts that understanding compliance 'requires a critical analysis of how law has evolved, and the power dynamics that have shaped it' and 'law itself needs to be questioned, including how it is defined and by whom' (Hauck 2008: 636). Compliance can only be expected if fishermen understand a rule so managers need to have contact with and knowledge of the fishermen. Managing fisheries is therefore much more about managing people than it is about managing fish (stocks).

Most scholarly work on fisheries management deals with the state as managing actor, and most is primarily associated with, or even directed to, managing fish stocks. See for instance Charles (2001), who in his chapter on fisheries management explains that there are three components of fisheries management of which the first is 'determining the level of fishing effort and/or catch' (p. 85). This reveals a management understanding that is primarily directed at a higher level (state or international) management and that reasons out of the large percentage of commercial fish stocks that are overexploited with the threat of being driven to extinction. This is reflected in the proposed measures such as maximum sustainable yield (MSY) which is based on ecosystem modelling (instead of the former biological modelling for single species). The notion of management reflects an open access/common pool thinking that is nicely formulated in the following quote:

> 'Unless an external agent intervenes and regulates access to and exploitation of common resources, the contradiction between commonly owned resources and privately owned means of production will lead to intensified exploitation beyond nature's carrying capacity. The ultimate result is a tragedy characterised by serious reductions in the resource base (including both biomass and biodiversity) and the depletion of potential economic profits that could have been generated.' (Jul-Larsen *et al.* 2003: 2)

In the event of overexploitation, therefore, the state is expected to act. This *paradigme halieutique* (Chauveau *et al.* 2000)[2] obscures the fact that fisheries management is about much more than fish, and also that fishermen themselves are largely active in managing activities sometimes jointly with government.

Management protagonists assume that fisheries (as in fish stocks) can be managed. Jul-Larsen *et al.* give three examples as to why this may be too simplistic. First there is the idea (based on equilibrium thinking) that human activity is the main cause of resource decline and that, therefore, the resource will be restored by managing human activity – a vision that has been questioned in New Ecology thinking (see for instance for West Africa: Fairhead & Leach 1995, Leach & Fairhead 2000). The second example is that resource management policy solely states what is needed whereas it often reflects political choices. Lastly they show that the opposition (in the sub-Saharan context) between traditional institutions and modern institutions is too simplistic; 'local institutions, crucial in the regulation of people's access to vital resources, often reflect a number of different meanings, are unclear and sometimes even lack coherence' (Jul-Larsen *et al.* 2003: 3-6).

Their critique points to the complexity of fisheries, making management a complex activity. The interactive governance approach as described in Chapter 6, provides a useful avenue for dealing with this social and natural complexity.

Collective action

Collective action has been used in many studies to refer to situations in which resource users organise themselves as a group in order to achieve a common goal. Collective action, and the institutions and power relations involved, is often ignored in many household biased livelihood studies (Brons *et al.* 2007; a notable exception is Hordijk 2000). Brons *et al.* explain this by the conceptual focus on measurable assets in livelihood studies, which has led to a methodological bias of measuring practices such as income generation, wealth accumulation, migration and social security from the level of the household (Brons *et al.* 2007: 9).

[2] See Chapter 3 for an explanation.

Collective action in natural resource management has often been applauded (Berkes 1989, Ostrom 1990) although there has often been strong criticism of Hardin's assumption (see Chapter 1) that a lot of common pool resources were left open and were unregulated. Common property resources have often been managed (hence becoming common property) collectively on the basis of commonly accepted rules (including norms) in order to guarantee the basic needs of people in uncertain times (Van Est 1999: 205 referring to Berkes 1989).

The question one would want to ask with regard to collective action is: who is involved in the collective? These groups can differ depending on for instance age, gender, ethnicity, religion, roles or with fishermen on gear users. As we saw in Chapter 6, discussions on heterogeneity are actually quite important as they give us insight into which collectives within a community unite before taking action (see also Van Est 1999). Platteau & Strzalecki (2004) analysed a case in Senegal where fishermen collectively organised themselves in an output-limiting scheme for purse seines and handline fishermen to address the problem of excessively low fish prices given to their fish by the middlemen, forcing them to pay more for the scarce fish. They wanted to break the market power of the local fish merchants (Platteau & Strzalecki 2004: 419). This was also seen as a good opportunity to heal some of the wounds that existed between two groups within the fishing community given that the bottom set-net operators were mainly migrant fishermen and indigenous fishermen used handlines and purse seines. The conflict came about when the indigenous fishermen accused the migrant fishermen of having contributed greatly to the decline in their catches, while also having been responsible for gear destruction whereby their active gear frequently got stuck in the passive gear of the fisher migrants. The conflict escalated and even led to loss of life. The community tried to solve the issue and created a commission with responsibilities relating to monitoring and conflict resolution mechanisms (Platteau & Strzalecki 2004: 420-422). The article focuses on the fact that the two fisher groups (migrants and indigenous) had divergent expectations as to what the result would be of this collective action. The action was directed at creating output-limiting schemes of both purse seine and handline fishermen, targeting the traders. The migrant purse seine and line fishermen (that is other fishermen than the passive gear migrant fishermen from the previous conflict) were much less optimistic about the success of the action than the indigenous fishermen. The authors conclude (after having discussed a series of hypotheses) that the migrant fishermen's suspicious attitude was due to the memory of painful inter-community tensions with regard to which they too felt they were the victims (Platteau & Strzalecki 2004: 442). On the outside, therefore, one sees collective action of fishermen against middlemen. However, if one differentiates, one sees different groups with different expectations and different power. This is a crucial thing to keep in mind. In the next section we assess the local management activities of the Anlo-Ewe beach seine fishermen and the government of Ghana.

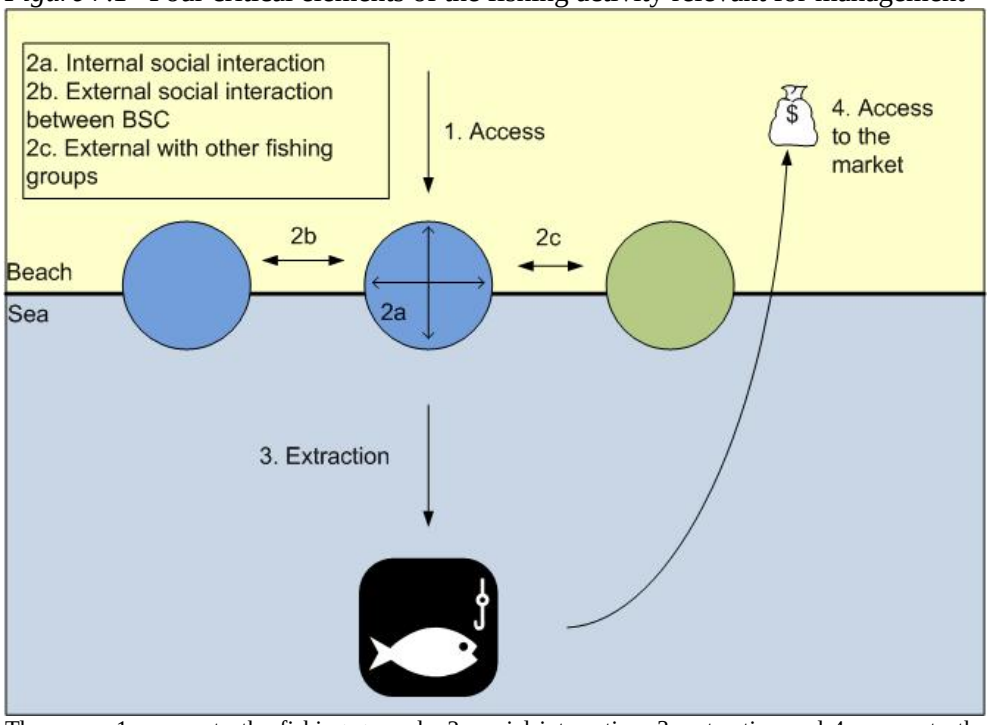
Local fisheries management

Beach seine fisheries in Ghana are managed at different levels with different institutions being involved. Beach seine fishing management relates to the activity (Chapters 3 and 4), takes place within certain governance structures (Chapter 6), has certain goals, is based on certain world views (knowledge and understanding of how the world works) and deals with different 'elements' of the fishing activity (as described in Chapter 4).

Migration (Chapter 5) also has implications for management and the other way around. At the end of this chapter we assess this relationship.

As we saw in Chapter 4, beach seine fishing involves a cycle of activities in time and place. The company needs to cross the surf, set the net and then haul in the net from the beach. When all that is done, the crew sells the catch to the women and goes home (after maintenance of the net) with their share. Four critical elements of the fishing activity can be distinguished that in most cases bring about management: *access* to the beach and fishing grounds (resource), *interaction* between fishermen, *extraction* of the resource and *access* to the market. These elements are shown in Figure 7.1 below. The government undertakes a number of activities to regulate certain issues of the artisanal fishing sector. These activities also relate to the access, interaction and extraction elements.

Figure 7.1 Four critical elements of the fishing activity relevant for management



These are: 1. access to the fishing grounds, 2. social interaction, 3. extraction and 4. access to the market. The two blue circles represent Anlo-Ewe beach seine companies, the green circle another gear user. Source: author.

Access

In order to be able to fish, fishermen need equipment (canoe, net, outboard motor) and access to the beach from which they can go to the fishing grounds. Access to the beach and fishing grounds is mediated by the chief fisherman's institution in Ghana. Access to equipment means having access to credit which is often arranged between fishermen and women, because credit opportunities for fishermen via official organisations are almost non-existent.

- Access to the beach and the fishing grounds

In Ghana all fishermen are allowed by national law to fish all along the coast (*de jure*), although access at local level is mediated by the chief fishermen. Consequently the chief fisherman in Woe is in charge of granting access to Woe's fishing grounds. All new fishing companies and migrants from outside need to ask his permission to fish in Woe. This permission – if the request is performed properly – is always granted (I never heard of cases of refusal). In migration situations, new migrants need not only to request permission from the chief fisherman, but first and foremost from the town chief. In Half Assini there was no chief fisherman at village level because the Nzema are not really active fishers. However, the Fanti and Ewe migrant fishing communities have their own chief fishermen. When I asked the chief fisherman of the Fanti fishing community in Half Assini why he never refused access to new applicants, he responded: 'The work is a lucky work. If you come and if you are lucky (…) we all profit from the luck of others. The sea is a gift of nature; we have no control over it' (interview 81). Other fishermen, when asked about this, explained that Ghanaian fishermen are free to fish everywhere. Asking permission seems to be more a social rule given that new fishermen need a place to build their huts, need to be accepted by the fishing community and need to have access to the market.

The assistant director of the Fisheries Department in Accra argued that chief fishermen do not manage access to the fishing grounds:

> DY: 'If you are coming in, you only need to go and tell him 'Please we are coming to put our boat on this land, if it is a bottle of Schnapps and 50,000 that you need, here it is; tomorrow we are going to sea'. And that is it.'
> MK: 'And they never say: "no we are full?"'
> DY: 'No.'
> MK: 'Ok, what you are saying actually is that they are not managing it, the access, they yah..., they are there.'
> DY: 'They are not managing access – no.'
> MK: 'Because what I understand is that people – for instance when they migrate to another place – have to do that, right? They have to go to the chief fisherman and pay...'
> DY: 'If you migrate into this area, and I am the chief fisherman here, you need to come and tell me, you need somewhere to sleep, you need water, you need to have a woman to help you around, and maybe buy your fish. You come and tell me, I arrange that, I take care of your safety and give you somewhere to sleep and look after you.'
> MK: 'So as a chief fisherman one is more a facilitator and not so much a manager?'
> DY: 'Hmmm, they are not managers, no. We want to use the CBFM system to make them managers, but now with their traditional rules, they are not managers, they are facilitators, they keep law and order and things like that.' (interview 78, 14-10-2005)

Even though permission is never refused and the role of the chief fishermen as access managers is not acknowledged by all, the rule as such is adhered to by the fishermen. In any event, chief fishermen are aware who is fishing from their beaches. A study of fisheries conflicts in developing countries suggested that Ghana's 'informal institutional framework' manages access to the fishery in an effective way and thereby prevents access conflicts as seen in other countries. 'No such arrangement exists in either Bangladesh or TCI [Turks and Caicos Islands in the Carribean]. Most Bangladeshi villages have no real power over how access to resources is regulated and therefore many are denied access to open access water bodies by powerful political elites who have illegally 'captured' these benefits (Bennett *et al.* 2001: 369).

- Access to credit

'Financial institutions have lost all confidence in the fisheries sector, and loans are hard to come by' (NCU Ghana 2001: 21). This was certainly confirmed during my study. Yet, net owners need a substantial amount of money to run their businesses (see Chapter 4). Women play an important role in providing this credit and this leads to a win-win situation since the women thereby secure access to fish and consolidate their source of fish supply (Tetteh 2007: 38). Quite a lot of studies have been conducted on the role of women in Ghanaian fisheries (Odotei 1991, Overå 1992, 1993, Christensen 1977, Vercruijsse 1983) and these works show that the really successful women managed to combine sources from their families (or had at least 'somebody to turn to') together with entrepreneurial skills and that they dared to take risks (Overå 1993: 127-29). In addition, the arrival of the outboard motor led to a huge number of investments with high returns in a business in which a lot of women were able to participate (Odotei 2002a: 66). One of the women I spoke to in Akosua Village explained to me that she borrowed money herself in order to be able to lend it to the fishermen for them to invest in nets, motors or to buy fuel: 'When the season starts, you get the money. Then you give out money and keep records. If I didn't lend money to fishermen, I wouldn't have to borrow it myself' (interview 57, 30-6-2004). She showed us the records she kept.

Below is an example of her day to day recording (Table 7.1). In that example we see how she records the fish received with its value, subtracts the money for fuel she had lent them and records what she pays to them with the date. In this case she has a little debt with these fishermen. From her records, a list on paper stating the fishing company and their debt to her, we saw that other fishing groups instead had outstanding loans with her totalling 34.5 million cedis (3,136 euros).

Table 7.1 Day to day accounting of a processor in Akosua Village

32 cases at 50,000	1,600,000
15 cases at 50,000	750,000
31 cases at 35,000	1,085,000
63 cases at 35,000	2,205,000
126 cases at 40,000	5,040,000
Total	**10,679,000**
Fuel	*2,700,000*
Balance	7,979,000
6/2/2002 gave money	**6,800,000**
Balance	1,180,000

The processor keeping this loan book, lends money (in cedis) to an Effutu fishing company, having them paying back with fish.

- Access to fishing inputs

Fishermen need to buy fishing materials such as nets and outboard motors to be able to fish. These inputs are often subsidised by the government. Although the government or other organisations such as banks do not provide loans to fishermen to acquire fishing equipment, the government does provide a variety of subsidies on inputs which can be seen as another form of access. Fishermen make use of these subsidised inputs, such as motors, netting and premix fuel. The government at the national level sets the rules and makes the inputs available through their decentralised organisations at the local level.

The subsidised premix fuel, first introduced in 1992,[3] is for sale at special filling stations and the nets in special shops. A pre-mix committee was set up by the ministry in 1996 to see to the distribution of the subsidised pre-mix fuel. The aim of the subsidy was to alleviate the operational costs of fishermen using outboard motors (DoF 2003: 61). However, committee members have been accused of corruption, leading to less availability of fuel for fishermen (Bannerman 1998 – section 4.10). Newspaper articles in Ghanaian newspapers repeatedly reported premix scandals, such as in October 2005 and November 2006 when premix was sold as fuel to motorists all over the country as again narrated in 2008 (Ghanaian Chronicle 27-1-2008).

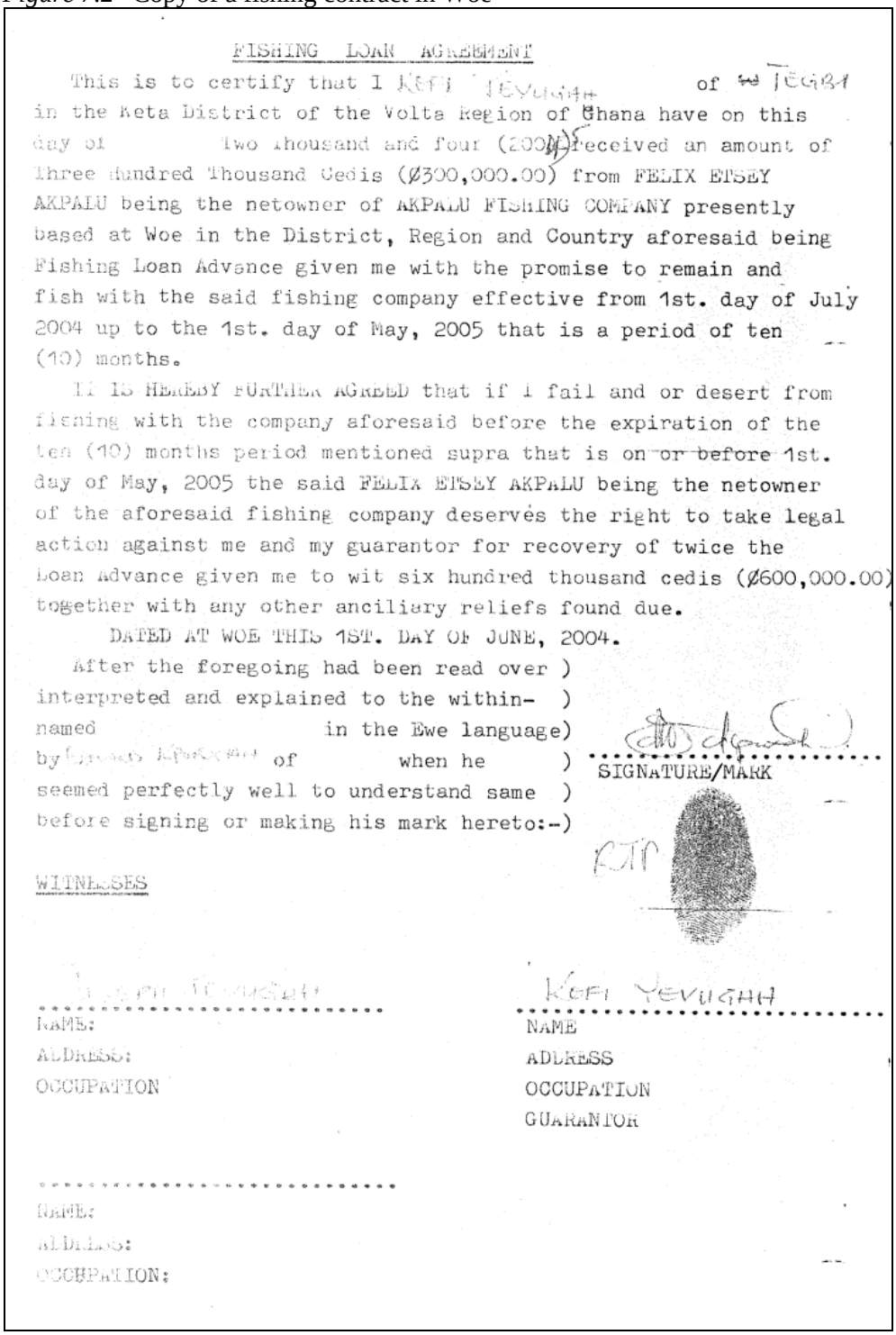
The outboard motors are distributed through the District Fisheries Departments. In August 2004 for instance the Keta District office of the MOFA had 20 outboard motors for sale at a reduced price. Normally they would cost 28 million cedis (2,545 euros), but the government offered them for 23 million (2,090 euros) each (interview 62, 17-8-2004). The district office would inform the chief fishermen and they would send word to the net owners. The net owners interested in buying one needed to pay for the motor in a bank account and with the receipt they could collect the motor in Accra. One of the net owners explained to us that these offers were not good enough and he would need to pay for the motor at once and could not apply for a loan (with the Districts Assembly). Loans were only granted to groups and not to individuals. The net owner questioned the sense of forming a group. He already had to take care of a group, all in all he had 95 people to take care of – as his crew members. The fisheries department explained that in the past fishermen had been unreliable in paying back their loans; 'they didn't pay back, so credit agencies are now reluctant. (…) Outright payment is demanded because in the past they would take it and go on migration to Abidjan, making it difficult for us to get our money back' (Interview 62, 17-8-2004). In some cases the subsidised motors are not sold to the fishermen involved in such projects, but sold to traders or fishermen who want to make a profit and resell the subsidised motors for a higher price (interview 16, 28-1-2004).

Internal social interaction

All beach seine fishing companies have set up rules and regulations to structure the internal social interaction between crew and net owner and amongst the crew. As we saw in Chapter 3, the net owner also needs to gain access to people with one way being to offer an advance payment. When a man starts working for a fishing company he will be given an advance payment of for instance 400,000 cedis (40 euros). He can use that money to buy some necessary items, pay off some debts or pay some bills for the household. Upon receiving this money he will sign a contract with the net owner for whom he will start working. These contracts formalise the working relationship between net owner and crew and state that the crew member will work for the net owner for a fixed period of time (9 months – a fishing season – up to 5 years), that the crew member has received an advance payment and that the crew member will 'abide by the rules and regulations governing his fishing industry'(see Figure 7.2, which shows the copy of a contract below of Akpalu Fishing Company in Woe from 2004). Breaking the contract will give the net owner the option of undertaking legal action. The contract is laid down in English, an indication that it is subject to the formal court system. A contract is read

[3] The premix fuel was withdrawn and later reintroduced (DoF 2003: 61).

Figure 7.2 Copy of a fishing contract in Woe



FISHING LOAN AGREEMENT

This is to certify that I Kofi Yevugah of Woe in the Keta District of the Volta Region of Ghana have on this day of Two Thousand and four (2004) received an amount of Three Hundred Thousand Cedis (Ø300,000.00) from FELIX ETSEY AKPALU being the netowner of AKPALU FISHING COMPANY presently based at Woe in the District, Region and Country aforesaid being Fishing Loan Advance given me with the promise to remain and fish with the said fishing company effective from 1st. day of July 2004 up to the 1st. day of May, 2005 that is a period of ten (10) months.

IT IS HEREBY FURTHER AGREED that if I fail and or desert from fishing with the company aforesaid before the expiration of the ten (10) months period mentioned supra that is on or before 1st. day of May, 2005 the said FELIX ETSEY AKPALU being the netowner of the aforesaid fishing company deserves the right to take legal action against me and my guarantor for recovery of twice the Loan Advance given me to wit six hundred thousand cedis (Ø600,000.00) together with any other ancilliary reliefs found due.

DATED AT WOE THIS 1ST. DAY OF JUNE, 2004.

After the foregoing had been read over) interpreted and explained to the within-) named in the Ewe language) by of when he) seemed perfectly well to understand same) before signing or making his mark hereto:-)

SIGNATURE/MARK

RTP

WITNESSES

NAME:
ADDRESS:
OCCUPATION

Kofi Yevugah
NAME
ADDRESS
OCCUPATION
GUARANTOR

NAME:
ADDRESS:
OCCUPATION:

to and translated for the fisherman in Ewe before he signs it (this is also stated in the contract).

If a crew member is new to a net owner he will not give the advance at once, but based on a couple of steps in order to allow a check on how they behave and to build up trust (interview with a former netowner from Akosua Village, notebook 14). As a crew

member you need to adhere to certain rules and regulations. These often include the following:

Box 7.1 Rules in fishing companies from the research research locations

1. You have to come to work every day and you have to be on time. If you cannot come to work for one reason or another, you will need to have permission in advance. If you are sick, you need to report that to the company as soon as possible. If you don't come to work you will be marked (by the clerk) and will not share in the catch. If you are sick or if you are late you will be marked half.
2. You don't engage in any act (like fighting, stealing, insults, getting drunk) that will bring the company's name into disrepute. Failure to observe this rule will result in a fine is imposed on you in the form of a drink or money which is deducted at the end of the fishing season period.
3. With the exception of the crew member assigned to see to the sharing of the fish, no one has the right to take any fish away.
4. You should not dodge doing the work, you should help bringing the canoe to sea, mend the net, paddle the boat, drag the net, carry the net, pack the boat etcetera. Also at night and also in bad weather. Failure to do so will result in a fine.

Source: author.

The company's clerk normally keeps track of attendance and a fine registry. Together with the loan book this will determine the level of a fisherman's salary at the end of the contract period. Box 7.2[4] shows a page out of such a fine book.

Box 7.2 Kofi's fine record[5]

12-1-1996	Went to weave coconut mat while others worked	10,000 cedis
18-2-1996	Did not wake up for work, 3 bottles	6,000 cedis
22-2-1996	Refused to carry ganovi[6] from Monyanu	4,000 cedis
3-3-1996	Did not pull under rope	5,000 cedis
17-3-1996	left work place intoxicated whilst others worked	7,000 cedis
5-7-1996	leaving to work for Amegadsie for the whole day while we were also working, 2 bottles	4,000 cedis
6-8-1996	Stole fish	4,000 cedis
7-8-1996	Stole fish	5,000 cedis
13-10-1996	Refused to go to work	10,000 cedis
11-12-1996	Wanted to fight Kwaku by all means, 1 bottle	5,000 cedis

Source: author.

The consequences of breaking the rules and regulations in the company are often financial. Either the crew members do not earn their daily share (if they fail to do their job) or they are fined. Crew are always fined in front of the other crew members. A young

[4] See Chapter 2. I was only able to look into these (older) fine books, because I knew this former net owner better.

[5] Copy of one of the pages of the fine book of a former net owner from Akosua Village. The name of the crew member has been altered. The fine book was so useful to me because it was kept in English, a rarity. This former acting net owner was educated as teacher.

[6] Type of net.

bozu from Akosua Village: 'When you break a rule, we all get assembled, the net owner reminds us all. You are fined in front of all of us, so all know the rules' (interview 39, 1-6-2004). Fights between crew members (of one company) are often solved within the company. The bottles (of Schnapps) that are added to the fine are to be shared by the crew members.

I analysed all fines given to crew members of a company in Akosua Village over two years (1995-1997), and came up with four categories of behaviour for which crew were penalised: refusing work, doing the work in a wrong way, misbehaviour and destruction. In some cases a certain worker broke more than one rule, for example someone was penalised for tearing a piece of net whilst stealing fish and I categorised that as misbehaviour (stealing) and destruction (tearing net). There was one case in which three workers were fined 25,000 cedis and two bottles of Schapps each in 1996 for: 'Instead of going straight to the sack in the small canoe, they stopped in the 1½ inch net and were picking herrings. By so doing we lost about 1½ segment of 1 inch net' (notes of caretaker in fine registry). Their behaviour would fit into all categories: refusing work (disobeying orders), doing it wrong (not understanding that speed was needed) and misbehaviour (stealing fish), all of which lead to destruction.

Most of the crew (23 in this fine book) were fined in the category of refusing work (98 times), this can be for not coming to work at all, being late, doing other work, walking away half way or not following specific orders (such as carry the net or push the boat). The clerk keeps track of which crew members come late and also when they come by counting the number of ropes that have been pulled ashore (e.g.: late, five ropes). The next category is misbehaviour (69 times), which contains being drunk during work, insulting co-workers or the leaders, fighting or stealing. The third category is 'doing it wrong' (thirteen times) which was for instance for untying a rope from a coconut tree when they should not have, not pulling the under rope, or not removing the net from the sea when the current had changed. In some cases (five times) these actions had lead to destruction of the net owner's property (see example above). Ten workers had been fined extra for general bad behaviour; notorious late comers for instance.

Net owners are also held to certain rules and commitments. First of all, they have to pay an advance, at the beginning of the contract period. Secondly, they have to provide daily 'chop' money for the crew members. Apart from that the fishermen earn their share whilst fishing, they are paid in fish (for the house) and share in the catch, the amount of which is registered to be paid at the end of the contract period. Thirdly, net owners have to pay the medical costs for sick crew members and have to lend them money when they need it (free of interest). This money will in the end be deducted from their share. When companies go out on migration the net owner is also committed to provide housing for the crew.

- Loans

Company members are able to borrow money from their net owner. All small and big loans are written down in the company's loan book by clerk or net owner. The amounts borrowed differ (varying from a thousand cedis to over a million). From the same company as above in Akosua Village I obtained the loan records from 1995-1997. In most cases money was borrowed for healthcare purposes (of themselves or their family), but also for food, clothes, housing, travel expenses, funerals and for fines. The average

amount borrowed in those years was 78,752 cedis (45 US$ at that time[7]). The highest loan was about 200,000 cedis (114 US$) and the lowest 7,000 cedis (4 US$).

Box 7.3 Two examples of loan records of fishermen in Akosua Village

Example 1

Date	*Particulars*	*Amount*
26-10-1994		5,000
15-2-1995	Hospital	2,500
22-2-1995	to home	6,000
14-5-1995	to Akosomboto	2,000
16-5-1995	wife's child to hospital	2,500
29-6-1995	dizziness hospital	2,500
22-9-1995	Loan	2,000
23-10-1995	to Half Assini	10,000
9-2-1996	wife hospital	3,000
22-6-1996	to wife at Half Assini birth	45,000
16-11-1996	police bail	5,000
1-2-1997	wife abortion	30,000
11-3-1997	police case (Soldier)	7,000
21-4-1997	police case (Jacobs stolen money)	18,000

Example 2

Date	*Particulars*	*Amount*
25-3-1995	Light	3,500
11-4-1995	Child hospital	5,000
14-6-1995	wife sick	2,500
19-8-1995	to grandmother	4,000
21-8-1995	Adre's net theft, part payment	27,000
18-9-1995	child caught in lagoon	5,000
9-7-1996	second hand clothes	4,000
7-9-1996	child to hospital	7,000
16-1-1997		6,000
27-2-1997	Loan	8,000
3-3-1997	wife police case	25,000
1-5-1997	Food	2,000
	transport from home with wife and children and money given for petty things	22,000
	Loan	4,000

Source: author.

In the two examples (Box 7.3) we can see the variety of needs for which crew take a loan with their net owner, and also distributed over time. The first fisherman for instance needed to borrow money five times in two and a half years for medical treatment. It appears that he lives seperated from his wife, who lives in Half Assini. She has children, probably from another relationship (wife's child to hospital – 16-5-1995) yet they also have a child together (22-6-1996), half a year later she is pregnant again which

[7] Between 1995 and 1997 1 dollar was worth 1050-2250 cedis and I calculated on the basis of 1750. It is not easy to convert this back to euros as the euro did not exist at that time yet.

they decide to abort (1-2-1997 wife abortion). In the end of 1996, and at the beginning of 1997, the fisherman is involved in three police cases. The lists reflect the hardship fishermen can face, for example being caught thieving, engaging in illegal fishing (in the lagoon), illness, needing to borrow money to buy food.

External social interaction between beach seine companies

There are also rules regulating the interaction between beach seine fishing companies and their crews. Whenever there is a conflict between companies, they have to report that to the elders (mostly net owners) or directly to the chief fisherman so he can settle the case, in order for peace to be restored. This is the main task of the chief fishermen in Ghana and they are renowned for it (Bennett *et al.* 2001). The chief fisherman has the mandate to solve these conflicts, only in cases of criminal offence (harming a person or damaging equipment), the police need to be involved as well. The police sends the cases to court or refers them back to the chief fishermen.[8]

On 20 November 2005 I joined one of the fishing companies in Akosua Village at sea to set the net. It was a calm morning and we were able to pass the surf smoothly. The canoe was propelled by man power and the men were singing rhythmically whilst paddling. Once the net was set and we returned to the shore the singing reached even higher levels and one could hear the joy of the crew that the net was set and that they could paddle more easily with the waves pushing the canoe to the beach. My research assistant Anthony had not joined the canoe but instead walked with some of the crew on the beach to the place where the canoe and second rope would land. When they arrived at the place where the crew were going to start pulling in the net they met some crew members of another company who already had started pulling. From Anthony's notes we can read what happened:

> 'Just as we got to them, one of their men rushed on to us to attack one of the three men I walked with and shouted: "Say! You think I am afraid of you!" So they started to fight. All of a sudden the boy attacking us rushed to his boat and picked a knife! His crew members rushed on to him to prevent him from getting to his enemy. Then I saw the canoe with Loes ashoring. The boy in my company rushed to that boat. I thought he would join the boat and sail to sea so that the one with the knife could not get him. To my surprise he also went for his paddle and came back threatening the other guy to break his head. Ah! It was horrible. Members of 'our company' also came and held him. I was happy both teams were able to calm their members.'

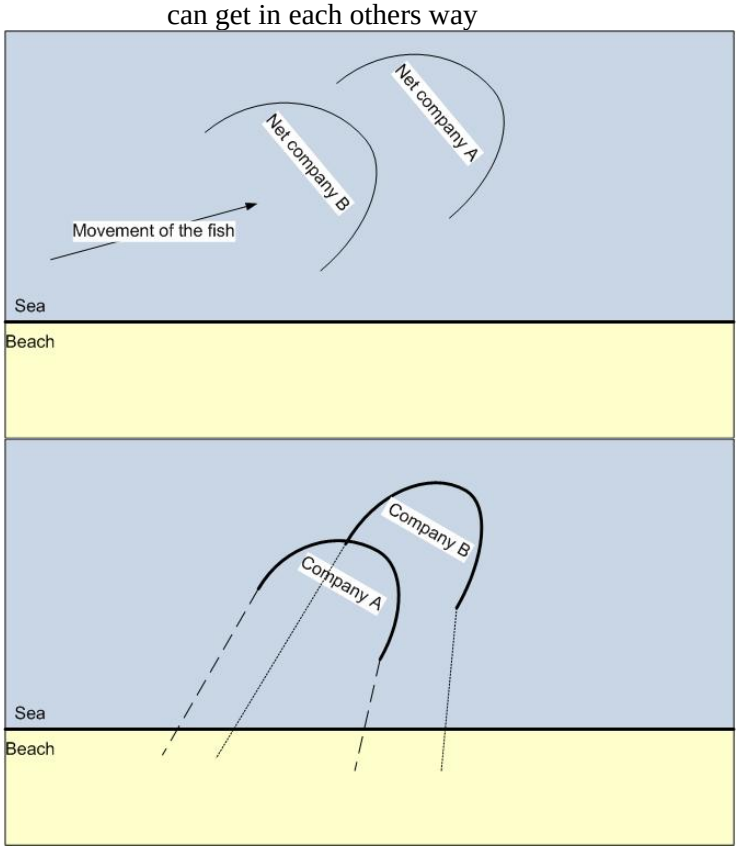
These two fishermen, who belonged to different crews, started fighting about an issue that was unrelated to fishing. Anthony later sorted out what had caused them to fight and found out that it was about a girl and that this was the reason they started insulting each other. Apparently, later that day, the two boys started fighting again and the man from the other company ended up wounding a bystander who interfered. Both the fishermen and the girl over whom they fought were newcomers to the village. The village elders discussed the matter with the attacker's mother and decided that he had to leave the village because they feared one of them would die if nothing was done, and that is how it was solved. In this case the police had not been involved, most probably because the father of the fisherman who was summoned to leave was a police officer.

Most conflicts between beach seine companies in Ghana have to do with how the nets are set. As the chief fisherman of Woe explained: 'Most of the cases are when at night nets are cast and then others also cast their net in such a way that they hinder the first ones. They get annoyed and come to complain' (interview 32, 6-5-2004). Conflicts

[8] See section 7.3: Interaction between fishermen and external social interaction between BSC.

can arise in two ways as portrayed in the Figure 7.3. In the first sketch company B hinders A by catching the fish out of the net of A. In the second, company B entangles the net of A with theirs as the net is dragged ashore.

Figure 7.3 Two examples of how beach seine fishing nets can get in each others way



Source: author.

The bylaws, a combination of state and local rules, also address this issue:

> If one fishing group encounters a shoal of fish and cast their net, and a second group casts their net behind the first one, the second group shall give one-third of their catch to the first group. Failure to do so will attract a fine up to one hundred thousand cedis. (Keta District CBFMC By-Laws 2000, section 2, article 3)

And:

> It is an offence for any group of fishermen to cast their net over a net already cast by another group of fishermen. Offenders shall be fined forty thousand cedis. (Keta District CBFMC By-Laws 2000, section 2, article 8)

In most cases, the chief fisherman is the most appropriate person to deal with these issues. In cases of criminal offence (harming a person or damaging equipment) the police has to be involved. One of the CID (Criminal Investigation Department) police officers of Keta District gave an overview of all fisheries related cases reported to the police in the last five years (see Table 7.2). It also shows the number of court cases that resulted from it. In total eighty cases had been reported at the Keta police office.

Table 7.2 Fishing related cases reported at Keta police station

Year	*N° of cases*	*Settled at home*	*Sent to court*	*Settled out of court*	*Comments*
1999	15	10	5		10 out of the 15 cases involved assault as a result of a misunderstanding. 5 were for causing damage to a net.
2000	19	17	0	2 pending or still under investigation	14 out of the 19 cases involved assault due to a misunderstanding. 5 were for causing damage.
2001	9	9	-	-	7 out of the 9 cases were due to a misunderstanding. 2 for causing damage.
2002	11	9	0	0	3 out of the 11 cases were related to causing damage and 9 were related to assault due to a misunderstanding.
2003	16	6	4	4	6 were still under investigation
2004	10	8	2	2	5 out of the 10 cases were related to causing damage. 5 were for assault.
TOTAL	80	59	11	8	

Figure 7.4 Confiscated net in the courtroom in Keta district

The majority of these cases were settled at home, which means that they were referred back to the chief fishermen. Less than 15 percent of the reported cases were sent to court. Most cases were heard at the local trial court in Keta[9] (Gorecki 2004: 12). Unlike the traditional courts, government courts are very formal, with strict procedures. A major difference between traditional courts and government courts is that in the latter you can be detained (in custody and jail). The Court registrar has a key role, handling all

[9] In addition there are the Appellate court and the Supreme court.

the court files and documents. Although attorneys can be used, most people cannot afford to do so and process their own cases (*Ibid.*: 13). The judge has to make the notes of the court case, which is very time consuming and, as a result, there is a huge backlog of cases (*Ibid.*: 14).

The majority of the cases were related to assault caused by a misunderstanding.[10] Conflicts arising from the problematic casting of nets often led to a conflict, which sometimes resulted in assault or damage. In 2004 two of these cases came to court, with the first relating to damage and the second to assault. The net owner (28 years old) of one fishing company made the following statement to the police:

> 'Yesterday whilst my fishing company cast the net at Tegbi-Kpota sea waters, Eklu Kataku Fishing company also came and cast theirs to entangle that of ours. When I warned him to stop, he paid deaf ears to me. I was called to the house to solve some problem. Whilst there a messenger came, that he had cut our dragging rope to the net. I rushed to the scene only to see him with a knife about to dive into the sea. I also dived after him, trying to prevent him from cutting it the second time, but he did not yearned to my words and then cut it the second time. I became provoked, hence I came ashore and retaliated. (…) As a result of his act, one of the ropes he cut got missing at sea.'

Apart from cutting the ropes of the net he also attacks people of his company. Besides having to remain in custody for several days, he was ordered in court to pay a fine of 500,000 cedis to the net owner. In another case the following statement was made:

> 'I fish with Congotor's fishing company at Tettekope. My fishing company cast its net at Tegbi-Hekpa beach. Whilst casting our net, another fishing company by the name of Kudzovio also came and cast their net behind us. While they were pulling their net, they pulled it over ours in the sea. On seeing that their net was on top of ours, I dived into the sea with the view to assisting them lift their net over ours. When I came to the surface of the sea one Besah Abusah of the latter fishing company hit me with a canoe paddle on my head thrice. The third hit caused my head extensive harm. I managed to get into his canoe on the high sea and collected the paddle from him. I then reported the case to police. At the police station I was asked to attend hospital, which I did.'

This case was settled amicably and all medical expenses were paid.

One of the major complaints fishermen have is that the government courts take such a long time to resolve an issue. In a case document that was given to me by the court registar it took almost a year before the case was closed. It dealt with a case against four net owners of fishing companies, having fished on a non-fishing day in Tegbi (Keta District) (coming from a neighbouring town, Dzelukope, with a different non-fishing day). In the end the case was concluded with: 'The Court has no criminal jurisdiction in customary offences. Consequently the accused persons are discharged'(court document).

Conflict arbitration

As already mentioned, a lot of cases are dealt with by the chief fisherman. If a conflict cannot be settled immediately with some elders at the beach, it is brought before the chief fisherman. If there is a case, it will be heard by him and the elders (net owners) of the community. In Half Assini we were able to listen in to traditional arbitration between two beach seine fishing companies.[11]

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[10] 'Misunderstanding' in these police records refers to the conflicts fishermen have whilst setting their nets.

[11] We were allowed to film the case which gave us the opportunity to literally transcribe what was said by everyone. The translation was done in the Netherlands by Godwin Dotsey Akaba, an Anlo-Ewe linguist and anthropologist.

- Traditional arbitration in Half Assini

The case was that Company A accused a member of Company B, who was also a traditional priest, to have taken a piece of their net when he visited their compound. The reason that he had come to them was that he had been sent by his net owner to bring a bundle of thread and some money for them to buy drinks and food. His net owner did so because the two companies had had a typical beach seine fishing conflict[12] some days ago, which had left company A with damage. He was able to pick a piece of net because they had to mend and redo their net extensively after the confrontation at sea. The reasoning behind the accusation was that the members of Company A feared that the man, being a priest, would cast a spell on their net which would mean that they would not catch any more fish. The accused admitted that he picked a piece of net, but denied that he took it from them and was angry about the back lying accusation.

The case was heard in Half Assini proper in the shade of a big tree on a large field separating the Anlo-Ewe migrant fisher settlement from the rest of town. The companies involved came from other small settlements along the coast towards Ivory Coast and fell under the custody of the Anlo-Ewe chief fisherman in Half Assini. Benches and chairs had been set out for the two parties, the elders hearing the case and the public. A special role was played by the linguist. He directed all communications between the parties and elders, kept order, collected money and arranged things. All in all the case took three hours, during which both parties were given a lot of time to explain their side of the story. Whilst they told their story, no interruptions were allowed:

> Linguist: 'Ok, in this arbitration court, when your opponent is talking whether it is true or false you are expected to remain silent till he is done. But when you open your mouth to interrupt him whilst he is talking, you are fined 100,000 cedis (9 euro) with two bottles of drink which will be taken from you before the court can proceed. Without that, the case is closed. Is that clear to both sides, is that clear to both sides?'

The elders and linguist were able to ask questions for clarification purposes before, during and after they make their statement. When the first party had finished narrating the case, the second party was allowed to ask questions. Based on the story of the complainant the accused was questioned. The elders' questioning can be quite insistent and this can result in heated debates. Witnesses and people involved (the net owners, *bozu*) belonging to both sides were also heard. Amongst the witnesses were two police officers who were involved in the case. At the end of the case the elders retreated and came back with a decision. The parties both had to pay for the case to be taken in. The main goal of the arbitration was to bring peace. As one of the police officers stated: 'But it seems there is no peace that is why the case has reached this place'. The way this arbitration was held resembled the procedure of the Chief's court (Abotchie 2002: 51-54, Gorecki 2004).[13]

The interesting thing about this case is that it focuses on an accusation of possible use of voodoo. The man who picked the net was a priest and that had made the crew members of the other net afraid. As one of the elders hearing the case stated, 'Tell him that the children [crew members] became scared he could do something with the net simply because he is a priest'. The accused claimed that he was surprised that he had been summoned as he thought the case had already been settled by an elder when the

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[12] See the previous section.

[13] See also Van Rouveroy van Nieuwaal & Van Rouveroy van Nieuwaal 1975 for a discussion of a court case in North Togo (Sansanné-Mango), which similarly has been filmed and analysed. The procedure of the court is remarkably identical.

incident had occurred. Yet the complainant argued that at that time the accused had denied picking the net, so rumours had remained. Therefore they had brought the case before the net owners for them to deal with it (at a higher level). Much of the case deals with trying to understand why the accused picked the net. Although he soon admitted having picked up a piece of net from the ground, he failed to explain why. According to him, no harm could be done since he had fished in this company before:

> 'Excuse me to say that I did not have any bad motive for picking such a net. I took it and put it back. Excuse me to say that, the net is mine, that particular net is mine. It was the net I have being using when I first came to this town and later went on.'

Yet the simple fact that he was a priest makes it a highly suspicious action, as one of the elders (of his own company) put it: 'Excuse me to say that you may not hold a gun but as far as you are known to be a hunter you are already feared'. Even more so since he, as the complainants claim, tried to hide the piece in his trousers when discovered, as the *bozu* of Company A explained:

> 'He was standing like this facing the east while he put his hand in the pocket. In returning his hand, he folded his hand and trying to put it in his pant (underwear) near his private parts. He was wearing black trousers and I walked towards him and shook the trouser for him. Then the net fell and I took it.'

Another interesting side to the story is that the accused and this *bozu* are related. The *bozu* called him uncle (on his mother's side). The elders spent quite a lot of time trying to understand why they were having this family fight in the open. One of the elders asked the accused whether they had other issues between them. They said that this was not the case. The *bozu* later explained why this court case was important to him:

> 'I am asking this [bringing this case] because the whole village talks about how I and my brother [the accused] have conspired, in order to stop that issue and if there is something to tell the company then I can tell them.'

The priest is heavily critiqued and was corrected by the chair repeatedly for his bad manners in court (he raised his voice often, spoke aggressively, refused to answer questions or to repeat answers he had given earlier, ignored the linguist from time to time). It made him look bad as one of the police officers stated: 'I have observed that whenever he is asked a question, I do not know if that is his behaviour or he has already harboured anger [literary in Ewe: there is some anger in his stomach]'. The accused explains himself as follows:

> 'As for me I speak with the intonation of "Eso language" [coded language of priests and people belonging to shrines] and I am not provoking anyone. You can only speak with the tone you have and I am not saying anything bad. That's all my case. Whether I did it or not is with the almighty god in heaven.'

As the net owner is responsible for his crew members, it was the net owner of the accused company who had to apologise to the complainant. He also had to pay the fees that were eventually decided on.

The accused cannot really be freed from the image of bad intentions, only by time going by and nothing bad happening to the complainant's company. As the elder stated at the end of the court case, 'so he must be praying always for God's grace over the net he approached before he was noted as such, to be able to catch fish any time they use it to fish then there will be no problem'. The suspicion will always stay with him. The accused was warned by the elders in no uncertain terms:

> 'He is not supposed to touch anything. Moreover, he refused to accept his guilt over and over, as he was questioned. Except for today he said he has done it. That should be his first and last from today,

> onwards. If it is something he has being doing or he is about to start today or in these days he must stop, so that his good name will be in the entire town. There is one thing about us, when we hear such a story about you continuously, we will go to the chief to banish you [they will ring a bell and send you out of the town, as an outcast]. You will be sacked from the town because no one came here for his name to be mentioned and all sort of things be said about him. That is it, so he has to know how to go about it.'

This case illustrates the ways in which Ghanaian fishermen can solve their conflicts. In the first instance they try to solve it 'at the beach'. An attempt was made to solve this particular conflict by an elder living close by. According to the accused it was then over with, but the complainant took it to this (higher) arbitration level because he felt that it was not over yet, since the accused had not admitted during the first arbitration procedure that he had taken a piece of net. He also felt that he was also suspected because he was related to the priest. He wanted to get the issue out into the open so that the whole community could hear.

Secondly, the police were involved. As the policeman explained:

> 'And what they [the complainants] said was that: 'this man [the accused] was sent to help mend our net which they [company B] have damaged, and he came to cut the net. (...) If he really did cut the net, then it will be a police case because that amounts to 'causing damage to someone's property.'

The policeman explained that once it was clear that he had not cut the net, but had picked a loose lying piece, the case was closed in that sense. The policeman also explained that it is crucial to know what the intention of the accused was to pick the piece of net, since he is a priest and since people are convinced that he therefore has certain powers.

> 'But if they themselves say that he is a very fearsome person to them and they are convinced that he can do something with the net, or tie the net that they cannot catch fish, then they can take him to wherever they... (...) if he has a bad intention then we cannot settle it here.'

His reference to 'not being able to settle it here' is a hint to another avenue of dealing with these kinds of conflicts. The net owner of company A all of a sudden told the court that he had also started this other path:

> 'I did send this case to somewhere. When I last travelled home, I sent the matter to Aklikor [a special place where people are summoned to the thunder god, this a place feared by everyone]. And they redirected me, said that we need to talk over the matter and if he refuses then I can bring him. So when he refuses or does not want peace to prevail, then he can say it. I brought the case to you to arbitrate and when he accepts his guilt, then that ends it. I am saying that if he agrees that peace should come he must say it; that he wants peace. On the other hand, if he wants to rebel then that is it.'

The crowd became unruly when the net owner revealed this. The chair asked for order and questioned the net owner as to whether he had not heard the explanations of the accused party. When the net owner admitted that he had heard them, the chair also questioned the Company A *bozu* whether he accepted the outcomes of this arbitration: 'pass it to [the bozu] would you not accept what the big men and fishermen tell them?' The *bozu* said he would accept it. The chair then said: 'it's finished, pass it to them [addressing the linguist] that that's where we have reached'. He consequently tried to immediately brush away the idea to go to Aklikor, and wants to show that it is possible and should be done so, to settle the case here and now amicably. Later in the final conclusions the chair came returned to the subject and said:

> 'He [the net owner] went to that place out of anger. He should know that where he is, this is the middle of the house and from here we go to the house. He should have brought the case here [to the middle of the house] when it was not resolved in the first attempt and when it did not work out then he

> may take further steps. How it came from his own mouth that he was at chief Kli and they asked him to return with the case and come if its not settled. He has bypassed the palm branch to cut the palm fruit [broken the protocol] that shouldn't be the case. Pass it to the *bozu* to give it to the net owner.'

Magic (charms, sorcery, juju) is used among the Anlo-Ewe. We can understand magic as follows: it consists of a variety of ritual methods whereby events can automatically be influenced by supernatural means' (Lessa & Vogt 1958: 245 quoted in Abotchie 2002: 69). As the Anlo-Ewe perceive the environment to be imbued with social and religious meaning (see Chapters 3 and 8), it is also perceived manipulable through religion and ritual (Akyeampong 2001: 104). The fear that the priest would use the piece of net is based on the belief in magic. The net owner of company A wanted to solve the problem by going to Klikor. The latter is an example of divination: 'the act of seeking to know hidden things and the future by magical means' (Abotchie 2002: 70). There are a couple of ways to do so, including hexing [*ame dede tro me*]: 'Hexing is employed in three instances in traditional southern Ewe society: a) invoking the supernatural forces to pass judgement on unknown offenders, b) invoking their wrath against wrongdoers or c) placing an evil 'spell' or 'curse' upon an object of value to protect it against trespassers' (*Ibid*.: 79). In many local bylaws in Ghana there are rules taken up about ritual and wrath of the Gods,

> Any person or a group of persons who curse by the gods or invokes the wrath of gods in one way or the other on another person or a group of persons shall be liable to an offence punishable to a fine of fifty thousand to two hundred thousand cedis (4.5-18 euro) in addition to two crates of schnapps, one gallon of akpeteshie, two sheep and one goat (Keta district CBFMC By-Laws, Section 2, article vi).

Going through the literal text of the court case reveals a wealth of information. The elders make use of proverbs and expressions, for instance:

> 'It takes only one goat to spoil the town [literally in Ewe: passage between the buildings] and they will say it is the town' or the disgrace of a crocodile is equally the disgrace of an alligator. And: There is no need carrying an axe in your hand when your case is right.'

They use a lot of proverbs especially in their closing statements. These proverbs and expressions are comparable to 'the law' used in formal court and it has also been called proverb law (Abotchie 2002: 52). They also make use of rhetorical questions as an examining technique, whereby the one questioned really has to give the answer whereby they make their point with a sense of theatre:

Elder:	Ask him whether he is blind.
Linguist:	Have you heard? Are you blind?
Accused:	I am not blind.
Elder:	So if a net is damaged and cut in pieces, can't you just see with your eye?
Linguist:	You heard it?
Accused:	Yes.

The same elder later comes back to this point:

> Elder: Linguist let him hear, as I have said earlier that even the smallest child can be able to identify a damaged net and know that that is Kodzo's damaged net and that is Kobla's net; this is how it is damaged. He is not supposed to pick any piece to try to find out whether it is the damaged net. That is why I was asking if he is blind.

There are some humoristic sections as well, for instance when the Bozu of Company A is asked to show the piece of net that brought the case, since he had told that he had kept it.

Chairman:	He should bring it for us to see.
	[The bozu got up and brought the net to the linguist who critically observed it and passed it on to the elders]
Chairman:	This thing has brought all this case?
Linguist:	Yes [and laughs].
Chairman:	It's not even long enough to be used as belt.
An Elder:	Yes, I was thinking it would at least be that big to be used to bath.
Chairman:	It is not long enough to fit the waste, to be used as belt.[14]
	[Everyone expresses their surprise at the size of the piece of net; speaking softly to each other]
Bozu (A):	Can't a small poison kill?
	[and after a while]
	Please give it back to me when you finish watching it.
	Please give it to me.
A woman:	Give it to the owner.

External social interaction between all fishing groups

Ghana's continental shelf is quite narrow and covers an area of about 24,300 square km. The fact that 8,000 canoes operate in this area using six main types of gear (ali, poli/watsa, drifting gill net, set net, hook and line and beach seine)[15] and that most of them (except the drifting gill net) operate in the inshore waters five to thirty metres depth zones (0.5-15 nautical miles far) means conflicts are inevitable. However, most conflicts involve fishers using the same fishing gear (Bannerman 1998, Bennett *et al.* 2001: 371). I can confirm this for the beach seine companies in the research companies. This is because beach seine fishermen are active in territories where others do not operate (see Chapter 5). Although the fishermen partly target the same resources (see Chapter 1) they have not as yet become involved in conflicts with each other about those declining resources. Ghanaian artisanal fishermen look more to the (semi-)industrial fishermen in that respect (see the section on extraction).

In Figure 7.5 we can see how intensive bottom trawling is done off the coast of Keta District. State legislation bans semi-industrial and inshore vessels from fishing in waters less than thirty metres deep since those are reserved for the artisanal fleet (Bennett *et al.* 2001: 370).

Most non-beach seine fishermen (who use agli nets, kuekpa and set nets)[16] venture further out in sea. The problem lies with the (semi-)industrial boats that come within the thirty metre deep line or come into collision with artisanal fishermen further out. (Semi-)industrial vessels fishing for bait come closeby and often destroy the fishing gear of the artisanal fishermen active there. These problems between artisanal fishermen and (semi-)industrial boats cannot be solved by the fishermen themselves. They need to deal with these problems via government organisations because the (semi-)industrial boats fall directly under the GoG.

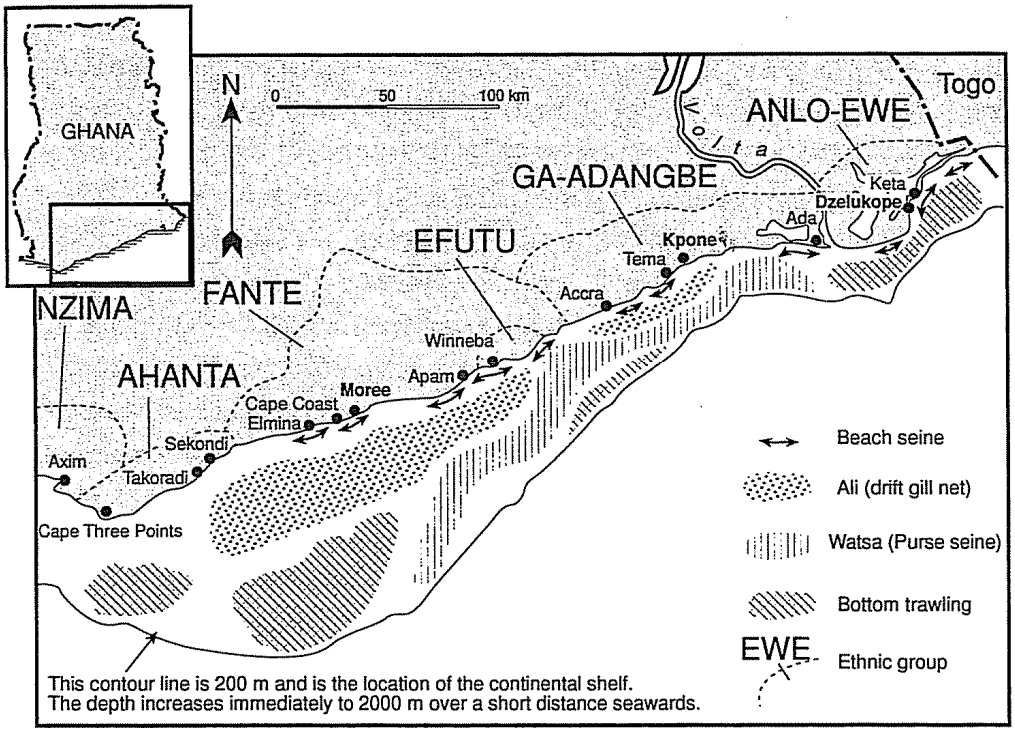
The chair of the town council of Woe at the time of my first fieldwork period, Mr Setsesofia, was the owner of a couple of kuekpa companies. Kuekpa fishermen work with set nets to (mainly) catch lobsters. Mr Setsesofia told me that there were quite a few problems with trawlers coming too close to the coast to catch bait. In doing so they quite frequently destroyed the fishing gear of the Woe fishermen. These encounters

[14] As we explained in Chapter 3, old pieces of net can be and are used for many things, such as for washing.

[15] See Appendix 1 for an explanation of the different types of gear.

[16] See Appendix 1 for an explanation of the different gear types.

Figure 7.5 Map of the coastal waters of Ghana showing where the different gear users fish[17]



Source: Overå 1998: 19.

between (semi-)industrial and artisanal fishers are problematic for the artisanal fishermen, because they feel they are unable to do anything to stop it. Officially they can report these encounters to the arbitration committee in Tema, but in practice they often do not know which boat caused the destruction. Even if they witness the boat doing harm and they manage to read and remember the registration number of the vessel, they feel that reporting these cases does not make any difference. The director of agriculture of the Keta District said the following about this problem:

> 'They are coming from Tema, they come to the inshore area for bait. Whenever it happens we take a report and take it to the arbitration committee in Accra. But it drags on (takes long). The boat owners are powerful. I have written strong letters about it. The MSC Unit is supposed to patrol the artisanal fisheries area. But here we are far away from Accra. Resources is the problem. The Navy and the Fisheries Department don't have enough resources. They use navy vessels. But the cost per trip is high! The Air force also takes part and they patrol and inform the Navy. Now they are installing some devices to report positions. Satellite to station. Then we will always have the position of the trawlers. You must have that. But it is sad, I feel for them.' (interview 62, 17-8-2004)

The presiding member of the District's Assembly in Keta also referred to the problem:

> 'We also have a problem with foreign interference. They are here to fish for tuna, they come closer to the coast to catch Keta Schoolboys[18] as bait. We see a lot of them here. They are causing problems,

[17] The bottom trawling is done by the (semi-)industrial fishermen.

[18] Keta Schoolboys is the local name for anchovy. The name was explained to me by saying that also the anchovy, just like Keta schoolboys, never come alone. Another name used for anchovy is bobby.

scooping up complete nets in their course. Law enforcement is a big problem.' (interview 66, 1-9-2004)[19]

During my fieldwork I heard more stories about this problem. On 12 August 2004, my research assistant Patience and I entered a household when carrying out our household survey in Woe. We met a man sitting in the compound mending a net. He told us how he and his partner – who owns the boat – and other fishermen (twelve in total) had set their nets for various fish, including lobster. A 'white man's ship' – the KLM 10 Takoradi, operating from Tema – ran over their nets. They were fishing here [near the shore] rather than in deep water where they should have been! He told us how they had managed to board the boat to demand the return of their nets and fish. The eight men they encountered had knives and threatened to drown them. They reported the case on fifteen May in Tema and also to the DA. Someone joined them to the fishing cooperation in Tema. But they could not act for them and there were no logistics to follow up. So there the man was, joining some old nets together. New nets would cost a million cedis (91 euros). However buying them is no easy task since there are no credit facilities and he does not have any savings. He told us how he suspected the whites of having bribed the person who negotiated for them. He complained about how the fishermen in the Central Region at least get some assistance. The fishermen in the Volta Region have been very neglected. He did not have a lot to eat now, there is no assistance and these days they do not even catch enough to eat (fieldnotes 12-8-2004). Another man we met mending a net at home told us that the net was not his. He owned Kuekpa and Sovi nets but a Japanese boat swept them away. He was not compensated for it and had not managed to buy new nets since then (fieldnotes 26-8-2004).

The majority of cases of conflict between artisanal fishermen and (semi-)industrial fishermen (including tuna operators fishing near the shore for bait) is collision and consequently gear destruction: 75-82 percent of the reported conflicts in the period 1993-1996 in Greater Accra Region (Bannerman 1998). Only a small number of these cases get resolved (11-31 percent) (*Ibid.*). One of the possible reasons for this is that (semi-) industrial fisheries are managed at national level, whereas artisanal fisheries are managed at district level. Moreover, 'the arbitration committees that handle conflicts between the artisanal and (semi-)industrial vessels do not have any legal backing and therefore the law courts are the final point of conflict resolution. This creates a lot of delays and frustration' (Bannerman 1998).

Ghana's waters are not controlled satisfactorily. With the Fisheries Sub-Sector Capacity Building Project of 1995, the Ghanaian government aimed to improve this by setting up an MCS unit: 'Uncontrolled fishing by the large distant water freezer factory trawlers in the shallow waters of the continental shelf is contributing significantly to the over-exploitation of the demersal stocks remaining in this area. (...) Many of the vessels in this fleet are using towed gear in waters of less than 30 metres depth using illegal nets extensively'. The solution was regarded as being the creation of a monitoring control and surveillance (MCS) unit: 'In offshore areas, the primary MCS' function would be deterring, and where necessary, apprehending foreign vessels found to be fishing illegally' (World Bank 1995, Annex 3: 5-6). This led to the collaboration of DoF with the navy and their organising a joint patrol programme. This started well 'untill eventually the navy began to carry out its own patrols and submit bills for the patrols for payment

[19] See also Bennett *et al.* 2001: 370: 'lack of enforcement was frequently mentioned by fishermen and acknowledged by fisheries officers in 62 artisanal fishing villages surveyed in their research.'

by the project'.(...) As a result it became too expensive for the DoF to bear, and joint patrol ship days were reduced' (World Bank 2003: 8-9).

Extraction

The third critical element of fishing for which rules have been developed is that of extraction, or more precisely of ensuring a good catch. This is closely related to the second category of the interaction between fishers. Conflicts between fishermen are often about the direct competition for a catch that others (using the same gear) also want. However, what is meant here are the rules, regulations and actions taken by managers to make sure that the fishermen get a good catch when they go fishing. There are two main ways of ensuring that this is the case, each of which is based on a different perspective or world view. The first comes from the Anlo-Ewe traditional religious world view and can be found among the traditional managers in the Anlo-Ewe villages, such as the chief fishermen and many net owners and priests and it is an approach generally shared by the other ethnic fishing groups in Ghana. The second is based on a scientific world view with biological knowledge. This is the central perspective of the managers of the Ghanaian fisheries department.

- Local religious knowledge of the sea[20]

The management perspective on extraction as it is held by many Anlo-Ewe is based on religious knowledge of the traditional religion of the Anlo. As we saw in Chapter 3, most of the fishermen are adherents of the traditional religion, although a lot of Christian fishermen also relate to certain ideas about the sea gods, and the balancing of nature, religion and the social order (see also Christensen 1977). It is important to understand that the traditional religion is inclusive and is not something that is only 'done' on 'Sunday'. Rather, it is a frame of mind, a world view (Sarfo-Mensah & Oduro 2007). The gods and spirits are ever present. The environment and life breaths religion. Everything in life is seen in this perspective and, consequently, a fisherman's catch as well. A good catch is up to the gods. They give it to you. It is therefore crucial to maintain your relationship with the gods. The community as a whole needs to be in harmony with itself and its environment. Rituals are held to maintain the relationship, such as the annual fishing ritual that was earlier mentioned, done by the Yewe cult. Any disharmony will effect the relationship with the gods and consequently also the fishermen's catches or the farmers' harvests. Anlo-Ewe fishermen have many rules to maintain a good relationship with the (sea)gods, like the following three rules I heard of during fieldwork, where showing respect to the gods is central:

1. During the catch you are not allowed to whistle. It is the gods who do the fishing for you, if you whistle you annoy the gods, in the sense that you don't show them respect.
2. Once the beach seine is cast, you are not allowed to fetch seawater from within the net. If you do that, they will stop you, because spiritually you will be taking the fish away.
3. You cannot join a canoe if you have slept with a woman without bathing first to be ritually clean.[21]

The matter of purity is important. A young fisherman in Akosua Village told me the following when I asked him about his opinion as to why the catches are so low: 'When I came here the catch was plenty, even if I didn't know how it worked. Now I know and see it is spoiled. *Why?* The customs, we don't perform them anymore. Some men don't

[20] Parts of this section appeared in a paper I wrote for the MARE conference (Kraan 2007).

[21] The potent force of dirt has been widely discussed in Anthropology, notably by Douglas (1966-2002). See also Sarfo-Mensah & Oduro (2007) for more examples in Ghana.

have their own room, and then have sex on the beach. It is not kept healthy' (interview 39, 1-6-2004).

Whatever one catches is up to the grace of the gods. In order to influence their grace, the Anlo-Ewe hold an annual ritual which involves offering a ram or cow to the sea gods. The town chief of Woe said the following about this ritual:

> 'Catches have been going down. The Fisheries Department has been telling us that it is due to the decline of the fish stocks, but the people have the idea that if they don't get a good catch, they believe that somebody somewhere would have done something to provoke the gods. That is the belief of the people. So they then need to pacify the gods, in order to ensure for a good catch again. In fact every year they have a certain ritual which is to pacify the gods. The local chief priest performs certain rituals in relation to the fishing. They have a special day fixed in which they perform certain rituals and then at night they take a life cow, tie it up, put it in a boat and send it to the high seas. At the beach drumming and certain rituals are taking place. Some also go on the boat. One of the high priests too will offer to the gods. The cow then is dumped into the sea alive. Thereafter they always have a good catch. The god of the sea, when it is pacified, it can bring a lot of fortune.' (interview 93, 5-11-2005)

This ritual is still performed by the Yewe according to the town chief of Dzelukope: 'It is the priestess of the Yewe god who performs it' (fieldwork notes 1-9-2004). The ritual is strongly connected to the community and all net owners contribute (financially) just as all will profit from the expected bumper catch. The non-performance of the ritual (in Woe for instance it has not been performed for over 6 years now) is also due to community-related reasons. According to Woe fishermen it has not taken place because of conflict within the community. This is a bad state of affairs and the gods disapprove of this disharmony and therefore catches are decreasing in size. The chieftancy conflict of the paramount stool of Anlo has been mentioned in Woe as a reason for angry gods and low catches. Since the last paramount chief of Anlo died, about 7 years ago, there has been an ongoing conflict between the two chief-providing clans about who should be the new chief.

Apparently there is a division between sea gods and priests serving them, communal gods and gods you relate to as an individual. Net owners of fishing companies in Anlo contribute to community rituals and also have their own shrines at their compounds where they make offerings to their own gods. Such a shrine is a place to make offerings often marked by some netting and sticks, with some empty bottles and other attributes around it. One of the net owners in Akosua Village said the following about why the jaw of a shark is placed at his shrine:

> 'It is a dangerous thing I took with my net. So I put it here. I don't want bad spirits to attack me, so. I don't want to catch this thing again. That is why I locked it here. It is locked, because I placed it here. I have performed some rituals and pray that it shouldn't come again. It is a bad spirit that wanted to enter in my life. I went to a sooth sayer, the diviner. He said bad would come in my life. Spirits can come and jump to attack you. There are bad spirits in the sea.' (fieldwork notes 2005)

As we saw in Chapter 3, canoes are not just canoes but are living objects that need to be made and maintained in a certain way, need to be fed and have a name. The taboos that have to be observed differ per canoe. Many canoes are also having little amulets hanging in front.

The belief is part of the world view of many Ghanaian fishermen and is important to understand. The connection between nature, the spiritual world and community is obvious in many African communities: 'the environment is invested with social meaning and rendered manipulable through religion and ritual' (Akyeampong 2001: 107). As Akyeampong explained: 'For the Anlo, the sea is a natural and supernatural realm popu-

lated by fish and deities. The sea yields its largesse when a proper and harmonious relationship is struck with it' (Akyeampong 2001: 19). Catching sharks in your net is a signal from the gods that something bad is going to happen to you. The catching of mammals, such as dolphins, should also be avoided. If they die in your net they would need to be buried like a human being and many rituals would be performed (interview 39, 1-6-2004). I have seen a few of these dolphin graves on the beach at the research locations.

Figure 7.6 Some charms in front of a canoe nearby Akosua Village

Declining catches, and also sea erosion (see Chapter 8), are signs from the gods of cosmological and social imbalance. Catches that you make as a fishermen are achieved by the grace of the sea gods. Fishermen often make a connection between declining catches and this ritual not being performed, due to disharmony in the community.

On 14 August 2004 the following article appeared in one of Ghana's newspapers:

> Priestess bans fishing at Keta:
> 'When this year's fishing season started yielding a good catch, the people of Keta were confident that their socio-economic situation will improve. However two days into the season, a fetish priestess ordered fishermen to stop their fishing activities since the bumper catch in previous days were mermaids (sea gods) and had threatened with death and afflictions anyone who would dare flout the order. Currently dozens of boat owners in the area, out of fear from their lives, are obeying the order to the detriment of their livelihood and their dependants.' (The Mirror, 14-8-2004)

According to the newspaper article[22] the events were as follows. A priestess went to the house of the chief of Dzelukope, a suburb of Keta, to inform him of the wrath that would be unleashed on the town if fishing activities were not halted immediately. According to the article she had said that 'the impending visitation of the anger of the sea gods stemmed from the bumper fishing of 'Keta schoolboys' the previous days which were the children of the sea gods'. After that she went to the houses of four other boat owners. She requested that a ritual be performed at Asigame[23] to appease the angry gods. The article further describes how the fishermen were not fishing; 'most of the boats were ashore', and how the fishermen were discussing the issue, claiming that the ban needed to be reversed as soon as possible. However, due to a chieftaincy dispute, the chiefs could not meet to take action to enable fishing to resume. The story was that the daughter of the priestess had left town to 'avoid the humiliation and ridicule' and that the District Chief Executive was investigating the issue.

When asked about this,[24] two weeks after the article had appeared in the newspaper, the town chief of Dzelukope claimed that he was not in the house when the priestess visited. His wife was there and took the message. The priestess told the wife that she had come to tell the town chief that they should not go fishing in the night as the Hogbeto shrine said the fish they are catching in the night are his children. That they have come to do something along the coast, so there should not be any fishing in the night. After she had delivered the message, the priestess asked his wife for a bottle of schnapps, and left for the chief fisherman. Then she went to the sea shore to inform four net owners.

Both the town chief and the chief fisherman claim that they had no faith in the whole thing. First of all the woman was no priestess but an adherent to the shrine. Secondly the coastal town was not 'under' the Hogbeto shrine. The town chief: 'We have our gods, our individual gods, our gods for this community. And with the help of the Yewe god we sacrifice when the need arises for us to do the customary rites for the gods and after that we have our bumper fishing'. Thirdly if a priest would have come, then the priest, the chief and chief fisherman would have needed to go and consult an oracle by definition, after which the outcome would have been discussed by the town elders.

According to the town chief and chief fisherman it was not true that the fishermen had not gone out for fishing. The chief fisherman: 'They were fishing, and they are still fishing, up till today'. The chief fisherman blames the reporter of the article: 'He is an incompetent news reporter, he should have come to us, to seek our advice'. The town chief: 'The Mirror-man came to me on a Wednesday, (…) as I said we don't fish on Wednesday'. No wonder – he said – that the reporter referred to a deserted beach and was able to print a picture in the newspaper of empty boats lying idle.

The adherents of the shrine in Atiavi,[25] of which the woman priestess claimed to come from, denied knowing this woman. They said that they had heard about the article. They were treating it as a rumour at the moment, since they had never heard of the woman and she was not a priestess to this shrine. In addition the assistant priest said:

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[22] Priestess Bans Fishing at Keta. By: Timothy Gobah, Dzelukope. The Mirror 14-8-2004.
[23] Asigame is in Togo.
[24] Fieldwork notes 1-9-2004.
[25] The priest of the shrine had travelled to Abidjan (Ivory Coast) to perform rituals so he was not available for an interview. The assistant priest was available.

> 'we don't control those at the seaside, we don't have control over fish. We are not specifically connected to the sea gods. Individual fishermen do come to ask for help, and if it is successful they come to give fish.' (fieldwork notes 25-8-2004)

Consequently both the leaders of Dzelukope, the town chief and the chief fisherman as well as the assistant priest of the shrine in Atiavi said that the story as it had appeared in the newspaper was not true. However the fact that a priest or priestess can ask for a ban on fisheries was not denied, and there are occasions on which priests successfully order a ban on fishing. As Chief Dzelu explained: 'When we are to perform our traditional rites to the gods, the gods will give us days not to fish' (fieldwork notes 1-9-2004). Such a ban lasts for between a couple of days and up to two weeks, until the gods have accepted the sacrifice. Consequently priests and gods indirectly influence the fishing actitivity.

The article stated that the daughter of the 'priestess' left town to 'avoid the humiliation and ridicule'. This might be explained by the fact that not all people believe such events. Not all are believers of the traditional religion. According to the chair of the town council in Woe, about thirty percent of the people are Christians (interview 68, 1-9-2004). This religious heterogeneity can cause confusion and conflict in communities. The chair of the town council in Woe explained that, in the past, Yewe priests and adherents received a lot of respect when they came to the beach. It was believed that they were responsible for good catches, since they performed the required ritual. Whenever they would come to the beach, they would get fish. Although this still happens (I witnessed it in 2005 on Tegbi beach[26]) it does not happen all the time anymore. Some fishermen still perform the ritual, others do not and some even show disrespect or ridicule. Because of this, the priests have started to ask money for performing the ritual. Those sums have become high, and the amount of believers has declined, leading to more conflict about the performance of the ritual. The chair of the town council, a net owner himself and a Christian, said the following on the declining catches due to non-performance of the ritual:

> 'I don't believe [that]. It is [because of] over- overexploitation! Because I mentioned earlier that when we were very young we had only three fishing companies along down here (…) but now we have 23 companies. And even we have a certain net now, they cast it in the night. Formerly it wasn't there, then the poli and watsa nets, formerly it wasn't there. Then the trawling boats, these big time trawling boats, they weren't here.' (interview 68, 1-9-2004)

Discussions with fishermen about declining catches generate a mixed picture of the gods punishing, too many people fishing, the industrial sector getting the blame and fish being present but also having fled due to the noise of the motors in the sea. Having a good idea of these perceptions is crucial in order to implement fisheries management measures because the solution to a problem (declining catches) depends on what people *believe* is the cause of a problem.

- Scientific biological knowledge of fishing stocks

The government's management perspective is based on biological knowledge and focuses on the idea that fish stocks can be overexploited, or rather that many stocks are already overexploited, that it consequently is useful to monitor catches in order to assess the stocks. Preventing overexploitation then leads to regulations about the gear, (mesh size, restrictions and bans), to catch quotas, to seasonal bans and to zonation measures.

[26] Tegbi is close to Woe, on the east side, in Keta District, in the Volta Region.

Limiting the number of fishermen (limiting access) could be a next step, yet such a step can only be taken once the government has a good idea of the current situation. One way of getting a better grip on the current situation is to register the canoes and the government intends to start doing just that (interview 78, 14-10-2005).

The district level branch of the fisheries department is most active as regards this aspect of management. Catches are monitored, gears are monitored and laws have been made about what can and cannot be used, certain fishing zones have been designated for certain gears and the latest discussion is focusing on seasonal restrictions.

The catches in Woe have been monitored by Mr Dawu every day since 1975. He visits the beach and registers the companies' catches (by sampling), as well as the kind of fish they catch, the amount and the price they sell it for. According to Mr Dawu, all catches have been declining since 1975. He reported this to the district office of the fisheries department in Keta where all the data from the district is gathered and sent to Accra. The water temperature and the salinity of the water are also measured on a daily basis. Mr Dawu said the following about some of the changes:

> 'The fishermen have to go further out, in the past the fish was closer, but now if you use six or seven ropes you will not catch anything. Also the sea is coming close, it is now too shallow and too warm. Buildings have been taken away, they are in the sea now. We have asked Accra to take them away, but they haven't come yet.'

One of the main issues in the Volta Region is the discussion on mesh size. The smallest size allowed is 1 inch, but many dragnets are 3/8 inch (interview 65, 16-7-2004). This is because the target species of the Anlo-Ewe fishermen is the anchovy. This species can only be caught with a mesh size smaller than 1 inch. By using such a small mesh size, not only the Bobby is caught but also the juveniles of other species. This is even more problematic in this area since it is an important spawning area, nearby the Volta estuary and Keta lagoon. Even though mesh size laws exist, in the Volta Region they are not strictly controlled because the managers feel that they are unable to do so (see also Chapter 6). It is too sensitive an issue since too many people depend on this type of fishing, and on this type of fish, and it is so key that it is said to have become part of their culture:

> 'It is the humanitarian aspect, you see, they have no alternative. For the dragnet, it has been done for ages! It is difficult to enforce! You see, here they believe in dragnet, it is their culture. The Volta Region alone takes about 50 percent or more of all dragnets in Ghana!' (interview 65, 16-7-2004)

Another problem is that the net owners are powerful people in society. The director of the Keta Districts Office Agriculture said: 'We should mobilise the net owners. They are powerful. Mighty houses of the net owners' (interview 62, 17-8-2005). The fisheries officer: 'If you do something, they even threaten your life! Yes! They will say that you don't want them to eat! They threaten, it is not easy!' (interview 65, 16-7-2004). The presiding member of the DA and the fisheries officer are looking for a solution in the form of some kind of seasonal ban. Anchovy are seasonal and the main period is from July to October. The idea would be that the beach seine companies would then be allowed to fish with the smaller mesh size to catch the Anchovy. When the season is over they would need to transfer to the larger sized net. If this is feasible, is questionable. One problem would be convincing the fishermen that Anchovy have a main season, since the fish are caught throughout the whole year. They would also have to be convinced to have two nets, with different mesh sizes. This point would be especially difficult since beach seine nets are so large and expensive.

A lot of biological knowledge on fisheries is dominated by western studies, and very little is known about 'the fish fauna of Ghanaian near shore waters, and little understanding of environmental influences on the near shore fish community' (Nunoo *et al.* 2006: 689). A study performed in Ghana confirmed that near shore regions (in this case also near a lagoon) are important nurseries for fish and macrocrustaceans (*Ibid.*: 694). Scientists in general agree that the beach seine is a destructive gear because it is perceived to contribute to the reduction of the spawning potential of small pelagic stocks. In Ghana beach seine fishing is quite important. It accounts for twelve percent of the artisanal catches (*Ibid.*) worth of 28 percent of the total value (see Chapter 1). However, the study by Nunoo *et al.* found that more than ninety percent of the species found in the catches (after monitoring over two years of 94 hauls) were juveniles of commercially important species and this concurs with studies performed in other regions of the world (*Ibid.:* 695). 'Over 90 percent of the fish examined[27] were small, ranging from between one and ten centimetres' (*Ibid.*: 694). The Ghanaian government has considered the idea of an outright ban of the beach seine: 'this fishing method is perceived to be destroying fish spawning grounds of most. In Ghana, the outright ban of this destructive fishing method has been recommended as a management measure. Biologically this would ensure recovery of fish stocks and possibly maintain ecosystem integrity' (Yeboah 2002: 20). This is something that has been suggested or recommended by others as well (JITAP 2002). An outright ban would obviously have detrimental social effects (in Ghana especially for the Anlo-Ewe fishermen) and would also be less effective if the neighboring countries would not join in such a ban (Gbaguidi 2003: 34). Nunoo *et al.* do not find that the most practical solution: 'Among the management strategies of beach seining under construction by West African governments, i.e. seasonal closures, mesh-size restrictions, use of square-mesh nets and outright banning of beach seining, seasonal closure appears to be the most practical for the nearshore waters of Sakumono' (Nunoo *et al.* 2006: 695). Their suggestion is a seasonal ban from May to July when catches are low anyway.

Another promising avenue is Ghana's participation in the Sustainable Fisheries Livelihood Programme of the FAO, which carried out a pilot study on the usage of a beach seine with a larger mesh size (twenty instead of ten millimetre mesh bag) making it more selective in 2002 in Benin; linked to a broader study on beach seines in a couple of coastal communities in Ghana, Togo and Benin. The outcomes of the pilot were promising in the sense that the seines caught fewer juveniles and even appeared to be more rewarding because of the higher prices for larger fish.

> 'The activities of the two gears were monitored over a period of sixteen months (June 2002 to September 2003). The fish landed by the new and old seines on the same days of the week were fixed at 39,062 kg being a turnover of 6,046,700 FCFA,[28] and 33,568 kg fetching 5,769,700 FCFA respectively. The average monthly income for the first gear is 377,900 FCFA, and for the second, 360,600 FCFA. However, the new seine leads to some shortfalls between August and December when the juveniles of some species (especially sardinella, anchovies and shrimps) are caught en masse.' (SFLP Bulletin 2003: 32-33)

However, there was also the unforeseen effect of raising the fishing effort because the new net was easier to haul in because it contains fewer juveniles meaning that fishermen would be more likely to fish with it a second time. The fishermen were quite interested in the new net and liked the results, but suggested that it would be better to use both

[27] Ten percent of the catch was examined (Nunoo *et al.* 2006: 690).
[28] One euro was 550 FCFA in 2003.

nets: the small mesh size net in the anchovy high season (about two months) and the new net the rest of the year. The only remaining problem would then be the cost of the second net (Gbaguidi 2003: 35).

Access to the market

Once they have accessed the fishing grounds and have managed to fish a good catch fishermen also need to have access to the market. This is the moment – after the fishing activity – when the women start to play a role.[29] In Ghana the trade and processing of fish is for a large part in the hands of women and they link, as it were, the fishermen to the consumers (Tetteh 2007). 'Success in the fish trade has earned the women a prestigious status in the society and their financial success affords some of them the ability to own and control fishing equipment' (*Ibid.*). It is important to make a difference between the type of saleswomen. There are wholesalers (buying large quantities and transporting these to larger markets further away) and retailers (buying smaller quantities to sell directly to consumers or at more nearby markets) (Odotei 1991). The wholesalers usually deal with the canoe owners directly or own canoes themselves. The retailers usually buy on credit from the wholesalers and make payment after the goods are sold (Odotei 1991). Women act as creditors (financing fishing equipment) and as financiers (financing fishing trips) – in both ways women secure their access to fish and consolidate their source of fish supply (Tetteh 2007: 38). Women also show that they are continuing to act in response to new chances and opportunities, for example by buying by-catch from trawlers (Overå 2005).

However, Anlo-Ewe women differ from this general picture of Ghanaian women since the Anlo-Ewe are part of a patrilineal society whereas the other coastal groups are matrilineally[30] organised. Overå studied the role of women in the fishing industry in Moree in the Central Region, in Kpone in the Greater Accra Region and in Dzelukope in the Volta Region (Overå 1998). She found that the few Anlo women, from Dzelukope, who owned fishing equipment either lived outside their hometown, were on migration, or owned other companies than beach seine companies (such as agli or watsa) and had mostly delegated the operation of their companies to a male relative (a son) (Overå 1998: 253). Overå explains the difference between the Anlo women and the Ga or Fanti women by pointing out that in Anlo-Ewe communities *yevudor* ownership is 'very much connected with masculinity, male authority and succession of both material and symbolic capital within the patrilineage' (Overå 1998: 253). Fanti women also have their own leader, the *konkohene (*queen of fish traders*)*, as the female equivalent of the male chief fisherman (*apofohene*) (Overå 1998: 95). The Ewe do not have such role for the women processers, and make use of the chief fisherman in relevant cases (such as conflict arbitration). Only in Half Assini, I met a woman who was called 'Queen mother' in the Anlo-Ewe migrant fishermen settlement. She was the sister of the chief fisherman of the Anlo-Ewe migrant fishermen.

[29] I met only one woman, in Woe, who had fished. She was the daughter of a net owner and learnt swimming and fishing (including casting the net, mending, and paddling) as a small girl. She did not fish and swim anymore when she grew older. She was however still mending nets.

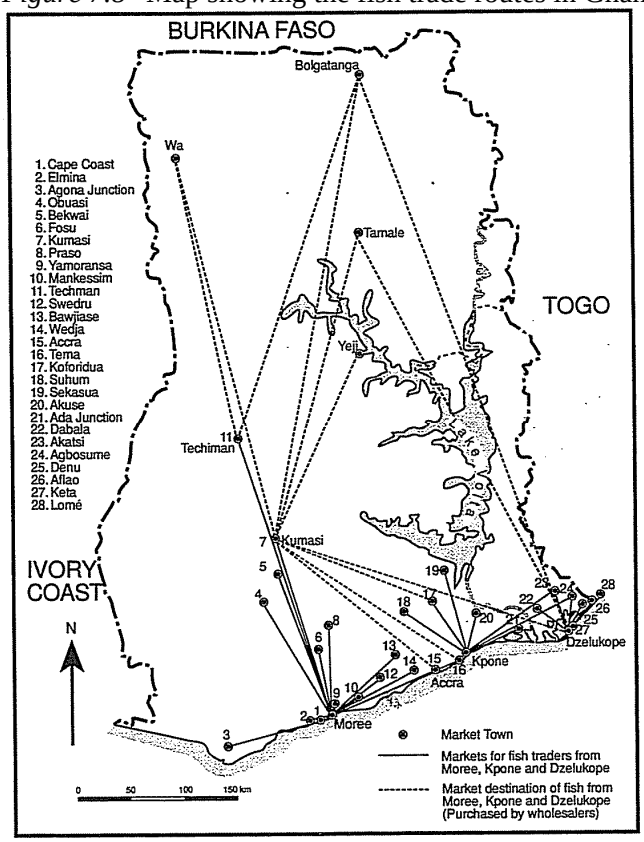
[30] With the exception of Effutu society which is organised by duo-descent, the women inherit and belong to the maternal side and the men inherit and belong to the paternal side.

Figure 7.7 Woman selling smoked fish at the market

When dealing with Anlo fish traders in Dzelukope, Overå found that they concentrate their activities at local markets in Keta, Denu, Akatsi, Dabala, Anloga and Agbosome between which market days rotate every four days. However, they also go to Denu, Akatsi, Agbosume, Aflao and Lomé (in Togo). Some travel to Accra and Kumasi themselves but most of them sell through wholesalers coming from Accra, Kumasi and towns even further up north (see Figure 7.8).[31] Conversations held with women during my research confirm this image that most would process fish and sell it at nearby markets (Anloga, Keta, Anyanui, Dabala and Aflao). However, in some cases – high value species – they would go to Accra themselves with the fresh fish to get a better price (interview 5, 13-1-2004). Fish can be smoked, sun dried, salted and dried, fermented or fried. Processing the fish gives the women the opportunity to preserve the fish and to keep it at home (for three up to nine months) until the prices at the market have improved. However, it also costs them more inputs in terms of salt or fire wood (interview 8, 14-1-2004). One of the women traders from Akosua Village explained to me: 'Fish comes plenty in the season. In August we sell fish at 30,000/40,000 per basket whereas in January – February at 100,000 or 90,000 a basket. That time you get something on top' (interview 57, 30-6-2004).

[31] For a complete overview of main fish markets by region in Ghana see DoF 2003: 32.

Figure 7.8 Map showing the fish trade routes in Ghana



Source: Overå 1998: 86.

The women in Akosua Village were not so active in large-scale processing operations. Most of the fish was sold to the Effutu from Winneba. There were two women in the village more seriously involved in the business. One of them tells us how she went herself (or her daughters) to the markets in Accra (Mamprobi) and Aflao or how wholesalers from Togo or Hohoe would come to the village and buy from her (interview 57, 30-6-3004). In Half Assini I observed some traders from Kumasi coming with vans to the beach to load fish for the market.

When the beach seine fishermen land their fish they sell the fish to the women to whom they (read the net owner) are indebted, to the women related to the company and to other buyers – and in that order. Often the wives of the fishermen buy the fish and re-trade it or process it before they bring it to the market. In many communities (see also Gbaguidi 2003, Overå 1998), including Woe, there are many women willing to buy, so they rotate in getting access to the fish that was caught. One of the women we met during the household survey explained to us that they have divided the women into groups and that each group can buy on a particular day of the week. She can buy fish every Monday (HH survey Woe additional notes 13-8-2004). Overå: 'In one Dzelukope company the rotation goes all the way from the wives of the canoe owner and down to the last company member's wife until it starts at the top again' (Overå 1998: 245). Such a rotation system is particularly important during the lean season when the catches are limited. The extent to which women can buy fish in the main season depends on their financial strength (access to credit). Both women and fishermen complain about the

Figure 7.9 Fanti fishermen selling their fish to women in Akosua Village

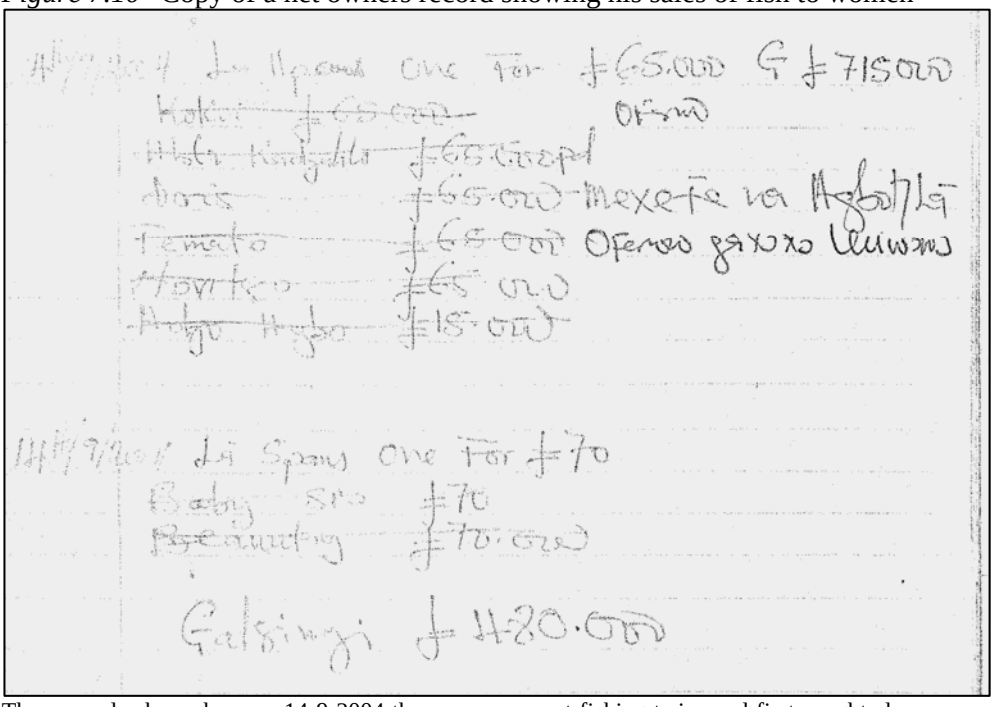
selling process. The women complain that the prices are too high, as explained by one of the elders of the fisheries committee in Woe:

> 'Sometimes the women report to you that we come to the beach and they have been selling to them a bowl of fish for some 500,000 cedis [45 euros]. And, so we used to sit down with the fishermen and discuss with them that 'oh these are your own people, these are your wives, so when you sell to them for this exorbitant price when they go to market and they don't get anything you'll stand to this', yes.' (interview 89, 1-11-2005)

On the other hand the men complain that the women, who often buy on credit, do not pay their debts (interview 45, 3-6-2004). This complaining of both men and women is reflected in other research: 'The fishermen claim that the women traders do not offer a fair price for the catch, the women claim that the fishermen are unrealistic about what the catch is worth' (Bennett *et al.* 2001: 371). Figure 7.10 shows a copy of a loan book that a net owner in Woe holds. In the margin the date is noted, then the amount of pans of fish that have been caught, at what price the pans were sold and then how much the women have bought. Only the names of the women buying but not paying are immediately written down. Their names were crossed out when they had come to pay.

What we have seen in the section above is that Anlo-Ewe beach seine fishermen have developed rules to manage their own fisheries. It has become clear that the Anlo-Ewe beach seine fishermen collective is not a homogeneous group of people. There are a number of sub-groups: there are certain leaders such as the chief fisherman and his elders, the net owners and the priests. It is also important to differentiate between net owners and crew members, fisher*men* and female processors and traders. All in all we have seen that the set rules are mainly directed to maintain peace and order on the beaches. The access to fishing is regulated by chief fishermen with the focus not so much on the resource but on the community. Interaction between fishermen is aimed at avoiding conflict and at solving any that occur quickly and smoothly. Conflicts between

Figure 7.10 Copy of a net owners record showing his sales of fish to women



The example shows how on 14-9-2004 the company went fishing twice and first caught eleven pans worth 65,000 pounds (130,000 cedis /12 euros), total 715,000 pounds (1,430,000 cedis /130 euros). During the second haul they caught 5 pans worth 70,000 pounds (140,000 cedis /13 euros) each. Source: author.

men and women are also solved by pointing out that the men and women need each other. The rules related to extraction, based on religion, are also more community directed than resource directed – the non-occurrence of an important fishing ritual is explained as related to community conflict and that is seen as damaging to fish catches (via the disapproval of the gods).

The government of Ghana's regulating activities directed to the artisanal sector – as discussed in the above section – are strongly related to modernisation of the sector on the one hand and to conserving fish stocks on the other. Subsidies are offered to encourage artisanal fishermen to upgrade their fishing equipment. However, most of the ministry's activities and regulations are aimed at the (semi-)industrial sector. In the event of conflicts between the two subsectors the artisanal fishermen often find the law is on their side but, due to the power difference between the two parties, the artisanal fishermen often (need to) give up. The government proves to be inadequate in protecting the weaker (in terms of finances, alternatives, access to credit) artisanal parties, even though the right regulations are in place.

Management and migration

In this section I discuss possible implications of migration for management and vice versa. I discussed migration with many officials and the two quotes below express two important reasons why fishermen migration has not received a lot of attention from the Ghanaian government:

> MK: Fishermen migrate a lot. Is there some kind of policy on this, is any action taken at all?
> Director (Keta): Fish migrate, like the horse mackerel. The fishermen know the fish, so they follow them. Migration means that many move and come back. The fishermen are good biologists. They know the movement of the fish and of the sea. When they migrate, they obey the rules there. French countries are strict on their rules. The fishermen know that. There are not really any problems with it, so why interfere? There are not many migrants coming to Ghana, rather Ghanaians go abroad. That is a good thing for us, it reduces the pressure. You could say it is good for management, as it reduces our pressure. (interview 62, with the Director of Agriculture from Keta District,17-8-2004)

And:

> MK: Can you explain that in more detail because it seems to be such an interesting phenomenon, and eh… why is not really studied?
> Assistant Director (Accra): Ok, let me say that the other issue that I am aware of is that, for a long time, the fisheries department itself had also concentrated on the resource, without concentrating on the people. It has always been an important resource, so there are a lot of studies on stock assessment, biology of fish, ... you know, a lot. The department did not concentrate too much on the people. (interview 78, with the Assistant Director fisheries department Accra, 14-10-2005)

The question is then why attention should be paid to migration if it does not pose any problems? On the contrary, it even has a positive effect as it reduces the number of fishing activities in Ghanaian waters. Paying attention to this might bring up difficult discussions in regional fora with neighbouring countries. Secondly, the government has always been much more focused on the resource than on the fishermen.

This research confirms that the government in Ghana in general has had less attention for the artisanal sector. The fishermen themselves have developed many more management institutions than the government. As migration is such a characteristic element of the artisanal fishing sector, we can expect the institutions that have developed to have been influenced by migration and perhaps also vice-versa. This might mean that we can expect not to find a major difference between the institutions in the different research locations. Migration has probably led to a spread of knowledge, as fishermen took their institutions along with them and this resulted in more or less the same institutions being present in a lot of fishing villages. The role of the chief fishermen has also been spread via migration. Whereas, in the past, they fulfilled a hereditary role in Effutu and Fanti communities, chief fishermen are now also found amongst the Ga, the Dangbe and the Ewe (Chapter 6).

Although access to the fishing grounds is open by Ghanaian law to all Ghanaians, in Chapter 6 we saw how Anlo-Ewe fishermen on migration need to ask for permission to settle from the local town chief and permission to fish from the local chief fishermen and (or only in case of absence of a local chief fisherman) from the chief fisherman of their own, existing community. As chief fishermen always grant permission, one might wonder whether chief fishermen actually manage access to the fishing grounds. Asking permission seems to be more of a social ritual yet it also serves as a way to prevent access conflicts (as seen in other countries). Looked at it from another perspective, chief fishermen do have accurate knowledge of the fishermen active on their beaches, this while the Government of Ghana finds such information useful but difficult to obtain.

The assistant director of the Fisheries Department in Accra explained how the government wishes to register artisanal fishermen as a first step towards limiting open access. Limiting open access to the artisanal fisheries in Ghana is seen as a way of controlling artisanal catches, as Ghanaian fish stocks are showing signs of depletion. Elsewhere it has been suggested that migration hampers the registration of canoes and fishermen since the mobile character of the sector makes it difficult to acquire a proper

overview. Canoes fish from village A and land fish in village B. As a consequence, it is difficult to decide where the canoe should be registered and which season is the best time to count canoes (Ferraris & Koranteng 1995).

Another aspect that should be taken into account when discussing migration and management is that the mobility of the Ghanaian artisanal sector is international. Consequently, if the Ghanaian government wishes to impose new mesh size regulations, fishermen can respond by leaving Ghana to fish in another country where they can continue using their gear, or they can buy the forbidden mesh size in another country and use it in Ghana. It would consequently be much better if Ghana was able to harmonise its fishing rules with its neighbouring countries. In terms of access to credit and inputs, research has already shown how better opportunities in neighbouring countries motivated Ghanaian fishermen to migrate there (see Chapter 5). Migrant fishermen therefore respond to structural differences related to management in their mobile strategy.

Based on our discussion of the management activities related to the element of social interaction, we can conclude that the fishing contract functions as a way for net owners to gain more control over their crew members. Companies on migration are, in particular, a financial risk for net owners. Crew members may run away with the advance payment. The contract gives the net owner a stronger case once the crew member has been found and has been taken to court. A net owner in Akosua Village told me how they sometimes spent quite a lot of money on finding runaway crew members. In Akosua Village a net owner also explained to me how one of the rules was that crew going to Winneba had to wear a shirt (instead of being bare-chested). As they stayed there as migrants, you had to behave properly. A misbehaving Anlo-Ewe in Winneba would reflect negatively on the whole village. As the net owner explained, ‘One rule is: don’t go to drink in another village, they may stab you, and then it becomes my case. If you do go there, do not drink and don’t offend anybody. They respect the rule’ (interview 51, 10-6-2004). The net owner, almost like a father, is responsible for the behaviour of his crew.

Avoiding getting into conflict with local fishermen is, as we have seen, not a major problem since the Anlo-Ewe beach seine fishermen do not use the same fishing space as the local fishermen (in Akosua Village the Effutu fishermen going far out and in Half Assini the other migrant Fanti fishermen also going far out). Conflicts occur much more amongst beach seine fishermen, including those on migration. In settling these conflicts the same rules are applicable as at home. Migrant fishermen bring along their rules and ways of solving these conflicts along whilst on migration and they have their own chief fisherman and elders.

Access to the market is of course also needed when on migration. Women often join the migrating companies and sometimes they are even part of the company. Only rarely are women not allowed to join or have restricted access to the fish caught by their men due to local women demanding the first right to the fish, as is the case in Benin (Odotei 2002b: 15). Overall, the women in Akosua Village did not play a major role and a lot of the fish were sold to Effutu and Fanti women. However, a few Anlo women did work on a broader scale and even had Effutu boats which brought fish to them directly on the beach (the landing of the canoes was always commented on by the Anlo-Ewe, the Effutu – who were used to Winneba harbour – were much less capable of landing their canoes on the beach then the Anlo). These women on migration traded their fish at local markets and the main national markets such as in Accra and Kumasi.

We can conclude that, with regard to the sea, it does not seem to matter a lot in terms of fisheries management whether fishermen fish near home or on migration. Yet, in Akosua Village I was able to research a conflict between the migrant Anlo-Ewe fishermen and the local leaders that focused on the use of the lagoon (see Chapter 8). The lagoon was located inland and was much less accessible than the sea. That case showed how fragile the relationship can be between migrant fishermen and their hosts. In the absence of crises, the living situation appears to be similar to that which exists between fishermen's hometowns and their migration locations. However, a crisis may cause this situation to change (something we have seen in other countries already – see Chapter 5). In that respect, declining catches can become crises over time and one may wonder what effect that will have on the current calm situation of internal migration in Ghana.

Assessing the management objectives of the fishermen and of the government

Table 7.3 contains an overview of the regulating activities undertaken by fishermen themselves and by the government. From the table we can see that the fishermen have made regulations relating to all fishing activities, whereas the government has confined its activities to subsidies, rules relating to the interaction between artisanal fishing groups and (semi-)industrial fishermen, while the ideas on extraction relate to a biological scientific perspective.

Table 7.3 Local managing activities of fishermen and government

	1 Access		*2 Interaction*			*3 Extraction*	*4 Access market*
	Access FG	Inputs	Intern.	Ext. BSC	Ext. all		
Netowners and trad. gov.	CF	credit	contract	rules	rules	religion	social relations
Gov.	x	sub-sidies	x	x	rules	biology	x

Access FG = access fishing groups; *Intern.* = internal social interaction; *Ext. BSC* = external social interaction between beach seine companies; *Ext. all* = external with other fishing groups; *gov.* = government

Like the other artisanal fishermen in Ghana, Anlo-Ewe beach seine fishermen have consequently made arrangements amongst themselves to regulate their fishing activities. We can deduce that the main objective of these regulations is to maintain order and peace on the beach in what is a highly mobile and heterogeneous social environment amonst themselves and vis-à-vis the gods. It is useful to remember that institutions are based on values and principles. Peace and order are thus valuable objectives which is reflected in the institutions of the Anlo-Ewe fishermen.

The fact that access is regulated by the chief fisherman ensures that newcomers do not just intrude but introduce themselves and are introduced to others by the chief fisherman. Access to credit and to the market is regulated by the social relations fishermen have with the women in their community. The interaction between and amongst fishermen is regulated by a whole set of rules, which are clear and known by all fishermen. The institution of the contract was set up to protect both net owner and crew member. Most of the conflicts occur between operators using the same gear and these

conflicts are dealt with by the chief fisherman. As such, artisanal fishing in Ghana is for a large part a self-regulated system in which the government does not play a major role. In the research locations I often asked fishermen whether they had ever dealt with officials of the fisheries department and in most cases the fishermen responded that they had never seen someone.

The introduction of new fishing materials, such as new nets and the outboard motor, led to contacts between government and fishers. The government introduced these measures as a way of modernising the sector and it has subsidised such capital intensive equipment since the start. Modernisation has for long been an important objective of the Ghanaian fisheries department.

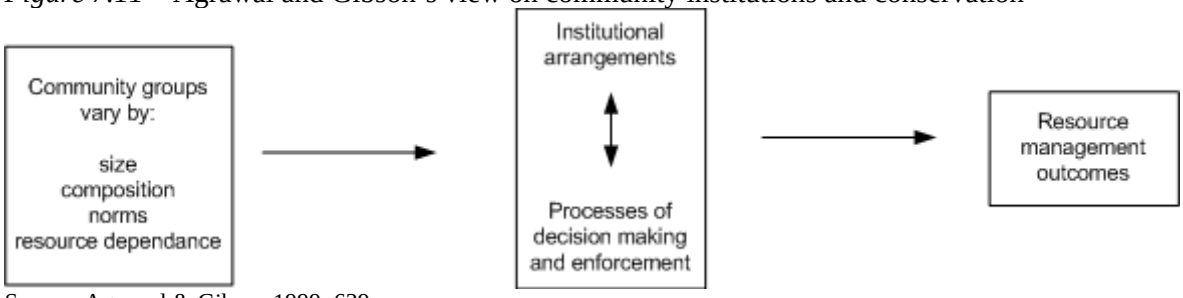
The interactions with the modern fishing sector and the artisanal fishermen also fall under the government's responsibility. The government has set rules for instance the non-fishing zone within 30 nautical miles for (semi-)industrial fishers, and is responsible for monitoring that such rules are obeyed. The functionality of their monitoring and conflict resolution management tasks is however very low. Lastly, it is clear that the government reasons from a different perspective than many artisanal fishermen. Although the biological perspective is known, understood or adhered to by some artisanal fishermen, this is certainly not the case for all of them. This may also be because most fishermen are too busy managing their livelihoods.

The CBFMCs that have been introduced by the government are an interesting case in point when it comes to analysing the interface between government and fishing communities. The committees were discussed in Chapter 6, but we need to review them again when assessing the regulating activities of the government and the fishermen. This will explain why these committees continue to fail.

An initial assessment of the literature on communities managing natural resources quickly leads us to an influential article written by Agrawal and Gibson in 1999. They propose that, for a couple of reasons, it is not right to talk of *the* community. 'The community' is often used by people who adhere to three assumptions about the community that are not in line with reality, namely that the community is a small spatial unit, has a homogeneous social structure and has common interests and shared norms. They propose instead a focus on institutions. I believe that their contribution is very valuable for the above definition has indeed been critisised directly or indirectly by a lot of researchers (see for an overview of fisheries: Allison & Ellis 2001). The authors suggest that an institutional approach would be more effective. Once again I agree and have done exactly that. However we should be careful whenever the outcomes of an institutional analysis lead to what has been called institutional crafting as the solution to NRM problems (see the critique offered by Cleaver as described in Chapter 6). To prove that this does not work, we can read the recommendations of Agrawal and Gibson on what a good local institution should be like. This only leads to the realisation that exactly the same arrangement existed in the case of the CBFMCs in Ghana, with representatives from the various groups in a community, being involved in solving local conflicts, and creating their own rules based on the existing local knowledge and enforce them (Agrawal & Gibson 1999: 638-639).

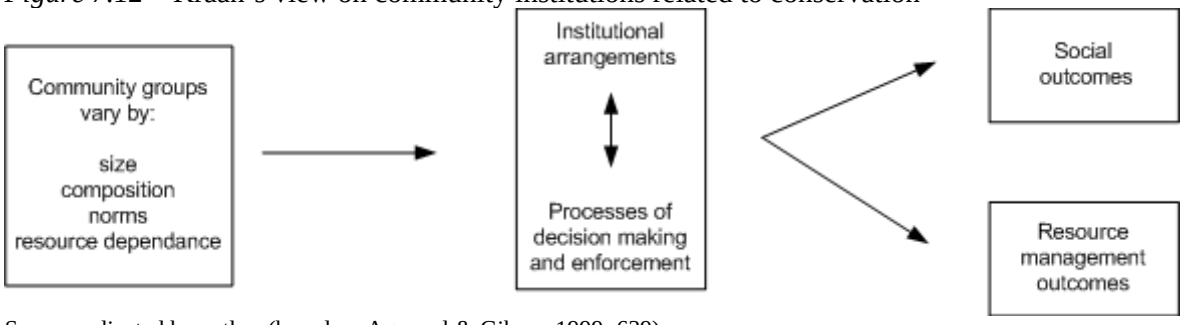
There are various reasons why this approach will not work. First of all it is assumed that the locally created institutions will empower 'locals' to take action in order to improve resource management outcomes (see Figure 7.11). However, based on an our assessment of the objectives of local institutions as held amongst the Anlo-Ewe, we should regard the diagram as shown in Figure 7.12 as being closer to Ghanaian reality.

Figure 7.11 Agrawal and Gibson's view on community institutions and conservation



Source: Agrawal & Gibson 1999: 639.

Figure 7.12 Kraan's view on community institutions related to conservation



Source: adjusted by author (based on Agrawal & Gibson 1999: 639).

This was endorsed by the assessment (Bamfo 2003) made in Ghana of the CBFMCs cited in Chapter 6. It also highlights the value of the livelihoods approach in fisheries management studies. If we recall Figure 3.1 in Chapter 3, which showed the livelihoods framework, we see that a livelihood has effect on both livelihood security and environmental sustainability. Finally, in practice we see that the 'local' rule-making procedure only functions if the local rules do not contest state rules and vice-versa. Bylaws will not be accepted by power holders at local level if the proposed rules impact negatively on their stakes (see the discussion in Chapter 6 on the bylaws).

Conclusions

In this chapter we presented the institutions of fisheries management in relation to Ghanaian beach seine fishery at local level. We defined institutions as the written and unwritten rules but also rights and procedures based on principles and values. We discussed the activities undertaken by Anlo-Ewe fishermen themselves and by the Ghanaian government in relation to beach seine fishing. By following a virtual boat in the sequence of the fishing activity we were able to distinguish the different elements in the fishing activity: 1. access to the fishing grounds, 2. social interaction between fishermen, 3. extraction and 4. access to the market. By doing so we acquired a clear understanding of how every step towards catching fish and making a living out of it is regulated. The managing activities carried out by the fishermen are embedded in social practice and religious world views and are mainly directed to maintain peace and order on the beaches. Peace and order can thereby be deducted as an important principle in beach seine fishing communities. In the next chapter we discuss in more detail how a

decline in traditional religion adherents and the change of social order in migration locations can impact negatively on the effectiveness of the rule-system related to beach seine fisheries. We also discuss the impact of power and leadership in more detail.

We saw in this chapter that Anlo-Ewe fisher communities are not homogeneous. We need to distinguish between a number of social categories: net owners and crew members, fisher*men* and female processors and traders as well as Christians and adherents of the traditional religion for instance. There are also certain leaders such as the chief fishermen and his elders, the net owners and the priests whom we need to take into account since such power holders can influence processes of rule making (as we saw in Chapter 6 on the bylaws). The fact that there are different groups makes it easy to understand how important this main task of the chief fisherman and his elders is as regards maintaining peace and order at the beach. This is, in itself, a considerable challenge given the many different groups, different leaders and different financial or livelihood related interests.

Our discussion of a traditional arbitration of a conflict between two fishing companies in Half Assini showed how such arbitration has a social function. It is an open hearing which everyone is allowed to attend. Both parties in the conflict are invited to tell their side of the story and are questioned by the elders of the community. The hearing itself is also regulated and a linguist is present who guides the whole process and repeats the rules guiding the hearing itself. The elders use proverbs and expressions (proverb law) in their verdict. They in fact use their knowledge of the 'ways of doing things' in their community to reach a verdict. Such arbitrations are in fact a way of re-explaining social rules to the community (via those gathered). We see the same idea in the fishing companies where fishermen who have broken a rule are punished in the presence of the whole group. In that way the whole group is again reminded of the rules and of the right way of doing things.

We also noted that the role of the government of Ghana in relation to regulating beach seine fisheries is ambivalent. A lot of the regulating tasks are left to the fishing communities themselves. Access is open to all Ghanaian nationals, no registration of canoes is currently taking place and, as a result, the government does not officially know, for instance, how many fishermen are active in the villages. The government provides inputs at cheaper rates than available on the market, such as subsidised premix fuel, nets and outboard motors. A couple of decades ago this served as a way of stimulating and modernising the sector. The government, via police and courts, is only involved in conflicts in the event of assault or damage. The involvement is not great since most of these cases are eventually settled by the chief fishermen. This chapter also showed that although the Ghanaian government has developed institutions to deal with some types of conflict between artisanal fishermen and (semi-)industrial fishermen, these do not function properly. The artisanal fishermen are the weaker party and often do not have enough knowledge, contacts or finances to profit from these institutions. The Ghanaian government is at the national level most involved in rules related to extraction. Their management perspective is based on biological knowledge and the ecosystem health principle applies at international level (Bavinck & Chuenpagdee 2005: 245). Catches are monitored and there are gear regulations (such as minimum mesh sizes) and fishing zones. However, it is not easy to ensure that the law is complied with. Two examples have been discussed, one is that (semi-)industrial vessels do not comply with the fishing zones and the second is that beach seine fishermen do not comply with the mesh size regulation. The government lacks the power and resources to make sure

that these rules are followed. This aspect of fisheries management shows that a discussion of principles on which certain rules are based is valuable, yet it is also important to understand why certain rules are or are not carried out. Power is an important factor in the effectiveness of fisheries management.

We have also come across some co-management initiatives such as the CBFMCs. By assessing these we see how the different world views of government and fishermen translate into the malfunctioning of these committees. Government is directed at conserving fish stocks and communities are directed at livelihood improvement. This brings about different expectations and outcomes.

Migration influences fisheries management and vice-versa. As migration is so much a feature of the Ghanaian fishing sector, and as the fishermen themselves are much more actively involved in regulating the artisanal sector, we can actually expect the influence of migration to be incorporated in its regulation. Migration has lead to a spread of knowledge, as fishermen took their institutions along and this resulted in more or less the same institutions being in place in lots of different fishing villages. Government officials explained why the government does not actively do anything about migration. According to them migration does not pose any problems and in fact, international migration even has positive effects as it reduces the amount of fishing in Ghanaian waters. Focusing on this may lead to regional discussions with neighbouring countries. This also highlights the issue that taking migration into account means that management should increasingly take place at regional level and should become part of international (West African) governance arrangements. Due to the migratory nature of the sector, regulations in one country will have an impact in other countries. Secondly, the government has always focused much more on the resource rather than on the fishermen. Despite the fact that migrants are incorporated, the relationship between migrant fishermen and their hosts is frequently fragile. Rules on how to behave are more important in the context of migration than in the home context since any misbehaviour on the part of the individual migrant fisherman rubs off on the whole community. The absence of crises means the fishing situation at beach level is often similar for fishermen at their hometown and in their migration location. However, this may change if a crisis occurs (something we have seen in other countries already – see Chapter 5). In that respect, declining catches may develop into crises over time.

The *analytical* division we have outlined between fisher institutions and state institutions works differently in practice. In practice there is interaction between the fishermen and the government in which all sorts of contacts occur.The cases presented in the next chapter help us understand how the interface between governance actors and fishermen works, and how Anlo-Ewe fishers negotiate their livelihood space.

8

Anlo-Ewe fishermen's negotiations within multiple governance settings

Introduction

Fishermen have organised their livelihoods in a certain way, go fishing, process and sell their fish, manage their activities and live their lives together with their families in their communities (Chapters 3, 4, and 7). Yet they form part of a larger society that is organised, structured and governed in a certain way (Chapter 6). They act within – and react to – (representatives of) governance structures, and within these structures they negotiate for livelihood space at home and – through migrations – in other places (Chapter 5). This chapter shows how Anlo-Ewe fishermen (re-)negotiate their livelihood space within multiple governance settings. It shows how Anlo-Ewe fishermen deal with powerful others, with the government of Ghana, with representatives of traditional governance structures and with other users of the coast.

Negotiation can take different forms. It can be direct by which two parties can be distinguished that discuss each other's offers, it can be institutionalised, when it has become a way of doing things, whereby the outcome is more-or-less known to both parties (for example when asking for permission to settle from the chief fisherman), but it can also be in the form of indirect manoeuvring, seeking alliances elsewhere, or may take the form of an apparent lack of negotiation. Not acting is also a reaction. As we will see in this chapter, effective negotiation is linked to effective leadership. Effective leadership is also linked to effective social, political and economic structures. Negotiating livelihood space is an ongoing process, both at home and when on migration. Failed negotiations can lead to acute conflict and direct confrontations but can also become a long route of renegotiation. However, fishermen on migration are more vulnerable than fishermen at home and therefore the need to be united and have strong leadership is greater than when at home.

In order to show this negotiation process at work we will focus on two cases, one in Akosua Village and one in Keta District. In these cases Anlo-Ewe fishermen are confronted with external trends and shocks which may either pose a problem to them or offer them an opportunity. Occurrences, such as the seasonality of catches or coastal erosion take place on a scale larger than local and also involve other actors. Both cases will add to our understanding of how Anlo-Ewe fishermen negotiate livelihood space.

In the first case the Anlo-Ewe fishermen are on migration whereas the second case refers to events in their home area. In Chapter 5 we saw how migrant fishermen negotiate access to new livelihood space and in this chapter we will see how fishermen, whether at home or in their migration location, need to *re*negotiate livelihood space due to external threats. It shows how negotiation for livelihood space is an ongoing process.

The first case is that of the Anlo-Ewe fishermen in Akosua Village coming into conflict with the Chief of Winneba over the use of Muni lagoon. A key element of the case is a shooting incident which was a threat to the Anlo-Ewe fishermen and was intended to chase them out of the lagoon. We performed an actor analysis in order to understand the actions of all actors in the shooting incident. This case shows how the position of migrant fishermen remains vulnerable and that, in order to be able to maintain one's position in times of crisis as well, it is important to be united and have the right leaders. When analysing the case we discovered how leadership in the village had become ineffective. This happened due to a combination of declining catches and alleged misuse of power by the net owners in the 1990s. It has resulted in the disappearance of the company institution in Akosua Village. The fact that this happened in a migrant village increased the implications for leadership since the political organisation in migrant locations is strongly linked to economic leadership. This internal problem made the migrant fishermen more vulnerable to external threats, as will become clear in the lagoon case. The lagoon case also shows very clearly how local politics can be framed in an international environmental discourse.

The other case deals with coastal erosion in Keta District. Coastal erosion has been cited by one third of the villages in eastern Ghana as a problem which has a severe impact on villages' ability to maintain fishing activity and which results in, for example, a loss in fishing days (Bennett *et al.* 2001: 372). The coastal erosion in Keta has been going on for over 100 years. The case strengthens the argument that different understandings of the problem lead to different strategies for solving it. This also underlines the idea that local issues can be linked to higher levels as a way of strengthening the claim in the negotiation process.

This chapter emphasises the importance of understanding the mindscape or world view of the actors that play a role in the negotiation interface. The way people frame a problem or a conflict is based on their knowledge, beliefs, norms and values and this defines their actions, although this should not be interpreted in a deterministic way. It is important to understand that actors can relate to a multiplicity of value systems, that they combine certain beliefs with certain bodies of knowledge, mix institutions (institutional bricolage) and make eclectic use of different paths to solve a conflict (as we saw in Chapter 7). Both the Keta and the Muni case will show how actors can also frame their political action in an environmental discourse, if they feel this is a useful strategy.

This chapter adds to the institutional debate in the NRM literature (Chapter 6) and that of the case of migrant fishermen in West Africa in particular (Chapter 5), in arguing that it is indeed important to have the right institutions in place but that it should not be forgotten that power (or lack thereof) and leadership also play important roles. The successful negotiation of livelihood space not only depends on having the right institutions in place (system) but also on having the right leaders (actors) in place, leaders that have internal and external legitimacy.

Multiple-meaning of Muni lagoon; conflict over the resource

Akosua Village is beautifully situated between the sea and Muni lagoon. Muni (or Moni) means 'hard water'[1] (*Iboni* in Effutu) (Hagan 2000: 21). The sandbar on which the village is set is not very broad and some parts of the lagoon and the sea are only 30 metres apart.

Figure 8.1 Muni lagoon

The fishermen of Akosua Village fish mostly at sea although, at times, they also venture into the lagoon. There they fish using a dragnet purposely made for the lagoon. Although using the dragnet in the lagoon is prohibited, the presence of the dragnets in the village is no secret. They can be seen drying on the compounds and the women can be seen doing the gutting and frying of large amounts of lagoon fish (which can hardly be caught using the approved cast net as that takes much more time – see below). The fishermen go to the lagoon when they do not fish at sea because it is, for example, a non-fishing Tuesday or the sea is too rough. As far as the Anlo-Ewe are concerned, fishing in the lagoon may therefore be seen as a livelihood strategy since the option of fishing in the lagoon increases their opportunities.

However, the fishermen do not seem to have many alternatives to compensate for those occasions when they cannot get enough fish from the sea. As one of the fishermen, who admitted fishing in the lagoon, put it: 'The law says we shouldn't go. But sometimes the sea is rough for two or three weeks! Is stealing an option? No. That is why' (interview 39, 1-6-2004). This insight is shared by Koranteng *et al.* (2000: 496): '(…) some fishers are compelled to diversify their operations in order to earn a living. In the Winneba area, fishing in the Muni lagoon is an attractive alternative for such fishers.'

[1] When the Effutu first arrived in that area oral history has it that: 'They next saw the lagoon in question and took it for fresh water, but when tasted it was found to be brackish or salt water' (Hagan 2000: 21).

Muni lagoon

Muni lagoon[2] is one of the ninety lagoons that can be found along the Ghanaian coast, and one of the six RAMSAR sites in Ghana.[3] The lagoon is about four square kilometres in size and it adjoins the Yenku Forest Reserve. It is a closed lagoon, which occasionally opens to the sea and is fed by two rivers, the rivers Muni and Pratu (Koranteng *et al.* 2000: 487). The lagoon area is used by fishermen, crab catchers, salt farmers and sand and stone extractors, fuel collectors, cattle herdsmen and farmers (interview 56, Wildlife Officer, 25-6-2004) (see Figure 8.3). Another type of resource users are the tourists and those who visit for leisure purposes, some of whom come to observe birds, given that the lagoon is an important feeding site for birds (Entsua-Mensah & Dankwa 1997: 9). The fact that the lagoon is a RAMSAR site means it is monitored by the Wildlife Department which has installed a bird watch platform nearby Akosua Village. However, Muni lagoon is not only important in terms of ecology. Lagoons and other water bodies in Ghana often have a religious meaning as well for local communities and the gods that are believed to live in these lagoons can play an important role in the history of the local population. This is also the case for Winneba – as we understood when we spoke to the chief priest of the lagoon:

> 'Some time ago (…) that was Asante's tribal war, he [the priest of the lagoon at that time] (…) went to (…) to tell [them], people are coming to capture Winneba town. So that those people would come and fight with them. So that they can take them away. They told them that that day was Wednesday. All the Winneba people should cross the [lagoon], [to] the other side. To see that the [Ashanti's] can come and take the [Winneba people] away. (…) The priest (…) beat the gong; all the people went by the [lagoon], to the back of the [lagoon], they were there, the [Ashanti's] were coming (…). That time when they reached at the Winneba town, the whole people weren't in, all of them had gone to that side. When they saw that the [Ashanti's] were coming, all of them were afraid. The enemies, when they saw that the people were there, they wanted to cross the [lagoon] to go and arrest them. The [lagoon] was making itself small so that the people could pass through. They thought it was only ground. When they went in and reached the middle of the water, then the river (…) came up, (…) the enemies sank in the water, so they couldn't capture the Winneba people.' (interview 71, 9-9-2004)

Within this mindscape the fish in the lagoon are not known as the blackchin tilapia *Sarothedoron melanotheron* (*Cichlidae*)[4] but as the children of the god living in Muni lagoon:

> 'On Wednesday's when you go there, you see a lot of fish, because the people don't go there on Wednesday, so he brings out his fish. They are his children, he is playing with them. After (…) Wednesday (…) you won't see [those big fish] again. He takes them to (…) hide (…) somewhere. Then you see the very small fish. As for that small, small fish, you can't chop(…) it.' (interview 71, 9-9-2004)

Management of Muni lagoon

The Chief (*Odefey* in Effutu) of Winneba,[5] paramount Chief of the Effutu State, traditionally owns the lagoon, as well as the lands and beach surrounding it. As Chief Ghartey explained: 'Traditionally it is my lagoon' (interview 58, 1-7-2004). Most of the lagoons in Ghana are traditionally managed through various rules and taboos (Dankwa & Entsua-Mensah 1996: 2, Ntiamoa-Baidu 1991). As is the case with the sea, the chief

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[2] At 5° 19' N 0° 39'W (Entsua-Mensah & Dankwa 1997: 9).

[3] Ramsar is the name of a city in Iran where the Convention on Wetlands of International Importance was signed in 1971. It was decided that wetlands are ecosystems of considerable importance, comparable to forests, rangelands and marine ecosystems and they deserve special protection.

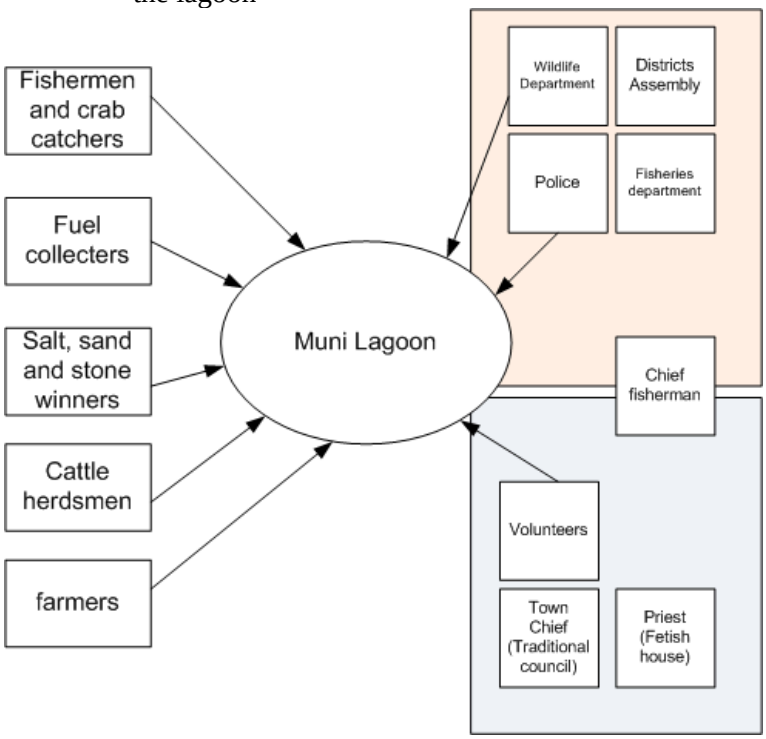
[4] The dominant species in the lagoon (90 percent) (Koranteng *et al.* 2000).

[5] The local name for Winneba is Simpa (Hagan 2000: 1).

fisherman, together with his council and the village chief and his council are directly responsible for the setting and guarding of the rules for the lagoon, as well as for acting when rules are violated.

Figure 8.2 One of the signs put up by the Wildlife department

Figure 8.3 Users of Muni lagoon and the authorities monitoring the lagoon



Muni lagoon is highly regularised when compared to other lagoons in Ghana:

1. It has a closed fishing season (the two to three weeks annually when the lagoon fills up at the onset of rains in May/June).
2. It has a closed fishing day (Wednesday) being a sacred day to the fetish of the lagoon called Kwaku Muni.
3. It has a restriction on mesh sizes (cast nets with a mesh size below 2.5 cm are not allowed).
4. It has a restriction on certain gears (drag nets).
5. It has a regulation of entry (only indigenous people, Efutus from Winneba, are allowed to fish in Muni lagoon[6] and women are not allowed to enter the lagoon during menstruation) (Entsua-Mensah & Dankwa 1997: 9, 19, 20).

The priest of the lagoon is also involved in safeguarding the taboos of the lagoon, and explained to us that all people should follow the rules or else the god will be angry. If you are ignorant to the rules (say as a tourist) there will be no harm done (Kwesi Muni, priest of the lagoon god, June 2004). From a study done on traditional ways of managing lagoons in Ghana we know that other rules may exist such as the ban on wearing footwear and wearing golden earrings when entering the lagoon, the ban on entering the lagoon with a vehicle or not being allowed to fry the fish caught in the lagoon. (Ntiamoa-Baidu 1991: 43). Taboos like these are not written down but are known to the locals. Breaking the rules leads to fines and if people refuse to pay it is believed that the gods will 'take care' of you. Ntiamoa-Baidu in relation to the Ningo lagoon:

> 'Fines for breaking the taboos ranged from a bottle of schnapps, twelve yards of white cloth, and two white fowls, to one cow plus the other items listed depending on the seriousness of the offence and whether the offender was a native who should know the rules or a stranger. Here also the taboos had no legal backing. If an offender refused to pay the fines, the elders would call him and advise him of the possible outcome. If he is adamant, they could only pour libation and hand him over to the gods who, they believed, would deal with him. It was believed that people have died as a result of breaking the taboos and refusing to pay the requisite fines to pacify the lagoon god.' (Ntiamoa-Baidu 1991: 43-44)

This traditional backing is said to be very powerful and this explains why, in general, taboos in Ghana are often respected more than government rules (Hens 2006: 25). These taboos also have positive effects for protected species: 'tabooed species were most abundant in the areas where their collection was forbidden'(Ntiamoa Baidu 1991: 46). Kwakuvi Azasu, a teacher at Winneba University and member of the Afrikania Mission,[7] tried to explain the power of African religion: 'African religion makes people behave well. Whatever you do on earth, God punishes you! In the flesh. The soul is a part of God. You will always be punished on earth – you get your punishment direct!' (interview 54, 22-6-2004). I have heard of this being referred to as 'instant justice', or as Abotchie calls it 'escapelessness' (Abotchie 2002: 66-68). There are, however, signs that these beliefs are breaking down. Factors believed to contribute to this breakdown are the introduction of Christianity, western influence and education, and immigration

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[6] When Effutu fisherboys reach the age of 12 they are given a cast net from their father to cast in the lagoon or in the surf (Hagan 2000: 57).

[7] According to Azasu Afrikania is the bona fide religion of Africa. Afrikania is the African Traditional Religion, 'Afri' in Akan means 'has come out of' and 'Kania' means 'light', and is together translated as 'bringer of civilisation' (Azasu 2003: 7). The Afrikania Mission can be found along the road from Accra to Winneba in the outskirts of Accra.

of people from other ethnic groups who neither believed nor respected the local fetishes and taboos (Ntiamoa Baidu 1991: 46).

The Government of Ghana is also involved via the district-level fisheries and wildlife departments (in case the lagoons are RAMSAR sites). Legislation has been laid down in the Fisheries Act (Act 625, 2002) and a lagoon that is a RAMSAR site is also subject to the Consolidated Wildlife Laws of Ghana (Act 43 plus all the subsidiary legislations, 2002) including the Wetland Management Regulations of 1999. The enforcement of these laws has been put in the hands of the police and the courts together with the traditional authorities.

Muni lagoon needs to be managed: 'In the light of the assessed exploitation rate, environmental degradation, mangrove loss and a reducing shellfish fishery around the Muni lagoon, it is obvious that fisheries in the Muni lagoon need to be managed' (Koranteng *et al.* 2000: 498). Ntiamoa-Baidu compared the stocks of T. fuscatus of Muni lagoon with of that of Djange lagoon (nearby Ningo). In Djange the species is protected by taboo and in Muni it is not: 'Whereas the Djange lagoon was literally teeming with T. fuscatus, the species was very sparsely distributed at Muni lagoon where it was heavily exploited for food (Ntiamoa-Baidu 1991: 46). The Wildlife officers are based in an office at the entrance of Akosua Village. However they feel they cannot control the lagoon effectively:

> 'Our staff is very small and we can't manage the place alone, so we resort to the Districts Assembly and the Traditional Council to come to our aid (...). Even when we go there dressed in our shoes and attire and the people are fishing in the lagoon, can we go inside to catch them? What (…) if we do not know how to swim? Would they wait for us? Or would they come when we just call them to come? All this necessitates the assistance of the Traditional Council and the Districts Assembly.' (interview 59, 25-6-2004)

The Chief of Winneba confirms that the wildlife officers cannot effectively monitor the lagoon, so the traditional council has selected 'volunteers' to do it. 'The fetish house [connected to the traditional council] makes sure it [the ban] is respected. They check, by visiting the place' (interview 58, 1-7-2004). These 'volunteers' feature later on in the shooting incident. However, before we discuss that event, we should take a closer look at why the Anlo-Ewe break the rules set in order to manage the lagoon.

The Anlo-Ewe and their fishing activities in the lagoon

As we saw above the Anlo-Ewe fishermen fish in the lagoon and, by doing so, they often break a number of rules. To begin with, they are not allowed to enter the lagoon simply because they are not from Winneba. Secondly, they break another rule by using dragnets in the lagoon, instead of cast nets or hook and lines. In the household survey we undertook in June 2004 we counted thirty-one dragnets made purposely for the lagoon.[8] If you compare that figure with the presence of about fifteen beach-seine nets (used and dormant), it is quite a significant number.[9] However, it is important to understand that a lagoon dragnet is a much smaller net than the one used in the sea and also that some net owners start with a lagoon net which they gradually expand until it is a net suitable for the sea. Thirdly they have to respect the non-fishing days and seasons, despite these not being strictly adhered to. On one occasion, a group of fishermen even

[8] Of the 130 households we counted, we interviewed 110 for the survey. So that means that more than 25 percent of the households own a lagoon dragnet.

[9] In 2004 there were ten fishing companies actively working in the village.

Figure 8.4 & 8.5 Lagoon fishing in Muni lagoon and the catch

asked me to take a picture of them when they went to the lagoon with their dragnet on a Wednesday in the rainy season…

The Anlo-Ewe know that they are not allowed to use the dragnet in the lagoon, since the rules have been in place since they came to live in the village:

> John: 'Traditionally fishing is not allowed with a drag net [in the lagoon]' and
> Afi: 'In those days [about 100 years ago], if you entered the lagoon you would be arrested.' (interview 21, 20-2-2004)

When you ask them about it, they often comment 'what else should we do, we need to eat'. It would seem that the community turns a blind eye to this rule. The Wildlife Officer explained the problem as follows:

> 'The reason being that when a person has to do a job to survive, then you know, you have a problem. It is only when someone does something out of fun, you see, out of leisure, then you are able to control. But(…) if it has to do with survival, then you have a very big problem at hand.'

The reason why the Anlo-Ewe use the forbidden dragnet instead of the cast net seems to be based on convenience and on the fact that they know how to use the dragnet since that is the technique they use at sea and it is also the net they use in the lagoon near their hometown,[10] the Keta lagoon. Keta lagoon is one of the few lagoons for which no taboos were reported in the study of Entsua-Mensah & Dankwa (1997) on Traditional Knowledge and Management of lagoons in Ghana (p. 17). It is a very fast and effective method, whereas using the cast net takes a lot of time and it is by no means an easy technique.[11]

Although the history and the meaning of the lagoon is probably not the same for the Anlo-Ewe as for the Effutus, they do believe in the divine aspect of lagoons: 'The sea and lagoon and the Anlo endeavour to harness these water bodies spiritually and materially in part explain the spirituality of Anlo life' (Akyeampong 2001: 220). So that cannot be the reason for violating the traditional rules.

When I was working in the village I quite often saw the Ewe fishing in the lagoon using their dragnet. I found two other accounts of researchers with regard to the Muni lagoon. Interestingly they did not witness the Ewe breaking the rules. The first is that of

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[10] See Chapter 5: the use of the lagoon dragnet in the Keta lagoon is also not allowed by state law, but this rule is not controlled effectively – so in practice it is possible to use it.

[11] One haul with the dragnet takes about fifteen minutes and is results in approximately two pans with a couple of hundred fish whereas the cast net fishermen catch maybe twenty little fish in one cast (which takes around ten minutes).

Pompert and Caron, two Dutch students who performed fieldwork in the village in 1997. They stated: 'It is a fact that the non-fishing day of the sea (on Tuesday) as the non-fishing day of the lagoon (on Wednesday) were respected by the entire village' [original text in Dutch] (p. 41). I checked their thesis for other remarks on the lagoon but they hardly wrote anything about it. Neither did Koranteng witness the Ewe fishing in the lagoon, but had heard that they do go there and therefore break the rules:

> 'For example, although we never came across dragnets in use in the Muni lagoon in the course of the study, we were informed that this gear is supposedly used in the night mainly by the immigrant fishers who have settled close to the lagoon' (Koranteng *et al.* 2000: 498).

The fact that these researchers did not see the Ewe break the rules (by using dragnets and by fishing on Wednesdays) could mean that the researchers simply missed seeing the Ewe going there, for instance by not being there at night time. It could also be that they were doing their research at times that there was no need for the Ewe to go to the lagoon – because the sea catches were satisfactory. However, it could also mean that the situation has worsened over the years. Both studies were carried out some years ago. According to my informant in the village, who in the past was a beach seine caretaker, the organisation of fishing in the village has changed in recent years due to mis-management by net owners. The net owners cheated the workers on such a scale that, at a certain point in time, the workers refused to work in a company system any longer. As John explained: 'Net owners were having luxurious lives, they had Benzes. They caught a lot. But then a change-over came, that was about three or four years ago. So people stopped working in the companies' (interview 17, 17-02-2004). The net owners still living in the village continue fishing with what you may call a company, but the system is not in use any more and all workers are paid (often in fish) on a daily basis. This means for most workers fishing has become subsistence fishing. This could be an indication of the worsened conditions faced by Anlo-Ewe fishermen in the last five years, which could in turn explain a greater interest in the lagoon as a means of survival. From the many interviews held in the village with fishermen I repeatedly heard that catches have been in decline since the 1990s. The changed social organisation and the accompanying social breakdown (which we will discuss in more detail below) could also explain why the Anlo-Ewe disobeyed the rules relating to the lagoon.

From the comparative study of Entsua-Mensah & Dankwa it appears that the taboos were strictly obeyed in only six of the twenty lagoons (studied). Non-compliance was higher in densely populated areas and in areas where there were migrant fishermen (p. 19): 'It was realised that the rules and regulations were constantly being disobeyed especially where there were settler fishers' (Entsua-Mensah & Dankwa 1997: 21).

Up to now we therefore know that Muni lagoon is an area of multiple meanings such as ecological, religious-historical and meanings related to livelihood diversification. These multiple uses of the area are, however, conflictive. The forbidden usage of the lagoon by the Anlo-Ewe came to a head with the shooting incident directed by the Chief of Winneba, the traditional owner of the location. The next section discusses what happened and in the subsequent sections we try to understand the harsh action taken by the Chief and also explain the lack of an appropriate community response on the part of the Anlo-Ewe.

The shooting incident unravelled

On Tuesday 15 June 2004, something quite shocking happened. We heard a gunshot in Akosua Village. We rushed to where the sound had come from and found a group of about fifteen villagers -mostly elderly men and some women- at the side of the lagoon, nearby the communal gathering ground, looking out over the water. Some were pointing to the back of the lagoon and some were talking and laughing. There was not a lot of consternation, no people were shouting or crying, no one ran to their house to call others or to collect weapons. When we had arrived there was not a lot to see anymore and the lagoon was empty except for some birds. The villagers told us that a group of twelve fishermen of the village had been fishing with the dragnet in the lagoon. At a certain point three men had showed up at the east side of the lagoon and they had shot at or in the direction of the fishermen. Kwame, one of the fishermen involved in the incident, told us what had happened:

> 'They sneaked up on us through the bush. They bypassed the red house [at the border of the village], crawling on arms and legs. One of us then saw them. I also looked and saw them. When they noticed that we had seen them, and were collecting our net, they shot. No one got hurt. I went to confront them to let the boys escape. We collected the net and went away. Those people don't know how to swim. They don't know, so we go deep. Deep places, they don't know where they are. At the far end, if you can't swim, you will drown. We ran away in the bush. (…).' (interview 55, 15-6-2004)

According to Kwame, the men wanted to surprise the fishers in the lagoon and that is why 'they were crawling on arms and legs'. The time between the moment the fishermen spotted the 'criminals' and the moment they shot must have been longer than stated in the quotation. The reason is that a lagoon dragnet is a large net (approximately 200 metres) and once cast in the lagoon it is quite difficult (heavy) to collect again and, when we arrived at the lagoon, we did not see the fishermen anymore, which was two minutes after the shooting.

Before we discuss the action taken by the two main actors in this case, the Chief of Winneba and the Anlo-Ewe villagers, we should take a closer look at the men who shot at the fishermen. Who are they and how could they have been armed?

The 'volunteers'

When we discussed the matter with the wildlife officer (interview 56, 25-6-2004) and the chief fisherman of Winneba they told me that the men were volunteers and came from the Asafo companies of Winneba: 'The elders; six from nr. one, six from nr. two – that is Asafo – and (...) my own kingmakers too. So some of my elders plus the youth – they formed the taskforce to monitor the place' (interview 106, with the chief fisherman, 19-12-2005). The Asafo companies of Winneba are an old institution that used to function as 'the force which defended the town against external enemies. It had judicial and political functions in maintaining internal peace and stability' (Hagan 2000: 144). More recently the Asafo have played an important role in the social life of the town, and have participated in funerals, marriages, social entertainment and have played a leading part in ritual and important ceremonial events (Hagan 2000: 144). The Asafo are an important element in the power balance of Winneba (Hagan 2000: 168).

An Anlo-Ewe fisherman said the following about them: 'But they are criminals, they work at Tema harbour normally' (interview 55, 15-6-2004). My research assistant later told me that the fisherman meant that these guys normally stroll around in Tema harbour to see what they can steal there from newly imported goods. As the fisherman said: 'They are new. These just came. The cast net doesn't catch much, they arrest us when

the catch has almost landed, catch one, then they bribe us. Pay 30,000-50,000 cedis [2.72-4.55 euros] per head fishing! That money they share by themselves. They are many, when they want money they just come on their own' (interview 55, 15-6-2004).

When I spoke to the Chief of Winneba, two weeks after the incident, he confirmed that the lagoon is monitored by his people (interview 58, 1-7-2004). Checking the place is not the same as shooting at people, so the question is whether they are allowed to be armed, and even more so to use their weapons? According to the Wildlife officer, managing this RAMSAR site certainly does not involve being armed, but later on in the same interview he admits:

> '(…) sometimes when you put people on a job to do some action(…) people get out of hand (…). Some can take some cutlasses along as they go monitoring the place. But (…) I have not experienced that someone has cut somebody, but people are going out there, they are holding clubs, sticks, some cutlasses in case you maybe have to cross a place or things like that. But that is not to say that they are going out there to cut people or … But they might be holding one or two sticks around, as they move along the monitoring.' (interview 56, 30-6-2004)

The chief fisherman of Winneba said the following about volunteers being armed:

> MK: 'Then the people who go there to monitor, are they allowed to have arms?'
> CF: 'Secretly some have, that is secretly.'
> MK: 'Ok, but are they allowed to use them? Or can they only?'
> CF: 'That is why it is secretly…'
> MK: 'Sacred or secret?'
> CF: 'Secret.'
> MK: 'Secret ok, so you should not talk about it? [we both laugh] So they bring, but what kind of weapons do they bring?'
> CF: 'The small let's say local ones pistols.'
> MK: 'Ok, and do they use them you think?'
> CF: 'To threaten you.'
> MK: 'To shoot in the air?'
> CF: 'A warning.'
> MK: 'Warning shot. Ok. And these pistols that they use, where do they come from?'
> CF: 'I said locally.'
> MK: 'Locally so, does it mean that these pistols are also used by the Asafo companies?'
> CF: 'The Asafo get guns.' (interview 106, 19-12-2005)

I wondered if the Anlo-Ewe fishermen were themselves also armed. Kwame: 'I have my strength and some traditional backing' (interview 55, 15-6-2004). When he said this, he smiled knowingly so it would seem that Kwame is not concerned about the possible harm they can do. About a week after the incident we met Kwame in a little bar in the village where he and some other fishermen came in for a drink in between pulling in their nets. We then asked him jokingly how it was in the lagoon yesterday evening, because we had heard that he and other fishers had seen me late at night coming back from town. I had been using a LED torch to find my way in the dark and at first the fishermen standing in the lagoon had thought that I was a group of Effutu men coming to check on them, but then one of them had said – 'no this light is too bright, it is the *yevu'* after which they had continued their fishing. However, the fisherman gave us a strange look and just laughed. He stepped outside and told Anthony that the two men in the bar (wearing shoes and glasses) are Effutu who are helping him pull in his net today, but who were harassing him in the lagoon the other day! (household survey notes 23-6-2004). Unfortunately I did not get to meet the volunteers, to hear their side of the story.

The volunteers are not very successful at monitoring the lagoon. First of all the Anlo-Ewe often work at night and then it is difficult to actually arrest somebody (interview

107, with the Chief). Secondly, according to the Anlo-Ewe fishermen, the volunteers cannot swim (while the Anlo-Ewe fisherman can): 'So we go deep. Deep places, they don't know where they are. At the far end, if you can't swim, you will drown' (interview 55, Kwame, 15-6-2004). Thirdly if fishermen can be arrested, which is permissible according to the Chief of Winneba, those caught can often pay to be released: '… they like bribe, so no court case will come. They take money; it doesn't even go to the government' (interview 55, Kwame, 15-6-2004). The Wildlife Officer also hinted at the volunteers being tempted into corruption: 'You see, if you volunteer (…) and you find yourself that your actions are not rewarded, it is tempt[ing] to pollute your actions (…). And we are very sure that some of them might go into that kind of action' (interview 56, 25-6-2004). One of the net owners of the village told me that people sometimes do get caught and are brought to the police. His own brothers got caught when they had decided to go to the lagoon after their net had been damaged at sea. They were put in custody for a week and he had to pay money to get them released. According to the fisherman that was a one-off chance and if they were caught again, they would not be able to pay for their release a second time (interview 37, 1-6-2004). From the Chief of Winneba I also heard that they had had little success prosecuting the fishermen that had been caught:

> CG: 'I think I once told you, we reported all these cases to the police. It was only one case that was sent to court, the others – [claps in hands] the police mishandled the situation.'
> MK: 'Mishandled it? How?'
> CG: 'They were not serious about it.'
> MK: 'But how can you not be serious about it?!'
> CG: 'I am telling you…'
> MK: 'The law is at their side?!'
> CG: 'The one that went to court, they also cautioned them and discharged it.'
> MK: 'Hm, ok, so…'
> CG: 'So they never took it so seriously.' (interview 107, 19-12-2005)

Asking the police directly to monitor the lagoon is difficult as well, as the chief fisherman told me: 'Before the police will go you need this, do this… that is a problem' (interview 106, 19-12-2005).

In the fieldwork period following the incident I continuously tried to understand why the Chief of Winneba was so serious about this issue of breaking the rules of the Anlo-Ewe and on the other hand I tried to understand the reaction, or rather the lack of reaction of the Anlo-Ewe to this incident. The two following sections reveal the outcomes.

The chief of Winneba

We learned that the Chief of Winneba, in concordance with the priest of the god of the lagoon and the chief fisherman, had gathered volunteers from both Asafo companies to monitor the place. The volunteers were allowed to use weapons to threaten the Anlo-Ewe fishermen and out of the lagoon. The arrests made were, however, not so successful due to a lack of will on the part of the police to follow up on the cases. What remains is the question of why the traditional authorities of Winneba were so strict on this that weapons were even used?

When I first spoke to the Chief (before the incident) I asked him about the Anlo-Ewe in his community. The Chief expressed a whole list of complaints about the Anlo-Ewe

fishermen; they failed to pay for the land,[12] the fisheries were mismanaged, workers left because net owners were not keeping them well, catches went down (since the dragnet has detrimental effects), they misused the lagoon and spoiled the area. Because of this misuse of the lagoon plus other mitigating facts, the Chief expressed his wish to relocate the fishermen. He had other plans for the location anyway. The Chief pictured the lagoon site as a perfect tourist location (interview 27, 27-3-2004). When I talked to him again (after the incident) he said: 'We want to resettle them, to the western end of Winneba where there is no lagoon they have to destroy' (interview 58, 1-7-2004). In this conversation he explained more about his other plans for the site:

> 'I am looking for a credible investor who is prepared to preserve the lagoon, keep the ecology in mind – of the place. (…) A resort or some kind of hotel. So we can have big fish again. (…) I want the investor to do some dredging and plant mangroves. Maybe also some water sport.' (interview 58, 1-7-2004)

The Chief therefore had other plans with the lagoon and framed his plans in an ecological perspective. The Chief and the WD were working well together on managing the lagoon. I asked whether the WD officer knew of the Chief's plans and what he thought of them. 'They want to develop the place for tourism, but I also have another perception (…).[B]ecause I know tourism also brings a lot of problems (…)'. Does the Wildlife officer think the villagers are an environmental threat – as the Chief suggests?

> [T]hey are not really a threat, but they are from the point of view of the traditional authorities (…) And (…) they are helpful, especially when the turtles come ashore to lay eggs, they realise that they are close where they live and can help. But if you put a hotel there and something happens, who are going to help? (interview 56, 30-6-2004)

Although the Wildlife officer was very concerned about the Anlo-Ewe, he still thought it would be possible for them to live there. He stressed that their misbehaviour is often due more to a lack of alternatives than other reasons. With enough education and awareness programmes he felt he could make improvements.

Apart from using environmental arguments against the Anlo-Ewe, the Chief also discredited them in another way. One of the first times I spoke with the Chief, I expressed my interest in this migrant group of fishermen living in his community and asked him what he thought about them. The Chief initially said that the Anlo-Ewe fishermen came to stay, and were not temporary migrants. However, later on in the interview he tried to stress the contrary – that their stay was meant to be temporary and even more so because they had constantly been causing trouble, even escalating to something as serious as ritual killing! At first, being an outsider, I failed to realise the full meaning of what he had said. Later I realised that this reference to ritual killing in relation to Ewe is a known practice in Ghana. It has resulted in the Ewe trying to conceal their ethnicity when travelling, due to the negative associations with being Ewe. When Sesime (my RA) and I went to Half Assini for the first time, we had a little chat with the owner of the hotel where we were going to stay for the first few days. She asked where we came from. I replied that I came from Holland and Sesime said 'I am a Ghanaian'. She asked: 'Where from?' He mentioned the village he came from in the Volta Region. When she had left to get our drinks, he said that he did not like to tell people where he came from. 'Isn't it enough to say you are Ghanaian? Why asking all these details?' I asked him why he did not like to say exactly which village he was from and he replied that it was

[12] This is denied by all Anlo-Ewe leaders. One of the net owners showed me a receipt proving his payment.

because they would then think you would be wicked (fieldwork notes 20-10-2005). Other studies have also revealed how other ethnic groups associate the Anlo-Ewe negatively as being 'thieves, kidnappers, sorcerers and ritual murderers' (Greene 1985: 83-84). 'Among Fanti townspeople [in Cape Coast] (…) the Anlo were generally regarded with fear, suspicion and hostility. From childhood, Fanti learned to view the Anlo as thieves, kidnappers, sorcerers and ritual murderers' (Wyllie 1969b: 133). Geurts explains this by pointing out that Anlo-Ewe have acquired a dominant position in Ghana due to their relatively high levels of literacy and lead in the professional and educated sector, for which they are respected and resented. Then there is their association with voodoo: 'stories abounded among Ghanaians about the potency of Ewe juju' (Geurts 2002: 122-125).

However, the Chief's environmental concern is a bit dubious since, if he indeed regarded the conservational aspect of the location as being so important, why then did he opt for this kind of activity, that is patrolling the site by volunteers sensitive to bribes, rather than other kinds of activity? In my fieldwork I easily found enough 'evidence' of the Anlo-Ewe breaking the rules: all those nets spread out to dry on the compounds, women openly cleaning heaps of lagoon fish (in quantities which are hardly possible to catch using cast nets) and fishermen freely walking around in daytime on their way to the lagoon on a Wednesday with a dragnet on their shoulders. Is it not convenient for the Chief to claim that these Ewe are misbehaving; not paying for the land,[13] misusing the lagoon, etcetera? When he told me about how he was trying to do something about the fact that the Ewe did not pay for the land some years ago, he said something interesting:

> 'In 1998 I took them to court, but then I dropped it. I realised it would create more problems. You see in conflict management you have to be smart, you have to act appropriately. So I dropped it and let them go. There it all started. They are causing harm and are not grateful, so… (interview 58, 1-7-2004)

He was also being smart. He created the image of the migrants not acting in accordance with their status as guests. The monitoring of the lagoon by volunteers fits the same image, namely that of following up on this rule that is being broken? The idea is probably so that he could prove what was happening and fuel his argument in favour of resettling. Already it seems to be that he was not really that concerned about the environment but was more interested in using the site for economic purposes (tourism), based ostensibly on environmental reasons. However, the persistency of the whole thing gives one the feeling that there is more behind the facade.

When I met the Chief he came across as a man who wanted to develop Winneba. He seemed to long for the bygone days of prosperity, when fishing boats returned home with abundant catches and when Winneba still had a harbour function. However, things had clearly changed. Winneba's population had, to a large extent, become impoverished and he obviously wanted to do something about that. He was a modern Chief, went to conferences, invited scientists to perform impact studies and wanted to set up a twinning relationship with a western city. He had travelled, had studied abroad and was happy to see me and was more than willing to talk to me and explain his viewpoints. We had a lot of discussions during which he often tried to see whether I could do something for him, and for Winneba.

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[13] See the appendix for a proof of payment one of the net owners of Akosua Village gave to me, to prove that they still do pay for the land.

One of the things we talked about was the chieftaincy conflict in which he had become involved. These are widespread in Ghana, but in Winneba it is quite serious. The conflict mainly revolved around the issue of who was entitled to the position of chief, with two rivalling houses (Otuano – the house of the Ghartey family – versus Akramano) each claiming their rights. The point of conflict is the line of descent, with the Otuano house claiming that, since time immemorial, all offices associated with 'nation-making' or politics have been transmitted from father to son (Hagan 2000: 170). The Akramano house claimed that the kingship in its present form (without ritual powers[14]) had developed mainly via its house. This house could lay claim to the position in 1858 via the maternal line, which could be backed by the dual descent organisation of Effutu society (Hagan 2000: 49, 169, 170).[15] The complicating aspect in Winneba is that the two Asafo companies had become involved in the dispute and each supported the other house (*Ibid.*: 149-172). Whereas in the past the Chief had been elevated above the two parties, nowadays the society is completely divided because of the opposing claims of the Asafo. The Chief therefore had the difficult task of manoeuvring in such a way that both Asafo groups were happy (this had always been the case but had recently become more difficult). The Effutu refer to this as being similar to carrying twins on your back and taking care not to drop one (*Ibid.*: 172).

Traditional festivities, with a central role for the Chief, were always tense. From 1996 onwards, Winneba's Deer Hunt Festival[16] festivals, whereby the two Asafo companies compete in order to catch the first live deer, have been potentially explosive.

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[14] This has been explained as the result of European presence: 'The European presence served to enhance the secular aspect of the Odefeyship, when the Odefey started negotiating trade terms, receiving gifts and rents, and, generally, being called upon to perform duties that hitherto had not been his prerogative'(Hagan 2000: 171).

[15] According to Ephirim-Donkor (2000) this matrilineal claim to the position of chief of Winneba has been influenced by the strong Akan (Fanti) influence on the Effutu. The Akan have a matrilineal descent whereby 'all matters pertaining to citizenship, political succession or inheritance rights come up to [to the question]: Who is your mother?' (p. 14) 'The gist of the problem in Winneba is the attempt to introduce the ebusua system of secession into the political process' (p. 18).

[16] The Deer Hunt festival is originally the main festival of the Effutu. It is celebrated in honour of the main god of the Effutu, *Penkye Out* and carried out in such a way that unity and peace were strengthened among the divided Effutu based on a code of mystical and moral regulations. During the festival the two Asafo companies go out to the hunting grounds to compete with each other in catching a deer (in fact it was an antelope). The first deer caught (alive) counts and is offered to the god. The deer hunt has also led to the creation of two Asafo companies, to speed up the catching a deer the Chief at that time created a second asafo. Each group tries to catch the dear at separate hunting grounds. The competition between the asafo companies is linked to the ecological and cosmological domain. If Asafo number one comes in first with the deer the Effutu believe there will be abundant rainfall and harvest, if number two comes in first there will be poor rainfall and a rise in births (the Effutu believe in a coinciding of food scarcity and a high peak of birth). Hagan studied the first link and he indeed found a correlation between the company winning and rainfall. He explains it by the separate hunting grounds – previous rainfall determines where the deer are best to be found (Hagan 2000: 131, 173-195). Nowadays it should be noted that the festival has changed, it has become a national festival supported by the government (*Ibid.*: 249). This has resulted in strong pressure for the festival to take place, whereas in the past it only took place when all parties (the two asafo companies, the chief and the elders) agreed to do so. The celebration of 1999 apparently completely broke with the moral code by having the two asafo bringing in a deer to other power holders than regulated, as Hagan concludes: 'The various breaches of the code have removed the fear that propelled all actors to resolve their differences and seek reconciliation and peace to enable them to celebrate the festival.' 'Thus chieftaincy disputes have remained unsolved, and the chieftaincy institution has ceased to be a unifying institution' (*Ibid.*: 250). The last complicating problem is that the deer has become so scarce, that it becomes difficult to catch one at all (Ephirim-Donkor 2000: 12).

Figure 8.6 Statues portraying the Deer Hunt Festival

Moreover, when I was there in 2004 the police had to send in extra personnel as a preventive measure, with tanks at all major crossroads! The Chief's drive to develop Winneba came across as genuine, and was understandable given his position as Chief whose legitimacy was being questioned. Being able to do great deeds for the community would perhaps silence his opponents. His urge to develop this tourist site would seem to fit this interpretation of events.

Just before I left Ghana I had a final discussion with the Chief. We talked about the problems facing Winneba and the opportunities, and about the chieftaincy conflict and the developments around the lagoon. At the end of my interview I returned to the issue of the Anlo-Ewe having to move from their village and dared to be straight with him. His answer was illuminating:

> MK: 'Can I just come back to these Ewe, because it is the main focus of my study. I don't want to upset you, but I just want to play devil's advocate … do you have some kind of grudge with these people? Because it seems you are very focused on their misuse of the lagoon, the way they go about the toilet, and, you know that they are defecating everywhere and the mangroves … But if I look around in Winneba, I see other things happening that are also not fine. You know if I go here to the beach, I find it much more dirty than if I go to this actual beautiful site … So somehow I can't help myself thinking that it is because these people are not from here, it is because they are migrants that you somehow want to relocate them, whereas if it would have been local people, you wouldn't have had that kind of insight.'
> CG: 'If we would have local people over there, we would still do the same thing, because um … the kind of resort we want to have cannot cope with that community. Let me say this, it is a decision not made but discussed, to relocate the Police Training School. You cannot put up that tall building and look at those … of the police. Dry their uniforms and that sort of thing, fire range, a lot of those …'
> MK: 'Yes, meaning it is not only the Ewe but it is also the police school that you are thinking of, yeah…' (interview 107, 19-12-2005)

After I had repeated what he had said, rather forlornly and with little hope of gaining any additional insight into why he was so focused on the Ewe's misuse of the lagoon, he suddenly revealed the underlying argument:

> CG: 'Now, they have done more harm. They have supported this chieftaincy dispute!' (interview 107, 19-12-2005)

I was excited about what he said and curious as to whether he could reveal any more. As we continued our discussion, I could tell he was really affected by this, and he wanted to convince me by vigorously repeating 'they have, they have'.

> MK: 'How have they?'
> CG: 'Financially! That is why a lot of their businesses have collapsed. They have put in so much money, in the other side.'
> MK: 'Why would they support the other side?'
> CG: 'Maybe they were coerced to do that, I can't tell, but they have!'
> Mk: 'Hmm.'
> CG: 'They have done it! There is no dispute about that.' (interview 107, 19-12-2005)

There it is then. The Anlo-Ewe have taken the wrong side in the chieftaincy conflict. So it all came together and at last made sense. His position is undermined by the conflict with the Ewe supporting the other side.[17] As a way to get out of the conflict, the Chief puts his money – as a figure of speech – into developing the town. This tourist development project is prestigious and a project like this is just what he needs in his precarious situation. The little village of the Anlo-Ewe is positioned at the heart of the whole plan, nearby the beach, nearby the mouth of the lagoon where it is safe to swim because the water is shallower there. The Chief is convinced that the area is valuable for upmarket tourism:

> CG: 'that area could be a cash cow for Winneba. If we have about a 1000 tourists coming to Winneba per annum and each spends about a 100 US$ in Winneba, that is a million dollars. And that is big money! (...) we want the place to be a resort free of all these ..., where people can have adequate land area to sleep under the coconut trees, you know whatever games and whatever sports, leisure, everything … Make it a class of its own. Like those resorts that you see on CNN.'
> MK: 'You are really thinking of a major, Busua Beach Resort, Elmina Beach Resort …'
> CG: 'Ah those even don't, the resources we have here don't match what we have at Busua or Elmina, I have been there a couple of times at workshops – we have a very nice scenery.' (interview 107, 19-12-2005)

The fact that the Ewe have to move from where they have been welcome for more than 100 years is easy to explain by pointing out that them being near such a beautiful resort is just impossible, and they are not the only ones that might need to resettle, since the police have to as well! In his quest to get rid of the Anlo-Ewe he used a variety of strategies, for example by stating that they never came to stay – that they were temporary migrants – stating that they failed to adhere to rules of paying, that they spoiled the area where they lived, that their fishing was not serious anymore, that they were an uncontrollable lot without a chief guiding them, making use of the stereotype that Anlo-Ewe were wicked by referring to ritual killings and by trying to convince us that the alternative location is the same thing as where they are staying now 'without a lagoon to misuse', etc. etc. The Anlo-Ewe have to move!

It is however questionable how successful he will be. One of my informants in Winneba said that at a political level (which is strongly interrelated in the Winneba

[17] As this interview was held at the end of my fieldwork period I was not able to discuss the chief's acquisition with the Anlo-Ewe. It is however important to realise that strangers in Winneba are soon dragged in the conflict. It is difficult for outsiders to stay out of the conflict, talking with people belonging to one party almost immediately means that you must oppose the other side. One day I was also pulled away by a stranger after leaving the chief's palace and asked to come and talk with 'the other side.' Although I was interested in doing so, the way in which I was approached at that time made me feel unsafe and I managed to walk away. As I had my hands full with my research in Akosua Village I kept my distance to getting involved in the chieftaincy conflict of Winneba.

chieftaincy conflict – see also Hagan 2000: 172) the Chief could never succeed in relocating the villages, for the NDC would never agree to it and the NPP Government will never dare to resettle Ewe people.

In the literature we can read about a similar story that happened in the Western Region, with a local leader taking on an Anlo-Ewe migrant community. That happened in 1964, in an Anlo-Ewe migrant fisher village called Abakam next to Cape Coast, albeit that the outcome of that case was more radical than in this case. The Abakam migrant fishermen were indeed evicted and their village was burnt down. Like Akosua Village, Abakam was founded at the beginning of the twentieth century and gradually evolved from a fishing camp into a permanent village. The villagers were warned a couple of times and then one day were ordered by the police to leave the village to be resettled in another village nearby. Once they had left their houses, the whole village was set on fire by the workmen employed by the Cape Coast Municipal Council (Wyllie 1969b: 132). In the analysis of what had happened we can see several similarities. In Abakam it was not the Chief but the Regional Commissioner who had acted 'primarily as an agent of powerful tribal sentiments, reinforced possibly by political considerations and by a desire to pursue a personal or family feud' (*Ibid.*: 140). In Wyllie's analysis of the case we see that the whole thing can be brought back to an important incident in the 1940s when the Regional Commissioner at that time became the director of a fishing company financed by his mother, which operated from the beach in front of the village. The fishing company had started fishing without consulting the village headman: 'Hagan is said to have taken the view that, as a Fanti, he did not have to consult an Anlo before fishing from a Fanti beach.' As other Fanti-owned companies had shown that respect to the Anlo headman the Anlo had seen his actions as a deliberate affront and a hostile act (*Ibid.*: 133).The Regional Commissioner only fished for two seasons and, according to the Ewe, he was a poor fisherman, after which he stopped and moved on to other professions ending up as Regional Commissioner after a career in politics and later becoming the initiator of the resettlement scheme.

The Anlo-Ewe in Akosua Village

There are two sides to this conflict, that of the Chief and other traditional leaders of Winneba and that of the Anlo-Ewe of Akosua Village. The question is how the villagers assess the situation and what position do their leaders take in the conflict?

The leaders in Akosua Village are the chief of the village, the assemblyman and the net owners. The Chief, a net owner himself, inherited his position from his father. The daughter of the founder of the village, the first Anlo-Ewe Chief of the village, explained how the present Chief became Chief:

> O: 'My father, … it was the people from Winneba themselves who made him Chief. He refused, but they also refused and forced him to be Chief.[18] So when he was on the throne and was getting old, he himself went to the town to tell them that they should get another Chief because he was getting old. He didn't want to settle these cases anymore, with this man says that, tomorrow that one says that…But they [the people from Winneba] also refused, and asked him to present somebody who he thinks could succeed him. So all of them came together; the Fanti's[19] and my father and decided that they would put Togbe Akpadeh on the throne. So when they did that, they said all of them were boat

[18] The translator added that the Fanti knew him to be the leading man so they forced him to become chief.

[19] The inhabitants of Winneba are often called Fanti by the Ewe. This is however not correct since the natives of Winneba are Effutu. Yet many Fanti live in Winneba and Fanti is the common language spoken (see also Hagan 2000: 1).

> owners, so no one should be bitter against the others. So they were all invited to come, and they told them that their elders say he can no longer be the Chief, and so they chose another Chief. This is how Togbe was introduced to them.' (interview 21, 20-2-2004)

The Togbe referred to was the father of the current Chief. It shows how the elders in Winneba demanded that the migrant Ewe have someone to represent them. Once that man had been appointed, subsequent chiefs could be chosen by the Ewe themselves. The current Chief came to power in 1986. According to the fisherman we spoke to after the shooting incident, the Chief of the Anlo-Ewe did nothing for them, did not confront the people monitoring with what they were doing (interview 55, 15-6-2007). His answer did not surprise me. From the many interviews held with the villagers a picture emerged that the Chief of the village was not a very active man and hardly respected. One of the fishermen had fished in the fishing company of the Chief and said: 'He inherited the chief position from his father. But he doesn't respect you, he doesn't want you to respect' (interview 39, 1-6-2004). Another fisherman replied, when I asked him how often he saw the fisheries chief, that he seldom saw him – he only came when the rent (to the hosts from Winneba) needed to be paid and even in case of conflicts on the beach they would try to settle the conflicts without consulting him (interview 41, 3-6-2004). The Chief also complained about the villagers: 'But the children now, they don't pay respect. I don't worry them, it is all on its own. I have houses here and at home, I relax here for one or two reasons. My net is in the room, the boat is here. But the people are no more here. The small net owners spoiled the business' (interview 23, 14-03-2004). The people the chief refers to are the net owners from the olden days, the leaders of the village. In a migrant village such as Akosua Village the economic leaders, the net owners are also the political leaders. Wyllie, who also performed research in Akosua Village in 1969,[20] explained how this was arranged:

> 'The net owners' authority is legitimated in three ways: 1) most non-members [of companies] are economically dependant, as fish curers or fish sellers, upon the incumbent company. Economic dependence is translated into political dependence upon its leader, the net owner; 2) most non-members are relatives of company members who are responsible for their good conduct and in this way bring them within the authority system of the company itself; 3) non-members reside in a section of the village by permission of the net owner whose company lives there. It is the net owner who rents the land occupied by residents of a section.' (Wyllie 1969: 407 [with my adding])

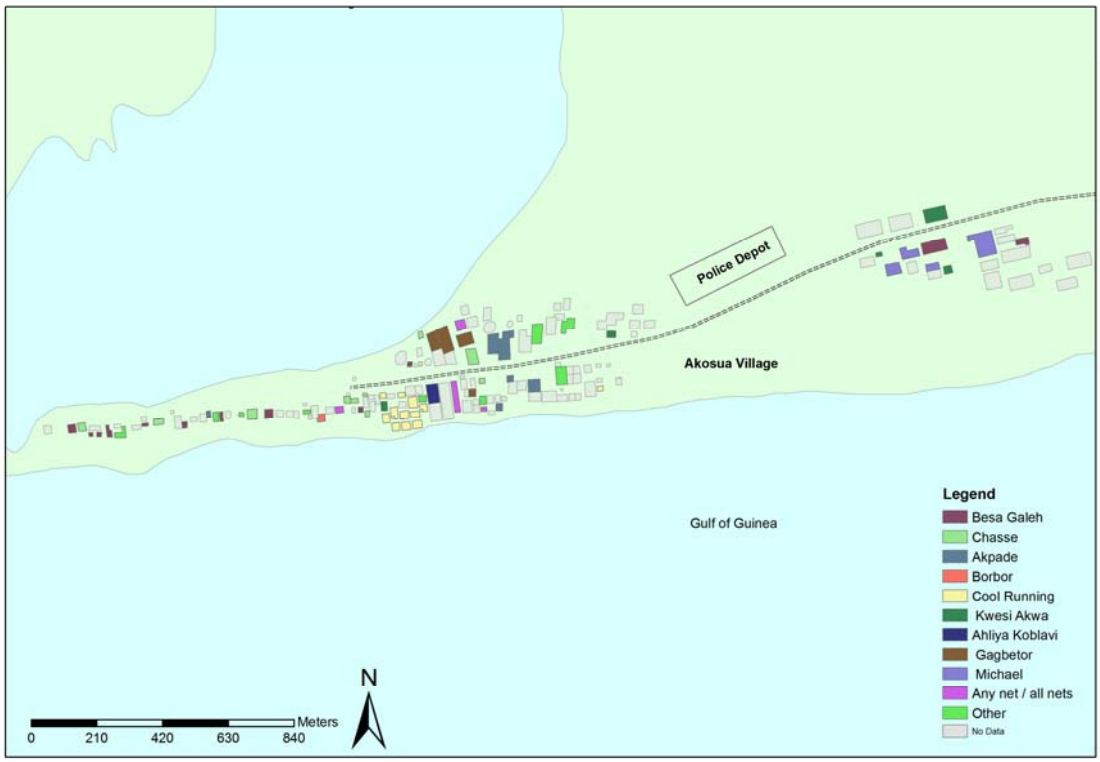
This village structure and leadership logic is still present in Akosua Village. When my research assistant Anthony and I decided to stay in the village in 2005, we were also advised by my informant to present a gift to, and to ask permission from, the net owner responsible for that part of the village, and so we did. Such a village organisation differs from the setup in the home area where leadership is based on kinship and positions in the lineage. In his article Wyllie compares Akosua Village with Srogboe (a village in Keta District), and shows how the villages differ in terms of organisation of the economy, physical setup of the villages (see Figure 8.7 in which this is still reflected in Akosua Village in 2004), demographically (compare with Chapter 3) and socially.

According to Wyllie the 'combination of youth and social heterogeneity constitutes a force which tends to undermine the power of tradition, particularly in relation to marriage' (Wyllie 1969: 409). He also explains that in Akosua Village, where there are fewer elderly people than at home, there is 'a paucity of those who personify tradition and, as its living agents, insist that things follow the time-honoured patterns (*Ibid.*: 405). The daughter of the founding father of Akosua Village said the following about the

[20] Akosua Village is called *Muniano* in the article.

youth losing their traditions (as translated to me): ‘Ok when it comes to the youngsters too, before you marry you had to ask permission from the parents. (…) Even if you were deeply in love and your parents didn’t agree, you had to respect your parents’ decision, because if you were to go against their decision, you wouldn’t belong to the family anymore. That is how things happened in those days’ (interview 21, 20-2-2004).

Figure 8.7 Map of Akosua Village showing in which company the men of the households fish



Source: author and the GIS department of AMIDSt.

According to Wyllie, the political organisation of the village is economically based and ‘Legitimisation of authority no longer requires a myth of the founding fathers, such as we find in Srogboe’ (Wyllie 1969: 410).

As we read before, some years ago the workers protested against the net owners saying that they were exploiting them. A lot of net owners then left the village, after which their children took over, and some new net owners arrived. Therefore, neither the Chief of the village nor the net owners are respected as village leaders anymore. Nor is the Assemblyman, who represents the Anlo-Ewe community in the Districts Assembly in Winneba. His appointment had also led to fierce campaigning and conflicts in the village. During our household survey we spoke to a man in the village about the assembly man. He is related to him but also he says: ‘Formally he worked, but now he is not doing anything at all’ (household survey ending 30-6-2004). Although he is the person they go to in the event of conflicts when the Chief is out of town, he is never referred to in a positive way.

This conflict in the village between the old net owners and the young fishermen, the fact that the villagers are not united, the low catches, the end of the company system, and the fact that the rituals are not performed as they should be, are all talked about as being connected to each other. The one cannot be understood without referring to the other. As one of the fishermen says: 'Leaders, net owners, bozus – they drink, workers fight, it is foolishness' (interview 39, 1-6-2004). 'Formerly the ritual was done here, but now we are not united. No one will be able to bring the people together' (field notes 28-11-2005).

In a discussion with a couple of fishermen together, I asked them why they did not fish in the company system anymore. The following discussion shows how this is related to the smaller catches and the cheating of the net owners:

> Young net owner: 'The former net owners deceived the workers, the workers were brought here to fish but the money never came. We [he was one of these workers before becoming a net owner] could see the catch coming, but no money came. That opened our minds, so we decided to all look for our daily bread now. I will stop here.' [many fishermen laugh]
> MK: 'Were only the net owners leaving, or did some workers go with them?'
> Young net owner: 'When they do it to you, when they hurt you like that, will you go? The nets are even still here, they just left!'
> MK: 'So when was this all happening?'
> Youth leader: 'That is why I said our uncles, our forefathers who were here first, they were honest. Our grandfathers would build a house for you if you came to work with them. They wouldn't just leave you struggling. It is those who were the treasurers, who cheated. They were outsiders. Now they are all out, their own kids are doing it now.'
> MK: 'So we can distinguish three periods in this village, the first of the forefathers who came here, then that of the uncles and now. How many net owners were there in the olden days?'
> Answer: 'Those who were elderly, they were about 12. They were understanding and honest people. It is when they died, those who took over, those were the ones causing the problem. Their children are the people now, stealing from the workers.'
> MK: 'How did the ending of the company go, that change in organisation, was there a revolt?'
> Answer: 'It was clear, you see the catch, you see what you get and you know. That is all, no revolt. All just left the company. The nets were still there, but who was there to pull?'
> Young net owner: 'If you work for someone, it is the food you eat that makes it fine. If you work on an empty stomach, you work with stomach aches, then you will leave.'
> MK: 'Where did the workers all go to?'
> Answer: 'Some left for home, some found other jobs, some joined other companies.'
> MK: 'The ones who stayed and stopped fishing, how did they survive?'
> Answer: 'Now there is no more company, that is how the system changed, so they started working on a daily basis.'
> MK: 'What is better, working in a company or outside a company?'
>
> Answers:
> - 'If the owners are honest, a company is better.'
> - 'No, even now, the time you are in a company 2,3 years, they keep your money – ah, you just use the interest to pay the people. I might as well get the money and interest myself!'
>   (…)
> - 'Some don't know about a company system, they don't know how it works. They don't know all, they just get their share and that is all. But at the moment the sac comes, and you have a catch, you pack the net in the boat and you go to the house, you see the account, then you see you are cheated. That is why they don't let you come to the house, then you will see.' (group interview fishermen Akosua Village, 8-6-2004)

Declining catches, the end of the company system and growing revolt among the workers are complaints referred to in one and the same breath. Or as one of the older net owners explained in response to my question about the main problems facing fishermen in Akosua Village:

> 'For us here, one of the problems is the net, petrol, the motor and the canoe; they are major problems. It is so expensive. Formerly, … they stopped pouring libation and making the customs. We had a net owner meeting. We went there, we consulted the Gods, we asked what they wanted from us and when we gave it to them we believed that the sea would open. But now general rules are left out, the small personal ones are done; to pour libation. But we have to do it as community.' (interview 51, 10-6-2004)

Young and old though complain about the rites, the rituals not being performed anymore as an explanation for bad catches. I asked a crew member (of 27 years old) how their fishing was going:

> Fisherman: 'There has been a drastic change since 1991. When I came [in 1990] the catch was plenty, even if I didn't know how it worked. Now I know and see it is spoiled.'
> MK: Why?
> Fisherman: The customs; we don't perform it anymore. Some men don't have room, and then have sex on the beach. It is not kept healthy. The Lybia net also is a problem. There are fetish on the beach – we believe; the kids spoiled everything.
> MK: How do you value the customs as a Christian? [He had told me he was a Christian.]
> Fisherman: Custom is custom. That is how I grew up. Whatever you worship, do it well in truth. Now some say they believe, but they do the wrong things! (…) Net owners and gods…, but now the gods are not doing their work. That is why I say that it is spoiled. Now they perform rituals, two companies but that is useless. Nobody puts all their trust in the gods. So things are changing.' (interview 39, 1-6-2004)

The fisherman tried to explain to me that, although some net owners still perform the rituals, this is no longer done by the community as a whole despite that being what is needed. Another fisherman (32 years old) told me the following when asked about how their fishing was going:

> Fisherman: 'It is not like it used to be. Now sometimes we are not even getting fish.'
> MK: 'How long ago?'
> Fisherman: 'Some six years ago there was a fall in the catch, with an occasional influx, but that doesn't stay.'
> MK: Why do you think it changed?
> Fisherman: Formerly when our grandparents were here, they would say 'Let's buy a male sheep – if there would be a fall in the catch, or a fowl. To pay the Gods, sacrifice, but those old people are not here anymore. It is we the children who are there. If I buy a goat and a fowl, someone should be there to perform.'
> MK: 'How is it performed?'
> Fisherman: 'The custom is not performed at home. They did it at the elder's beach. Only the elderly were there, children can't come, that is part of the cult. Whenever it was done, there was a change.' (interview 41, 3-6-2004)

As we saw before in this thesis, this linking of religion, nature and social functioning of the group makes sense in the world view of the Anlo Ewe. Ecological disorder – such as declining catches – 'also signalled disequilibrium in the social and cosmological realms' (Akyeampong 2001: 104). The reverse is also true, namely that disequilibrium in the social realm can create ecological disorder. In the other case referred to in this chapter I devote more attention to this mindscape. For now it is important to realise that the Anlo-Ewe in Akosua Village are not united and lack legitimate and respected leadership, which is problematic in their relationship with their host community. The Chief of Winneba is able to simply deny the presence of the Chief of Akosua Village: '*There is no Chief, he left three years ago, took his gear to his hometown. I was told he came back, but have not been seeing him*' (interview 27, 27-3-2004).

Sub-conclusion

On the surface this case is about a local chief taking action against migrant fishermen breaking rules set to regulate access and use of a lagoon. This may seem to be just and understandable but it is also slightly questionable since a number of rules are broken (also in relation to the use of other lagoons in Ghana) and one might wonder why these rules are monitored to the extent of using weapons! We discovered that the Chief *framed* his course of action in an environmental discourse and emphasised his right to act as the traditional owner of the lagoon and as being empowered by the laws of the Government of Ghana. Looking at the case in more detail reveals that the environmental concern was not the driving force behind his actions. Instead, he was motivated by economic and political interests. After all, his entitlement to being Chief of Winneba was being openly questioned and was dividing the town into two camps, namely those supporting him and those supporting his opponent. The legitimacy of his rule was at stake. In this whole context the Anlo-Ewe had, according to the Chief, taken the wrong side! Moreover, because of the chieftaincy conflict he was eager to silence his opponents by showing his capacity to be a good chief. The tourist project at Muni Lagoon is going to be a prestigious one and that positive attention for his leadership is clearly necessary. Therefore the Ewe simply stand in his way. In order to get rid of them, he used a wide range of strategies. He tried to discredit them by saying that they failed to pay the rent for the land, thereby undermining their right to be there, by playing the ethnicity card (evil Ewe!) and most convincingly by pointing out that they damage the environment and that their presence is of no interest anymore since the big companies have collapsed. The Chief was aware of the Anlo-Ewe internal problems and exploited these.

Although the Chief did come across as a Chief who cared for the development of his town and was therefore looking for investments that would generate economic development and job opportunities, it is doubtful whether a five star hotel will bring wealth to the community as a whole. The other traditional leaders supported the Chief in his actions against fishing in the lagoon. It is unclear whether they are also hoping to gain from possible profit from any future tourist facilities.

The wildlife officer was at least doubtful about whether the relocation of the Anlo-Ewe and the creation of a tourist facility would have positive environmental effects. He was happy with the assistance provided by the Chief as regards monitoring the lagoon, since he and his staff were largely ineffective and lacked resources. However, he was not that positive when asked whether the approach used was effective; aware as he was of the difficulty of preserving stocks if the users are dependant on it for their livelihoods.

The volunteers appeared to be a group of men who were less involved with the cause of their action and more with arranging their own livelihoods. This might explain the lack of shock on the part of the Anlo-Ewe when the gunshot was heard for they knew that it was not deadly serious and that things could be arranged with the men who, besides being volunteers, also helped to drag in their nets.

The Anlo-Ewe fishermen were breaking the rules because of a lack of alternatives. Fishing in the lagoon is their livelihood strategy of diversification, one of the few they have as migrants. The monitoring activities do not seem to worry them too much since they know that things can be arranged. This might be explained by the fact that fishing in the lagoon is officially also forbidden in their home area but since Keta lagoon is so large and since the law is questioned much more in the land of the beach seine, they are

not familiar with fierce control of the state law. There are no traditional taboos on fishing with a dragnet in Keta lagoon. The environmental discourse that the leaders of Winneba make use of in justifying and explaining the action taken does not seem to take root in the mindscape of the Anlo-Ewe fishermen. Instead of referring to the traditional and religiously embedded rules, the leaders refer to the detrimental effects on fish stocks. This conservational discourse does not have an effect on the Anlo-Ewe fishermen because they do not have the 'luxury' of conserving fish-stocks, and because they are short of alternatives and need to eat. They realise that catches are declining at sea as well as in the lagoon, and they know that something needs to be done about it. However, their solutions are expressed in terms of disharmony in the community, the breakdown of social order (having sex on the beach) and the failure to perform the right rituals. However, in the end they put their hope in their belief that the gods will also provide for the future.

The lack of articulation of protest against the Chief of Winneba's action is, however, also a sign of a lack of leadership. Akosua Village comes across as somewhat disintegrated, as the Ewe Togbe himself said 'it is every man for himself', an expression that does not tie in with Ewe norms and values. The fact that Akosua Village is a migrant settlement explains how the changes in the economic organisation of the village (the loss of the company institution followed by the old net owners leaving the village) has resulted in a breakdown of political organisation. Wyllie pointed out how the demographic structure of migrant villages and their economic focus resulted in a loss of traditional power and to changes of the social order (Wyllie 1969). The declining catches of the 1990s and the malpractices of net owners in those days resulted in the demise of a social system. All this has resulted in ineffective leadership, a power vacuum and a breakdown of social order. It appears to be a little village in crisis as regards the social, environmental and cosmological order, where people all engage in their own endeavours without much concerted effort. This makes them highly ineffective in their dispute with the Chief of Winneba.

In the following part of this chapter we shift our attention to the homeland of the Anlo-Ewe to see how they deal with external events that affect them in their livelihood in their home area where their own governance structures apply. Are they more effective at home? We will see how they themselves, in the Keta case, frame their political action in an environmental discourse. The Keta case will also show how one should be careful in dealing with mindscapes and world views in a deterministic way since some Anlo-Ewe made use of 'tradition' to solve the problem whereas others put their hope in 'modernity'.

Keta Sea Defence Project[21]

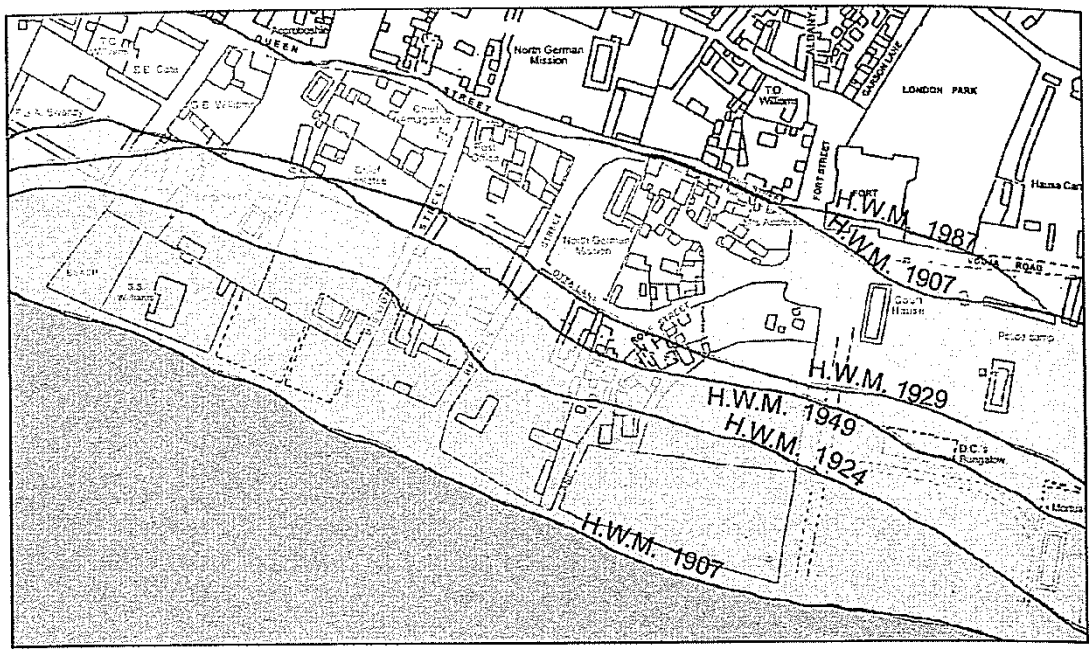
The coast of the Volta Region, and more precisely of Keta District, has been suffering from severe sea erosion for over 100 years now. Ever since the erosion occurred, the problem was assessed and plans were made, both by local inhabitants and by policy-makers. The case in point here shows how a different understanding of the problem has led to different strategies for solving it and how technocratic solutions – including the

[21] This section appeared earlier in a paper entitled 'Integrated coastal zone management as a technocratic project: the Keta sea defence case of south-eastern Ghana' written with Visser for the CERES summer school 2006 in the Netherlands (see reference list).

final proposal of the Keta Sea Defence Project – partly solved problems but at the same time shifted them to other places and – by neglecting social realities – created new ones.

The Anlo-Ewe homeland, in the South East of Ghana, is dominated by fresh, brackish and salt water. The coastal strip from Atiteti to Adina is sandwiched in between the Volta river to the west, Keta Lagoon to the north and the Atlantic Ocean to the south (see Figure 3.2). All of the water bodies are connected by streams and creeks, and the land strip is dotted with ponds and shallow wells. The strip is generally a couple of kilometres wide, but at some places no wider than twenty to forty metres. The Anlo-Ewe have been living in this area for about 300 years (Akyeampong 2001: 27) and have, in the course of time, adapted to the landscape and developed a maritime culture. It was a harsh landscape which the Anlo-Ewe moved to from inland Togo. It was a landscape 'with infertile soil, irregular rainfall and frequent droughts' and, later on, with the growing threat of sea erosion and floods from the lagoon (Akyeampong 2001: 14).

Figure 8.8 The different high water marks in Keta



Showing the floods of 1907, 1924, 1929, 1949 and 1987.
Source: Akyeampong 2001: 206.

The erosion of the coast apparently started about one hundred years ago, in 1907. The next major floods were in 1924 and 1929, while the last ones (at the Keta–Kedzi area) were in 1996 and 1997. To make the situation even more threatening the lagoon also flooded every now and then, meaning that the inhabitants had to deal with water problems from two sides. The Keta Sea Defence Project had started in 2000 but, when I arrived in Ghana in 2003, the scene in Keta was still quite shocking. A large part of Keta town consisted of roofless and collapsed houses which were either surrounded by water, or filled with sand. The roads were pieces of tar held together by potholes and bumps. Fort Prinzenstein[22] was a ruin, with parts of it washed away by the sea, leaving

[22] A Danish Fort also known as Prindsensten.

only the forecourt still intact. Keta had clearly suffered from a combination of coastal erosion and flooding of the lagoon. People travelling from or to Togo had to cross the beach by jeeps since the coastal road had been washed away.

In 2005 a lot was done to prevent further threats from the sea and the lagoon. The Keta Sea Defence Project was almost finished. An eighty-four million dollar project, funded by the Ghanaian government, had resulted in 300 acres of reclaimed land (built with sand dredged from the lagoon), a newly constructed road (8.3 kilometres) between Keta and Horvle re-establishing the link with the Eastern inland area of the Volta Region and with Togo, sea defence works, and a flood control structure (built under the road). In addition, the government had started with the construction of 850 new houses in villages to the west of Keta, for persons displaced by the sea (GLDD 2000: 2 and Daily Graphic 27-5-2004).

Figure 8.9 Fort Prinzenstein

The mindscapes of the actors involved[23]

- The ecological mindscape[24] of the Anlo-Ewe

If one walks around the Anlo-Ewe area one quickly notices that the environment is full of items of religious significance. Trees, crossroads, and entrances of households, thatch constructions on the beach; everywhere one can see sacred objects, places for offerings

[23] It is important to make clear that I know that both Anlo-Ewe inhabitants of Keta District and government officials often have layered identities (see Sen 2006, quoted in Chapter 5) and thus refer to plural mindframes. An individual can be educated, work for the local government, be involved in traditional tasks as performing rituals as an elder in his lineage and go to church on Sundays. People are quite well capable of combing these different mindframes, which to an outsider appear to be so different. In this section I however wish to sketch in an idealtypical way two dominant mindscapes that have played a role in the debate around the Keta Sea Defence Project and that can roughly be attributed to these two groups 'the Anlo-Ewe' and the 'government officials' at national level.

[24] The concept of mindscape was developed by Arjun Appadurai (1990) especially to indicate how today's global interactions create tensions between cultural homogenisation and cultural heterogenisation. The dynamics of modernisation are evident from the spatially and temporary highly intensified and complex flows of information, people, and commodities that may or may not interact with each other.

and other ritual markers. These visible expressions of meaning are not the full story. All physical attributes are imbued with meaning. The sea or lagoon is not just a water body full of natural resources in which you can swim or fish. Trees are not just trees, and paths are more than just a space to move from one place to another. Locations are 'defined as much by their physical properties as by the spiritual forces that […] occupied and operated from these locations' (Greene 2002: 1). The space the Anlo live in is perceived as ecological, social and cosmological (Akyeampong 2001: 104).

Considering the fact that the Anlo-Ewe land is dominated by water, it is no surprise that water is at the centre of Anlo culture (Greene 2002: 35). Potable water bodies, the lagoon and the ocean were localities in the landscape infested with spiritual meaning, which resulted in rules and taboos. 'Water in general constituted a powerful spiritual fluid in Anlo religion' (Akyeampong 2001: 112). Greene cites some elderly people she spoke to during her fieldwork, about how one of the ponds near Anloga was regarded. One of them stated:

> 'There were [also] lots of crocodiles in Blolui. It was believed that the crocodiles normally came out to roam about in the town at night. When we were children [some ninety years ago] we were told not to fish in Blolui if we had eaten left over food. Women were not to cross or approach the pond when they were on their menses. No one was supposed to enter the pond after having sex … We were told that if we went against these prohibitions, the crocodiles in the pond would drag us to the bottom … They would even chase you into town.' (Greene 2002: 48)

Histories, meanings and spiritual significance are subject to (continuous) transformation and the same holds true for the Anlo-Ewe perception of water. Environmental change, technological innovation, colonial rule, education and missionary influence have impacted on local perceptions. Greene points out in her book that, over time, the potable water bodies and the lagoon lost their spiritual meaning. Potable water bodies became less important when, due to technological innovation, it became possible to create wells virtually everywhere in the landscape. The lagoon also had lost its importance when catches declined due to over-fishing but also when the introduction of the *yevudor* (beach seine) combined with the knowledge to cross the surf with canoes made it possible to fish at sea.

However, not all water bodies have lost their former meanings since the ocean has retained its power for many in Anlo (Greene 2002: 36). The ocean is seen as the home of many gods and therefore numerous rituals take place along the shore, offerings were made to enhance the trade relations with the Europeans, or to ensure a good catch, to cleanse sacred objects or to separate themselves from their deceased spouse but also to restore harmony in the community or to ask for control of the sea in the light of the erosion (*Ibid.*: 53). These rituals still take place in Anlo because of the economic importance of the ocean for the Anlo. Fishing is one of the main activities in the local economy, an activity that is not without danger. Even though the majority of the fishermen are beach seine fishermen,[25] crossing the surf is a hazardous operation that quite often ends with a capsizing canoe. Drowning is still a risk even for experienced swimmers, since the undertow in the surf is a constant danger. Obviously bad weather at sea is a threat to fishermen and also shark attacks occur. The power of the sea can also be observed in the heavy erosion that occurs at the Anlo coast.

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[25] In 2001, 154 of the 323 canoes were beach seine canoes (47 percent) (see Chapter 1). Considering the fact that beach seine companies have the highest number of crew (average thirty compared to six with other techniques) most of the fishermen are beach seine fishermen in the Keta District (MFRD 2001, Table 1.2).

One of the gods, Awleketi who lives in the ocean, is part of the Yewe religious order of the Anlo:

> 'It [the ocean] can destroy everything in its path and has done just that in Keta. It can drown the most able swimmers, but it is also an important source of potential wealth. Its mysterious depths are the home of ancestors, strange creatures of the sea and Awleketi – a member of the Yewe religious order that has not only withstood the onslaught of Christianity, colonialism, and the opposition from the Anlo's war god, Nyigbla, but has come to thrive in the towns and villages of Anlo. The ocean represents all this in the minds of many Anlo, Christian and non-Christian alike.' (Greene 2002: 58)

The Yewe had, and still have, a strong foothold in Anlo towns. They also perform the main annual ritual whereby a cow or a ram[26] is thrown into the sea out of a canoe and offered to the gods (see Chapter 7).

However, even more rituals are performed and more gods are consulted in relation to the fishing activity. Net owners perform rituals weekly and often also daily to appease the gods that help them. These rituals are performed at the beach (for instance by feeding the canoe) or at the home of the net owner where almost all have their own shrine. A canoe setting off for migration will not leave without some rituals at home and on the beach.

This shows that the spiritual meaning of the ocean is still central in the daily life on the Anlo-Ewe coast. It is also important for an understanding of the solutions sought by the Anlo-Ewe to avert sea erosion. Before we examine this in more detail, we will now focus on the mindscape of the government officials related to the sea erosion in Keta.

- The technocratic mindscape of government officials

The mindscape of government officials has not fundamentally changed since colonial times. State projects of legibility (Scott 1998) are by their very nature of being a state project aiming at simplification, homogenisation, and visibility. 'Legibility is a condition of manipulation. Any substantial state intervention in society … requires the invention of units that are visible.[27] … The degree of knowledge required would have to be roughly commensurate with the depth of the intervention. In other words, one might say that the greater the envisaged manipulation, the greater the legibility required to effect it' (Scott 1998: 183).

Project intervention to control erosion of the land by the sea has been receiving increased attention in the discourse on coasts and seas where Integrated Coastal Zone Management (ICZM) is the key concept. The terms are of recent origin, having been put on the map by the Intergovernmental Panel on Climate Change (IPCC) and the Earth Summit in Rio de Janeiro in 1992. IPCC's concern was with sea level rise and the possible threat to low-lying coastal regions. It recommends 'endorsed integrated coastal management as the appropriate framework […] to reduce vulnerability to accelerated sea level rise' (Cicin-Sain & Knecht 1998: 36). ICZM should safeguard humankind from the sea, from hazards such as flooding, and from marine disasters such as environmental degradation and pollution.

ICZM primarily serves macro-economic, land-based, and state-induced interests. Safeguarding the land from the sea is conditional to a state agenda of large-scale

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[26] Both the literature and the people spoken to during the fieldwork spoke alternatively of a ram or a cow. Most likely it was a ram that was sent to sea, since the ritual was called *Agbodedefu*, which means 'sending a ram to the sea' in Ewe (Akyeampong 2001: 121).

[27] This is a different visibility than the popular demand for 'visibility' and transparency of today's political actors.

demographic, urban development in the coastal zone. It is expected, by the United Nations, that by the year 2025 75 percent of the world's population will live in or off the coastal zone.[28] Secondly, ICZM is also an intervention tool, an instrument enabling governing bodies to intervene in the social, economic and even political living conditions of coastal people by means of spatial rules and regulations (Visser 2004: 32-33).

Table 8.1 Overview of projects and proposals to counter the sea erosion at Keta in the 20th century

Year	*Event / Report / Who*	*Proposal / Activity*	*Estimated cost*
1923	Director of Public Works, arranged by the Commissioner of the Eastern Province	Erect groynes along a part of the seashore at Keta	
1929	A.T. Coode; contracted by colonial government	Permanent sea defence works	£1,000,000
1938	Anlo State Council	Build a retaining wall along the shore at Keta	£70
1951	New African Gov – Officer in charge Keta District Public Works Department	Anti-erosion work at Keta & temporary groynes	£8,000
1956	Sr. William Halcrow and Partners, ordered by the Minister of Works and Housing	Report: Halcrow lagoon land reclamation project	
1963	Aryee – Officer in charge Keta District PUBLIC Works Department	Cut a canal at Kedzi	
1978	Volta Regional Commissioner, Commissioner for Works and Housing – contracted Messrs Marine Salvage	Stone works	C450,000
1985	Blueprint for coastal protection with Togo, Benin, Nigeria – PNDC		Meeting sponsored by EEC
1986	Study Coastal Erosion – Prof. Mawuse Dake – PNDC		
1987	Report of Cooperativa Muratori and Cementisti – PNDC	Integrated plan for sea defence, lagoon flooding control and econ. rehabilitation	$44,148,000 (Donors) $488,000 (Gov) C634,420,000 (Gov)
1996	GLDD – NDC Gov	Keta Basin Integrated Development project	$84 million

Source: Akyeampong 2001.

The Earth Summit of 1992 also stressed the need to relate sustainable development to poverty alleviation. In the case of the Keta Sea Defence project, land reclamation and a housing project were later added to the project's objectives. Therefore, a coastal management intervention 'to fight the sea' was partly transformed into a coastal development project for those who were dispossessed by the sea. The coastal project history of the Keta Lagoon can therefore be taken as an illustrative example of the implementation of the Earth Summit's agenda on Integrated Coastal Management.

[28] The coastal zone is defined in the RAMSAR Convention as the area 60 km inland and 40 km into the sea.

Yet, Table 8.1 shows that this kind of technical intervention in the coast in order to safeguard land, urban enterprise, and macro-economic objectives is no recent governmental invention, but indeed has a long history in coastal Ghana.

During the last 100 years different state actors played a role in relation to the environmental problems in Keta District. There were the British and Gold Coast colonial government, followed by the Ghanaian post-colonial departments that shared a technocratic, engineering approach to the problem of erosion. Erosion of the land by the sea is explained in terms of natural processes, sometimes as a result of, or worsened by, human interventions like sand mining, or the construction of harbours and dams, in the 20th century as much as today:

> 'Dams and other impoundments prevent sediment from reaching down-stream water courses. Deficiency in nutrients and sediment reaching deltas results in coastal erosion and reduction in the natural productivity of some aquatic life forms. For example, the normal nutrient and sediment supply circle for the Lower Volta Basin downstream of Akosombo was disrupted by the construction of the dam and has resulted in increased sea erosion in the Keta and Ada-Foah areas of the coast line.' (Republic of Ghana 1999: 9)

In the 19th century Keta was quite a wealthy coastal town with a busy harbour, the only port east of the Volta in what is now Ghana. It was a trade hub of the region and became the district capital[29] in 1906 (Akyeampong 2001: 7). The colonial government began to record the high water levels at Keta from 1907 onwards, but for a long time they did not do much more than that because they were of the opinion that the merchants and inhabitants also had to invest in saving their own town and businesses. However, the merchants and people of Keta believed that the colonial government was obliged to do something as part of their political over-rule (Akyeampong 2001: 116). The majority of the government buildings (east of the Volta) were in Keta and were also threatened. As they hoped that the erosion would be temporary, they chose to relocate the offices away from the ocean front. In 1923 the government constructed a wall by erecting some groynes to protect the coast, but that did not last for long. They therefore sought expert advice and approached the London-based engineering firm of Coode, Wilson, Mitchell and Vaughan-Lee for a technical evaluation of the Keta situation. Coode had already scheduled a trip to Lagos, Nigeria and it was decided that he would stop over on his way back. Coode's report sealed the fate of Keta for the rest of the colonial period:

> 'In all the circumstances such as we have endeavoured to describe, we conclude that the expenditure which would be requisite on a system of groynes or other preventive work could not only be justified by the prospects of success but, moreover, that the value of the buildings and property to be saved does not warrant the very large outlay which would have been incurred.' (Gold Coast, Despatches Relating to Coast Erosion in the Neighbourhood of Keta (Accra, 1929). A.T. Coode to the Under Secretary of State for the Colonies, 15 August 1929. In: Akyeampong 2001: 117)

By the early 1980s two-thirds of Keta had been swallowed up by the sea. However, in the same decade the first steps to real action were taken. In 1986 the PNDC[30] commissioned a group of consultants to study the problem of coastal erosion in Ghana. They recognised twenty-two active spots of erosion along the coastline, of which Keta was the most pervasive. The Italian firm Cooperativa Muratori and Cementisti was asked to write an integrative plan for sea defence, lagoon flooding control and economic devel-

[29] At that time the district was as large as the whole coastal area of the Volta Region and stretched beyond the lagoon.

[30] PNDC stands for the Provisional National Defence Council. This was headed by President J.J. Rawlings, an army officer who had come to power in 1979.

opment. Their report (1987) would serve as a blueprint for future works. In 1996 the NDC[31] government was able to announce the start of the project after it had secured the funding from the Unites States Export-Import bank and had contracted the USA Great Lakes Dredge and Dock Company to do the work, with Pentrexx Ltd. as the Ghanaian representative. In the course of 1999 the objectives of the project were expanded to include land reclamation and housing (Akyeampong 2001: 200-214). The implementation of the Keta project started in May 2000 and was officially finalised in 2004 when the newly reclaimed land and the lagoon were opened to the public.

Since the start of the sea erosion a lot of technocratic solutions have been proposed and reports submitted (see Table 8.1). Indeed, the Keta Sea Defence Project included many of the ideas mentioned before, such as a controlled connection between lagoon and sea, land reclamation from the lagoon, and coastal defence works. All these technocratic projects or proposals came from the governments of the various times (colonial – contemporary) and were based on engineering solutions.

Mustafa (2005) claims that technocratic projects are characteristic of modern day environmental management but the case of the Keta Sea Defence Project shows that there often is a long institutional history to more recent interventions. By institutional history we not only mean the earlier proposals and projects initiated by the colonial British and postcolonial Ghanaian state. We also want to draw attention to the long political-economic history of the Anlo-Ewe and their role and position in the modernisation of Ghana.

The Keta Sea Defence Project

The American company Great Lakes Dredge & Dock Company (GLDD) was awarded a contract by the Ghanaian government in 1996 to implement the sea defence project. It conducted a series of studies and tests together with its subcontractors Baird & Associates (BA) and Research Planning, Inc (RPI). BA made the model of the flood control structure, which was used in the design phase of the project (www.bairdsoftware.com). RPI drew up an Environmental Impact Statement in 1996 and 1997 and Environmental Monitoring Studies between 2000 and 2005 (see http://ridgetoreef.com). This is institutionally interesting, if indeed RPI is a sub-contractor of GLDD. In that case, the environmental impact assessment, which should be an independent control mechanism for sustainable intervention in the coastal environment, has been carried out by an organisation that is structurally dependent on the very project implementer (GLDD). One may wonder how this impacted the outcome of their study. Indeed, the GLDD accepted the components for the Keta Sea Defence Project proposed by RPI:

1. Construction of an 8.3-km road/causeway between Keta and Hlorve, re-establishing a communication link that was lost due to erosion.
2. Sea defence works to limit further erosion by stabilising the shoreline with one offshore breakwater and seven headland groynes, a feeder beach and beach nourishment placed between the groyne bays from Keta to Hlorve.
3. Construction of a flood control structure to provide inhabitants around the lagoon with relief from extreme flooding conditions.
4. Land reclamation from the lagoon in the area of Keta, Vodza and Kedzi, providing areas where housing and businesses can be rebuilt.

[31] NDC stands for National Democratic Congress. This party was headed by Rawlings and was set up in the 1990s.

5. The creation of bird habitats in and along the lagoon (GLDD 2000: 2).

Negotiating livelihood space

In this section we will see how the different actors pursued different strategies. The strategies of the different 'stakeholders' seem to be targeting a common goal, that is protecting Keta and environs from sea erosion. However, at the same time it has become clear that their 'stakes' are quite different, as KSDP also served other goals.

In fact, as far as the local Anlo-Ewe fisher folk were concerned, ecological disorder – such as sea erosion – 'also signalled disequilibrium in the social and cosmological realms'. If the environment is imbued with social and religious meaning, then it is also perceived as being open to manipulation by religion and ritual (Akyeampong 2001: 104). The sea erosion that started to become serious at the beginning of the twentieth century 'presented a challenge to Anlo moral ecology for it undermined their understanding of their historic survival in the aquatic environment of south-east Ghana' (*Ibid.*: 106). This was even more so because, in former times, the sea had actually retreated extending the littoral for settlement (600 feet between 1784 and 1907), which the Anlo had believed to be caused by their ancestors in partnership with local deities.

Figure 8.10 New houses built on reclaimed land

The influence of the Europeans and their missionaries had been opposed by the Anlo for a long time because they feared that uncontrolled change would lead to ecological imbalance. Modernity was therefore seriously opposed by some (*Ibid.*: 114). The missionaries at Keta were unable to develop their work for about fifty years. In 1903, they had hardly progressed beyond the point they were at in the 1850s. Moreover, the fact that a lot of missionaries had died soon after their arrival was seen by the Anlo as ancestral disapproval. It was believed that those who wanted to oppose against these new influences used environmental disaster (coastal erosion, droughts, fire outbreaks, earthquake) to advance their cause. The bodies of local belief and knowledge of control over

the sea in Anlo were the Bate clan and the Yewe religious order. Both were unable to play a central and recognised role in reversing the sea erosion. The Yewe lacked the official support to explore a spiritual solution to the sea erosion and were even persecuted by the paramount Chief Sri II, supported by the missionaries and the colonial government (*Ibid.*: 122).

Clearly, there is no single, uniform Anlo-Ewe mindscape. Others sought another strategy, hoping that their identification with modernity and colonialism would make the colonial government to come to their rescue. 'Missionary education had created the awareness that technology existed in the West to halt coastal erosion' (*Ibid.*: 115). The colonial government, however, was of the opinion that not only the government should hold financial responsibility, but also the mercantile firms in, and the people of, Keta. However, there were no real interventions before the second major period of sea damage in the 1920s. The first coastal works in Keta were timber groynes sunken off the coast with the idea being to break the force of the sea. However, it soon became clear that these did not help and that the coast was worse off after the intervention (*Ibid.*: 117). However, once the Coode report (1929) had made it clear that serious interventions would be very costly, the colonial government decided that the work simply was not worth it. For them the case was clear and resettlement was the only option. However, this was unacceptable to the Anlo. The residents of Keta refused to leave their houses. Over the course of the next fifty years quite a number of technocratic solutions were proposed, of which most did not progress beyond the report stage. The Anlo State Council built a retaining wall at Keta in order to try to protect the town, but this had no major effect. The New African Government, in 1951, carried out some anti-erosion work at Keta and installed some groynes. In 1956 the Halcrow report was published but did not result in any action. In 1963 an officer in charge of the Public Works Department at the Keta District took the initiative and cut a canal from the lagoon to the sea. However, he and the ground he was standing on was immediately swept away by a huge flood and it turned out that his plan had done more harm than good.

In general, the people of Keta and the Anlo felt betrayed by the government. After all, had Keta not been very valuable for the government for a long time? The Anlo tried other livelihood strategies, such as land reclamation from the lagoon, migration (especially on fishing expeditions), illicit distillation (*Ibid.*: 131-133) and smuggling (Nugent 2002: 89) and they also started to look for allies, for example the Ewe. The sea erosion marked the beginning of a new ethnic-political consciousness which later became the Pan-Ewe movement[32]. The Anlo 'began to frame questions and notions of political inclusion and exclusion in a discourse of the environment' (Akyeampong 2001: 187). The Anlo had always been prominent members of the Anlo-Ewe unification movement (Amenumey 1989: 1) and continuously pointed to the bias of the Ghanaian governments in giving priority to development projects in the region to the West of the Volta river (Akyeampong 2001: 199), marginalising the Anlo region. 'With the exception of the CPP, most of the post 1966 governments were portrayed as insensitive to coastal devastation and socio-economic decline in Anlo' (*Ibid.*). Although studies had been performed, no permanent solutions had been found. 'The financial considerations of the colonial government continued to determine the evaluations of independent Ghanaian

[32] This movement was mainly involved in lobbying for a unified Eweland. By the time the Europeans had arrived the Ewe had been divided over two territories with different rulers, namely the British (1850) and the Germans (1884) and later (after 1914) the British and the French. Independence gave the Ewe hope of unification again (Amenumey 1989).

governments' (*Ibid.*). The Anlo were convinced that the implementation of the development projects like building ports (Takoradi-Sekondi in the 1920s and Tema 1962) and constructing dams in 1961 and 1965 (in the Volta river) had seriously increased the sea erosion at their site, threatening their livelihood opportunities (see also Bennett *et al.* 2001: 372[33]). In addition to the fact that the damming of the Volta reduced fish stocks in the lagoon and the sea, this led to a prevalence of more waterborne diseases (such as malaria, schistosomiasis) and seriously altered the hydrological regime of the lower Volta basin (see Akyeampong 2001: 159-185). The ethnic dimension gained in importance once the only governments that appeared concerned with Keta's plight were those with prominent Ewe members. The military PNDC[34] government, lead by J.J. Rawlings, an Anlo-Ewe, was the first to seriously 'tackle Keta's myriad environmental and economic problems' (*Ibid.*: 200). External and internal pressures caused the military government to consider a transition to a democratically elected civilian government in the 1990s. The first elections were held in 1992 and these were highly ethnicised. Its main opponent was the NPP, an Akan-dominated party (*Ibid.*: 208-209). The NDC won the elections and went on with the KSD project. It all finally resulted in the announcement by the NDC[35] government in 1996 that it had secured the required funding from the Ex-Im Bank for the Keta Sea Defence Project (*Ibid.*: 211). The moment when this was announced was highly political. First of all it was done during the Anlo-Ewe Hogbetsotso festival in Anloga – the town which was home to the headquarters of the Anlo-Ewe traditional state. Secondly this took place one month before the next elections, which were held in December 1996. It might not come as a surprise that in none of the Anlo constituencies the presidential vote fell below the 95.8 percent!

Apart from the technocratic approach to the Keta Sea Defence project, there are interesting political dimensions to the interest of 'the state' in a coastal development project East of the Volta river. The reasons for the NDC to take the initiative to come with the project were clear. In the end the NPP government, which won the elections of 2000 and 2004 continued with the project. For them continuation with the project would also serve political goals (attracting voters, impressing donors) whereas stopping the project would give a lot of political and ethnic upheaval. The political context clearly shows that the state is not just a multi-level organisation but that there are individual and institutional actors whose ethnic-political interests and power positions constitute an arena in which the interests in development of the eastern region are negotiated (Long 2001).

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[33] Bennett *et al.* discuss the coastal erosion in the Volta Region as one of the conflicts (Type V conflict as having a relation to non-fishery issues). I find the following remark interesting: 'Here we can conceptualise conflict between the villagers (with certain local objectives to continue living and fishing in certain areas) and government (whose objectives have failed to protect the coast) although this link was never made by the respondents' The sentence is followed by a footnote stating: 'This may be simply that village communities are not yet 'politicised' enough to establish such a link.' This chapter proves the researchers wrong and rather suggests that doing research on the basis of three months fieldwork in a whole country selecting 62 villages on the basis of questionnaires (Bennett *et al.* 2001: 368) might not be enough for a full understanding of certain issues.

[34] Provisional National Defence Council.

[35] National Democratic Congress.

Future mindscapes?

The changed importance of the spiritual meaning of the lagoon and other water bodies in Anlo which Green (2002) described could be explained by the decline in importance of the lagoon because of declining fish stocks and by the increased control over potable water due to the growing availability of other access points for potable water due to technological innovation. Following this line of argument we might expect the same to happen for the spiritual importance of the sea in Anlo. In addition, a technological intervention removed one of the main threats of the sea in that, for the first time in 100 years, Keta and environs are much better protected against the force of the sea. Yet, the sea still seems to escape this techno-scape and retains its Janus-face as life-giver (fish) and life-taker (fishermen drowning).

Again, the increasing decline in catches might alter the economic importance of the sea, as was the fate of the lagoon in the first half of the 20th century (Akyeampong 2001: 135). Although quite a few fishermen attribute declining catches to social-spiritual causes (conflict in the community; punishment of the gods), more fishermen are aware of the increased fishing effort as a cause for declining catches. In addition, now that the Sea Defence Project is finished, the lagoon has regained economic significance vis-à-vis the sea. The lagoon has been dredged and has acquired an open link with the ocean which enables shrimps to come into the lagoon. The environment is less dangerous for fishing, and the catches of valuable shrimps have increased in size quite quickly.

This research reveals a trend that the spiritual control of the sea has become less important for the Anlo. In Woe, one of the towns where fieldwork was done, there was a problem. The main ritual intended to appease the gods in the sea had not been performed for some years (see Chapter 7 and also Akyeampong 2001: 121-122). Three reasons have contributed to it, the first being that a growing number of fishermen have become Christians and have been struggling with their participation in such a ritual. The second reason is that the people who perform the ritual – who are supposed to be a member of the Yewe ritual order – have started asking for money in order to perform the ritual because the fishermen have not been showing the same gratitude and respect to them as in the past. Back then, whenever there was a bumper catch the net owners would send fish to the shrines and if the Yewe devotees or priests came to the beach they would be given fish by the fishermen. This custom is being adhered to less and less. That has resulted in the Yewe priests asking for a payment for the ritual which, interestingly enough, they also request from the town council (interview 89 with the chair of the town council of Woe, 1-11-2005). The third reason was that, in addition to these issues, a conflict had arisen within the Yewe ritual order (see Chapter 7).

This case is a good example of a long-lasting power struggle in which there was both strife about the definition of the problem (a natural phenomenon or a social-cosmological problem) and about the solution to the problem. With their holistic mindscape of natural, social and cosmological order the Anlo-Ewe perceived coastal erosion as a signal of disequilibrium in all three sets. Therefore the solution for the natural phenomena lay in the social and cosmological realm. This way of thinking contrasted sharply with that of the government officials, which was more directed to technical intervention to safeguard land, urban enterprise, and macro-economic objectives. The discussion at that level focused more on whether this Ewe land was worth the technical intervention. Naturally this did not require a wholly technical debate but rather a political one. In the end the KSDP was built and this proved to be a technical solution to an environmental

problem which was finally achieved after a political pathway had been followed of shifting alliances with ethnic dimensions. In the end one might, of course, wonder who has actually gained from the implementation of this project.

Coastal erosion has threatened the Anlo-Ewe homeland for considerable time. Due to the already limited natural resources, population growth and shortage of land, a lot of fishermen were motivated to migrate. This migration has been one of the reasons why the Anlo-Ewe have coped with these adversities at home. They created institutions to make their migrations possible (Chapter 5) and took existing institutions along. At the same time, as we saw from the Akosua Village case, migration also undermined the social structure and base for authority whereby some institutions became less effective away from home.

Conclusion

The cases discussed in this chapter have illustrated how Anlo-Ewe fishermen at home and on migration negotiate their livelihood space. They can be more or less successful, depending on internal and external attributes. In the case of Akosua Village we see that the Anlo-Ewe respond quite passively to the direct and indirect threats of the Chief of Winneba in what is almost a lack of negotiation capability .It shows the crucial role of leaders in the negotiation process. Since Anlo-Ewe leadership in Akosua Village is almost non-existent, a situation with which they apparently 'can live', they only react to what happens. In the Keta case the Anlo-Ewe were much more proactive in their negotiations. They actively tried out all sorts of negotiation strategies; by aligning with and without the authorities (European and post-colonial), spiritually or pan-Ewe. In the end they managed to have a 'solution' although the outcomes of the project are not clear yet for the future.

The Akosua Village case also shows how rules based on conservation are very hard to implement when resource users have few alternatives. It also shows that it is absolutely crucial to connect to the world view of resource users in fisheries governance. As the Keta case shows, the mindscape of people largely explains their actions. Addressing the overuse of Muni lagoon might mean doing something about the social cohesion and ineffective leadership in Akosua Village first. It shows how the social side is an integral aspect of fisheries governance.

The Keta case showed that it is important to realise that 'a people' cannot be assumed to have a certain homogeneous mind view. Communities are heterogeneous, and various groups make strategic use of the available resources.

The other group of actors of the negotiation interface, representatives of traditional and state government alike also figure in an ethnic-political power arena where they pursue their own goals. The Chief of Winneba is working hard to remain Chief and is tying to improve the economical situation in Winneba. The democratic configuration of Ghana also plays a role, we saw that the relocating option of Akosua Village would probably be difficult for both main parties in Ghana. The NPP governing party (at the time of research) would probably – as a large Ashanti party – not dare to resettle Ewe in Akan area, whereas the NDC – as a large Ewe party – would probably never agree to it. In the Keta case we also see how the political parties try to use the struggle over the coastal protection project for their advantage. The (P)NDC party had started the project, which had given them almost a hundred percent vote in the Keta area. And the NPP finished it – with both trying to use it in their struggle to win over voters.

The observed trend that spiritual control of the sea is becoming less important for the Anlo, combined with the decline of economic importance of the sea due to declining catches, makes us wonder what the consequences will be for the future of beach seine fishing and the way it is organised. From the lagoon case discussed earlier in this chapter we know that the sea has become less important economically in Akosua Village due to declining catches. This, together with the misuse of the net owners, led to the breakdown of the company institution. The loss of the company system can also be observed in Woe where, due to declining catches, more and more companies recruit workers on a daily basis (see Chapter 3). We might therefore wonder what the effect will be of these changes on the locally managed beach seine fisheries in Ghana as a whole. The question is whether the combination of declining catches, less economic benefit and less spiritual power will lead to further institutional changes in beach seine fisheries in Ghana?

9

Summary and conclusions

The moon moves slowly, but it crosses the town[1]

Reviewing the argument

This research has been performed amongst Anlo-Ewe beach seine fishermen in Ghana, one of the four main artisanal fisher groups active at sea. It feeds into the need for more knowledge and understanding of artisanal fisheries in the West African region, needed to improve fisheries governance.

The Anlo-Ewe beach seine fishermen who figure in this study, actively negotiate livelihood space in a situation of multiple governance structures and migration. The elements livelihood, multiple governance and migration are central to this study and form characteristics of Ghanaian artisanal fisheries. Fishing is a livelihood activity, providing fishermen with income and identity. Artisanal fishermen in Ghana are highly mobile, and I was eager to see how mobility affects their position as it develops within multiple governance settings. These governance settings are multiple as in Ghana it consists of traditional governing actors (such as chiefs in villages) and of those of the Government of Ghana.

It is important to realise that the Anlo-Ewe beach seine fishermen operate in a condition of declining catches in the West African region. As the Anlo-Ewe fishermen are specialised marine fishermen, declining catches affect them as regards their livelihood. The fact that they operate in a niche – a technical specialisation in beach seine fishing combined with a spatial concentration – also means that there is a narrow livelihood base limiting the number of possible alternatives.

As artisanal fishermen catch 75 percent of the marine catches in Ghana, and as fish plays an important role in the Ghanaian diet, artisanal catches strongly contribute to Ghana's food security. With almost ten percent of the Ghanaian population directly or indirectly depending on fisheries for their livelihood, these factors together make declining catches a societal problem. The issue of declining catches has predominantly been addressed by biologists and economists. There has been insufficient input from the social sciences, yet their contribution is imperative because fisheries governance is a

[1] Ghanaian proverb; meaning that although change can be slow, it takes place nonetheless.

social activity which deals not only with fish but also with fishermen. It is also a political process in which multiple private and public actors take part.

This study is intended to contribute to a better understanding of the practice of fisheries governance. A new approach called interactive governance was introduced to fisheries during the past decade (Kooiman 1999, Kooiman *et al.* 2005). I have discussed this approach in relation to the situation of Anlo-Ewe beach seine fishermen in Ghana. Generally speaking I found the analytical schema of interactive governance theory to be useful for diagnosing my particular case. Some aspects, however, were troublesome. First, this study has shown the complex nature of the governance effort, such as the variety of public and private actors involved in beach seine fisheries. It has also demonstrated the range of values and principles motivating governing actors in Ghana. In such circumstances the connection between values and principles, institutions, and the daily management of beach seine fishing is difficult to discern and untangle. Moreover, the reality of beach seine fishing questions the functioning of institutions and governors in a context of pluralism, which Kooiman *et al.* link to underlying values and principles. It has been demonstrated that power differentials – a factor downplayed in the interactive governance approach – play a decisive role in explaining actual performance.

In a situation in which even the Ghanaian fisheries law is often more *de jure* than *de facto*, the principles guiding international governance of fisheries these days are even more so, and it is difficult to discern whet is actually driving governance. Kooiman *et al.* (2005) take a further step by discussing the principles that *should* guide fisheries governance and, although many of us agree with their findings, they seem to be very removed from the reality on the ground: The reality of a declining yet valuable resource base, of fishermen seeking to fulfil their livelihood while managing their own businesses, and of a state government which, on the one hand, is seeking ways to earn some much-needed currency via their fish resources and, on the other, is trying to maintain what is left, hindered as it is by a lack of compliance and control power. Lastly, by discussing the livelihood space of the Anlo-Ewe fishermen this study has shown that interactions (central in the interactive governance approach) have spatial connotations, and are in fact place-bound. All in all it seems as if the interactive governance approach has paid more attention to the universals than to particulars. Jentoft (2006) correctly argues that both are important in a phronetic social science contribution to fisheries governance.

This study has also contributed to the livelihoods debate given that a lot of previous studies focused insufficiently on structural influences. By focusing on negotiation this study manages to connect a livelihoods approach with a governance approach. It thereby includes the structural level by paying attention to what happens in the interaction between actors within governance structures. This study also contributes to the livelihoods debate by introducing the concept of livelihood space. The concept of livelihood space adds weight to the elements of identity and place, countering the material bias of many livelihood studies. Thirdly, this study pays attention to collective action, which has been an important omission in many individual and household level biased livelihood studies.

The study has been undertaken in three fisher communities along the Ghanaian coast, in Woe (Volta Region), Akosua Village (Central Region) and Half Assini (Western Region). Woe lies in the home territory of the Anlo-Ewe, while the other two communities lie in different territories governed by other chieftaincies (Effutu and Nzema traditional

areas) thereby making the governance structure more complex. The fishermen have migrated to these places to continue their main livelihood activity.

I have made use of a variety of both qualitative and quantitative social science methods which are derived from anthropology and geography. My research has been both localised and in-depth and linked to higher levels (national and international). I have thereby tried to understand local configurations of actors as well as linkages spanning larger distances. Herein lies the strength of the research. Firstly, I have emphasised the local embeddedness of identity, institutions and practices but I have also shown how local contexts are not isolated and linked in many ways to ideas, power and institutions derived from elsewhere. Secondly, multi-locational research is imperative in a context of mobility. By developing the concept of livelihood space I have also contributed to a better understanding of the special configuration that exists for people with mobile livelihoods. I have thereby not only addressed the spatial aspect but also that of identity. By combining methods and approaches to research derived from anthropology and geography research can be both more grounded as well as have a larger range.

For the purpose of this research a set of research questions has been developed, in which each separate question focuses on a different element of the central research question. The central research question is: *How do Anlo-Ewe beach seine fishermen negotiate livelihood space, within multiple governance systems, both at home and in migrant settings in Ghana?* By using the concept of negotiation the research question links livelihood with governance. The question is answered by using both a livelihoods approach and a governance perspective. This research thereby addresses the lack of attention for structural factors in livelihood research but also brings in more empirical input in the often academic and normative governance debate.

The key findings in relation to the research questions are presented in the following sections. In the last section the main central research question is answered followed by a discussion of challenges for governance and recommendations for further research.

Anlo-Ewe fishermen's livelihood space and beach seine fishing

The sustainable livelihoods approach was used to answer the first question: *how have Anlo-Ewe beach seine fishermen organised their livelihood?* The livelihoods approach can be used to understand how people make a living, based on their assets, in the context of certain trends and/or shocks. The approach was developed in the 1990s as a reaction to previous poverty research with the aim being to alter the way poor people were seen: As people imbued with agency rather than 'victims of structural constraints'. The strength of the livelihoods approach is that it has highlighted the dynamics and multidimensionality of poverty. The usefulness of the livelihoods approach for this research lies in the fact that it shows how *all* assets and capabilities, and the relationships between them, are potentially important. This is particularly necessary in fisheries research that has for a large part been performed under the so-called *paradigm halieutique*. This refers to a primary focus on access to the natural resource and related assets (such as the fishing gear) whilst disregarding other assets such as family labour, physical strength, skills, political influence, identity and infrastructure (to name a few) (see Chapter 3).

The livelihoods debate has incorporated ideas from other scientific traditions. The entitlements approach contributed to the argument by showing how a livelihood is not only a matter of 'having' enough assets but rather, that being able to build up a sustainable livelihood is a matter of having *access* to assets and, even more so, that having

access to certain resources (for instance having a net) is not necessarily enough. Due to the lack of access to other assets (for instance finding enough workers) people still might not be able to actually use them. Moreover, assets should not only be seen as resources people use to make a living since they also give meaning to a person's world and give people the power to act. The latter two arguments underscore the fact that access to assets, mediated by institutions, social relations and organisations, is a political (and therefore not neutral) process. Entitlements (or successful access to resources) are the outcome of negotiations among social actors in which power is involved and in which, in a situation of legal pluralism, it can be unclear which institutions prevail. I have therefore chosen to make the concept of negotiation central to this study and to connect the livelihoods approach to the governance debate. I thereby hope to do counteract one of the weaknesses of the livelihoods approach, namely that structural influences do not receive enough attention or are downplayed.

The livelihoods approach has also been criticised for its material bias, whereby researchers focused on livelihood outcomes (often implicitly understood as income). By contrast, this study shows that, in reality, a livelihood is more than just any activity by which people earn their living. Anlo-Ewe beach seine fishermen are fishermen by choice. Fishing is their profession in which they have specialised as the generations before them. Being a fisherman is part of one's identity, as expressed in the songs sung during fishing, the decoration of the canoes, the identification via common clothing with the company when returning from a successful migration fishing season but also by the fact that many fishermen speak of their profession in a positive way.

Finally, livelihood studies have focused too much on the individual and household levels and have failed to understand enough of the political aspects related to livelihood creation. Having an excessive local focus has resulted in insufficient attention to interactions with powerful others (such as the state) and collective action. This study links a livelihoods approach with a governance approach by using the concept of negotiation. The Anlo-Ewe fishermen have organised themselves collectively by forming companies and we have seen how the institution of chief fisherman plays an important role in their negotiations, given that the chief fishermen acts as broker between governance structures and fishermen (Chapter 7).

- Livelihood space

By introducing the concept of livelihood space this research has combined an anthropological and social geographical approach and has connected a spatial element to that of identity. This is an important contribution to livelihood studies as the spatial dimension of livelihoods is often overlooked. The concept of *livelihood space* reinforces the need to look beyond livelihood activities and outcomes and to take a certain place-boundedness in account. A livelihood is embedded in specific geographical places, and in economical and social/cultural space. It is the livelihood space that fishermen negotiate, at home and on migration. The concept of *livelihood space* connects the different places where fishermen live and work and the places between which the fishermen have set up linkages leading to flows of people, goods and ideas. Livelihood space refers to three elements:

1. A spatial element:
   - space to work:
     - to fish (the sea)
     - to sell the catch (the market)

- space to live safely
- space where one can make use of facilities and services

2. An economic / sectoral element: Space within the fishing sector, by creating a certain niche;
3. A social / cultural element: Apace where one is accepted, where one finds or has one's place in society, positioning oneself within social relations.

Place boundedness should not be understood as a limitation to migration between places. Instead it highlights the fact that each place, with its cultural, social, economic and spatial characteristics, produces its unique pattern of re-alignment between actors, processes and consequences. The concept livelihood space thereby addresses the need to pay more attention to livelihood networks along which remittances, information, ideas, goods and people flow as well as show how people operating in those networks are located in places. The concept of livelihood space is also useful when understanding the migration of the Anlo-Ewe beach seine fishermen (see the next section) as their livelihood space may bypass national and ethnic boundaries. What I argue is that they have thereby created a livelihood space within which they are able to maintain their livelihood activity thereby being able to maintain their identity as a whole. The concept of livelihood space is related to the concept of transnational social space, however – as I will elaborate on in the next section on migration – it differs in two important ways. Livelihood space does not refer to the nation, it is not necessarily transnational, and it emphasises the link with the livelihood activity (in my case fishing) which is useful for this kind of 'professional migrants'.

In discussing the boundedness of places within the Anlo-Ewe livelihood space we took time to discuss the Anlo-Ewe homeland in historical and social perspective. We saw how the Anlo-Ewe developed a maritime tradition as a previously non-maritime people and became known and respected as sea fishermen. We saw how their story of origin is a story of migration and how it has been used both as a way to link the Anlo-Ewe to other Ewe groups (by the European missionaries at first and later by the Ewe nationalist organisations) but more recently rather as a way to set themselves apart from the other Ewe. From other research we learnt that the details of the arrival of the leader of the migration in what later became the traditional capital Anloga in the story is expressed by *nlo* (which means coiling up) and that this is central to what it means to be Anlo-Ewe. This process of (re-)creation of a common history and shifting group boundaries is what has been referred to as an 'imagined community'.

The organisation of Anlo society through clans and lineages is related to their political organisation, land ownership, settlement organisation, to the environment and to their so-called 'traditional religion'. Although nowadays the majority of the Anlo-Ewe are Christian, 40 percent are adherents of the traditional religion and many of the Christians still adhere to elements of their traditional cosmo views. The traditional religion should not be seen narrowly as a belief system. This is important partly because in Anlo society religion is not separated from culture, nature, politics and social relations. The Anlo-Ewe perceive their livelihood space as an ecological, social and cosmological whole. Environmental imbalance signals social and cosmological imbalance and otherwise. This understanding has not changed when Anlo Ewe converted to Christianity.

The clan system underscores their common history, defines the relation to the land and waters and shows how legal and ritual powers came together in their (traditional) leaders. The system still plays a role in Anlo as a system on which the traditional

governance structure is built, but its importance and impact is changing. Under influence of Christianity, formal education, the money economy and the establishment of formal courts the Anlo traditional authority eroded and this has changed Anlo society in a number of different ways. These days people are associated in ways other than only clan membership, for example via friendships, the church and professional associations. Moreover, the nuclear family is slowly gaining importance over the extended family. All these changes might affect the traditional governance structure eventually.

In terms of their place in the economical space we saw that the Anlo managed to create a niche for themselves as *the* beach seine fishermen in the Ghanaian fishing sector. Creating that niche was not self evident since their way of fishing was opposed by the other fishermen when the Ewe started to migrate and use the *yevudor* (which means white man's net) outside their home area. The *yevudor* was said to be a destructive fishing gear (catching too small fish) and the other gear users feared that the *yevudor* would be detrimental to their livelihoods (see Chapter 3). The fierce resistance to the *yevudor* by other gear users has been explained by the idea that persisted under the protesters that it undermined existing relations of production, with fishermen becoming wage earners and the sector being opened up to technically less-skilled fishermen. The fact that the beach seine was an expensive net led to the creation of fishing companies of workers (wage earners) working for the owner of the net (the sole investor). The *yevudor* owners became a new class of accumulators and they acquired a reputation for their wealth in Anlo. Although the net is still controversial today from a biological perspective, the Anlo-Ewe have successfully negotiated space for their activity. The net mesh sizes are often smaller than the law allows. The reason fishermen do not easily comply with state law is that they target anchovy and they claim to lose too much of their catch when they use larger mesh sizes. Although too many small fish are caught, at least beach seine fishermen do not discard any fish, so all fish caught – no matter how small – is used.

In order to account for the migration of the Anlo-Ewe fishermen, this research was carried out in three fisher communities along the Ghanaian coast where Anlo-Ewe beach seine fishermen are active. The first is Woe (8,545 inhabitants), in the Anlo home area, and the second and third are respectively Akosua Village (630 inhabitants) and Half Assini (11,000 inhabitants). All three communities are situated in a water-rich environment of ocean and lagoons, with Keta lagoon near Woe and Muni lagoon next to Akosua Village being RAMSAR sites and hence near areas with international protection. The fishermen in Woe live alongside their fellow Anlo-Ewe (fishermen and farmers alike). Akosua Village is an all-Anlo-Ewe fishermen village (except for about ten to twenty Effutu), yet it is in the vicinity of Winneba which is quite a large Effutu coastal town. Half Assini is a Nzema town, with the fisher migrants neighbourhoods along the coast in the town of Half Assini, Fanti in the East and Anlo-Ewe in the West. The fishermen live in fishing communities with limited facilities. However those in Akosua Village and Half Assini have access to more facilities than the fishermen in Woe as both are, or are nearby, district headquarters.

- Assets

In this research, assets have been defined as stocks of capital that can be utilised directly, or indirectly, to generate the means of survival of the household or to sustain its material well-being at differing levels above survival. We have distinguished five asset types: natural, physical, financial, human and social. We have not included cul-

tural or political capital because cultural practices are inherently social and are therefore included in social capabilities and are related to structure and culture and consequently part of the context. Including political capital suggests that one does not *always* need to deal with power whereas access is inherently political, hence the decision in this research to focus on *negotiating*. Creating a livelihood is a process and is not something one has or does not have.

Comparing the three research populations (see Chapter 3) confirms general hypotheses about migration. First, the young and able men and women migrate and the elderly return home. This results in a higher percentage of elderly at home (Woe) although school-age children are often sent home as well (giving a higher percentage for the eleven to twenty age group). Households on migration are more mixed (including more non-kin and extended family members) than households at home. This confirms the fact that migrants make use of networks, migrating to places where they already know people. Thirdly, the people who have migrated are fisher migrants, they are active as fishermen (more than ninety percent). For Half Assini the percentage of fish processors (89 percent) is also higher than in Woe (84 percent). Akosua Village has a remarkably low percentage, which can be explained by the fact that fishing is practised less seriously (also reflected in 'only' 82 percent of the working population being active in fishing). The Akosua Village women are at the same time more actively involved in other trades. Akosua Village also had the lowest number of ovens for processing purposes (33 percent of the households compared to eighty percent in Half Assini). In Half Assini 93 percent of the working population is active in fishing; this is lower in Woe (85 percent). However, Woe has a much higher percentage of non fishermen, such as farmers (nineteen percent). The reason that we found hardly any farmers in Akosua Village and Half Assini is that migrants often have no access to land.

In terms of access to facilities such as electricity and water we concluded that the more rural the communities are, the better the access to water (see Woe) and the more urban they are the better the access to electricity (see Half Assini). On the other hand, arranging your own facilities is more difficult when on migration than 'at home'.

The figures on fishing gear (Chapter 4) showed that twenty percent of the households (of the total research population) owned a *yevudor*, of which between 56 and seventy percent were used at the moment of the research. The reason why there are not many owned nets and even less in actual use, is that the nets and its exploitation, are expensive. Woe had the highest percentage of dormant nets. This can be explained by the fact that it is a hometown where families keep the family nets that are not in use. In Woe all net owners who used their net also owned a canoe. In Akosua Village this was 81 percent, in Half Assini 33 percent. Canoes are made from the Wawa tree that can be found in Ghana's tropical forest. However, the trees are becoming scarce due to extensive deforestation and they are therefore becoming ever more expensive. The motorisation of the Ghanaian canoe sector started in the 1950s, yet the beach seine canoes are the least motorised compared to the other fishing gear types. An outboard motor costs at least 25 million cedis (2,000 euros), and although this is subsidised by the Ghanaian government (see Chapter 7), net owners complain about not being able to pay the amount at once. Akosua Village had the highest percentage of motorised canoes (59 percent) compared to 53 percent in Woe. In Half Assini none of the canoes of our research population were motorised.

A *yevudor* owner needs an initial capital of about 20,000 euros for a large net, a canoe and outboard motor. This is a considerable amount in Ghana. This explains why

new net owners often do not start out in this way, but slowly work on building a net, piece by piece. At a certain point they can start using their net in a lagoon or in the surf to start recouping some of their investment. Soon they need more people to perform the fishing activities. Finding enough loyal and skilled people is not an easy job and the same holds true for crew members. The more 'hands' a net owner has the better because the sooner the net comes in, the fewer the fish that can escape. Getting people to work for and with you requires social capabilities and financial assets. Net owners often have crew members working for them who are related to them. Once they have really started, they have to continue investing in people, their net, in fuel and in buying a new motor every couple of years. Beach seine fishing is a costly enterprise. One needs financial, social and human assets before one can start. At the same time a net owner also needs to gain access to fishing grounds and to the market.

For workers (without their own fishing equipment), finding a trustworthy net owner is also important. The assets needed to become a crewmember depend on the role one wants to play, yet most of the special skills can be learnt on the job except that of clerk.

- Beach seine fishing

Beach seines, operated from the shore, can differ in size (between 150-1,800 metres in length and between six and 22 metres deep). Generally speaking the nets in Woe and Half Assini were larger than in Akosua Village. A beach seine net needs a lot of maintenance and these nets are continuously being repaired, in fact after every day's fishing. Beach seine fishing is done by crews of between twenty to ninety people (the company). Going out to sea with the canoe and casting the net is a truly skilful job whereas pulling in the net, which on average takes between three to seven hours, mainly requires strength. The last part of the pulling, when the net is almost ashore again is more crucial and entails skilled crew members making the right decisions and doing the right thing in the water and on land (Chapter 4). Another crucial aspect of the fishing is the fact that there are other nets around. A net's movement can be hindered by another company's net. This is a frequent problem and results in conflicts between companies (Chapter 7). Often more people than only the crew (including for instance students, elderly, mentally challenged) assist in the pulling, and these helpers are always given some fish. That is an important social side to beach seine fisheries. When the net has almost been landed, more skilful work needs to be done such as diving, carrying the net in the water and deciding when the net should close and how fast it should be pulled. The community function and the fact that women and children show up and help, the singing whilst setting the net and pulling all shows how deeply embedded beach seine fishing is in village life.

Beach seine fishing is business and seldom done for subsistence only or because of a lack of alternatives. Net owners do intensive bookkeeping (recording catches, loans, sales, fines and expenses). Those working with a contract system need to maintain these records because the money is shared at the end of the contract period. In all three villages we were able to analyse some of these records and found that catches were indeed seasonal and the prices fishermen get for their catches vary depending on the season and on the catches of other companies. It also showed how the catches are shared between net owner and crew (Chapter 4).

We looked into the books of three companies. Two of them work with a contract (Woe and Half Assini) and one on the basis of daily sharing (Akosua Village). In all cases expenses are deducted first including the part for the crew members with special

roles who earn extra. The remainder is shared between net owner and crew. This is shared either in three parts or in five parts. The difference between them is that when the catch is shared in five parts, the crews get a relatively larger part (two-fifths is more than one-third). From all sharing systems it can be deduced that the net owners receive a fairly large amount, often with a separate part earmarked for investments in the canoe and net, and always with the cost of the expedition already deducted.

Due to declining catches, fishing on the basis of a contract is becoming less common in Ghana. As far as crews are concerned, the daily sharing of the catch increases their short-term control over their income but they are at the same time less able to make savings and they lose their long-term certainties. Crew members of the two companies fishing under contract, whose books we were able to examine (differing in time between nine months – Woe – and seven months of a one year contract – Half Assini) were able to earn between 700,000 and 1,800,000 cedis in a season. Between these two figures lie a range of possible 'salaries', depending on the role of the crew member. Next to that they have been paid in kind (with fish and food) during the fishing days and have received advance payments and loans both of which are then subtracted from the final amount at the end of the fishing contract period (Chapter 4). It is more difficult to determine what a net owner exactly earns, as his costs are not all clear. It has become evident from the examples that the net owner owns considerably more than his crew members as each catch is divided in half after accounting for the direct costs, between him and crew. For net owners, contracts have the advantage of enhancing the reliability of labour. For a net owner it is crucial to have enough men (fitting the size of the net) since fishing with less men than needed means less catch. Crew members with special skills can enhance their earnings. Income from fishing is important for Anlo-Ewe beach seine fishermen as they are quite specialised and do not have many other income-generating activities. Declining catches can impact strongly on the income of the fishermen (depending on how market prices react), whereby the crew members, due to the catches dividing system, are more affected than the net owners. Net owners have the possibility of placing a large part of the risk on the crew. This is also reflected in the job satisfaction of crew members, which is much lower than that of the net owners. Access to credit (for net owners and thus also for crew) is not easy and if that becomes worse, it will also impact on the organisation of beach seine fishing. If all these developments will continue beach seine fishing might slowly become less business and more subsistence fishing (as is going on now in Akosua Village).

It must be understood that many fisher households derive income from both men (fishing) and women (processing and trading fish), and have in fact diversified their income base. Ten to twenty percent of fishing households have diversified their incomes with other jobs. Access to other income-generating activities is limited due to the generally low level of education and the lack of access to land whilst on migration. From the crew and net owner questionnaire we learnt that all net owners on migration (except one) were only involved in fishing, whereas half of the net owners in the home setting (Woe) were also involved in farming. As regards the crew we saw that forteen percent of the Woe crew were involved in farming compared to four and five percent in Half Assini and Akosua Village respectively. However, the fisher crews on migration (Half Assini forteen percent, Akosua Village seventeen percent) appeared to be more involved in other occupations, such as in trade or construction work than the crews in Woe (two percent). This might be explained by the fact that both migrant locations were urban or nearby an urban centre, enlarging other job-opportunities. Only eleven percent

of the fishermen responded that members of their households earned incomes from non-fishery related activities. Overall, fishermen are mainly active as specialised fishermen. In general, fishing households do have highly nutritional diets due to the access to fish every day. Fishermen are generally not the poorest of the poor. It should also be kept in mind that income is not only what crew members get in return for their labour or what net owners receive as direct income from their fish business, or what both groups get out of other income-generating activities. Other sources of income are returns from savings or from lending money or equipment to others. The latter is a strategy of female traders in Ghana. By lending money or equipment to companies, the women are able to claim a certain part of the fish. Moreover, income can also consist of 'gifts' (remittances received from family or friends on migration), pensions, social security payments, 'begging' or 'presents'. Although I have not studied these sources of income in detail, I did meet fishermen who benefited from these alternative sources of income. It is, however, important to realise that fishermen and women on migration hardly ever send remittances. Migration is often partly a strategy to escape from these requests. An interview with women in Woe did show how migration of fishermen was good for the economy of the town in the sense that there were less resources to share with others. Finally it is normal to comply with the request of someone asking for fish when the fish are landed.

- Vulnerability

People's livelihoods are affected by external trends and shocks and as such vulnerability is an element of the livelihoods framework. As a reaction to trends such as population growth, the seasonality of fish catches and also negative trends and shocks like coastal erosion, the Anlo-Ewe fishermen have developed strategies to deal with these, including migration. We saw, however, that the fact that the Anlo-Ewe fishermen have specialised in one technique makes them additionally vulnerable to adverse trends and shocks. The case of algal bloom in the coastal waters of Half Assini revealed this vulnerability. The algae meant that their way of fishing was not possible in the affected areas, impacting negatively on their access to the fish, and thus on their livelihood. The fact that they are *specialised migrant* fishermen is a combination that limits their alternatives to deal with the problem. These fishermen have fewer alternative job opportunities due to a lack of skills, funds and access to land and to having another mindset. Farming, for instance, means a longer process time than fishing and does not have an immediate result.

Although the Anlo-Ewe fishermen were most directly affected by the phenomenon, they did not seem to appear to be affected. This is because of their limited political capital as migrants. The algae bloom is a cross-border event affecting multiple stakeholders and with a plethora of natural and anthropogenic causes. It is widely (locally and at the national policy level) perceived to be a health threat with socio-economic consequences for the coastal communities affected. Yet the fact that it is a trans-border problem coming from Ivory Coast makes it really difficult to address for Ghanaian governors.

This study has shown how Anlo-Ewe fishermen overall are vulnerable to declining catches. The lagoon case (Chapter 8) shows how worsening ecological conditions combined with a collapse of institutions put pressure on the livelihood space. This is worsened by the increasingly hostile social environment. When comparing Akosua Village with Half Assini we see that in Half Assini the institutions of the Anlo-Ewe fishermen are still in place and the leadership is still effective. In addition, the type of environment is determined by a different alignment of actors, less hostile than in Akosua Village. Future developments may be linked to the characteristics of these

places. As Half Assini lies in Nzema area, where there are hardly any local fishers, we can expect a longer remaining niche for migrant fishermen. In the Central Region, where there is a very active local fishing population, we can expect that increased ecological pressure will impact on the niche for migrant fishermen. This shows how how different collective vulnerabilities are the outcome of political and ecological conditions of their livelihood space.

- Alternative livelihood programmes

Alternative livelihood programmes have been suggested as a way of reducing the fishing effort in an attempt to reduce the pressure on fish stocks and slowly reverse the trend of declining catches. However, research has proved that alternative livelihood programmes often are based on false assumptions. These factors should be included in discussions about alternative livelihood programmes. Chapter 4 showed that these projects have rarely been a success either internationally or in Ghana. The whole idea of alternative livelihood strategies seems to come from the way the livelihoods approach is used. Combined with the idea that livelihood 'outcomes' should be solely understood as income, the idea of *alternative* livelihood activities as a solution to loss of income is easily adopted. As we already saw from the discussion on how fishing takes place, fishing is more than just an income-generating activity. Fishing is a way of life, part of the people's culture and identity. It also has functions and value for the community as a whole, as an easy source of work because it offers disadvantaged groups in society the possibility of becoming involved and earning some fish and because of the regular community fishing days.

It would be much more instructive to think in terms of developing supplementary income options in the fishing villages, since this would also tackle the problem of seasonality of catches. However, such thinking requires a governance perspective that is elevated above the current mono-sectoral approach which focuses on day-to-day management. This research shows how the identification of fishing as a profession is very important when considering alternative livelihoods.

Combined with the answers on job satisfaction we might conclude that fishermen value education highly and that improving the educational level of their children might have a positive impact on their children's alternatives.

The impact of declining catches is most likely to be an important factor when explaining the dissatisfaction amongst crew as they also bear most of the effects as the cost for fishing (the net owner's responsibility) is always deducted first. It is important to understand that the dissatisfaction of the crew in an historical perspective as many accounts I listened to during my research were coloured by reflections on how good fishing was in the past, and the difficulties the fishermen (net owners and crew alike) now face.

Migration

Anlo-Ewe beach seine fishermen have been able to expand their livelihood space by migrating within Ghana and abroad. The research question discussed in Chapter 5 was *'How can we understand the migration of Anlo-Ewe beach seine fishermen?'* Previous research has clarified the direction of the movement by distinguishing between push and pull factors. It has been recognised that fishermen left their homes due to coastal erosion, population pressure or overfishing as well as being positively triggered to move to new places. Explanations for this include marine biological ones such as the mobility

of fish species and upwelling or have a socio-economic basis, for example that the stronger FCFA could be earned in neighbouring countries (in a context of economic hardship in Ghana) and that it was possible to save money away from family. Other explanatory factors have been that migration is seen as an adventure whereby the experience adds to one's social status.

By reviewing the literature I have distinguished between push and pull factors in the early period of fisher migrations and other factors that explain the continuation of migration later. The availability of existing migration networks has been one of these factors which explains early fisher migration and this has underscored the finding that mobility is not a recent nor an exceptional phenomenon and that it should be understood in conjunction with wider social economic and political developments.

In this thesis I have argued that previous research explaining migration of fishermen has failed to account for the composition and type of movement and has therefore failed to generate an understanding of this dynamic and complex reality. This research has moved beyond the unidirectional push and pull factors by using a translocal approach which emphasises the continuous flow of people, goods, money and ideas between the different places within the livelihood space of the fishermen.

Migration is understood to be a livelihood strategy linked to the fishing activity. The concept of livelihood space is particularly useful as it is able to include translocal mobility, connecting the different places Anlo-Ewe fishermen live and work in and it helps us understand the migration dynamics. Livelihood space refers to three elements of space: 1) space to work (fish and market the fish), live safely and make use of facilities and services, 2) space within the fishing sector (niche creation) and 3) space where one is accepted – where one has a place in society. Understanding fisher migration on the basis of the logic of the activity, including fisher spatial logic, rather than on the basis of the logic of the state helps us to come to a better understanding of fisher migration. As I have argued, state logic (including its boundaries) continues to play an important role in much migration research. The preference of the state for sedentary citizens and the importance of state boundaries for policy (including fisheries policy!) has coloured research questions whereas this research (together with other research) has shown how mobility (especially in the African context) is part of fishermen's life and of making a livelihood.

The transnational approach has improved migration research and has downplayed the role of the state, including in identity creation (and maintenance), as group boundaries can transcend the local. Previous fisher migration research explained how fishermen manage to find and maintain the first (space to work and live) and third (space where one is accepted) element of livelihood space. This research has *particularly* shown how the second element of livelihood space – niche creation and maintenance – contributes to an understanding of fisher migration. The ethnic-technological divide in the Ghanaian fishing sector corresponds to a spatial divide at sea which allows for internal migration. As the different ethnic groups have specialised in different techniques and thereby use different spaces, they create room for other ethnic groups to come and fish in their territory. The niche differences also explain the differences in type and duration of their migrations.

As we have seen, Ghanaian fisher migrants, both within Ghana and abroad, have in general been welcomed at their migration destinations as their migrant fishermen added considerably to local and national economies. On some occasions, however, there have also been hostilities affecting or directed at Ghanaian fishermen. These negative con-

frontations underscore the insecurity of a migrant's position. Niche creation and maintenance is a continuous activity whereby migrant fishermen negotiate for livelihood space. The observed decline of catches increases the pressure on these negotiations. We can therefore conclude that livelihood space is not automatic but is negotiated continuously.

Multiple governance structures and fisheries governance

Chapter 6 answered the research question: '*What are the relevant multiple governance structures in Ghana for Anlo-Ewe fishermen?'* We emphasised that the Ghanaian government has a dual structure and as such also consists of governing bodies stemming from the pre-colonial indigenous states (Chapter 6). The various steering and policy oriented organisations important in coastal villages and related to fisheries, linked to both governing structures were set out and described from the sub-village level to the national level.

We began with the organisations of the Government of Ghana, first the steering organisations as the Regional Coordinating Councils at the regional level and the District Assembly at district level. Subsequently we described the executive organisations at all levels under the Ministry of Fisheries and Agriculture, the Wildlife Department as well as the Ministries of Justice and Interior under which the police and courts function. We then discussed the structure under the traditional governance structure with paramount, village and lesser chiefs and explained the chieftaincy institution. Finally the chief fisherman was described as relevant in the executive organisation of the traditional governance structure. The chief fisherman is the most important traditional executive institution in relation to fisheries in coastal villages, the most important liaison between fishermen and women processors, and between fisherfolk and the government and therefore potentially plays a key role in the negotiation interface. The chief fisherman institution was initially an age-old and traditional institution, spread by the Fante and Effutu via migration to other coastal fishing communities. In the 1980s the chief fisherman institution was also actively stimulated by the Ghanaian government and this added a hybrid element to the institution.

This is done to understand the interface at which Anlo-Ewe fishermen negotiate livelihood space. It has shown how both governance structures are ordered in their own right and how they are linked and interdependent and this has also led to the development of hybrid organisations. The Community Based Fisheries Management Committees are a good example of such a hybrid organisation. However, they have not always functioned successfully due to all sorts of problems such as the position of the chief fisherman, local power struggles and a lack of legal backing (related to the difficulty of getting byelaws gazetted).

The governance perspective is applied to fishing in this thesis, and used in contrast to the more limited management perspective. It is more inclusive, broader and longer term than the management approach and is more capable of addressing the diversity, complexity and dynamics in the fishing sector that has been confronted with a global fisheries crisis.

Governance is a key concept in many academic debates resulting in a variety of definitions in many disciplines such as international development studies, political geography and legal anthropology. The definitions differ in their view on the state, civil society, power and the role of policymakers, yet all share a focus on the interaction between state, civil society and the market. Governance perspectives recognise that

governing is a matter of public and private actors and a matter of societal concern. The popularity of the concept, sparked by the World Bank's introduction of the concept good governance in the 1990s, has been explained by the same lack of clarity as regards its usefulness as a way of dealing with difficult power issues. In this thesis I use the governance perspective by defining governance as 'the whole of public as well as private interactions taken to solve societal problems and create societal opportunities. This includes the formulation and application of principles guiding those interactions and care for institutions that enable them' (Kooiman & Bavinck 2005).

Governance is, in fact, about: Who sets what rules, when, how, why and based on what knowledge? Discussions about the management of natural resources have long been dominated by discussions on ownership based on property rights. This debate was influenced by the Tragedy of the Commons debate in which only state property or private property was seen as a way out of counteracting the depletion of open access resources. The debate has been complicated for a number of reasons but particularly in the African context where ownership has crucially had a meaning which is different to that in Western society (where the debates were dominantly held). The colonial history of Africa has resulted in a confusing array of mechanisms and rationales. The legal pluralism debate is therefore necessary in the governance debate on natural resources in Africa as it recognises that more actors are involved in governing and these actors relate to plural normative orders. Combined with the fact that many people have multiple identities, this results in a situation of institutional bricolage. Institutional crafting, creating institutions in a top-down way to improve natural resource management, is doomed to fail if these institutions are not embedded in local dynamics with plural normative orders. They also fail if they ignore heterogeneous local needs as has, for example, been recognised in the case of the CBFMCs. It has also been accepted that power plays a role given that management and governance are about rule making and enforcement. Actors in governance of natural resources differ from each other, for example as regards their level of power. The case of not getting the byelaws of Keta district gazetted (Chapter 6) is an example of how local power holders successfully manage to slow down and potentially block the decision to change fisheries rules.

The institutions of fisheries management

The research question dealt with in Chapter 7 is: How is Anlo-Ewe beach seine fishing managed at local level, both by the fishermen themselves within the traditional governing structure and by the Ghanaian government? is based on the assumption that fishermen will try to manage their fishing well if they depend on it for their livelihood. As fishing is a risky business with many uncertainties but which also offers many opportunities, it is obvious that fishermen try to organise their business collectively in such a way that risks are reduced and opportunities can be pursued. Ghanaian beach seine fisheries are indeed managed quite extensively. Fishermen have regulated the access to the fishing grounds, the interaction (including conflicts) between the fishermen both within fishing companies and between different groups (and gears), and the extraction of fish and access to the market. The regulations fishermen and governors make are based on their world view and knowledge and are the result of the wish to solve or prevent certain problems. Making rules is one thing, making sure that the rules are complied with is another. Only with compliance and/or control can management be effective. As compliance is the preferred situation, management is much more about managing people than it is about managing fish (stocks). However, fisheries management

literature has often focused mainly on either managing fish stocks (which elsewhere has been called the paradigm halieutique) or on understanding the market. This focus is based on the assumption that the human activity is the main cause of resource decline, a vision which has been questioned in the New Ecology thinking. Moreover, the state has often been ascribed a central role which has obscured the fact that fishermen themselves are largely active in managing activities.

I have defined management as: All kinds of activities people purposely undertake on a collective level to regulate fisheries (by making rules or developing norms based on existing – or new – values).We discovered in Chapter 7 that Anlo-Ewe fishermen have regulated access to the fishing grounds. All fishermen need to ask permission to fish from the chief fisherman in a village. They have regulated access to credit, women play herein an important role as official organisations such as banks have lost trust in lending money to fishermen. The government of Ghana provides the fishermen with access to fishing inputs, such as outboard motors and premix fuel. The fishermen have regulated their internal social interaction by setting up rules and regulations, some of which are laid down in a company contract. Conflicts between fishermen are almost always solved by the chief fishermen, or at his council of elders. Only in case of assault or damage do the police need to become involved. However, even then most cases are referred back to the chief fisherman. The government of Ghana is almost only involved in cases of conflict when it is between artisanal fishermen and (semi-)industrial boats.

Such arbitration procedures are rarely held, however, and the artisanal fishermen seldom gain anything out of them. Anlo-Ewe beach seine fishermen have their own ideas and belief in the sea they fish in. Many relate to the idea of sea gods and the balancing of nature, religion and the social order. In order to ensure a good catch, society, nature and cosmology have to be in balance and rituals need to be held. Any difficulties will be reflected in the catches. Although many fishermen believe in the importance of this balance and consider the rituals to be important, many also refer to different causes of declining catches, such as too many people fishing or the industrial sector causing harm to the stocks. The Ghanaian government is active in this area of fisheries management based on biological scientific knowledge and they aim to prevent overexploitation and have developed regulations about the gear, catch quotas, seasonal bans and zonation. The last moment in the fishing activity that is regulated is access to the market. The market is largely run by the women and any conflicts between the traders and the fishermen are also solved by the chief fisherman.

When analysing the collective institutions that fishermen have developed in their fisheries management it is important to keep in mind that ‘the fishermen’ consist of different groups (different leaders, net owners and crew, fishermen and women processors), with different expectations and levels of power. The rules set by the fishermen are embedded in social practices and religious worldviews and are all in all mainly directed to maintain peace and order at the beaches. This is done by solving and preventing conflicts in the highly mobile, heterogeneous social environment amongst themselves and vis-à-vis the gods. The chief fisherman herein plays a key role.

The government of Ghana’s regulating activities with regard to the artisanal sector is oriented much more around modernising the sector and conserving fish stocks. However, the artisanal sector is for a large part a self-regulated system in which the government of Ghana does not play a major role.

It has also been recognised that the fishermen are primarily concerned with managing their livelihoods. This is becoming more difficult as catches are declining. The topic

of declining catches can be one on which government and fishermen may share views. Although views on the decline may differ as regards the causes, both the government and fishermen are concerned by the occurrence. It is, however, important that the government learns from its own experiences with the fairly unsuccessful realisation of CBFMC by realising how important it is to connect to the worldview and knowledge of fishermen and connect to their interest in social and economic outcomes of regulations.

As the migration of fishermen is so much part of artisanal fisheries in Ghana, and as artisanal fisheries are mainly regulated internally it can be expected that migration has influenced fisheries management. Migration has led to a spread of knowledge and this is maintained as the places are connected in the Anlo-Ewe livelihood space with continuous flows of people and their ideas. This has resulted in the same institutions in the research locations. Half Assini was a bit of an exception as the Nzema local population was not actively involved in fishing and therefore did not have its own chief fisherman. Despite the fact that migrants are incorporated in their host-communities, the relationship between migrants and hosts remain fragile and behavioural rules of fishermen are therefore more important whilst on migration. Government officials do not involve themselves with migration as it does not pose any problems. Officials also told me instead that international migration (which we saw in Chapter 5 is also quite widespread) relieves fishing pressure in Ghanaian waters.

Negotiating livelihood space

Now that we have discussed all the elements of the central research question, in which we have an understanding of how Anlo-Ewe fishermen have organised their livelihood, go fishing, process and sell their fish, manage their activities and live their lives together with their families in their communities at home or elsewhere as part of the larger livelihood space that is structured and governed in a certain way, we can answer the main research question of this study: *How do Anlo-Ewe beach seine fishermen negotiate livelihood space, within multiple governance systems, both at home and in migrant settings in Ghana?*

Negotiation occurs in the interface between the leaders of the fishermen and representatives of the various governance structures. How the negotiation of livelihood space takes place has been illustrated in more detail using two cases. One case was situated in Akosua Village, a migrant settlement nearby Winneba, and involved the villagers of Akosua Village and the Chief of Winneba. The setting for the other was Keta district, in the home area of the Anlo Ewe, and involved the Anlo-Ewe inhabitants and the colonial and post-colonial governors and politicians. The cases have illustrated how negotiation can take different forms and can take place at different levels, the very local (Akosua Village) to the national (Keta). Negotiation can be direct, institutionalised, but can also take the form of indirect manoeuvring or even take the form of an apparent lack of negotiation. The Keta case has been an example of direct negotiations but also indirect manoeuvring, whereas the Akosua Village case was more characterised by an apparent lack of negotiation. The Keta case also shows how long negotiations can continue since it has taken over a hundred years for a solution was found. The other case was more recent, and is in fact an example of failed negotiation leading to direct confrontations such as the ‘shooting incident’ which was the core of the lagoon case in Chapter 8. The issue of time is important in the sense that situations can change: that is why one should realise that negotiation is a process. The case studies were performed at a certain

moment in time, thereby influencing the analysis. If the case study in Keta would have been done in the 1990s, one might have concluded that the negotiation practices of the Anlo were ineffective. Now we can see it as a major success.

The cases also showed the linkage between effective negotiation and leadership. The lack of leadership in which de facto leaders do not take the lead in Akosua Village contributes strongly to the situation of failed negotiations. One might argue that the apparent lack of negotiation at the side of the Akosua villagers, which seems to be ignoring the incidents that take place, is the best possible strategy considering their situation.

One of the main conclusions of this research is that, although in all three locations the same governance structures are in place, (with an extra and differing layer when in a migration context), with grosso modo the same organisations / institutions in place, there are still considerable differences in the spaces for negotiation to be seen between the research locations. This has resulted in the idea that research should not only focus on structures and institutions but should also critically study the actions of relevant actors; which people are active in which roles?

From the literature we know that the position of migrant fishermen is vulnerable. External conflicts can have serious repercussions for them (Liberia, Sierra Leone) or they can be involved in crises that develop over time (Ivory Coast, Nigeria, Congo and Ghana). However, it would be too simplistic to conclude from these studies that migrant fishermen are neccesarily more vulnerable in the migration settings than at home. Studies have shown that migrant fishermen in West Africa take their own institutions along on their migrations. Yet that does not automatically mean that these institutions are resilient and the migrants always effective in their negotiations. One of the conclusions of this research is that there are differences in how the fishermen deal with situations in the different settings. It is not only important to look at the institutions that fishermen have developed, and at how they have organised themselves *vis-à-vis* their hosts and the government, but also to understand how power plays a role and to assess the leaders in place. As a consequence, resilience not only depends on having the right institutions in place (structure) but also on having the right leaders (actors). Effective leadership at such times is crucial. From the literature we know that in Ivory Coast and Congo the consequences of external threat to which migrants had to respond were limited because the right institutions and the right leaders were in place (Odotei 2002b, Jul-Larsen 1994). Sometimes the crisis is too big for the leaders as was the case in the little Anlo-Ewe settlement Abakam near Cape Coast, where they were unable to make a difference (Wyllie 1969b). Akosua Village has the right local-level institutions in place, but the leaders are ineffective as they no longer have any legitimacy. That means that they play no role and that the villagers are left to their own devices.

The fishermen in both the Lagoon case and the Keta case are confronted by external threats to their livelihood. The way such threats are interpreted (what is the problem and what is the solution) depends on the actors' mind frame. In the Keta case we see how different understandings of the problem lead to different strategies for solving it. The way people frame a problem or conflict is based on their knowledge, beliefs, norms and values. One should remember how people are able to relate to a multiplicity of value systems, can combine beliefs with bodies of knowledge, mix institutions and make eclectic use of different paths to solve a problem. We saw that in the case handled by the traditional arbitration in Half Assini when the net owner tried to solve his net-related problem in a number of different ways (going to the police, to the elders of the com-

munity and to a priest in his home area). We also saw that in the Keta case where Anlo-Ewe representatives aligned with traditional, colonial and post-colonial governments and tried to solve the conflict spiritually with the Yewe cult who tried to align with the other Ewe and convince the governors to solve it technically. All strategies have been used in changing configurations of Anlo-Ewe groups and some were more successful than others. The Anlo-Ewe in the Keta case were much more proactive than the Anlo-Ewe in Akosua Village. In the Keta case they most likely had an identical understanding of the problem, namely coastal erosion. In the case of Akosua Village the Anlo-Ewe did not agree on what the problem actually was. It may have been declining catches at sea which created the need to fish more in the lagoon, declining catches in the lagoon, possible confrontations with the Effutu about their illegal use of the lagoon, the non-performance of the rituals, lack of leadership … and all these seem to be linked together without there being any apparent solutions given the lack of leadership and coherence in the village.

In both cases some actors framed their actions in terms of an environmental discourse. The Anlo-Ewe in Keta referred to the detrimental environmental effects of huge construction works such as Tema harbour and the Volta dam on erosion, fish populations and waterborne diseases. In the Akosua Village case the Chief of Winneba explained his actions against the Anlo-Ewe as being based on a concern for the fish stocks in the lagoon and general lagoon environment. In both cases one can be critical about this usage of environmental arguments. The construction of the Keta Sea Defence Project will have negative effects on coastal erosion just next to the site. Newspaper articles have already confirmed the fear that the project only transports the erosion problem to the east. In the case of the lagoon one might wonder why the environment of the lagoon needs so much surveillance and control while other environmental problems in Winneba are less seriously monitored and whether the proposed new use of the lagoon such as waterskiing and a five star hotel with its heavy water use will fit the ideal environmental picture outlined by the chief. The lagoon case has also shown how ineffective environmental policy is when people have few alternatives.

The observed trend that spiritual control of the sea is becoming less important for the Anlo-Ewe, combined with the decline of economic importance of the sea due to declining catches, makes us wonder what the future is of beach seine fishing and the way it is organised. The breakdown of the company institution as observed in Akosua Village, and the fact that the institution has also become less used in Woe, might be a first indication of institutional change of beach seine fisheries in Ghana due to declining catches. As artisanal fisheries are largely managed by the fishermen themselves, the question is which effects these and possible other institutional changes will have for the management of artisanal fisheries in Ghana. The increasing scarcity of fish will also increase the competition between fishermen and will –with possibly more conflicts- put more pressure on the institution of the chief fisherman. The mobility of the artisanal fishermen might also become less common in case of increased decline of catches as competition will become greater. The fact that conflicts between different artisanal gear users until so far have been an exception might change once fishermen feel they are fishing in the same limited resource pool.

In the light of declining catches it is important to bear in mind the fishermen's supplementary income sources. The government has indicated the wish to restrict access to persons currently fishing as a first step to downscale the artisanal fishing sector. Until this time the question is what supplementary income sources fishermen can make use

of. Subsequently, in the event that access to the fishing grounds becomes restricted for artisanal fishermen, the question is which alternative income sources are available in Ghana's coastal areas. Alternative job projects carried out so far in Ghana and elsewhere have generally been unsuccessful. In Ghana this is a matter of access to knowledge and finances, but more importantly of a different mind frame that the fishermen have compared to farmers and their strong fisherman identity. This research has shown however that many crew members of beach seines envision another future for their children, for which schooling is a prerequisite. Government should therefore invest in the schooling options (which goes further than the availability of free primary education) of fisher children as a way to tackle resource scarcity in the future.

The dynamic of the sector is both its strength and its weakness. It means that it is still a thriving sector but also difficult to govern by state organisations (for instance due to the extreme mobility). Fishermen on migration have weaker links with the government. The importance of local level traditional governance institutions in decentralised governance means migrants are rarely scrutinised. Migrant fishermen are less visible and this can have a positive effect as well as a negative effect on them, in terms of being visible for policy (for instance resulting in less access to inputs and to alternative livelihood programmes).

As we have seen how people's mind frame explains their actions, it is crucial to connect to this mind frame in fisheries governance. From the lagoon case in Chapter 8 we can learn that addressing the overuse of the lagoon cannot become a success as long as the social problems in the village are left unattended. A lack of social cohesion and lack of effective leadership will most likely need to be solved first before another use of the lagoon can be established. The non-effectiveness of the CBFMC (Chapter 6) is another indication of the necessity of proper structures in society before the use of natural resources can improve. We have also seen that one can question institutional fixes such as the setting up of committees if underlying power struggles remain unattended. This research underlines the importance of input of the social sciences in fisheries governance as has been pleaded for by Jentoft (1998) and developed by Kooiman *et al.* (2005).

Challenges for governance

This study has demonstrated the importance of fisheries for Ghana both in terms of local food security and employment. The artisanal sector has been shown to be of prime importance, contributing a large proportion of total catches as well as being a source of local employment in Ghana.

The fact that the artisanal fishing sector is largely managed by fishermen themselves does question the priorities of Ghana's government. How can it be that such an important sub-sector receives so little attention? This research has shown that fishermen are generally successful in managing their fisheries, regulating access to the sea and making sure that peace and order prevail on the beaches. These are major accomplishments. Yet, the problem of declining catches cannot be solved by the fishermen alone. The increasing scarcity of fish is also putting more pressure on the institutions fishermen have developed to manage their fisheries. The following is a selection of issues which deserve more attention from the Ghanaian Ministry of Fisheries.

1. The government of Ghana should reconsider its approach to the fisheries sector. Most fishermen these days have rarely heard of the Fisheries Department and

there seems to be little guidance at beach level. It is so important to be in the villages and on the beaches and to work alongside the fishermen. Only by talking and listening to government workers can the fishermen learn more about the reasons why, for instance, the Ministry wants to increase the mesh size. Fishermen's ideas are based on their world view and if the government's perspective is not part it, it will be unable to affect their actions.

2. Declining catches and a growing fishing sector have clearly revealed the problems of overcapacity. Having noted the importance of the artisanal sector for livelihoods, it is imperative to begin downscaling the (semi-)industrial sector. Decommissioning (semi-)industrial vessels has a greater impact on fishing effort and affects the least number of jobs. In addition, the government should reconsider partnerships with foreign parties, as long-term stock benefits are more valuable than short-term financial benefits. However, above all, the government should seek ways to invest in control units, as the national fishing grounds need protection against unwanted intruders (illegal, unreported and unregulated fishing).
3. Conflicts between artisanal gear and (semi-)industrial gear users need to be acted upon by the government directly. The weaker party should be able to count on the government at all times. Showing force here will improve the image of the government among the coastal communities. The idea of having the government pay fishermen to patrol fishing grounds might be introduced as a supplementary income activity linked to their livelihood space.
4. The next step is to down-scale and limit access to the artisanal sub-sector. It is important to realise that this cannot be done overnight and that it should be done in collaboration with the fishermen themselves. Perhaps artisanal fishermen can be bought out, or induced to reduce the fishing effort collectively. Refusing access to the fishing grounds should go hand in hand with the active development of supplementary livelihood opportunities.
5. Limiting fishing effort means that the artisanal fishermen who continue fishing need protection against outsiders. As Ghana's artisanal sector is organised along ethnic (technical) lines, the government and local leaders should, however, beware of fuelling inter-ethnic tensions. This can only be done in close cooperation with the chief fishermen and other fishermen leaders and requires investment in explaining the limits of the resource.
6. Mesh size regulations need to become more effective. This can only be the case if fishermen and local leaders understand the importance of the regulations (see point 1 above). As far as the beach seine is concerned it has been suggested that smaller mesh sizes be allowed during the anchovy season and larger mesh sizes at other times.
7. The Ghanaian government should not only increase its regulatory effort at beach level, but also (continue to) seek alliances with the neighbouring countries (via CECAF). After all, if measures (such as on mesh sizes) are only taken in Ghana, this may result in migration to other locations and countries.
8. It should be born in mind that institutional crafting is doomed to fail if institutions are not embedded in the reality of plural normative orders and if they ignore heterogeneous local needs. Consequently, instead of creating a CBFMC, it might be more instructive to improve and strengthen institutions, like those of the chief fisherman and his council of elders which are already in place. As we

have seen in this study, local leaders are crucial for local governance. Reinforcing local leadership therefore needs to be a priority in improving fisheries governance. Local leaders are the link between the villagers, fishermen and outside organisations. They are the brokers in the multiple governance setting. Legitimate leadership is key to local compliance with national rules and regulations.

9. Reinforcing local leadership means investing in education. Education is important in order to expand people's capabilities, provide children in fishing communities with more job opportunities and transfer scientific knowledge on fisheries to fisher communities. All this will help to improve local knowledge.

Fisheries governance is ultimately about making hard choices and the government as one of the governing actors should be prepared to make these choices in concurrence with the fishermen in order to simplify the process of policy implementation.

Appendix 1

Overview of the gears used in the artisanal fishing sector in Ghana, showing the mesh sieze, crew size, sea area, regional area, period and target species.

Fishing gear	**Principal mesh size (mm)**	**Crew size**	**Sea area**	**Regional area**	**Period**	**Target Fish Species**
Cast net	25-45	1-2	Shallow waters of sea and lagoon	All coastal areas	Year*	Tilapia, Mullet, *Bonga*
Set gillnet (*toga/tenga*)	40-50	2-6	Bottom	All coastal areas, except Volta Region	Year	Threadfins, Grunts, *Ilisha*
Set gillnet (*tenga adado*)	50-55	4-6	Bottom	Central Region	Mar-May Oct-Jan	Sea Breams, Grunt, Sardinella
Set gillnet (*ashoo*)	30-40	2-4	Bottom	Restricted to Nungua in Greater Accra Region	Year	Juvenile of Threadfin, Bigeye, Grunter, *Mojaras*
Set gillnet (*tengirafo*)	75	4-6	Hard bottom	All coastal areas, except Volta Region	Oct-Mar	Catfish, Common Sea Bream, Croakers, Tongue Sole, Dogfish, Molluscs
Set gillnet (*solu-yaa*)	60	4-5	Shallow waters	Accra area	Oct-Mar	Sole, Red Pendora, Blue-spotted Sea Bream, Molluscs
Set gillnet (*nyaa-yaa /kotorboa / lobsternet*)	80-125	3-4	Hard rocky bottom	Parts of Greater Accra Region and eastern parts of Central Region	Nov-Mar	Lobster, Sharks, Rays, Molluscs
Driftnet (*obue-man ali net*)	45-50	7-12	Surface inshore	Greater Accra Region and Central Region	Year	Sardinella
Driftnet (*flikilo-yaa*)	50	4-6	Surface inshore	Parts of Greater Accra Region and Volta Region	Oct-Mar	African Half Bleak, Flat Needlefish, Atlantic Flying Fish, Sardinella, Club Mackerel
Driftnet (*nifa-nifa*)	100-200	4-6	Surface inshore	Parts of Greater Accra Region, Central Region and Western Region	Jan-Dec	Shark, Ray Mantra, Tunas (Yellowfin, Bigeye, Skipjack), Atalantic Little Tuna, Sailfish, Swordfish

Driftnet (*libias / sika-ye-abrantie*)	31	3-5	Surface inshore	Central region	Jan-Dec	Juvenile Sardinellas
Encircling gillnets (*aborketeo / kokole-yaa / kokore-boa, shad net*)	55-60	3-5 8-10	Surface inshore	Parts of Greater Accra Region, Central Region	Nov-Dec Mar-April	*Bonga*
Seine net (*beach seine*)	50-60 (main body), 12-18 (bag)	30-50	Surface to bottom	All four coastal regions, especially Volta Region	Year	Horse Mackerel, Grunt, *Ilisha*, Threadfin, Anchovy, Sardinellas, Mackerel Scad
Purse seine net (*watsa – poli*)	38-50 18-25 (in the bunt) 10-13	18-25	Surface inshore	All four coastal regions	year	Sardinella, Anchovy, Chub Mackerel
Hooks and line		1-2 5-6	Rocky bottom, surface, inshore and offshore	All four coastal regions	year	Groupers, Sea Breams, Snappers, Horse Mackerels, Scad, Pandora, Yellowfin Tuna, Skipjack, Sailfish, Sharks, Spanish Mackerel, *Wahoo*, Atlantic Bonito, Dolphin Fish, Barracuda
Traps			Bottom of lagoons, shallow estuaries	All four coastal regions	Year	Shrimps, Crabs, Tilapia, other small pelagics

* year = used all year through.

Source: Adapted from Mensah *et al.* 2006: 22-24.

The table shows the ethnic-technical specialisation, yet not so clear as one might expect but that is because the table does not mention the main ethnic groups but regions. And due to internal migration most ethnic groups operate in all coastal regions (see Chapter 3).

Appendix 2

Research questions, questionnaires and household survey

Research questions

Migration

1. Why do fishers migrate?
2. Where do they migrate to?
3. Since when have they been migrating?
4. How is their migration organised?
5. What position do they have in the receiving settlement?
6. How do they get permission to stay and access to the fishing grounds?
7. What position do they have in the sending settlement?
8. What is the meaning / importance of their migration for the sending settlement?

Fisheries management

1. What forms of management can be distinguished in the research location:
2. Who are included and excluded in the process?
3. What kind of decision-making process is there?
4. And how does it take place; what are the regulating activities they undertake?
5. What objectives of management can be distinguished in the research location?
6. Why do they have these objectives?
7. Where do these objectives come from, what is the world-view behind it?
8. Can the objectives be realised (in theory, by implementing their management-scheme)?
9. Are the objectives realised in practice?
10. What is the intensity of management in the research location?
11. How important is it?
12. How is it supervised?
13. What are the amount of regulations and rules?
14. What are the rules in beach-seine fishing in the research location?
15. Where do these rules come from, who made them?
16. Why are these rules made?
17. Since when are these rules in existence?
18. How are the rules enforced?
19. What is the range of the rules (for whom do they apply and for where)?
20. How are these rules adhered to in actual practice?
21. Which rules are violated often and why?
22. What is done when rules are violated?
23. Does the violation of rules lead to conflicts?
24. How are these conflicts addressed and solved?

Anlo-Ewe

1. What is the history of the Anlo-Ewe?
2. What are the boundaries of the Anlo-Ewe group?
3. Who are the leaders of the Anlo-Ewe?

4. How are the Anlo-Ewe organised?
5. What is their position vis-à-vis the other ethnical groups in Ghana?

Beach seine fishers

1. How is it done / how is it organised?
2. What equipment/gear is used?
3. Who are the beach-seine fishers?
4. Since when have they been doing it?
5. Why have they been using this technique?
6. Where are they fishing?
7. What is the purpose of beach-seine fishing?
8. What is the meaning of beach-seine fishing?
9. When do they go fishing and what are the main seasons to be distinguished?

Research sites (Woe, Akosua Village)

1. What are the various neighbourhoods that can be distinguished?
2. Where do the fishermen and processors live?
3. What are the characteristics of fishermen's households and what are the assets of fishermen's households?
4. What facilities can be found?
5. What are the places of interest?
6. Why are these the places of interest?
7. How many inhabitants are there?
8. How many people have migrated to other places (percentage)?
9. Where have they migrated to?
10. Why have they migrated?
11. What does this migration mean to the village?
12. Are there any migrant-settlers in the village?
13. Where do they come from?
14. Why have they settled here?
15. What are the authority structures in the village?
16. How do these authority structures work down at lower levels and how are the linked to higher levels of authority?
17. What is the main ethnic group in this village?
18. What are the main religions practices in this village?
19. What is the importance / influence of these religions?
20. What are the main organisations that can be found in this village?
21. What is the importance of these organisations?
22. What economic activities can be found in this village?
23. What is the importance of these economic activities?
24. What are the natural assets of the village and its surrounding?
25. What is the importance of these natural assets?
26. What is the history of the village?
27. What is the position of the village in the larger District?
28. What is the position of the village in the ethnic area?

Questionnaire crewmembers companies

1. What is your name?
2. How old are you?
3. What is your ethnicity, your clan?
4. Are you married? If yes, how many wives, how old, what do they do for a living?
5. Do you have children? If yes, please indicate (per wife) their age and what they do (school, work)?
6. What is your education?
7. In which company are you now fishing?
8. For how long have you been fishing in this company?
9. Have you ever migrated with this company? If yes, where to, when and how long?
10. Have you ever fished in other companies? If yes, which, when, how long and where (origin and migration destination)?
11. Have you ever done other jobs? If yes, which? (or are you now also involved in other work, like farming)
12. What were (are) your grandparents and parents doing for a living, and where are they from (hometown, migration)?
13. What do you want for the future for yourself (in terms of work)?
14. What do you want your children to do (be doing)?
15. Who are your household members and what are the income deriving activities in the household?

Questionnaire net owners companies

1. What is your name?
2. How old are you?
3. What is your ethnicity, your clan, your hometown?
4. Are you married? If yes, how many wives, how old, what do they do for a living, where do they live?
5. Do you have children? If yes, please indicate (per wife) their age and what they do (school, work)?
6. What is your education?
7. What is the name / are the names of your company(ies)?
8. Since when do you have this / these company(ies)?
9. When did you start with this / these company(ies)?
10. Have you ever migrated with this / these company (ies)? If yes, where to, when and how long?
11. If not, why not?
12. How many nets (also dormant) do you have, how many boats, how many outboard motors? * if they are joint owned, please indicate with who * if they are not used / dormant please indicate why they are not used currently.
13. How did you become owner of this / these nets (built yourself or inherited)?
14. Have you ever fished yourself in other companies? If yes, which, when, how long and where (origin and migration destination)?
15. Have you ever done other jobs? If yes, which? (or are you now also involved in other work, like farming?)

16. What were (are) your grandparents and parents doing for a living, and where are they from (hometown, migration)?
17. What do you want for the future for yourself (in terms of work)?
18. What do you want your children to do (be doing)?
19. Who are your household members and what are the income deriving activities in the household?

Easter questionnaire (Home coming party in Woe)

Please tick: Male / Female

1. What is your name?
2. How old are you?
3. What is your marital status?

3a. If you are married, how many wives do you have?

4. How many children do you have?
5. What is your profession?

5a. What is the profession of your husband / wife(s)?

6. What is your hometown?
7. Where do you live in your hometown?
8. Where have you migrated to, what is your current address?
9. How long have you lived there?

9a. With who did you migrate to there?
9b. If your husband / wife(s) did not go with you, where are they now?
9c. If (some of) your children did not go with you, where are they now?

10. Have you ever migrated to other places (next to above mentioned)?

10a. If yes, where to?

11. Do you own any of the following, and specify how many? *yevudor* / boat / cast net / outboard motor / set net
12. How often do you annually visit Woe?

12a. On what kind of occasion is that? Easter / Christmas / Festival in October / Funeral / Marriage / Outdooring Ceremony / Other occasions (indicate which)

Household survey – 1st part

Name of village part:
Name of respondent:
Length of stay (of respondent) in Village:
Migrated to:

No (a)	Name hh member (b)	Sex (c)	Age (d)	Marital status (e)	Rel. to hh head (f)	Educ. level (g)	Profession (h)	Company / Net owner (i)	Other i.d.a. (j)	Religion (k)
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

a) No: household head gets number one
b) Name household member: fill in the names of the household members
c) Sex: **M** = male, **F**= female
d) Age: if the respondent is not sure, fill in an estimation and add **±**
e) Marital Status: **S** = single, **M** = married, **D** = divorced or separated, **W** = widowed
f) Relation to household head: **S**= spouse, **C** = child, **G** = grandchild, **Si** = sibling, **P** = parent, **O** = other kin, **N** = non kin
g) Educational Level: **I** = illiterate, **P** = primary school, **JSS** = Junior Secondary School, **SSS** = Senior Secondary School, **V** = Vocational Training, **U** = University (NB: if not completed, add the number of years that were completed > fi. P3 (primary school third year completed)
h) Profession: **NA** = not applicable, **F** = fisherman, **N** = net owner, **P** = processor, **T** = trade, **O** = other (NB: add what)
i) Company / Net owner: if the hh member is Fisherman or Net owner under (h), add in which company he fishes or who the net owner is of the company where he fishes (most).
j) Other income deriving activities: apart from the profession which generates income, are there any other i.d.a.?
k) Religion: **C** = Christian, **T** = Traditionalist, **M** = Muslim, **O** = other

Household survey – 2nd part

Facilities of the household

1. Do you have electricity or a generator on your household compound? Yes / No
2. Do you have a water pipe or well on your household compound? Yes / No

2a. If no, where do you fetch your water? ……

3. Do you have toilet facilities on your household compound? Yes / No

3a. If no, where do you go to instead?
beach / public toilet / bush..……

4. Do the members of the household own any of the following:

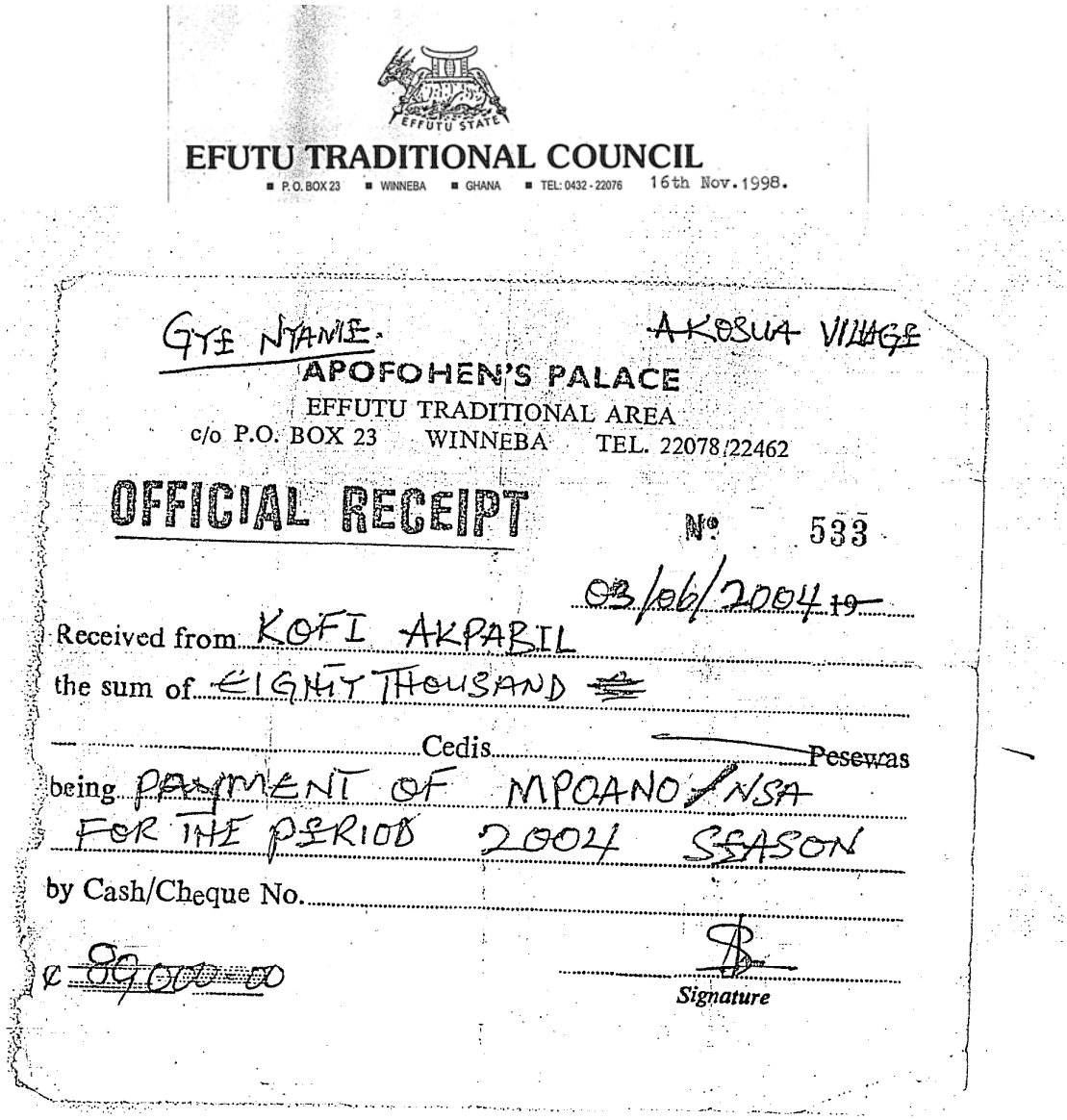
Assets	Amount	Who owns *	Commercial **
Smoking oven			
Gas stove			
Refrigerator			
Canoe			
Outboard motor			
Yevudor			
Lagoon *yevudor*			
Lybia			
Cast net			
Coconut tree			
Cat			
Dog			
Goat			
Poultry			
Sewing machine			
Car			
Bicycle			
Radio			
Television			
……			

* If it is for a specific hh member, state the **number** of the owner. If it is for general use in the household, state **hh**.
** If it is used for commercial use, please explain what it is used for. If left open it is presumed to be for private use only.

5. If you / the household owns a *yevudor*, are you currently using it? Yes / No

Appendix 3

Request of Effutu Traditional Council to the Anlo-Ewe net owners of Akosua Village to pay the land royalties (1998).
And proof of payment of land of a net owner in Akosua Village (2004).



EFFUTU TRADITIONAL COUNCIL
P.O. BOX 23 ■ WINNEBA ■ GHANA ■ TEL: 0432 - 22076

16th Nov. 1998.

GYE NYANIE. AKOSUA VILLAGE

APOFOHEN'S PALACE
EFFUTU TRADITIONAL AREA
c/o P.O. BOX 23 WINNEBA TEL. 22078/22462

OFFICIAL RECEIPT No. 533

03/06/2004 19

Received from KOFI AKPABIL

the sum of EIGHT THOUSAND

Cedis Pesewas

being PAYMENT OF MPOANO/NSA FOR THE PERIOD 2004 SEASON

by Cash/Cheque No.

¢ 80,000.00

Signature

Appendix 4

Keta District CBFMC Bylaws

Preamble: The …….. CBFMC is hereby authorised and empowered by the KETA DISTRICT ASSEMBLY as from the …….day of …….2000 to use the following bye laws as part of the CBFMC constitution to safe guard the fish stock fishing and activities in the community.

* *THE CBFMCs SHALL BE RESPONSIBLE FOR THE ENFORCEMENT OF THESE BYE LAWS*

1. CONSERVATION OF FISH STOCK

Using chemicals and poisons	(i)	The use of chemicals or poisons is prohibited. Offenders shall be liable to a fine including burning of the fishing gear and cash of One hundred thousand cedis.
Hauling and landing of fish juveniles	(ii)	The hauling and landing of fish juveniles apart from Abobi ashore is banned. Perpetrators will be fined Five hundred to One million cedis.
Use of prescribed net	(iii)	The use of beach seines and nets with mesh size less than 25mm or 1 inch is forbidden. Offenders will be prosecuted at court.
Close season	(iv)	Close season will be imposed from time to time by the CBFMC in consultation with DOF. Offenders will be arrested and prosecuted.
Protection of sea turtle	(v)	Anyone caught in possession or harming the Sea turtle or any other endangered species shall be prosecuted.
Use of dynamites	(vi)	The use of dynamites and any other explosives in fishing is prohibited. Perpetrators will be prosecuted at court.

2. CONFLICT ALLEVIATION

Fighting	(i)	Fighting of any sort either at sea or at beach is prohibited. Offenders will be fined a sum of money ranging from twenty thousand to one hundred thousand cedis.
Conflict among vessels/canoes	(ii)	Conflicts between two canoes and/or will attract one hundred thousand cedis each before arbitration by CBBFMC and fifty thousand cedis if the case is later withdrawn.
Two groups casting net one after the other	(iii)	If one fishing group encounters a shoal of fish and cast their net and a second group casts their net behind the first one the second group shall give one-third of their catch to the first group. Failure to do so will attract a fine up to one hundred thousand cedis.
Retrieving of items	(iv)	Any fishing input or item found or retrieved either at sea or at the beach shall be lodged with the CBFMC within the first three days from discovery. The chief fisherman shall then look for the owner through the appropriate means of announcement. Defaulters will be fined fifty thousand to four thousand cedis.
Compensation	(v)	An appropriate compensation determined by the owner and the CBFMC depending on the item retrieved shall be given to the founder/owner after a period of time.
Cursing and invoking the wrath of gods	(vi)	Any person or a group of persons who curse by the gods or invokes the wrath of gods in one way or the other on another person or a group of persons shall be liable to an offence punishable to a fine fifty thousand to two hundred thousand cedis in addition to two crates of schnapps, one gallon of akpeteshie, two sheep and one goat.
	(vii)	Any person or a group of persons who by their action damage fishing inputs or any article belonging to another person or a group of persons shall be made to replace such items and also pay a fine of fifty thousand cedis to the CBFMC.

Casting net over already cast net	(viii)	It is an offence for any group of fishermen to cast their net over net already cast by another group of fishermen. Offenders shall be fined forty thousand cedis.
Carting of fish to land	(ix)	Should any fisherman haul in more fish than he could load onto his canoe and gives part of it to another fisherman to cart to land, the quantity of fish landed by the helper shall be equally shared between them. Offenders shall pay One hundred to four hundred thousand cedis.

3. SANITATION AT THE BEACH

Making the beach insanitary	(i)	Any person or group of persons who by their action create any insanitary condition at the beaches commits an offence. Offenders will be fined five thousand to fifty thousand cedis and in addition removed the unwanted material.
	(ii)	Any fisherman who leaves his abandoned or unserviceable canoe at the beach shall be charged fifty thousand cedis whilst he will be given time to remove the debris. *OR the committee shall remove the debris at the expense of the owner of such debris.

4. SECURITY AND SEAFTY AT SEA

Carrying of harmful articles to fishing	(i)	Apart from fishermen operating drift gill net 'nifa nifa' and the hook and line, no fisherman is permitted to carry cutlass, missiles, club or any harmful article to sea or fishing grounds. Offenders shall pay a fine of fifty thousand to one hundred thousand cedis.
Refusal to assist at sea	(ii)	Any fisherman or a group of fishermen who ignore or refuse the appeal for help or turn down the invitation for help of fisherman who is facing problems at sea due to mechanical fault of the outboard motor being used or entangling of the net resulting in immobility commits an offence. Offenders shall pay a fine of fifty thousand to one hundred thousand cedis.
Going to sea alone	(iii)	It is an offence for one man to go to sea. Any one found will be fined of fifty to one hundred thousand cedis.
Drunkenness	(iv)	No fisherman shall get drunk when going to sea. Offenders will be fined twenty thousand cedis.
Carrying of paddles to sea	(v)	No fisherman or a group of fishermen shall go to sea without oars or sails. Offenders shall be fined fifty thousand cedis.

5. CONDUCT AT BEACH AND SEA

Restrict movement of fismongers	(i)	Fish carriers and fishmongers are not to meet any canoe on its way to shore in attempt to transact business. *Offenders will be fined fifty thousand cedis.
Registration of canoes	(ii)	Any canoe which has not got registration number embossed on it shall not be allowed to fish* or operate at the beach.
Interfering	(iii)	Any person found interfering with the discharge of fish by another person or group will be guilty of an offence. The person will be fined twenty thousand cedis.
Sale of narcotic drugs	(iv)	Sale of India hemp or *any narcotic drug is prohibited. Offenders will be prosecuted at court.
Compliance	(v)	Any migrant fisherman who does not comply with the norms of the community shall *not be allowed to operate at the beach.
Carrying of fishmongers to sea	(vi)	Any fisherman who ferries any fishmonger to transact business on sea or lake will be fined two hundred thousand cedis, a sheep and a crate of schnapps.

Heeding to chief fisherman's call	(vii)	Any person who fails to attend to a lawful call of the chief fisherman shall be fined five thousand cedis for fishmongers and then thousand cedis for canoe owners. *A lawful call shall be constructed to mean a call to discuss matters concerning fishing, the welfare of the community and these bye laws.

6. STEALING CASES

Stealing of fish	(i)	Any person who steals fish irrespective of the quantity shall be guilty of offence. Offenders shall be fined fifty thousand cedis.
	(ii)	*Parents of children caught stealing will be made to twenty thousand cedis.

7. FISHING HOLIDAYS

Fish holiday	(i)	There shall be no fishing whatsoever on Wednesdays. *Offenders shall be fined four hundred thousand cedis.
Strange canoes at beach	(ii)	Any strange canoe landing at the beach on Wednesdays shall give one painful or crate of fish in every ten crates of fish to the CBFMC else will not be allowed to off-load.

8. LEVIES

	(i)	Any strange canoe landing at the beach on fishing days shall give one crate of fish to the CBFMC. Failure to give, the canoe will not be allowed to discharge its catch.
	(ii)	Every group of fishermen is to give one pan full or a crate of fish to in every twenty crates or pans of fish to the CBFMC.
	(iii)	Special levy shall be imposed on every fisher and fishmonger from time to time as the need arises. Defaulters shall be fined one hundred thousand cedis in addition to the imposed levy.

9. CHILDREN INVOLVEMENT IN FISHING

	(i)	It is prohibited for all school going children to go to sea during shool hours irrespective of shift system. Parents of any child seen will be made to pay a fine of then thousand cedis per child.
	(ii)	Children below the age of 15 shall not be allowed to go to sea. Boat and canoe owners who contravene this law shall be fined fifty thousand cedis.

*** The CBFMC shall render accounts to the District Assembly twice in every year.**

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Samenvatting (Dutch summary)

Dit proefschrift gaat over het onderzoek dat ik heb verricht onder kleinschalige vissers aan de kust van Ghana die met een strandzegen vissen. De kleinschalige visserij in Ghana is in 2005 met 13.000 boten verantwoordelijk voor driekwart van de mariene vangst en is dus belangrijker (qua volume) dan de (semi-)industriële visserijsector (met 464 boten). Naast het feit dat ze zoveel vangen, geeft de sector ook veel directe en indirecte werkgelegenheid. De vissector is verantwoordelijk voor tien procent van de werkgelegenheid in Ghana. Vis is in Ghana ook een belangrijk onderdeel van het dieet, goed voor 27 kilo per hoofd van de bevolking en voor meer dan de helft van de totale dierlijke eiwitinname.

Visbestanden staan wereldwijd echter onder druk, meer dan tachtig procent van de visbestanden wordt maximaal bevist, is overbevist of herstellende van overbevissing. Ook de West-Afrikaanse wateren staan onder druk en vissers in Ghana klagen dan ook over afnemende vangsten. Deze berichten zijn niet alleen zorgwekkend vanuit een ecologisch perspectief, vergelijkbaar met het verdwijnen van de tropische oerbossen, maar ook met het oog op voedselzekerheid en werkgelegenheid. Vis is namelijk in veel ontwikkelingslanden een belangrijke en goedkope bron van eiwitten; ondermeer omdat het na verwerking (drogen, roken of zouten) goed houdbaar is en tot diep in de binnenlanden verhandeld kan worden.

Ik wil met deze studie dan ook bijdragen aan beter visserijbeheer. Ik doe dat vanuit een sociaal-wetenschappelijk perspectief. Visserijbeheer is lange tijd gedomineerd geweest door biologen en economen. Sociale wetenschappers zijn nog maar relatief kort betrokken bij de theorievorming (en toepassing) van visserijbeheer. Dat dit aan het veranderen is, is een goede zaak, aangezien visserijbeheer niet alleen gaat over vis maar vooral ook over vissers. Ten tweede is beheer een politiek proces waarin zowel publieke als private partijen een rol spelen. Sociaal-wetenschappelijke kennis met betrekking tot de artisanale visserij in West Afrika is schaars en deze studie voorziet dan ook in een behoefte.

Ik maak in deze studie gebruik van een nieuwe benadering in de sociaal-wetenschappelijke theorievorming van visserijbeheer, de zogenaamde *interactive governance approach*, ontwikkeld door Kooiman *et al.* (2005). Vertrekpunt hierin is dat visserij wereldwijd complex en divers is en een dynamisch karakter heeft. Daarnaast stelt deze benadering dat beheer niet voorbehouden is aan de overheid alleen. Behalve van *interactive governance* maak ik in mijn studie gebruik van de *livelihood approach*, ontwikkeld in de jaren negentig, om tot een beter begrip van het handelingsperspectief en de kwetsbaarheid van arme mensen te komen. Hierin worden complexiteit, diversiteit en het dynamische karakter van armoede benadrukt. Het uitgangspunt is dat mensen op basis van voor hen beschikbare en toegankelijke hulpbronnen, activiteiten ontwikkelen waarmee zij in hun bestaan kunnen voorzien. Bestaansverwerving moet niet alleen opgevat worden als het genereren van inkomsten maar ook als een bron van identiteitsvorming. Het derde wetenschappelijke debat dat een rol speelt in dit onderzoek is dat van het beheer van natuurlijke hulpbronnen, waarin de gemene-weide-problematiek (*Tragedy of the commons*) centraal staat.

In dit proefschrift staan de Anlo-Ewe strandzegen-vissers centraal. Ik beschrijf hoe deze vissers onderhandelen over ruimte voor bestaansverwerving (*livelihood space*) binnen meervoudige bestuursstructuren, zowel in hun plaats van herkomst als op plaatsen waar zij naartoe gemigreerd zijn binnen Ghana. Drie kenmerken van de Ghanese artisanale visserijsector komen daarbij naar voren. Ten eerste blijkt dat visserij een belangrijke rol speelt in de bestaansverwerving en de daaraan gekoppelde identiteitsvorming van vissers (samenvallend in de Engelse term *livelihood*). Dit druist in tegen de opvatting van bijvoorbeeld Jorion (1989) dat mariene visserij een uit nood geboren activiteit is voor mensen met een gebrek aan alternatieven. Ten tweede laat deze studie zien dat de artisanale sector een zeer mobiele sector is. Veel vissers in Ghana migreren zowel binnen Ghana als in de West-Afrikaanse regio. Ten derde zijn bestuursstructuren in Ghana meervoudig. Niet alleen de Ghanese centrale overheid speelt daarin een rol maar ook lokale vorstendommen. Deze drie kenmerken beïnvloeden de onderhandelingspositie van de vissers en hebben implicaties voor visserijbeheer. Door middel van het begrip onderhandeling verbindt deze studie de gewoonlijk gescheiden discussies van bestaansverwerving (*livelihood*) en bestuur en beheer (*governance*). Door deze twee sociaal-wetenschappelijke debatten bijeen te brengen in één kader wordt aan bestaande tekortkomingen tegemoet getreden. Het gaat daarbij om het gebruikelijke tekort aan aandacht voor structurele factoren in bestaansverwervingsonderzoek en het tekort aan empirisch onderzoek in het vaak normatieve debat over bestuur en beheer.

Het veldwerk dat aan deze dissertatie ten grondslag ligt vond plaats in drie dorpen langs de Ghanese kust: Woe (Volta Region) in het oosten aan de grens met Togo, Akosua Village (Central Region) en Half Assini (Western Region) in het westen aan de grens met Ivoorkust. Woe ligt in het herkomstgebied van de Anlo-Ewe, terwijl de andere dorpen migratiedorpen zijn. In elk van de dorpen is dan ook een ander lokaal vorstendom aanwezig, respectievelijk de Anlo-Ewe, de Effutu en de Nzema. Akosua Village is echt een migratiedorp waar alleen Anlo-Ewe's en aangetrouwde Effutu en Fantis (afkomstig uit het nabij gelegen Winneba) wonen. In Half Assini wonen de vissers in een aparte wijk. Naast de Anlo-Ewe migrantvisserswijk is er ook een Fanti migrantvisserswijk. Alle drie de dorpen zijn gelegen in een waterrijke omgeving.

Ik heb gebruik gemaakt van verschillende kwalitatieve en kwantitatieve onderzoeksmethoden (zie hoofdstuk 2). Door onderzoeksmethoden afkomstig van de antropologie en geografie met elkaar te combineren heb ik een mate van etnografische diepgang alsook generaliseerbaarheid van de gegevens weten te bereiken. Daarbij heb ik laten zien dat identiteit, instituties en activiteiten lokaal ingebed zijn, maar dat tegelijkertijd lokale verschijnselen niet geïsoleerd zijn maar samenhangen met ideeën, instituties en machtsprocessen elders.

Het proefschrift is ingedeeld aan de hand van vier deelvragen die beantwoord worden in de hoofdstukken 3-7. De hoofdvraag wordt tenslotte beantwoord in hoofdstuk 8, waarna de conclusies getrokken worden in hoofdstuk 9. In deze samenvatting hanteer ik eenzelfde indeling, te beginnen bij de eerste deelvraag.

De ruimte voor bestaansverwerving van Anlo-Ewe strandzegen-vissers

De eerste deelvraag luidt: *Hoe hebben Anlo-Ewe strandzegen-vissers hun manier van bestaansverwerving georganiseerd?* Deze vraag is in hoofdstuk 3 en 4 beantwoord door gebruik te maken van de *livelihood* benadering. Deze benadering laat de dynamiek en verscheidenheid van armoede zien. Het laat zien hoe *alle* hulpbronnen van bestaans-

verwerving evenals de onderlinge samenhang tussen die hulpbronnen, potentieel van belang zijn. Er worden vijf categorieën onderscheiden: natuurlijke (land, water, vis), fysieke (infrastructuur, huis, netten, boten), financiële (geld, toegang tot krediet), menselijke (kennis, vaardigheden, arbeidstijd en gezondheid) en sociale hulpbronnen (relaties gebaseerd op wederkerigheid en vertrouwen). Bestaand visserijonderzoek heeft zich lange tijd blind gestaard op toegang tot de natuurlijke hulpbron (vis) en gerelateerde hulpbronnen (zoals netten en een boot) (de zogenaamde *paradigm halieutique*), waarbij andere hulpbronnen (zoals familiearbeid, fysieke kracht, vaardigheden, politieke invloed, identiteit en infrastructuur) over het hoofd gezien werden. Zo kunnen vissers bijvoorbeeld wel een net in huis hebben, maar door een tekort aan toegang tot arbeid kan het net toch ongebruikt blijven. De *entitlements approach* heeft in sterke mate bijgedragen aan het armoededebat door te laten zien dat armoede vooral draait om het hebben van *toegang* tot die hulpbronnen. Een studie naar honger in India liet zien, dat het niet ging om een tekort aan voedsel alswel om een gebrek aan toegang tot het aanwezige voedsel voor de armen (Sen 1981). Ook blijkt uit de theorie dat toegang tot hulpbronnen een politiek (en dus niet neutraal) proces is, en bepaald wordt door sociale relaties, organisaties en instituties. Hulpbronnen zijn daarom niet alleen middelen om een bestaan mee te verwerven, maar geven ook mensen de macht tot handelen. Dit laat zien dat structurele (politieke) processen een belangrijke rol spelen bij de bestaansverwerving van mensen, iets dat lange tijd te weinig aandacht heeft gekregen in onderzoek naar bestaansverwerving.

Toegang tot fysieke en financiële hulpbronnen

Toegang tot water blijkt in de meest rurale onderzoekslocatie (Woe) beter te zijn, terwijl de meest urbane onderzoekslocatie betere toegang geeft tot elektriciteit (Half Assini). Twintig procent van de totale onderzoekspopulatie bezit een strandzegen, waarvan tussen de 56 tot 70 procent het net ook in gebruik heeft. Woe had het hoogste percentage aan niet-gebruikte netten, hetgeen verklaard kan worden door het feit dat familienetten in het gebied van herkomst worden bewaard. In Woe beschikten alle actieve neteigenaren ook over een boot, in Akosua Village was dit 81 procent en in Half Assini maar 33 procent. Aangezien een buitenboordmotor, ondanks overheidssubsidies, zeer kostbaar is (2000 Euro), zijn lang niet alle boten gemotoriseerd. In Akosua Village was 59 procent gemotoriseerd, in Woe 53 procent, terwijl in Half Assini alle boten door menskracht voortgestuwd worden. Ook een net en boot kosten veel geld; al met al heeft een neteigenaar een startkapitaal nodig van 20.000 Euro. Dit is voor veel vissers onbereikbaar. Veel strandzegens zijn (geërfde) familienetten. Als vissers voor zichzelf beginnen hebben ze of een investeringskapitaal van buiten de visserij nodig of ze beginnen met kleine stukjes die langzaam uitgroeien tot een volledig net. Veelal beginnen ze met vissen in de lagune; als het net groot genoeg is gaan ze over naar zee. Het vinden van voldoende mankracht om een strandzegennet binnen te halen is eveneens niet eenvoudig. Om de mannen aan je net te binden (zodat je zeker bent van de arbeid) vereist goede persoonlijke contacten en/of het kunnen aanbieden van voorschotten en leningen, dus geld. Vrouwen spelen een belangrijke rol in het lenen van geld aan neteigenaren. De vrouwen in de visserijsector in Ghana zijn actief in de verwerking en handel van vis en beschikken zo over geld. En aangezien banken vaak geen geld meer uitlenen aan vissers, wegens wanbetaling in het verleden, spelen vrouwen een belangrijke rol in de financiële dienstverlening. Strandzegenvisserij is een kostbare onderneming; als neteigenaar moet je continu investeren in je mensen en het materiaal. Voor de

bemanning geldt dat het van belang is om een betrouwbare neteigenaar te vinden. En ook al vereist het binnentrekken van het net alleen kracht, er zijn veel meer taken die verricht moeten worden die meer kennis en vaardigheden vereisen.

Samenstelling van de onderzoekspopulatie in de drie dorpen
Een vergelijking tussen de drie van de samenstelling van de onderzoekspopulatie onderzoeksdorpen bevestigt bestaande ideeën over migratie. Allereerst blijkt dat het met name jonge mensen zijn die migreren, waarbij de oude mensen achterblijven of terugkeren. Ook schoolkinderen keren vaak terug naar het herkomstgebied om naar school te gaan. De samenstelling van gemigreerde huishoudens is meer gemengd (met meer niet-verwante leden of leden van de grootfamilie) dan van de huishoudens in het herkomstgebied. Dit bevestigt dat migranten gebruik maken van hun netwerk en vaak naar plaatsen migreren waar ze al mensen kennen. Ten derde valt op dat vissers in migrantdorpen gemigreerd zijn om in de visserij actief te zijn (meer dan 90 procent). Uit onderlinge vergelijking valt verder op dat Half Assini nog meer op de visserij is toegelegd dan Akosua Village en Woe. In Woe zijn meer mensen actief in de landbouw; iets dat voor migranten niet is weggelegd aangezien ze geen toegang tot land hebben. Van de mensen in Akosua Village is slechts 82 procent werkzaam in de visserij, hetgeen onderschrijft dat het een vissersdorpje in verval is.

Bestaansverwerving is meer dan alleen levensonderhoud
Bestaansverwerving is veelal meer dan alleen een middel om in het levensonderhoud te voorzien. Ook uit dit onderzoek kwam naar voren dat vissers vissen omdat ze visser willen zijn: het is onderdeel van hun identiteit en vaak komen ze uit families die al generaties lang vissen. Dat het een onderdeel is van hun identiteit blijkt uit de liederen die gezongen worden tijdens het vissen, uit de versierde boten, de identificatie met de strandzegen-vissersgroep en uit de manier waarop vissers over hun vak spreken.

Ruimte voor en plaatsgebondenheid van bestaansverwerving
Dit onderzoek heeft verder laten zien dat bestaansverwervingsactiviteiten gekoppeld zijn aan een bepaald gebied en dat er ruimte voor moet bestaan in economische en sociale zin. Om dit te benadrukken is het concept '*livelihood space*' ontwikkeld. Hierin komen drie elementen samen: 1) een ruimtelijke component: ruimte om te werken (te vissen en vis te verhandelen), ruimte om veilig te leven, en ruimte waar men gebruik kan maken van bepaalde faciliteiten en diensten. 2) een economische component, waarbij vissers een niche voor zichzelf creëren in de sector en 3) een sociaal-culturele component: een plek in de samenleving waar men zich thuis kan voelen en zichzelf kan zijn.

Deze plaatsgebondenheid van bestaansverwervingsactiviteiten moet niet opgevat worden als een belemmering voor ruimtelijke mobiliteit (door middel van migratie). Integendeel, vissers die migreren creëren juist door hun expansie ruimte voor hun bestaansverwervingsactiviteit waardoor zij het hun bekende vak kunnen blijven uitoefenen. '*Livelihood space*' laat zien hoe vissers die migreren nieuwe relaties leggen tussen plaatsen en daarbij ruimte creëren voor hun bestaan. Het blijkt dat administratieve grenzen (zoals die van een land) niet bepalend werken en ten onrechte veel aandacht krijgen in onderzoek.

Zoals gezegd zijn mensen vaak verbonden met bepaalde plaatsen. Voor de Anlo-Ewe is dat de Anlo traditionele staat, aan de kust in de Volta Region. Dit waterrijke gebied naast de monding van de Volta en tussen de Keta lagune en de Golf van Guinee, werd

bereikt na lange migraties in het verleden en heeft ertoe geleid dat de Anlo-Ewe die van oorsprong uit het binnenland van Togo kwamen, een maritieme traditie ontwikkelden. Dit deden zij door zout te verzamelen en op de Keta lagune (de grootste lagune in Ghana) te vissen en te verzamelen en later – door de introductie van de strandzegen – op zee te gaan vissen. De Anlo-Ewe maken deel uit van de grotere Ewe etnische groep. Terwijl zij in het verleden aansluiting zochten bij de andere Ewe groepen in hun positionering ten opzichte van andere etnische groepen in de Ghanese samenleving, benadrukken de Anlo-Ewe tegenwoordig meer hun eigen identiteit. De grenzen van een groep zijn dan ook niet vastomlijnd maar fluïde en afhankelijk van sociale definities, hetgeen gekenschetst is als '*imagined community'* (Anderson 2006).

De Anlo-Ewe samenleving is georganiseerd aan de hand van clans en afstammingsgroepen. Deze structureren de politieke organisatie waarin juridische en religieuze macht samenkomt; bepalen landeigendom en vestigingsbeleid; bepalen het gebruik van de natuurlijke omgeving; en hangen samen met de traditionele religie. Veertig procent van de Anlo-Ewe is aanhanger van de traditionele religie. Deze moet niet begrepen worden als slechts een geloofssysteem; in de Anlo-samenleving hangen cultuur, natuur, politiek, gezondheid en welbevinden, religie en sociale relaties nauw samen. De Anlo-Ewe ervaren hun leefomgeving als een ecologisch, sociaal en kosmologisch geheel. Dus ook de bijna 60 procent christenen hechten nog belang aan de traditionele kosmologische ordening van de samenleving. Tegelijkertijd kan men constateren dat de komst van het christendom, formeel onderwijs, de geldeconomie en formele rechtbanken de Anlo-samenleving veranderd hebben en de machtsbasis van het traditionele bestuur doen eroderen. Mensen associëren zich nu op meer manieren dan via afstammingsgroepen, bijvoorbeeld via de kerk, vriendschappen en professionele relaties. En het kerngezin wint langzaam terrein ten opzichte van de grootfamilie.

De Anlo-Ewe vissers hebben een niche voor zichzelf gecreëerd als *de* strandzegenvissers van Ghana. Dit was geen eenvoudig proces. De introductie van de strandzegen (afkomstig uit Europa, vandaar de lokale naam *yevudor* – 'net van de blanke') ontmoette buiten Anlo hevige weerstand. Het zou een destructieve visserijmethode zijn die teveel kleine vis ving en de bestaande productieverhoudingen zou verstoren. Immers, doordat bij de strandzegen al het productiekapitaal in één hand kwam te liggen (bij de neteigenaar) zou de bemanning alleen maar arbeid leveren. De visserij zou zo ook opengesteld worden voor 'domme kracht', want alleen trekken aan een net vereist niet veel meer vaardigheden dan kracht. De strandzegen-neteigenaren in Anlo werden inderdaad een welgestelde klasse. En ook al is het net nog altijd controversieel vanwege de niet-selectieve vangstcapaciteit, de Anlo-Ewe hebben hun plek in de sector weten te veroveren en behouden. In 2004 waren ze verantwoordelijk voor 27 procent van de artisanale vangst in volume, goed voor 28 procent van de waarde. Het is een feit dat de netten vaak met een te kleine maaswijdte opereren. De vissers verklaren een kleinere maaswijdte nodig te hebben om de ansjovis (waar ze met name naar op zoek zijn) te kunnen vangen. Ook al vangen de vissers veel ondermaatse vis, dit resulteert niet in *discards*, want alle vis wordt gebruikt en verhandeld.

Strandzegen visserij

Strandzegen-visserij vindt plaats vanaf het strand door bemanningen (*companies* genaamd) van tussen de twintig en negentig man. Een net wordt, nadat het is uitgezet in zee, in drie tot negen uur binnengehaald. De zegens variëren in grootte met een lengte tussen de 150-1800 meter en een diepte van tussen de zes en 22 meter. De netten in

Woe en Half Assini waren groter dan in Akosua Village. Een strandzegennet heeft veel onderhoud nodig. Het doorkruisen van de branding en het uitzetten van het net in zee verreist goede kennis van golven, stroming en ondergrond en ervaring van de techniek. Het binnenhalen is tamelijk eenduidig, echter aan het eind als het net bijna binnen is, zijn ervaren vissers vereist voor het maken van de juiste beslissingen. Ook zijn er op het laatst mannen in de zee actief binnen het net, die het net moeten binden en hoog houden – vaak in het midden van de branding. Ook als er iets fout gaat, doordat bijvoorbeeld een touw breekt of het net zich ingraaft, zijn vaardige duikers en snelle zwemmers nodig om het kostbare net en de aanwezige vangst te redden. De meeste problemen ontstaan echter met de andere netten in het water, netten die kruisen of door de plaatsing vangsten afvangen. Dit resulteert vaak in conflict tussen vissersgroepen, die meestal weer vaardig opgelost worden door de (oudere) visservoormannen. Naast de leden van een vissersgroep helpen vaak ook andere dorpsbewoners een handje mee en verdienen zo een deel(tje) van de vangst. Dit is een belangrijk sociaal element van de strandzegen-visserij; het voorziet in de avondmaaltijd van menig oudere man, gehandicapte of werkloze. Vrouwen van de mannen in de vissersgroep en kinderen komen ook vaak meehelpen. De vrouwen kopen na afloop de vangst om die te gaan verwerken en verkopen. Neteigenaren houden tamelijk gedetailleerde boekhoudingen bij van hun uitgaven aan het net, leningen en boetes aan hun bemanning, verkoopcijfers en leningen aan en van vrouwen. Veel *company* leden staan onder contract en hebben aan het begin van het seizoen een voorschot ontvangen. Pas aan het einde van het seizoen (dat negen maanden tot zelfs vijf jaar kan duren) worden de vissers uitbetaald. Ondertussen krijgen ze wel eten (of geld daarvoor) en kunnen ze geld lenen. In toenemende mate stappen vissersgroepen van het contractvissen af en verdelen ze de vangsten dagelijks. Dit is een gevolg van de dalende vangsten en minder toegang tot krediet van neteigenaren, maar soms ook het gevolg van ontstane conflicten en vertrouwensbreuken tussen neteigenaren en bemanning (zoals in Akosua Village). Voor zowel bemanning als neteigenaar heeft dit als nadeel dat lange-termijn zekerheden wegvallen. Voor de bemanning gaat het dan om zekerheid van inkomen (alsmede de mogelijkheid tot sparen) en voor de neteigenaar van arbeid (alsmede van een spaarpot om investeringen en tegenvallers mee te financieren). Dit zal ertoe leiden dat strandzegen-visserij in mindere mate een bedrijfsactiviteit zal zijn en zal verworden tot vissen voor dagelijks eten. In alle gevallen worden van de vangst eerst de kosten afgetrokken, alvorens de opbrengst wordt verdeeld tussen eigenaar en bemanning. Afhankelijk van de verdeelmethode ontvangt de bemanning $2/5^{de}$ of $1/3^{de}$ deel van de opbrengst. Neteigenaren verdienen dus aanzienlijk meer dan de bemanning. Bemanningsleden die speciale rollen hebben vervuld (zoals het net uitzetten op zee, het net herstellen, zingen, de vis verdelen, duiken of zwemmen) verdienen meer dan de mannen die alleen het net binnenhalen. Vrouwelijke leden (die water brengen en het net dragen), oudere mannen en kinderen verdienen het minst. Bemanningsleden in de onderzoeksdorpen verdienden tussen de 63 en 163 Euro in een seizoen (variërend van zeven maanden tot één jaar). Uit het onderzoek kwam verder naar voren dat visserhuishoudens sterk leunen op het inkomen uit visserij-activiteiten. Ook dragen zowel mannen (door te vissen) als vrouwen (door te handelen in vis) bij aan het gezinsinkomen. Tien tot 20 procent van de onderzoekshuishoudens verkreeg ook inkomsten door werkzaamheden buiten de visserij (meest kleinschalige handel en, in het herkomstdorp Woe, ook landbouw). Ook bleek dat toegang tot andere (eveneens schaarse) werkgelegenheid beperkt is vanwege lage opleidingsniveaus of door een gebrek aan toegang tot land (met name in de migrantdorpen). Het aanbieden van alternatieven (het-

geen nog al eens geprobeerd is door de overheid of door NGO's) is niet eenvoudig, ook omdat vissers liever vissen dan andere activiteiten ondernemen.

Kwetsbaarheid
De mogelijkheden tot bestaansverwerving worden beïnvloed door externe trends (zoals bevolkingsgroei) en plotselinge gebeurtenissen (bijvoorbeeld sterke kusterosie als gevolg van een storm). Het feit dat Anlo-Ewe strandzegen-vissers gespecialiseerd zijn in dit type visserij maakt ze extra kwetsbaar. Zo vormde de algenplaag in de kustwateren van Half Assini met name voor de Anlo-Ewe migrantvissers een bedreiging. Door de algen konden ze niet vissen; en door gebrek aan toegang tot andere hulpbronnen konden ze moeilijk omgaan met deze gebeurtenis. Migrantvissers zijn, door hun specialisatie, tamelijk beperkt in hun alternatieven. Ook hebben ze beperkte politieke invloed. De dalende vangsten vormen een bedreiging voor de vissers. De lagune casus in Akosua Village (hoofdstuk 8) laat zien hoe ecologische achteruitgang in samenhang met een institutionele ineenstorting van het sociale systeem grote druk zet op middelen en mogelijkheden (de ruimte) tot bestaansverwerving. De vergelijking met Half Assini laat weer zien dat dit soort externe bedreigingen lokaal andere uitwerkingen kunnen hebben doordat er andere sociale configuraties zijn. Kwetsbaarheid hangt dus niet alleen af van de bedreiging, maar ook van de sociaal-politieke en ecologische condities waarin de vissers zich verkeren.

Migratie

Hoofdstuk 5 gaat over migratie. Ghanese vissers zijn actief in de gehele West Afrikaanse regio. Maar ook binnen Ghana migreren vissers. Anlo-Ewe vissers vertrekken uit hun dorpen van herkomst om te gaan vissen in dorpen aan de andere kant van Ghana. De tweede onderzoeksvraag luidt dan ook: *Hoe kunnen we de migratie van Anlo-Ewe strandzegen-vissers begrijpen?* Eerder onderzoek richtte zich op de zogenaamde biologische en sociale *push (*kusterosie, mariene opwelling, bevolkingsgroei, overbevissing) en *pull* (betere marktcondities, mogelijkheden tot sparen of hang naar avontuur) factoren. Maar de migratie kan niet verklaard worden met een lijst van redenen die vertrek of vestiging stimuleren. Plaats van herkomst en migratiedorpen staan namelijk met elkaar in verbinding, een translokale (hier *en* daar, in plaats van hier *of* daar) benadering van het fenomeen biedt meer verklaring. Zo'n benadering benadrukt de connectie tussen de plaatsen, die verbonden zijn door een continue stroom van mensen, goederen, geld, en ideeën. Hier past ook weer het concept *livelihood space;* de plaats van herkomst en nieuwe vestiging maken beiden deel uit van de *livelihood space*.

Migratie wordt in deze studie ook begrepen als een strategie in de bestaansverwerving en is dus gekoppeld aan de visserij-activiteit. De migratie dient vanuit die activiteit begrepen te worden, wat een ander licht op de zaak werpt. In migratie-onderzoek staan bijvoorbeeld veelal landsgrenzen centraal. Dit onderzoek laat zien dat die niet alles kunnen verklaren, vissers hebben andere kaarten in hun hoofd waarbij andere grenzen van belang zijn. Mobiliteit, zo blijkt uit dit onderzoek, is voor vissers in feite een normaal verschijnsel. Ik heb hierbij gebruik gemaakt van ideeën uit transnationaal migratieonderzoek, dat eveneens de rol van staatsgrenzen minder centraal stelt. Door toepassing van het concept *livelihood space* werd ook duidelijk dat de etnisch technische specialisatie in Ghana ruimte heeft geboden aan de interne vissersmigratie (met ieder eigen niches). Doordat de Fante in de *Central Region* verder verwijderd van de

kust vissen, is er ruimte voor de Anlo-Ewe kustvisserij. Nichecreatie en -onderhoud is overigens een doorgaande activiteit. De dalende vangsten kunnen de ruimte voor interne migranten wel eens veranderen.

Meervoudige bestuursstructuren en visserijbeheer

In hoofdstuk 6 beantwoord ik de derde deelvraag: *Waaruit bestaan de voor de Anlo-Ewe relevante, meervoudige bestuursstructuren in Ghana?* Het Ghanese bestuur kent een duale structuur daar (prekoloniale) traditionele vorstendommen onderdeel uitmaken van c.q. bestaan naast het huidige bestuur. In dit hoofdstuk beschrijf ik de relevante bestuurs- en beleidsorganisaties in de onderzoeksdorpen, waarbij ik met name inga op die organisaties die gelieerd zijn aan de visserij. Aangezien beide bestuursstructuren nauw met elkaar verbonden zijn, is er ook een aantal hybride instituties of organisaties ontwikkeld, zoals dat van de *chief fisherman* (visservoorman) of de *Community Based Fisheries Management Committees* (visserijbeheerscommissies op dorpsniveau). Een *chief fisherman* vervult een spilfunctie in het visserijbeheer op lokaal niveau, hij is ook de liaison tussen vissers en het meervoudige bestuur. De *chief fisherman* is een eeuwenoud instituut ontwikkeld in Fanti vissersdorpen en is van daaruit verspreid onder de andere etnische vissersgroepen. De overheid heeft dit instituut geïntroduceerd onder de Anlo-Ewe, waardoor het een hybride element gekregen heeft.

Hoofdstuk 6 gaat ook in op het concept '*governance'* in relatie tot visserijbeheer, en wordt afgezet tegen het concept '*management'*. *Governance* is breder dan *management*, is meer inclusief en meer gericht op de lange termijn. *Governance* is een taak van particuliere en private partijen en handelt over zaken met maatschappelijk belang. *Governance* is gedefinieerd als: 'het geheel van publieke en private interacties gericht op het oplossen van maatschappelijke problemen en het creëren van kansen. Hierbij gaat het ook om het formuleren en toepassen van principes die richting geven aan die interacties, alsook de instituties die interactie mogelijk maken' (Kooiman *et al.* 2005). *Governance* gaat in het kort om: wie maakt welke regels, hoe, waarom en gebaseerd op welke kennis?

Discussies over het beheer van natuurlijke hulpbronnen zijn lange tijd gedomineerd door discussies over eigendom en eigendomsrechten. Dit debat werd gevoed door de gemene-weide-problematiek (*Tragedy of the Commons)* dat stelde dat alleen staatseigendom of privaat eigendom uitputting van natuurlijke hulpbronnen (zoals overbevissing) zou voorkomen. Op deze theorie is om een aantal redenen kritiek geuit, in deze studie benadruk ik vooral het probleem dat eigendom in Afrika niet een eenduidige betekenis heeft, in tegenstelling tot het Westen (voor velen het vertrekpunt van de discussie). Eigendom in Afrika was in de prekoloniale context al een gelaagd concept, maar werd dat nog meer met de koloniale tijd. Verwarring over een begrip past bij een situatie van meervoudige normatieve structuren. Dit betekent ook dat instituties die worden ingesteld van boven af, gebaseerd op westerse ideeën, zonder aan te sluiten bij de lokale plurale werkelijkheid gedoemd zijn te mislukken. Tot slot werd in dit hoofdstuk met een case duidelijk gemaakt dat macht een rol van betekenis speelt in de effectiviteit van instituties. Visserijbeheer kan alleen succesvol zijn als de organisatie die de regels uitgevoerd wil zien, legitimiteit of macht heeft. Lokale machthebbers dienen dus betrokken te worden, wil men resultaat hebben.

Instituties in visserijbeheer

In hoofdstuk 7 beantwoord ik de vierde onderzoeksvraag: *Hoe wordt strandzegen-visserij op lokaal niveau beheerd, zowel door de Anlo-Ewe vissers zelf als binnen de traditionele bestuursstructuur als binnen die van de Ghanese overheid?* De onderliggende aanname is dat vissers hun visserij zullen beheren als zij er voor hun bestaan van afhankelijk zijn. Aangezien visserij een risicovolle onderneming is, ligt het voor de hand dat vissers collectief zullen proberen risico's te verkleinen. Visserijbeheer [*management*] is gedefinieerd als: 'alle activiteiten die mensen bewust ondernemen om collectief visserij te reguleren door het maken of toepassen van regels op basis van normen en waarden'. Het is inderdaad gebleken dat de Anlo-Ewe vissers een actieve beheersrol op zich genomen hebben. Ze hebben de toegang tot de visgronden gereguleerd, de interactie tussen vissers (zowel binnen de strandzegen-vissersgroepen, tussen strandzegen-vissersgroepen als met vissers die met andere technieken vissen) evenals de extractie van vis en de toegang tot de markt. De grote rol die vissers in Ghana zelf spelen in beheer is om twee redenen van belang. Allereest wordt al te vaak alleen gekeken naar de rol van de overheid en binnen die rol wordt veelal vooral aandacht besteed aan de visbestanden. Echter, om beheer effectief te laten zijn is de inachtneming van de regels cruciaal. Visserijbeheer gaat dan ook veel meer om mensen dan om vis en daar is veelal te weinig aandacht voor. De overheid van Ghana is vooral actief in het aanbieden van subsidies op buitenboordmotoren en gasolie. Conflicten tussen vissers worden bijna altijd opgelost door de *chief fisherman*. Als er sprake is van mishandeling of schade aan bezit, dient de politie betrokken te zijn. Maar ook de meeste politiezaken worden uiteindelijk door de *chief fisherman* opgelost en niet door de rechtbank. De rechtbanken ontbreekt het vaak aan kennis of jurisprudentie om de zaken op te kunnen lossen. De overheid speelt wel een rol bij conflicten tussen artisanale en (semi-)industriële vissers, middels de door haar ingestelde arbitrage commissie. Helaas blijkt dit in de praktijk voor artisanale vissers niet bevredigend te werken.

De overheid is, meer dan vissers zelf, veel actiever betrokken bij visstandbeheer door middel van onderzoek, technische maatregelen, vangstbeperkingen, het instellen van zones en tijdelijke sluiting van de visserij. Dat hangt samen met de rol maar ook met het wereldbeeld en kennisniveau van zowel vissers als overheid. De overheid baseert zich op wetenschappelijke biologische kennis, daar waar veel vissers zich baseren op hun eigen wereldbeeld dat uitgaat van een samenhang tussen maatschappij, natuur en kosmos die in balans moet zijn. Vissers geloven bijvoorbeeld dat dalende vangsten ontevredenheid van de goden weergeeft, omdat er in het dorp slepende conflicten zijn of omdat een bepaald ritueel niet is uitgevoerd. Door dat aan te pakken, zullen uiteindelijke de vangsten weer toenemen. Niettemin zijn veel vissers ook overtuigd van andere oorzaken van dalende vangsten, zoals teveel vissers of de industriële visserij. Deze verklaringen kunnen ook heel goed naast elkaar bestaan, mensen relateren veelal aan die verschillende normatieve structuren.

Onderhandelen over ruimte voor bestaansverwerving

In hoofdstuk 8 beantwoord ik de centrale onderzoeksvraag: *Op welke wijze onderhandelen Anlo-Ewe strandzegenvissers over hun leefruimte (waarbinnen zij zich een bestaan verwerven) binnen meervoudige bestuursstructuren, zowel in hun herkomstgebied als in de migratielocaties?* Ik doe dit door twee cases te bespreken. De eerste case speelt zich af in Akosua Village, een migratiedorpje vlak naast Winneba, en gaat

over een conflict tussen de *chief* van Winneba met de inwoners van Akosua Village over het gebruik van de lagune. De tweede case speelt zich af in Keta district dat geteisterd wordt door ernstige erosie van de kust en handelt over hoe de lokale bevolking deze bedreiging het hoofd probeert te bieden. Beide cases illustreren hoe vissers op verschillende manieren onderhandelen over hun leefruimte, waarbinnen zij zich een bestaan verwerven. De onderhandelingen kunnen op verschillende wijzen gevoerd worden (direct en indirect) en kunnen op verschillende niveau's spelen (lokaal tot nationaal). Gebleken is dat er een nauwe samenhang bestaat tussen effectieve onderhandelingen en leiderschap. Het ontbreken van effectief leiderschap in het migratiedorpje Akosua Village heeft sterk bijgedragen aan de problematische situatie van de dorpelingen met een verslechterende ecologie, sociale structuur en gespannen verhoudingen met de plaatselijke bevolking. Het ogenschijnlijke gebrek aan onderhandeling is daar een directe resultante van, hoewel het in de gegeven omstandigheden wellicht de beste optie voor de vissers is.

In beide cases worden vissers geconfronteerd met bedreigingen van buiten af. Van belang is echter hoe die bedreigingen opgevat worden: wat is het probleem en wat is een mogelijke oplossing? Verschillende opvattingen over een probleem – en dat is aannemelijk in een plurale normatieve context – leidt tot een andere oplossingsrichting. In Keta heeft de bevolking geprobeerd de kusterosie spiritueel en later ook technisch op te lossen – dit gebeurde dan ook met wisselende configuraties binnen de Anlo-Ewe – en met wisselende allianties van buiten. Daar waar in Keta eensgezindheid bestond over het probleem, werd toch de oplossing in verschillende richtingen gezocht. In Akosua Village bestond echter ook al onenigheid over het probleem. Het belang van het wereldbeeld dat mensen hebben in relatie tot hun begrip van problemen en zoekrichting van oplossingen is evident. Het is voor visserijbeheerders van buiten daarom van groot belang om aansluiting te vinden bij dat wereldbeeld van de vissers.

Een van de kernconclusies van dit proefschrift is dat ondanks de vergelijkbare bestuursstructuren in de drie onderzoeksdorpen, met in grote lijnen dezelfde organisaties en instituties, er nog altijd aanzienlijke verschillen bestaan in de ruimte voor onderhandeling. Effectieve onderhandeling draait dus niet alleen om instituties en organisaties, niet alleen om structuur, maar draait ook om macht en de rol die de leiders spelen. Dit is dan ook meteen de kritiek op de *interactive governance approach* die ik in deze studie gebruikt heb, waarin onvoldoende aandacht wordt besteed aan macht. De nadruk die Kooiman *et al*. leggen op principes die richting geven aan bestuur en beheer heeft normatieve waarde, maar is ver verwijderd van de dagelijkse praktijk in Ghana. De realiteit toont dalende vangsten; en dus afnemende visbestanden en vissers die in hun levensonderhoud proberen te voorzien in een omgeving met weinig alternatieven. De realiteit toont een overheid die aan de ene kant geld wil verdienen aan een waardevolle natuurlijke hulpbron en aan de andere kant probeert die natuurlijke hulpbron te bewaren voor de toekomst. Daarbij wordt de overheid gehinderd door een gebrek aan een inachtneming van de regels en een gebrek aan (controlerende) macht.

Uitdagingen voor visserijbeheerders

De case van de Anlo-Ewe strandzegen-vissers heeft laten zien wat de waarde is van de artisanale sector in Ghana, voor voedselzekerheid, werkgelegenheid en bestaansverwezenlijking. Daarbij komt dat de vissers voor een groot gedeelte hun visserij zelf in beheer hebben; en daar vooral op sociaal gebied zeer goed in slagen. Het probleem van

dalende vangsten kunnen vissers echter niet alleen oplossen, daar hebben ze de overheid bij nodig; temeer daar de situatie bestaande instituties onder druk zet. De overheid van Ghana staat dus voor de taak om haar betrokkenheid bij de artisanale sector te vergroten. We hebben gezien hoe het handelen van mensen in relatie staat tot het wereldbeeld en de beschikbare kennis. Door meer zichtbaar aanwezig te zijn kan de overheid een groter draagvlak creëren voor haar beleid; en door uitleg te geven kan de lokale kennis van visstandbeheer groeien. Bestaande wet- en regelgeving dient meer effectief in acht genomen te worden, zoals de maaswijdte van standzegens. Daarbij is het, in verband met migratie, aan te bevelen dat de Ghanese overheid samenwerkt met de buurlanden. Door bij conflicten tussen de (semi-)industriële en artisanale boten en bij IUU-visserij krachtdadig op te treden, wint de overheid ook aan legitimiteit bij de artisanale vissers. Het zou goed zijn als de visserij-intensiteit omlaag gaat, bij voorkeur beginnend bij de (semi-)industriële sector. Hierbij moet ook oog zijn voor de ontwikkeling van alternatieve hulpbronnen van inkomsten. Het versterken van bestaande lokale instituties geniet de voorkeur boven het van boven af implementeren van nieuwe instituties. Uit dit onderzoek is naar voren gekomen dat lokale leiders een spilfunctie vervullen. Versterking van dat leiderschap en het legitimeren ervan – door leiders de juiste uitrusting mee te geven – is een prioriteit om te komen tot beter visserijbeheer. Dat betekent ook investeren in onderwijs. Onderwijs biedt de kinderen van vissers meer mogelijkheden en onderwijs kan ook gebruikt worden voor het aanbieden van meer toegepaste kennis over visbestanden en visserijbeheer.

Visserijbeheer betekent uiteindelijk dat er moeilijke keuzes gemaakt moeten worden. De overheid, als een van de beheerders, moet bereid zijn om die keuzes in samenspraak met de vissers te maken.

About the author

Marloes Kraan studied Cultural Anthropology at the Free University, Amsterdam. She did part of her studies at the University ISCTE in Lisbon, Portugal. She specialised in Religious and Symbolic Anthropology and wrote her masters thesis on the Ghanaian migrant community in Amsterdam Southeast. After university she started to work as a junior researcher at the Centre for Maritime Research (MARE). In 2002, she began her PhD research amongst Ghanaian fisher migrants funded by the Amsterdam Institute for Metropolitan and International Development Studies (AMIDSt), University of Amsterdam. As a PhD student she was a member of CERES, the coordinating body for development-oriented research in the Netherlands. During her fieldwork period she was affiliated to the Institute of African Studies at the University of Ghana, Legon, Accra. Since September 2008 she is employed as policy officer on sustainable fisheries at the Dutch Fish Product Board.