RESOURCE MANAGEMENT IN THE ANLO-EWE MIGRANT FISHING COMMUNITY ABAKAM IN THE CENTRAL REGION, GHANA.

Patrick Kuranchie Owusu

Master of Philosophy Degree in Resources and Human Adaptations
Department of Geography
University of Bergen, Norway,
Spring, 2009
ABSTRACT

The study is focusing on resource management of the Anlo-Ewe migrant fishing community Abakam in the Central Region, Ghana. The study identifies that access to fishing rights among the migrants depends on the chieftaincy arrangement in the community. There is an inequality in having access to fishing grounds among the differentiated social actors. Anlo-Ewes get access to land through three major ways; purchase, inheritance and abusa system of farming. The major source of livelihood is fisheries (which include fishing, fish trade in the local market). Other sources of livelihood include farming and selling of items. The study is showing that informal institutions play major role in the management of both land and fisheries resources. Chiefs mediate and negotiate conflicts among fishers by the using the informal institutions. Class exploitation is integral part of the fishing activities in Abakam.
DEDICATION

I dedicate this work to my father, Mr. Philip Nsonwah Kuranchie, my mother, Elizabeth Ababio, and to my lovely wife Philomina Danquah Effah for their encouragements.
ACKNOWLEDGEMENTS

I would not have been able to write this thesis without the help of very important people who assisted me in diverse ways. I therefore wish to thank the following for the immense assistance given me during this research.

In the first place, I thank Almighty God for given me the wisdom to enable me put my thoughts together to make this thesis a reality.

I wish to extend my profound gratitude to my caring and accommodative supervisor, Prof. Ragnhild Overå, for her constructive criticisms, guidance and supervision throughout my studies in Bergen, Norway.

My appreciation also goes to the entire lecturers of the Department of Geography, University of Bergen for their suggestions at the graduate students’ seminar.

I am also grateful to the Norwegian Government who financed my entire studies in Norway.

Lastly, to my brothers, Francis Atta Kuranchie, Richard Atta Kuranchie, Philip Oduro Kuranchie, Peter Nyarkoh Koranchie and to my beloved friends in Fantoft, George Freduah, Festus Boamah Michael Nkansah and Mariama Zaami for their encouragement and support.
# TABLE OF CONTENTS

ABSTRACT ...........................................................................................................................................i  
DEDICATION ....................................................................................................................................... ii  
ACKNOWLEDGEMENTS .................................................................................................................. iii  
TABLE OF CONTENTS ......................................................................................................................iv  
LIST OF MAPS ..................................................................................................................................... viii  
LIST OF FIGURE ................................................................................................................................... viii  
LIST OF TABLES .................................................................................................................................. viii  
LIST OF PLATES ................................................................................................................................... viii  
LIST OF ABBREVIATIONS .................................................................................................................. x  

## CHAPTER ONE: INTRODUCTION ................................................................. 1  
1.1. Introduction .................................................................................................................................1  
1.2. Migration of fishers .......................................................................................................................2  
1.3. Marine resource management .......................................................................................................4  
1.4. Role of the government in fishing in Ghana .................................................................................6  
1.5. The research problem .................................................................................................................. 8  
1.6. Research objectives .....................................................................................................................10  
1.7. Proposition ..................................................................................................................................10  
1.8. Relevance of the study ................................................................................................................10  
1.9. Structure of the study ..................................................................................................................10  

## CHAPTER TWO: STUDY AREA ................................................................................. 12  
2.1. Introduction ...............................................................................................................................12  
2.2. Climate .......................................................................................................................................14  
2.3. Vegetation ...................................................................................................................................14  
2.4. Location .....................................................................................................................................14  
2.5. History .......................................................................................................................................15  
2.6. Religion ......................................................................................................................................17  
2.7. Educational facilities ..................................................................................................................18  
2.8. Water facilities ...........................................................................................................................19  
2.9. Nature of buildings .....................................................................................................................20  
2.11. Livelihoods ...............................................................................................................................21
CHAPTER THREE: THEORETICAL FRAMEWORK ................................................................. 23
3.1. Introduction ................................................................................................................. 23
3.2. The theory of entitlement ......................................................................................... 23
3.3. Critiques of the entitlement approach ...................................................................... 24
3.4. The theory of environmental entitlement ............................................................... 24
3.5. Institutions ............................................................................................................... 26
3.6. Relevance of the environmental entitlement approach to the study ..................... 28

CHAPTER FOUR: METHODOLOGY .................................................................................. 31
4.1. Introduction ............................................................................................................... 31
4.2. Doing fieldwork ....................................................................................................... 31
4.3. The choice of an interpreter .................................................................................... 33
4.4. Role and status during fieldwork ............................................................................ 34
4.5. The sample .............................................................................................................. 35
4.6.0. Methods of data collection .................................................................................. 36
4.6.1. Participant observation ....................................................................................... 37
4.6.2. Group discussions .............................................................................................. 39
4.6.3. Case studies ....................................................................................................... 41
4.6.4. The interviews and the questionnaire ............................................................... 42
4.7. Other sources of data ............................................................................................. 43
4.8. The reliability and validity of the data .................................................................. 43
4.8. Methods of data presentation ................................................................................. 44

CHAPTER FIVE: PEOPLE AND LIVELIHOODS IN ABAKAM ........................................ 45
5.1. Introduction .............................................................................................................. 45
5.2. Demographic characteristics of the respondents .................................................. 45
5.2.1. Age and gender .................................................................................................. 45
5.2.2. Age and education ............................................................................................ 46
5.2.3. Education and Gender ..................................................................................... 47
5.2.4. Number of children .......................................................................................... 48
5.3. Gender division of labour ...................................................................................... 50
5.3.1. The role of men ................................................................................................ 50
5.3.2. The role of women ........................................................................................... 50
5.4. Occupation of the respondents ................................................................. 51
5.5. Method of fishing in Abakam ................................................................. 51
5.6. Reduction in fish catch ........................................................................... 53
5.7. Price fluctuation in bumper harvest ....................................................... 55
5.8. General problems facing fishers in Abakam ............................................ 56
  5.8.1. Financial problems (ga nya) ............................................................... 56
  5.8.2. Lack of storage facilities ................................................................. 57
  5.8.3. Operation of foreign trawlers ........................................................... 57
  5.8.4. The use of poisonous chemicals and lights in fishing ....................... 58
  5.8.5. Weather conditions ......................................................................... 58

CHAPTER SIX: ACCESS TO RESOURCES AND INSTITUTIONS ...................... 59
6.1 Introduction .............................................................................................. 59
6.2. Differentiated social actors in Abakam .................................................. 59
6.3. Access and right to resources in Abakam ............................................... 61
  6.3.1. Fishing grounds ................................................................................ 61
  6.3.2. Agricultural land ............................................................................. 64
  6.3.3. Residential land ................................................................................ 65
6.4. International migration among respondents .......................................... 66
6.5. Internal migration among respondents to Volta Region ......................... 68
6.6.0. Management of the resources ............................................................. 69
  6.6.1. Formal institutions in resources use and management ....................... 69
  6.6.2. Informal institutions in resource management .................................... 73
    6.6.2.1. No fishing on Tuesdays and farming on Thursdays ..................... 73
    6.6.2.2. Casting shift system ..................................................................... 74
    6.6.2.3. No fishing during festivals and funerals ..................................... 74
    6.6.2.4. No fishing/farming during conflicts ........................................... 75
    6.6.2.5. No fighting during fishing/farming ............................................. 75
    6.6.2.6. The use of standard mesh size .................................................... 76
    6.6.2.7. The use of explosives and poisonous chemicals .......................... 76
6.7. Conflicts among the fishers .................................................................... 77
6.8. Negotiations of conflicts ....................................................................... 80
6.9. Sanctions on violation of informal institutions .................................................................82

CHAPTER SEVEN: THEORY AND REALITY IN ABAKAM ...........................................84

7.1. Introduction ..................................................................................................................84
7.2. Discussion of the findings ............................................................................................84

CHAPTER EIGHT: CONCLUSION AND RECOMMENDATIONS ..................................91

8.1. Conclusion ....................................................................................................................91
8.2. Recommendations .......................................................................................................92

REFERENCES .....................................................................................................................94
LIST OF MAPS

Map 1: Regional map of Ghana ................................................................. 12
Map 2: Map of Abakam ................................................................. 13

LIST OF FIGURE

Figure 1. Environmental Entitlement Framework. Source: Leach, Mearns and Scoones (1999:234) ................................................................. 25

LIST OF TABLES

Table 1: Age and gender ........................................................................ 46
Table 2: Age and Education ................................................................... 47
Table 3: Education and Gender ................................................................ 48
Table 4: Number of children ................................................................... 50
Table 5: Beach seines, canoes and fishers in Abakam from 1986-2004 ............. 53
Table 6: International migration among respondents ..................................... 66

LIST OF PLATES

All plates by author during fieldwork, 2008.
Plate 1: Remains of burnt house in 1964 ...................................................... 17
Plate 2: Other burnt houses in 1964 ............................................................. 17
Plate 3: Basic school (Public) ............................................................... 18
Plate 4: Private school (kindergarten) ......................................................... 18
Plate 5: Water pump 1 ......................................................................... 19
Plate 6: Water pump 2 ......................................................................... 19
Plate 7: Bricks building ........................................................................ 20
Plate 8: Raffia and brick building ............................................................... 20
Plate 9: Surrounding environment ............................................................. 21
Plate 10: Children playing ..................................................................... 21
Plate 11: Presentation of drinks to Togbui .................................................. 32
Plate 12: At Togbui’s house ..................................................................................................................32
Plate 13: Daniel and I interviewing fishmonger/waakye seller .........................................................34
Plate 14: Pulling of beach seine ashore .............................................................................................39
Plate 15: Fish caught ..........................................................................................................................39
Plate 16: Group discussions with the young men ..............................................................................41
Plate 17: Fishmongers ......................................................................................................................41
Plate 18: Fishers pulling the beach seine ashore ..............................................................................52
Plate 19: Poor condition of a beach seine .........................................................................................55
**LIST OF ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAGDS</td>
<td>Accelerated Agricultural Growth and Development Strategy</td>
</tr>
<tr>
<td>CBFMCs</td>
<td>Community-Based Fisheries Management Committees</td>
</tr>
<tr>
<td>CCTC</td>
<td>Cape Coast Traditional Council</td>
</tr>
<tr>
<td>DA</td>
<td>District Assemblies</td>
</tr>
<tr>
<td>DCE</td>
<td>District Chief Executive</td>
</tr>
<tr>
<td>DoF</td>
<td>Department of Fisheries</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agricultural Organization</td>
</tr>
<tr>
<td>GEPC</td>
<td>Ghana Export Promotion Council</td>
</tr>
<tr>
<td>GPRS</td>
<td>Ghana Poverty Reduction Strategy</td>
</tr>
<tr>
<td>IEZ</td>
<td>Inshore Exclusive Zone</td>
</tr>
<tr>
<td>MCs</td>
<td>Management Committees</td>
</tr>
<tr>
<td>MoF</td>
<td>Ministry of Fisheries</td>
</tr>
<tr>
<td>MLGRD</td>
<td>Ministry of local Government and Rural Development</td>
</tr>
<tr>
<td>MP</td>
<td>Member of Parliament</td>
</tr>
<tr>
<td>NDC</td>
<td>National Democratic Congress</td>
</tr>
<tr>
<td>NGOs</td>
<td>Non Governmental Organizations</td>
</tr>
<tr>
<td>PNDC</td>
<td>Provisional National Defence Council</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nation Development Program</td>
</tr>
</tbody>
</table>
CHAPTER ONE: INTRODUCTION

1.1. Introduction

Fishing is one of the fastest growing industries in the world and can take the form of either marine, fresh or lagoon water fishing. Much attention has been given to this industry in recent times due to its economic, social and political implications in many countries. Small-scale fisheries play a very essential role to the coastal and rural poor. FAO (2004) statistics indicate that fishers account for about 36 million worldwide. Out of these, 90% are classified as small-scale fishers and 95% are based in the developing countries. The artisanal fishery provides full time jobs for 4,600,000 fishers as well as 1.5 million people who are engaged in fish processing and marketing most of whom are women in West Africa (FAO, 1997). In an attempt to reduce unemployment in Ghana the artisanal marine fisheries offers employment for over 100,000 fishermen, in the canoe census of 1986 (Odotei, 2002). The 2001 Ghana canoe survey indicated that a total of 123,156 fishers were recorded during the survey (Bannerman et al 2001:7). This figure increased to 124,219 in the 2004 canoe survey (Amandor et al 2004:10) showing an increment of 1063 fishers within three years.

Migration among the small-scale fisher migrants is often seen as a response to complex and diverse factors, existing both in the migrants communities of origin and destination. Migration is sometimes regarded as the result of economic crisis, political or civil tensions and socio-cultural factors (Fellmann et al.2005). Most of the migratory movements among the small-scale fishers in Ghana however, are volitional, which shows the individual’s response to the factors influencing people to migrate. Available research indicates that migration and for that matter mobility plays an essential role in the small-scale fisheries in Ghana. Overà (2001:1) indicated that in Moree (a Fante fishing community along the coast of Ghana), fisher migrants migrate to other places with the main aim of accumulation of wealth to invest in order to improve their well-being of their matrilineage or household and also their personal status. It has been noted that fishermen migrate to partake in the “rich seasonal fisheries following the annual up-welling pattern in the gulf of Guinea” (Overà, 2005:1). The Moree fishers, for example move out during the ‘off’ fishing season from October to March and return to Moree around Easter (Ibid: 8). This means that the
fishers move out from their shelves to follow the pattern of the movement of the fish in order to get better catch which indicates how relevant migration is to the fishers. Although the small-scale fisher migrants migrate to seek new opportunities in different geographical areas they are often confronted with the problem of accessing the marine resources and how they can institute informal institutions to regulate the use and the management of the marine resources.

One such small-scale fisher migrants’ community is Abakam, which is found in the Cape Coast Municipality in the Central Region of Ghana. Abakam is a small coastal fishing community in an area of land that belongs to the Fante ethnic group or what I here call ‘Fanteland’ which lies between Cape Coast, the regional capital town of Central Region, and Elmina. Abakam is inhabited by Anlo-Ewe fishers who have migrated from ‘Anloland’ in the Volta Region of Ghana. The first Anlo migrant fishers are believed to have come to Abakam around 1918 and the choice of the site was motivated by its fine rock-free and sandy beach (Wyllie, 1969). The livelihood of the Anlo-Ewe small-scale fisher migrants in Abakam depend mostly on the fishing activities. This means that certain institutions exist in negotiation access to the resource and the management of the fishing grounds. This makes it necessary to understand how they are participating in resource management using informal institutions to help sustain marine resources before any policy on resource management can be successfully implemented especially at the local level.

It is against this backdrop that this research aims at seeking information on how the Anlo-Ewe fisher migrants obtain and maintain access, that is the right to use to the marine resources through the institutions (customs or traditions, rules or bylaws and norms) governing or regulating the use of the marine resources in Abakam.

1.2. Migration of fishers

Migration is the movement of people from one place to another and it could be internal migration or external migration. Migration has become one of the major characteristics of Ghanaian fishers. Fishers migrate to different destinations for different reasons and this has been identified by several authorities.
The fisher migrants from Benin taught coastal dwellers of Ghana how to fish, build canoes and also introduced the triangle oar which is now used nation-wide (Megorowitz, 1952 in Akyen 1996:23). The movement of the Ghanaian fishers has been a very old practice within Ghana and beyond (Overå, 2001:1). Certain factors regarding economic opportunities such as farming, fishing, mining and trading and political stability served as pulling agents that attracted people to these areas (Odotei, 1991c). It has been identified that one of the major features of small-scale fishers is that they are usually ‘generalists in their fishing strategy’ (Smith and McKelvey cited in Lindqvist and Molsa 1990:193). Mobility has become part of them and that moving from one place to another to fish is easier than those involved in the industrial fishing. However, Overå (2001) noted that fishers migrate to seek new opportunities rather than to run away from misery. Overå (2005:17) identified four factors that influence the decision of the fishing people of Moree as to when and where to migrate which will depend: (1) seasonal and long-term availability of marine resources, (2) existence of a market, (3) political and economic conditions in both home and host country, and (4) the contacts and institutions available in the migration destination. In the Fante migratory fisheries in West Africa, “commercialization and urbanization” were the main driving force attracted the Ghanaian fisheries migrants into foreign coasts that increased in the first half of the 20th century (Ibid.p.5). Where the indigenous people were not active in marine fishing in West African coast new markets created fresh chances (Ibid.).

This situation is not different as far as migration of fishers within Ghana is concerned. The main driving force of fishing migrants is to seek new coastal marine resources rather than urbanization and commercialization. According to Kraan (2005:2), the Ewe marine fishers can be found as far as in the Central or the Western Region including other places. In his survey of the fishing industry in Old Ningo in Ghana, Anyang (1996) noted that the fishers of Old Ningo especially the ‘watsa’ fishers migrate to other centres like Apam, Nyanyano, Keta and Tema all along the coast of Ghana to fish as a result of relatively higher price for fish in those centres. This means that fishers move to different geographical locations at a specific period of time with the aim of making better catches and also exploit the marketing opportunities available.

Lindqvist and Molsa (1990:194) added that access to fishing rights becomes a problem to small-scale fisher migrants upon reaching their destination. Some of the fisher migrants get access to
fishing rights at their destination by having contacts with the indigenous people. This was noted by Anyang (1996), that the Ada fishers migrate to Old Ningo to fish and on their arrival they get access to fishing rights by paying a courtesy call on the Ningo chief Fisherman to present a bottle of schnapp and ten thousand old Ghana cedi from each canoe before they are allowed to fish. Some of the fisher migrants also migrate to other countries in West Africa as it has been noted that the fishers in Old Ningo migrate to Togo, Benin and Gabon and their main reason was to fish due to anticipation of better opportunities and the migrants stay as long as three to four years (Anyang, 1996).

1.3. Marine resource management

The main idea in this section is to identify different views identified by different writers on marine resource management so as to relate them to my findings. Resource management is frequently perceived as a precondition to or as an essential element of development (Degnbol, 1990:209). The conventional plan of management of fisheries is to avoid overfishing (Lindqvist and Molsa, 1990:191) and fisheries management is regarded as any form of control or adjustment of fishing operations (i.e. the amount of fishing, type of gear used, size of fish caught) in order to optimize the use of the natural resource (MoF, 2002). This mean that not only the measures to restrict peoples’ activities like the closed seasons coupled with management in the small sense, but activities and development plans that take into consideration the restrictions which are set on the resource. Over the years, fisheries management has usually meant “management for equilibrium production target” (Ibid) with measures which are enforced by the state. There has been little evidence for good performance of the centralized fisheries management strategies, especially in areas of low levels of funding, staff, expertise and technology (Ibid). As a result of this, attention has been shifted to community and co-management strategies in the management of fisheries. This has become necessary because individual fishers’ activities has effects on many others fishers, and on the fishery. Management consists of activities that aim at conservation and sustainable utilization. It also comprises multiple decisions and actions that affect the intensity and composition of fishery resources; and finally the distribution of benefits from its products (Ibid).
According to Welcomme (2001), management is to utilise, guarantee and protect, increase production and improve resources. FAO also defines Management as “an integrated process of information gathering, analysis, planning, consultation, decision making, allocation of resources and formulation and implementation, with enforcement as necessary, of regulations or rules which govern fisheries activities and accomplishment of other fisheries objectives” (1995; 2001). By this, the FAO definition places emphasis on the role of the government in the management of the fisheries rather than the role of the local institutions. Degnbol (1990) defines resource management as “the regulation of the mobilization of a natural resource by society in order to achieve some objective” (p. 213). This means that the central part of resource management is the objective (Ibid). On his contribution to problems facing fishing industry in Ghana, Oppong (1994) noted that the natural water bodies in Ghana are regarded as being community-based and as such regulatory measures have not been rigidly enforced and that this has led to unsustainable fish harvesting and depletion of fish resources. Peoples’ activities such as fertilizers, herbicides, mercury and insecticides usage finally flow into the water bodies, and therefore hamper the development of the industry. Haughton (1996) added that various factors such as pollution, degradation of coastal habitat, waste disposal, reckless fishing practices, insufficient institutional capacity and lack of knowledge of the resource systems jeopardize the health of fisheries and other aquatic systems (Haughton, 1996 cited in Essien, 1999:1). What this means is that for healthy environment to prevail in the fishing industry and for that matter small-scale fishing people should be aware of the damage caused by their activities and also proper institutions need to be put in place. There is an obvious signs of over-fishing which is showed by damages caused by ecosystems and this is a disturbing one and has led to fisheries authorities all over the world to express the wish at various international fora for a better structure to manage marine resources (Lassissi, 1997 in Essien, 1999:1).

According to Ghana Poverty Reduction Strategy (GPRS), Marine fish production in Ghana fell in 1997 and 1998 and this was a result of declining fish stocks due to increase in the activities of demersals trawling in the near shore waters, lack of a legal framework and an active fisheries resources management and increasing fisheries operations costs (GPRS, 2002:55). The role of the Accelerated Agricultural Growth and Development Strategy (AAGDS) for sustainable natural resource management is there to seek to develop and ensure improved access to technology (Ibid:
Tvedten and Hersoug (1992) argue that the weather conditions coupled with loss of important fishing gear, illness, injuries due to adversity in the fishing carrier account for the insecurities of catches and income among the fishers. Odoi (1995) identified over-exploitation and the practice of unconventional methods as contributing to the decline in marine or water resources in Ghana. She explained that the use of chemicals and small mesh nets do not give the resources enough time to restore themselves whilst endanger their existence through pollution simultaneously. This means that apart from the pollution of the water by the poisonous chemicals juvenile fishes are also killed. In addition, the use of the small mesh size also traps the juvenile fishes and therefore depleting the fish stock which will then take a long time to regenerate.

In relation to rituals in marine resource management, Tvedten and Hersoug (1992) comment that magic and rituals influence fishers’ activities and strategies both in their work situation and their relation to non fishers and that “rituals and magic are integral part of fishing technologies rather than “additions” (p.15). This means that in the fishing industry, especially the small-scale fishing, certain rituals are performed in order to maintain access to the fishing grounds and also to improve catches and avoid disasters as well. The kind of conflict-solving strategies such as how to regulate access to fishing-grounds or use of fishing gears in artisanal fisheries is more difficult to establish (Ibid: 14). Lindqvist and Molsa (1990:192) added that little consideration has been given to the local characteristics, and demands, of small-scale fisheries and fishers as far as the management of the fisheries are concerned in fisheries studies. In all these, there is the need to provide appropriate measures to overcome these management problems that faces the small-scale fisheries.

1.4. Role of the government in fishing in Ghana.

Natural resource management and for that matter fish resource over the years, has been the conventional (top-down), centralised management. The government of Ghana has been playing a supporting role in both the management of the marine resources and provision of infrastructure. The government of Ghana is to establish a linkage between commerce, social development and sustainability, interest of the various groups in the fishing sector (MoF, 2002). The government has been assisting in commercial fishing through access and acquisition of certain inputs like premix fuel, fishing nets, outboard motors, and landing sites (Ibid).
According to MoF (2002), Government’s support for commercial interests in the fishing sector has centred on facilitating access to inputs (premix fuel, marine gas oil, fishing nets, outboard motors, and marine engines) and supporting infrastructure development, with particular attention to safe landing sites. Social development programmes in fishing communities has been pursued by the government. Such programmes include mobile clinics in the form of vessels to reach remote fishing communities, and non-formal education programmes.

Efforts have been made by the government to ensure the sustainability of the natural fishing resource and particularly of fish stocks through the establishment of MCs units, and co-management programmes which involve collaboration with other government agencies, like the Ghana Navy, District Assemblies (see chapter six) and traditional leadership and enforcement institutions.

The government uses registration fees, levy and penalties to regulate the operations of private commercial fisheries. The Government also interact and collaborate with a number of private commercial and private voluntary organizations to pursue its cross-cutting commercial, social development and sustainable-ensuring programme. The Government interact with the private commercial fisheries sector in relation to industrial fishing and processing companies through the individual firm and also works through fishing associations and Community-Based Fisheries Management Committees (CBFMCs) for inshore and artisanal fisheries.

The Government also provide infrastructural development support in fishing sector as a new fishing harbour—the Albert Bosomtwe Sam Fishing Harbour—was constructed at Sekondi, using a Government of Japan loan of US$ 13 million in 1999 (Ibid). The harbour is equipped with a cold store, an ice-making plant, offices, a berthing bay for inshore vessels, a jetty for canoes and a net drying area.

In a similar way, the Government also helps in terms of access to inputs and credit. According to MoF (2002), the Government of Ghana invested US$ 5 million grant from the Government of China to provide nets and ropes for sale to fishers at non profit through fisher associations in

7
1997. In addition, the Government of Ghana also subsidized premix fuels to fishers through fisher associations as for example nearly 51 million litres of premix fuel were sold in 1998. It was also noted that 300 units of outboard motors and quantities of netting materials for artisanal fisheries were imported by the Government of Ghana in 2001. The fishers were made to pay 60% of the cost of items to rural banks and Agricultural Development Bank branches in fishing communities before delivery (MoF, 2002). In 2001, MOFA also released 1.08 million cedis from its Fisheries Development Fund to purchase 60 outboard engines for sale to artisanal fishers to enhance their fishing activities.

The Government of Ghana provide support to the fishery sector through capacity building by enhancing food safety standards. The government has been paying particular attention to smoked fish as a commodity interest after EU has raised concerns that Ghana’s smoked fish was processed under unhygienic conditions. To solve the food safety problem, a US$ 20 000 pilot project which is sponsored by UNDP, ITC and Ghana Export Promotion Council (GEPC), is being undertaken under the export-led poverty reduction project to assist smoked-fish exporting companies to meet EU standard (Ibid). This involves the construction, testing and replication of a fish processing of smoked fish under hygienic and sanitary conditions.

The above contributions are made by the Government of Ghana towards the improvement of the fishery sector in Ghana. However, despite the above contributions the fishery sector in Ghana continues to face several problems.

1.5. The research problem

A resource is a “natural potential which has been mobilized for utilization by society through technological, economic and social development” (Degnbol, 1990: 209). This means that it is the society that must appreciate the usefulness of a particular resource other than that it becomes a stock. The ability of people to create livelihood or increase their assets will depend upon the effective usage and control over resources as well as their accessibility to useful resources. Accessibility will depend upon integrating different kind of social institutions, wealth in material terms and transactions through the market (Berry, 1989). Accessibility to and control over natural resources is one of the controversial issues around the world. Although people use market means
which are supported by property rights by legal actions to get control over resources (Leach et al., 1999), there are several channels by which access to and control over resources can be gained beyond the market, which include networks through kin, permission obtained from or forming part of the groups owning the land by marriage, fostering or by putting themselves under the care and superiority of its leaders and many ways of acquiring such access and control outside the formal legal system, such as customary law, social conventions and norms.

How migrants maintain access to resource and the institutions that regulate the use and the management of these resources (marine and land resources) is an issue which needs attention. Overå (2005) noted that political and social institutions at the origin and destination nodes by migrants are important in the negotiation of access to foreign coastal lands, fish catch and the use of markets for fish in different locations by fishermen. In Overå’s (2001) study on Fante migratory fisheries of West Africa, she noted a link between accessibility to resources by migrants outside their origin and well developed institutions and modes of behaviour.

The Anlo-Ewe fishers of Abakam in the coastal area of Cape Coast in Ghana are migrants from the southeastern part of Ghana living on the land of the Fante (Fanteland) and this means the resources (sea and land) do not belong to them as they are in a ‘foreign land’ (land which belongs to different ethnic group) and so the institutions which regulate the use of these resources for sustainable development become a problem which needs to be looked at.

Most of the studies on small-scale migrant fishers in Ghana tend to focus on fishing and methods of fishing, artisanal marine fishing industry in Ghana, the role of women in the artisanal fishery sector in Ghana, the role of fishing in the development process and problems confronting fishermen among others, not much has been done on the informal institutions that the migrants use to regulate the use and the management of the marine resources on their foreign land. It is against this background that this research focuses on the informal institutions put in place by the Anlo-Ewe fishers’ migrants in Abakam in the regulation on the use and the management of the marine and land resources.
1.6. Research objectives

The main aim of this research is to study how the different social actors in Abakam get access to the fishing rights and land resources and the informal institutions that regulate the use and the management of the resources. Based on the above, the specific objectives of the research are to obtain information on:

i. How the Anlo-Ewe migrants get access to fishing rights and land in Abakam and how they maintain this access.

ii. The institutions involved in the regulation on the use and the management of the resources.

iii. The negotiation of conflicts among fishers.

1.7. Proposition

Access to resources and maintenance of access in Abakam depends on the existence of both Fantes and Anlo-Ewes informal institutions.

1.8. Relevance of the study

The study is relevant because it investigates why the Ewes have managed to maintain access to resources. They have adapted to Fante institutions and developed their own, and this has helped them to overcome access and management problems. The study is hoped to contribute to the existing knowledge on informal institutions on resource management on marine and land resources by migrants and in general. It is also hoped that policy makers in Ghana can adopt some of the findings from this research which would help to contribute to the management policies on marine resources in Ghana. This work would also be useful to Non Governmental Organizations (NGOs) and other organizations who are also interested in marine resource management through informal institutions.

1.9. Structure of the study

This study consists of eight chapters. Chapter one looks at the general introduction to the research which includes the introduction, a review of the literature on migration of fishers and marine resource management, role of government in fishing in Ghana, problem statement and its objectives and finally the relevance of the study.
The study area which includes the climate and vegetation, history of the area, facilities and their livelihoods are found in chapter two.

Theoretical framework is found in chapter three where the environmental entitlement approach by Amartya Sen (1981) and later modified by Leach et al (1999) has been used and its concept of institutions. The relevance of the theory in relation to this research is also described in this chapter.

Chapter four deals with the methodology used in the research where triangulation method is used and it also looks at the role and status in the field and concludes with the reliability and validity of the data being collected.

Chapter five looks at the people and livelihood in Abakam, where demographic characteristics of the respondents; gender division of labour, occupation of the respondents, methods of fishing in Abakam, reasons for reduction in fish catches are found. The chapter concludes with the causes of fluctuation of fish prices during bumper harvest and the general problems facing the fishers in Abakam.

The findings on access to resources and institutions are found in chapter six. This chapter describes the various differentiated social actors, access to resources, migration pattern of the respondents, the various institutions (formal and informal) that regulate the use and access to the resources, conflicts among fishers and its negotiation processes. The chapter concludes with sanctions on violation of the informal institutions in Abakam.

Discussions of the findings in relation to the theory are found in chapter seven.

Finally, chapter eight considers the conclusions of the research where recommendations are also made.
CHAPTER TWO: STUDY AREA

2.1. Introduction

This section provides background information necessary to understand the development and significance of the problems presented in this study. A description of Abakam is presented in order to explain the importance of how resources can be managed at the local level using informal institutions.

Map 1 : Regional map of Ghana
Map 2: Map of Abakam.
2.2. Climate

Abakam is located in a warm, humid climatic region which has an annual mean temperature between 26°C and 29°C. Variations in the principal elements of temperature, rainfall, and humidity that govern the climate are influenced by the movement and interaction of the dry tropical continental air mass, or the harmattan, which blows from the northeast across the Sahara, and the opposing tropical maritime or moist equatorial system. Annual rainfall averages from 750 millimeters to 1500 millimeters. Abakam is characterized by generally humid conditions. This is particularly so during the night, when 95 to 100 percent humidity is possible.

2.3. Vegetation

The area is characterized by coastal savanna which is one of the four sub regions of the low plains in terms of vegetation distribution. The land is relatively flat and covered with grass and scrub. Abakam in the Cape Coast Municipality is located in the littoral anomalous zone of Ghana. February and March are generally the hottest months just before the main rainy season, while between June and August are the coolest months. The climatic variability is generally influenced more by rainfall than temperature, which as mentioned. The vegetation cover consists of shrubs, grasses and a few scattered trees. Behind the community is a large area of wetland which serves as barriers to physical development. The major river is the river Bakam which enters the sea at Eture (Map 2) near Elmina.

2.4. Location

Ghana is divided into ten regions (Map 1) and the regions are usually occupied by different ethnic groups (example Fantes, Gas, Anlo-Ewes among others). Where a particular ethnic group originates they are considered as the landlords and their area are called Fanteland, Asante land, and Anloland etc. Abakam is one of the suburbs in the Cape Coast Municipal in the Central Region of Ghana (Map 2). The Central Region was part of the Western Region and was carved out before the 1970 Population Census. According to the 2000 Population Census, the Region has a total population of 1,593,823 (GSS, 2005). Abakam is situated on the main highway road between Cape Coast and Elmina. To the north of Abakam is a water logged area and river Bakam.
and to the south is the Gulf of Guinea. To the east is the Cape Coast Municipal Assembly and to the west is Elmina (Edina).

2.5. History

Cape Coast, which is the regional capital, was the capital of The Gold Coast until 1877, when the capital was moved to Accra. Abakam is inhabited by Anlo-Ewe migrants along the coast (Map 2). The Ewe, which include Anlo, Be, Gen, Peki, Ho, Kpando, Tori, and Ave occupy southeastern Ghana and southern parts of Togo and Benin. Historically, it is believed that the Ewe migrated into Ghana before the mid-fifteenth century. Among the West African people, Anlo are one of the ethnic groups who are “geographical mobile” (Wyllie, 1969:131). Overà (2001) noted that the first fishing migrants to settle towards the east, as in Benin in the 1920s were the Anlo-Ewe. The origin of Anlo can be traced from the northern part of Yoruba-land (Nigeria), where they migrated from there about five hundred years ago, and the town Notsie in Togo (Bukh, 1979 cited in Overà, 1998). Under different kinds of leaders they migrated westwards in stages along the coast and inland near the River Volta (Odotei, 1991b). Anlo fisheries are characterized by long term and seasonal migration (Overà, 1998). Due to the diminishing catches on the coast of Anlo (Srogbe), the fishing companies increasingly migrated to places like Elmina, Cape Coast, Winneba and Half-Assini in Ghana and outside Ghana like Benin, Ivory Coast, Sierra Leone, Gabon and Congo (Nukunya, 1989). The name Abakam was named after river Bakam (Map. 2). Togbui Gbagba I and other ten people were the first settlers in Abakam. They were fishing along the coast of the Volta Region in a village called Srogbe but due to the diminishing catches in Srogbe they decided to look for new fishing grounds and finally settled in Abakam. By 1960 about 20% of its population at that time had been born and it was considered as one of the “earliest Anlo fishing settlements” to be settled outside Anloland in the area (Wyllie, 1969:132). The area was a forest when they arrived and so were planting coconut trees during their time off. However, the dry coconuts were kept in rectangular cement blocks which were used as a source of oil for frying of fishes.

However, in April, 1964, an unexpected incidence happened in Abakam where the whole community was burnt under the authority of Cape Coast Municipal Council. The number of inhabitants of Abakam was about 1000 at the time of its destruction (Wyllie, 1969). The Anlo-net
owners sometimes employed the native Fantes as their crew members and after sometime fishing company owned by the Fantes were on the Abakam beach operating. However, there seems to have been an uneasy relation between the Fantes and the Anlo as the Fantes perceived the Anlo as thieves, kidnappers, ritual murderers among others.

Despite all these, there was only one essential problem between the two ethnic groups before the destruction. This happened in the 1940s when a Fante woman, Mrs. Hagan, formed a fishing company which started operation on the Abakam beach under the care of her son, J.E. Hagan, without informing the Abakam headman (Wyllie, 1969). Before fishing company starts fishing on the Abakam beach, a bottle of local drink *akpeteshie* among others are usually presented to the Abakam headman, Togbui, as a sign of establishing good relations because having involved in the fishing for some 20 years in that area certain respects are accorded to the Abakam headman. As a result of this, Hagan’s action was considered as an intentional and hostile act. This created a poor relationship between Hagan’s company and the Anlo of Abakam until Hagan’s company stopped operating as a result of poor management (Wyllie, 1969). After becoming a Central Regional Commissioner after joining a political party, J.E. Hagan requested the Ministry of Social Welfare to resettle the people of Abakam at Bantama near Elmina as new structures were to be put in place at Bantama for them. Unhygienic condition of the area was the main reason cited. Even though only six houses had been completed in Bantama at the time of destruction of Abakam, the residents were served with notices which contains a section of the bylaws of the Cape Coast Municipality which spelt out clearly that before buildings could be erected people should seek the approval from the Municipal council and this bylaw had been neglected by the residents of Abakam (Wyllie, 1969).

The residents attributed this action to the collapse of the Hagan’s fishing company, while others attributed it to the fear and prejudices of his Fante local fishers that the eviction of the Anlo from Abakam would make the local Fante fishers fish along the coast without competition. It was noted by Wyllie (1969) the poor physical appearance of the village and its situation along the main highway was the major reason for the eviction and that visitors who travel along the way often see Abakam and it was not speaking well of Ghana. This explanation was linked to the visit of Her Majesty Queen Elizabeth II to Ghana in 1961 and it was believed that when she was
traveling along the coast she took a picture of Abakam which did not speak well of Ghana. This led to the burning of the whole of Abakam in 1964 (Plate 1 and 2 as remains of some burnt houses).

According to the Anlo-Ewes, the Cape Coast Municipal council told them they were going to put up new houses at the place so they should evacuate the place. However, after evacuating the place for some years nothing was done at the place and therefore decided to come back to settle the place again. Since they came back nothing of that sort had happened again and they are now comfortable living there. The total population as at 2000 is approximately 700.

The idea here is that J.E. Hagan did not follow the institutional procedure before fishing in Abakam and this created a huge problem. This therefore means that the existence of informal institutions are very powerful in terms of who get access to what kind of resources in Abakam. It can therefore be argued out that there is a strong link between getting access to marine resources as well as maintaining this access in Abakam and the informal institutions that govern it

2.6. Religion

Religion is an essential personal characteristic as it regulates peoples’ attitude, statuses and behaviour. Some of the inhabitants of Abakam are polytheists in their religious beliefs and attitudes. They believe staunchly in the existence of a supreme God. They have numerous gods they worship who can be described as functional gods. The gods derive their power from this
supreme God. Next to these gods, in order of importance are the departed ancestors. They are considered to be present in spirit at all times, supervising the activities of the living. All fortunes and misfortunes of fishing are attributed to them. There are several denominations including E.P. Church, Pentecostals and other orthodox churches in Abakam indicating the religious nature of the inhabitants.

2.7. Educational facilities

The Abakam community has one basic school which was established by the Evangelical Presbyterian Church (Ghana) and it is 20 years old. It has been taken over by the Ghana Government (Ghana Education Service). The school had its foundation through the effort of the Togbui Gbagba II who is a Christian and the congregation while the council of elders was against its establishment. This was due to the reason that the council of elders were non Christians and they had a belief that the church would introduce their children into Christianity and their doctrines would conflict with that of their religion and this may influence their children. However, upon persuasions by the Togbui and the Pastors in the church, the school was put up (Plate 3). Apart from this the community also has one private school (kindergarten) owned by one of the fishers (Plate 4).

Plate 3 : Basic school (Public)  
Plate 4 : Private school (kindergarten)
2.8. Water facilities

The community has five boreholes but only two were functioning as at the time of fieldwork. Due to irregularity of the flow of the water, several containers (Plate 5 and 6) are used as storage facilities for water. The irregularity of the water creates problem for inhabitants especially school children as they have to wake up early in the morning to queue for water. This sometimes makes the children late for school even though the school is closer to them.

Plate 5: Water pump 1

Plate 6: Water pump 2
2.9. Nature of buildings

There are two main forms of building in Abakam. Most of their buildings are constructed with bricks and mud, roofed with raffia mat and long grasses (Plate 7).

Plate 7: Bricks building

Plate 8: Raffia and brick building

Others are constructed with raffia mats and roofed with long grasses (Plate 8). The inhabitants live together with their relatives and families in compound houses in order to maintain togetherness. It is not uncommon to find things like mud ovens, nets, baskets, ropes as well as straying animals like dogs, goats, sheep and fowls. Garbage and trash are dumped close to area and this makes the general surroundings become overcrowded and dirty environment (Plate 9). Children are sometimes left alone to be playing around (Plate 10) even though they are sometimes looked after by grandmothers and siblings while parents are either at the beach waiting for landing fish or processing their fish.
2.10. Other facilities

There are two corn Mill machines operating in the community. The community has electricity but no street lights thereby making the community become dark and creates poor visibility in the night. The community has drinking sports where the fishers sit and take some drinks after the hard day’s work from the beach. Also there is one gari processing centre along the road where the women process gari to be sold along the road. There is one 31st December Women’s Association building which was constructed under the era of the National Democratic Congress (NDC) Party in the 1990s. The association is not active and therefore the building has been converted into a community centre where the inhabitants converge to discussion issues with the chief or the Assemblyman of the electoral area. However, the community lacks public toilet facilities and so inhabitants defecate in the nearby bush and at times at the beach. There is no clinic and so inhabitants have to go to Cape Coast to attend clinic and hospital.

2.11. Livelihoods

According to the 2000 Census, Central Region accounts for between 40-45 per cent of Ghana’s total fish landings (GSS, 2005). The major occupation among the inhabitants was fishing. Among some of the species which are caught include cassava fish, soul, shrimps, and herrings, lobsters
among others. It is common that men do the physical fishing operation at sea, while women stay at home and care for children, process the fish and then “transform the fish into marketable and edible commodity” (Overå, 1998). In addition to the fishing, most of the inhabitants also do farming. Most of the farmers grow cereals and various forms of tubers. The major cereal crop which is normally cultivated is maize. The maize is usually cultivated for subsistence and is used for preparation of local dishes such as banku, akple among others for household consumption. Cassava and cocoyam are the major tuber crops cultivated. The cassava is used for the preparation of cassava dough which is mixed with the cough dough for the banku. According to the respondents, some of the cassava is also sold to women who use it for gari preparation. The gari is usually sold along the road to drivers and passengers plying on the road.

Apart from the cereal and the tubers, other crops such as palm fruits and coconut are also produced in the community. Palm fruits which are harvested from the palm trees are used for the preparation of palm oil and palm kernel oil. The palm kernel oil is also used to fry the fish while the palm oil is for local consumption and little is sold. This means that the palm trees are not cultivated for commercial purpose even though some might be left for sale. Until recently, the main idea for the plantation of the coconuts was for preparation of coconut oil for the frying of the fish. However, the demand for fresh coconut fruits has increased and so some of the fruits are harvested fresh and sold to people. This is due to the location of Abakam near urban areas and University of Cape Coast (UCC). This implies that incomes are generated from the selling of the coconut fruits and this contributes to the farmers’ livelihood activities. In addition to these three major crops, other vegetables such as tomatoes, cabbage, okro, onion, egg plants (garden eggs) are also cultivated on the small basis on the land. These are basically for household consumption. The above described livelihoods indicate the inhabitants combine both fishing and farming. It is also likely that more people would also resort into farming when they are able to get access to land in order to diversify their livelihood strategies.
CHAPTER THREE: THEORETICAL FRAMEWORK

3.1. Introduction

Every research has a theoretical position which rests upon a basic philosophical position - ontology. Ontology is the theory of existence, a philosophy of what really exists as against what does not. It can also mean the basic world view of phenomena, and poses the basic question ‘how is the topic constituted?’ (Holt-Jensen, 2004).

To be able to know the existence of a problem results in the question of epistemology (the theory of knowledge). Problem formulations, theory evaluation, the choice of appropriate research techniques and results interpretation are guided by epistemology (ibid). Natural resource management has been one of the topical issues in recent times. Different theories and models have been proposed by different authorities in dealing with how natural resources can be managed sustainably at local level. In an attempt to comprehend the resource management situation within Abakam this study gets its theoretical insights from the environmental entitlement approach.

3.2. The theory of entitlement

Sen (1981) developed the concept of entitlements approach to explain the cause of famine and how it is that people can starve in the midst of plenty of food as a consequence of a fail in their ways of control over food (Sen, 1981 cited in Leach et al, 1999:232). By this Sen means people go hungry while there is food because of their failure to control food. He used the concept of entitlements to denote “the set of alternative commodity fortunes that a person can command in a society using the totality of rights and opportunities that he or she faces” (Sen, 1984 in Leach et al, 1999:232). The main concern of Sen was to look at the way entitlements are gained by different people from their endowments in order to improve their well-being (Leach et al 1999:232). Sen differentiated between the availability of food and the relationships between a person and the food available. According him, food is obtained by a person who is legally or socially entitled. He can exchange his own entitlements for other entitlements. Starvation is therefore seen as the consequence of a person’s incapability to establish entitlement to sufficient
food. His major argument was against the popular thought that famines are caused as a result of decline food availability and therefore proposed that the cause of famine is due to what he called entitlement failure.

3.3. Critiques of the entitlement approach

The theory of entitlement has been criticized on several grounds as the concept has some conceptual problems especially in applying the approach in certain areas. Firstly it has been noted that Sen was mainly concerned with command over resources through market channels which is supported by formal legal property rights but did not recognized that there are many ways of gaining access to and control over resources such as kin networks, and other ways of legitimating access and control like customary law, social conventions and norms (Leach et al. 1999:233). It has also been argued that Sen focused exclusively on entitlement mapping, which is how endowments are transformed into entitlement but did not pay more attention to endowment mapping, and the way people gain endowment (Ibid).

It has also been argued out that the history of famine indicates that decline of food output was the cause of famines and so projecting entitlement as the main cause of famines was inappropriate. Above all, Sen’s idea of ‘entitlement’ was particularly on the owing of commodities and did not take into consideration the probabilities of other means of having resources like control and access.

3.4. The theory of environmental entitlement

Leach et al. (1999) were inspired by the Sen’s theory of entitlement and latter presented the concept of environmental entitlements, which focuses on implications of intra-community dynamics and ecological heterogeneity (ibid: 225). The approach builds on a conceptual framework pinpointing the central role of institutions (regularized patterns of behaviour between individuals and groups in a society): endowments (social actors’ rights to resources, for example labour, land, skills); and capability (what people can do or be with their entitlements) in accessing resources. In this way the environmental entitlement framework looks at the relation between different levels of goods such as fishing grounds, land and principles of differentiation (which include age, gender, ethnicity, religion etc). The approach gives more insights to explain how the
effects of environmental change and access to and control over natural resources are socially separated (ibid: 232). The main question in relation to people-environment relationships concerns accessibility to and control over resources as well as availability to resources in general. The main question in the environmental entitlement approach, which is relevant for this study is:

How do different social actors gain access to the fishing rights and land resources and what are the institutions governing the management of these resources?

It turns the attention towards elaborating and understanding communities and environment as heterogeneous and variable. Leach et al (1999) define environmental entitlement as:

‘alternative sets of benefits derived from environmental goods and services over which people have legitimate effective command and which are instrumental in achieving well being’ (ibid: 233).

Figure 1. Environmental Entitlement Framework. Source: Leach, Mearns and Scoones (1999:234)

The figure above (fig.1) joins the elements of environmental entitlements framework together in a form of a diagram. It also shows how institutions interfere with entitlements, endowments and capabilities concerning environmental resources. Leach et al. (1999) concept of environmental entitlement framework concentrates on how endowments (social actors’ rights to resources) are acquired by people from environmental goods and services and how these are transferred into entitlements (fig.1). It also focuses on the analysis and the role of different levels of institution
(micro, meso macro) on how they interfere during the process of endowment and entitlement and capability building of differential social actors. The actions and practices of people which are performed within a certain context of institutions, may serve to either conserve or reproduce existing features or processes of the ecology but the environment may also be transformed through who may act as agents (Leach et al, 1999:239).

3.5. Institutions

The institutional approach to resource management has been developed mainly in response to the use of the concept of community in a simplified way in many studies of use and access to common resources. Institutions have been used and defined by several authorities in diverse ways. Institutions are regarded by Parsons as systems of norms that “regulate the relations of individuals to each other” and that define “what the relations of individuals ought to be” (Parsons 1990 in Hersoug et al, 2004:207). Agrawal and et al (1999) defined institutions as "sets of rules describing and prescribing human actions"(ibid: 638). This means that institutions sets limits people’ actions. Similarly, Agrawal (2001) states that institutions are "sets of enforceable rules that facilitate and constrain human action." Institutions are identified with a social purpose and performance making rules governing cooperative human behaviors. Leach et al (1999:225) define institutions as the regularized patterns of behaviour between individuals and groups in society, in mediating on the relationships between environment and society. In this sense institution becomes a mechanism which is available to mediate, soften, structure and facilitate particular outcomes and actions. Formal and informal rules and regulations are continuously made and remade in course of people’s practice over time.

The environmental entitlement approach sees institutions as regularized patterns of behaviour that emerge from underlying structures or sets of rules in use that are frequently made and remade through the practices of peoples (Leach et al, 1999:237). This approach focuses on both formal and informal institution and as a result institutions can be differentiated from organizations (ibid). “If institutions are thought of as the rules of the game in society, then organizations may be thought of as the players” (North, 1990 in Leach et al, 1999:237). These formal and informal rules that exist shape the way in which members of a community treat the environment and how they use the natural resources (Leach et al, 1999: 240). It is also noted that there are many
different institutions within a community which combine to form the way that the environment is dealt with by community members (ibid).

Institutions are seen as “mediators of people and environmental relations” and this makes “different people rely on them to make claims on environmental goods and services” (Leach et al, 1999). Agrawal et al (1999) add that institutions may often be seen as “provisional agreements on how to accomplish tasks” and these tasks may include resources distribution, management, disputes arising in relation to resource uses. This makes Cleaver (2001) to argue that the management and resource-use practices at the local level are perhaps to be a complex combination of formal and informal, modern and traditional practices (ibid:29). To be able to determine and ensure equal accessibility of a resource to people, certain rules are set to govern the distribution primarily to ensure that people who are marginalized in a particular community are also benefited. For these rules to be sustainable in communities, institutions usually address issues of conflict and power among the local people themselves concerning exploitation of resources and use and also among various communities in the same way. In this way institutions are more or less positioned to handle both internal and external threats in terms of accessing and competing for resources. Apart from these institutions also settle disputes among resource users as well as delimiting the access to resources. Leach et al. (1999) study in Ghana support this fact where the study describes the role of local level institution on the collection of leaves which has a significant value in household level economics.

Agrawal et al. (1999) emphasized that power to resource management at the local level needs the exercise of authority and control by local actors in three domains :(1) making rules on resource management, conservation and use (who has the rights to use, conserve and access resources); (2) accomplishing the created rules (the rights to oversee the use of the resources and to state explicitly the sanctions against those who break the rules); (3) settlements of disputes which will arise in the application of the rules (the rights to guarantee that sanctions are obeyed) (ibid:638). They claim that institutions are “conceptualized rules describing and prescribing human actions” in these three domains (Agrawal et al. 1999:638). This could mean that the institutional arrangements are very important to understand if decision-making is to be included when working with a particular group (Agrawal et al. 1999:639). Paudel (2006) adds that both governmental and local institutions regulate the use and access to resources. For example, in
Nyishang in Nepal, the major decisions on resource use are taken with consultation with Lama by village council or mitheba (ibid: 53). Similarly, Koranteng et al. (1999) for example noted that certain institutions such as taboos and cultural practices help in the maintenance and conservation of fisheries in lagoons in Ghana. This was confirmed by Hens (2006) who noted that certain bans are put on certain days in terms of fishing in the Fesu lagoon in Ghana and that refusal to abide by the fishing bans for example is punished by the chief of the village by killing a sheep and two bottles of schnapps.

Local institutions regulating access to resources are usually nested in traditional culture and this traditional culture lays down the basic ethics and codes of conduct. The traditional culture is sometimes used to guide, instruct, and govern and to determine who has access to environmental resources. Berry (1989) notes that in certain parts of Africa, to gain access to resources (land etc) people had to obtain permission from or actually join the land holding group through institutions like marriage, fostering, purchase among others (ibid: 42). This serves as a barrier to prevent the outsiders from acquiring such environmental resource and by so doing restricting peoples’ access to resources and conserving the resources simultaneously.

3.6. Relevance of the environmental entitlement approach to the study

The central elements of environmental entitlement approach which are relevant to this study include endowments, entitlements, capabilities, institutions and differentiated social actors and these are discussed below.

Endowments here mean the Anlo-Ewes rights to marine and land resources in Abakam. Entitlements refer to utility the Anlo-Ewes gain from their rights to marine and land resources in Abakam. Capabilities which refers to the command over entitlements, which is what the Anlo-Ewes can do with it. Rights to a resource (endowments) are meaningless if one does not have the ability to utilize it (entitlements). Similarly, usefulness of a resource (capabilities) is uncertain if right (endowments) are not attached.

In relating fig.1 to the study, marine/sea and land are considered as environmental goods/ natural resources. The right to fish and the use the land for agricultural purposes by the Anlo-Ewe in Abakam is described as an endowment. The utility gained from the sea and the land is considered
as the use of the resources (entitlement) and the usefulness of the resource to improve one’s well-being indicate the capabilities. Each of the components in the framework is related to some level of institution which governs it. However, the Anlo-Ewe people in Abakam are migrants who have migrated from their region into a different region and therefore having rights (endowment) and maintaining their access to these coastal/marine and land resources is another issue. It therefore becomes necessary to find out how the Anlo-Ewe migrants in Abakam got access/right (endowments) to the resources (right to fishing ground and farm) as well as how they are maintaining these rights (see chapter six).

Another key element in the environmental entitlement approach which is also relevant to this research is on the institutions. The institutional aspect employed in this theory helps to map the resource use in a dynamic way. The approach shows how access to and control over resources is mediated by a set of interacting and overlapping institutions, both formal and informal (fig.1). The environmental entitlement analysis focuses on the roles of institutions (fig.1). Different social actors in the community acquire different legitimate effective command over resources and capabilities. The people of Abakam are also governed and regulated by certain institutions on the use of the resources and also how the institutions mediate when conflict arises among the fishers.

At the local level, the Fantes as well as the Anlo-Ewes also have some institutions regarding the use of the resources. This also makes it relevant to find out the institutions involved in the regulation/negotiation of access to and use of the resources today in Abakam (see chapter six on informal institutions).

The environmental entitlement approach is also useful to this study of how different social actors operate and regulated by the institutions. Access to resources depends on the different social actors’ ability to utilize his or her capabilities as some groups maybe wound be contrained in terms of getting access. This was noted by Bene (2003:960) that individual or groups are constrained on command over resources through social marginalization, economic exclusion, class exploitation, and political disempowerment. Institutions assist to reform the interactions that take place around resources as well as designating some of the power relations that determine the actions among those who take part in the creation of institutions community (Agrawal et al. 1999:637). There is an existence of local institution, which regulates human activity and
interaction, and focus on cooperation and minimising patterns of conflict (Cleaver 1999:33-34). Natural resources and for that matter sea/marine and land resources are managed through such institutions, and there exist certain patterns of power attached to them. In this sense there is a potentiality of addressing questions about how different social actors gain access to fishing rights and land resources, how the institutions are enforced and the kind of sanctions on violation of the institutions. Both the Anlo-Ewes and the local Fantes have informal institutions (see chapter six) which are backed by sanctions once the rules and the norms are broken and this makes it very important to find out how these institutions are being enforced and the sanctions applied.

It is from the above discussions that make the environmental entitlement approach in addition to institutional concept a useful approach to this research.
CHAPTER FOUR: METHODOLOGY

4.1. Introduction

The main method used in this study is qualitative method. Qualitative research has been recognized as primarily descriptive (Silverman 2006), and “general, theoretical (context-independent) knowledge” is more important than case study research based on “concrete, practical (context-independent) knowledge” (Flybjerg, 2004: 421). In addition, recognizing that all methods have limitations and the biases of a single method could neutralize the biases of the other method (Creswell, 2008); quantitative method was also used to solicit for more information from the respondents. This method of using both qualitative and quantitative approaches can be described as mixed method. Concurrent mixed method was used and this enabled me to merge the quantitative and qualitative data in order to provide a comprehensive analysis of the research problem.

This chapter looks at the various methods used in this research in gathering the information, how the data is analyzed and presented as well as the reliability and validity of the data collected.

4.2. Doing fieldwork

The fieldwork took place in Abakam fishing community, a suburb of Cape Coast Municipality in the Central region of Ghana (see map 2). Before I first entered into Abakam and interacted with Anlo-Ewes in the community, I had often heard many myths and stories about the Anlo- Ewe people such as: The Anlo people generally gain power from the assistance of evil spirit mostly for divining. They are spiritual murderers and they kill people using *juju*. They are also seen as kidnappers. They are also considered as thieves.

So I had some fear in my mind as to whether I could be able to conduct a successful interview without any difficulty. The actual field work took place from June to August 2009. This period helped me to participate and study the behaviour of the inhabitants and how they go about their daily activities. This also assisted me to acquire the necessary information needed to make this
research a reality. It also enabled me to organize group discussions and also to get case studies for this work.

Since the inhabitants in Abakam were Ewe-speaking people and therefore language was a barrier I made an arrangement and got an interpreter called Mensah Doe who is a forest guard at Assin Foso to help me especially during the group discussions and case studies to enable me solicit the necessary information from them. As we (Mensah Doe and I) arrived at Abakam, we met a man, Nicholas Kponorvi, on the road and he took us to Togbui Gbagba II (chief). Incidentally, he happens to be the small brother of the Togbui. I first of all presented one bottle of schnapp; two bottles of local palm brandy called *akpeteshie* and one bottle of another local drink called *pusher* (Plate 11 and 12) to Togbui before telling him our mission.

Plate 11: Presentation of drinks to Togbui

Plate 12: At Togbui’s house

I then introduced myself as a Ghanaian student studying in Norway who is interested in studying fishing in the community. The nature of the work was explained to him. However because this year was an election year he was having some doubts in his mind so he ordered Nicholas Kponorvi to go through the questionnaires with me which I obliged. After going through the questionnaires with Nicholas he was convinced that it was for only academic purpose so he gave me the green light to carry on with my research.
4.3. The choice of an interpreter

In the course of the fieldwork I encountered two major problems with my interpreter, Mensah Doe. Firstly, his level of education was low and he could not speak English fluently. Secondly, he could not really understand and speak my local language *Twi* very well. These also created a communication gap between us. So upon second thought I decided to look for a new interpreter. Fortunately for me I met Daniel Kponorvi, who was a first year student at University of Ghana and had come on summer holidays. He is studying Geography and Resource Development which was the same course I studied at the bachelor level. He also happened to be the son of the Chief, Togbui Gbagba II and he was the only university student in the community.

Having Daniel (chief’s son) as an interpreter might involve methodological problems in the sense that the respondents might have hidden certain vital information with the fear that he would inform the chief about the kind of information given out. Secondly, Daniel could have also hidden certain information concerning the chief and his elders of council from me. In addition, some of the respondents were not willing to answer the questions as they kept on saying that Daniel would have more information than them about the fishing activity since he is the son of the chief/chief fisher. Being aware of these problems the questions were explained to Daniel and more importantly the questions were not sensitive in terms of chieftaincy and other issues concerning the chief but were straightforward on how the marine resources are accessed, maintained and managed through informal institutions.

Daniel was chosen because he had command over the English language, has some experience in research and also he is familiar with the fishers. In addition he also had knowledge about their tradition and culture. He then became my interpreter for the rest of the fieldwork (Plate 13). He took me around the community and along the beach and gave me the necessary information that I was looking for in my work. With him we were able to locate the fishers so that they could respond to the questionnaires. Also he translated the questions into their local Anlo language for informants and then gave me their answers in English language. Those who were able to speak the Fante language I spoke to directly.
4.4. Role and status during fieldwork

*Status* refers to the position of the individuals in the society, associated with rights and duties while the *role* also represents the dynamic aspects of status which is the actual behaviour that a person plays out of his status (Linton, 1936). According to Aase, a person’s role expectations are usually expected to relate to the status and that if the person’s role does not correlate with his or her status, a new status and position would be assigned to him or her in a society (Ibid: 2005).

The status obtained by the researcher when doing fieldwork can also affect the reliability and the validity of the data collected. The informants may hide certain information about the community if the researcher is considered as guest or may also exaggerate their needs and problems if the researcher is seen as a different person (Ibid). In doing the interview the status of the interviewer can also affect the communication of the interviewees as well as the interpretation of the questions. When this happens then the informants are sometimes become more concerned with whom the interviewer is, than the nature of the project (Silverman, 2006). The roles and the statuses of the interviewer, the interviewees and the interpreter, as well as the context and the expressions in the course of the interview also have an impact on the outcome (Ibid).
In the course of the fieldwork I tried to let the informants understand my status as a student who is interested in researching into accessing, maintaining and management of natural resources and especially fisheries. Although I presented myself with this status, the people in the community perceived me differently and ascribed me with a different status. Firstly, they perceive me as a tourist who was interested in observing things in the community as they saw me taking some pictures at the beach. However, my continued stay in the community made them perceived me in a different way and therefore ascribed new status to me. This was because since this year is an election year they might have perceived me as a ‘spy of government’ who wanted information to feed the political parties. In order to surmount these challenges Daniel and I tried to inform them about the aim of the research. At a certain point in time they thought Daniel had taken a bribe from me and was trying to defend whatever I was doing in the community. I made it clear that the data was only for academic purposes and not for use by the government as I showed the front page of the questionnaire depicting the logo of the University of Bergen.

Moreover, at a point in time they were also claimed that they were ‘fed up’ with students as they realized that I was not the only person who had been there as a student wanting to do research on fishing as some students from the nearby university have been visiting the community with the same mission. However, the statuses of my research assistant as the only University of Ghana student in the community and also being the son of the chief and having been walking with me everyday, made them understand the purpose of the research and through that I was able to achieve my status as a student.

4.5. The sample

The target population included the inhabitants of Abakam. Since interviews could not be conducted on the entire population, a sample was drawn from the population. The act of sampling is relevant in survey research as who answers to a survey can have important effects on the outcomes (McLafferty, 2003: 95). The sample included the population of Abakam who were into fishing and farming. In all, a sample size of forty six (46) were selected and interviewed and out of these 39 were men while 7 were women (see chapter five). There was a gender imbalance in the sample as it was skewed in favour men. This was because the questions were geared towards accessibility, and institutions on management of the fish resources and the women were not
directly into fishing and farming (that is going to the sea or owning land) but rather were into the processing and marketing of the fishes. The population of Abakam is homogeneous in terms of ethnicity and occupation. As a result the respondents were selected using simple random sampling technique which ensured that an individual respondent has equal chance of being selected and that the main idea was not to compare individual households. In addition, purposive sampling was also used. By making use of purposive sampling implies that the researcher selects his informants and sites for study because meaning to the research problem and main phenomenon in the study can be provided by them (Creswell, 2007:125). Using purposive sampling also permits us to select a case because it demonstrates some feature or process in which we are interested (Silverman, 2008:129). Purposive sampling method was employed in order to include key informants like the chief/chief fisher and some of the elders in the community so that I could seek their views on the topic study as well as other historical account of the area. Purposive sampling was also used for the key informants because they were more likely to know about the institutions and the sanctions given to fishers who break the institutions.

4.6.0. Methods of data collection

In order to be able to comprehend the way the fishers live at Abakam, qualitative method was employed and this method can be considered as one of the approaches suitable for answering the research objectives put forward. According to Cook (2005), qualitative method can involve a process of three stages: In the first place, get access to the specific community of study. Secondly, work and/or live there to learn and understand their way of living. Finally, go back to the university and through writing make a “reconstruction and understanding of the community’s culture” (ibid).

Qualitative method helps to gain insights and to understand the local practices and the activities in Abakam as well as the meanings attached to individuals’ behaviour in the study area. The aim of qualitative method is to come closer to people and what the community practices (Flybjerg, 2004). Qualitative method is proper as “the aim is to draw large conclusions from small, but very densely textured fact” (Geertz 1973: 4). Again, qualitative method also brings detailed information about the activities in the area. In addition, qualitative method helps to depict the nature of the social world through an understanding of how people go about the things they do.
and provide meanings to their lives (Eyles and Smith, 1998: 2). This implies that qualitative method search for justification to events. The main methods which were used in the research included participant observation, group discussions, case studies and interviews and questionnaires.

4.6.1. Participant observation

Participant observation is where the researcher is able to observe events and interview informants about things and events. Participant observation is where one spends time being, live or work with people or communities he is studying so as to comprehend them. (Laurier, 2003:133). “The participant observer gathers data by participating in the daily life of the group or organization he studies. He watches the people he is studying to see what situations they ordinarily meet and how they behave in them. He enters into conversation with some or all of the participants in these situations and discovers their interpretations of the events he has discovered” (Eyles and Smith, 1998:8).

The main aim was to understand the fishing occupation, the institutions governing the fisheries and land resources and how the informants go about it. Participant observation necessitates first hand participation in the community under study (Marshall and Rossman, 1995:78). This means that observation entails the organised making of notes and recording of events, behaviour and things in the community (Ibid). In the course of doing the fieldwork I observed several fascinating events, just by moving around on the shore to observe how the people were going about their daily activities like the way they paddle the canoe, cast the net and also the way they pull the net by singing and cracking interesting jokes. Interesting events were also observed in the Abakam in general. In an attempt to know more about their daily life activities, I could speak to many fishers especially the youth, women and other people I met on the shore and in the community. In the community I observed that during the off season the women were just sleeping in the sand and when I approached them they said they did not have anything to do. The women did also not go to farm with their husbands because they had to cross river Bakam by a canoe (if they had one) or by swimming and they saw that as a dangerous activity, so they only farm when the river subsides in volume. It was also noticed that the young men went to sea with the canoe while the old men would be waiting at the beach. In other words, the fishing occupation in Abakam was dominated mostly by young men (see chapter five). I also observed that anytime
they wanted to be friendly with me they would speak the Fante dialect, but when they wanted to hide something from me then they would speak the Ewe dialect. So I would sometimes ask Daniel what they were saying and he would tell me what was going on. In certain circumstances he would tell me it was not necessary so I should forget about it but I kept on asking him and he would tell me. I also observed the way the women processed a local food called *gari*.

Although I tried my best, I found it very difficult to be integrated generally in the community as a participant due to the language barrier, though on few occasions they would speak Fante with me. In an attempt to participate in their daily activities, I suggested fishing with the crew in the canoe but since I could not swim they advised me against that and because of that I could not participate in the casting of the net. However, I took part in the process of pulling the beach seine to the beach (14 and 15). Putting him/herself in the social situation assists one to hear, see, and begin to understand and feel reality as the local dwellers do (Ibid). Since it was my first time of pulling net, I was incompetent and could see myself described as an ‘outsider’ (Laurier, 2003:135). Because of this the fishers were only expecting me to be observing and learn how to pull the net. In the process of pulling the net we would be singing and cracking jokes simultaneously. These songs and jokes gave us extra vigour to pull the nets without feeling tired. Again sometimes I tried to mend the nets with them and was also involved in drying the nets as well. Although a participant observer does not need to become *excellent* in the whole activity before becoming successful (Ibid: 137), I was able to acquire some common knowledge about how the beach seine is being pulled to the shore and how the canoe is also dragged to the beach by the fishers. However, I tried on several occasions to visit their farms but to no avail because it was a rainy season and river Bakam was full and since I could not swim I was not allowed cross the river.
Nevertheless, the participant observation in the form of qualitative approach assisted me in taking part in their daily activities like the fishing. This also helped me to actually comprehend some of the institutions regarding the use of the fishing grounds (see chapter six). Through this I understood the nature and the kind of work they were engaging in. During this period how the fish caught are shared and how some of the disputes emerge were also identified and noted (see chapter seven). Through this method I was able to get ‘more direct access’ (Ibid: 145) to the phenomenon I was studying.

4.6.2. Group discussions

The group discussions usually involve a small group of people including the researcher who meet in an informal setting to discuss issues designed by the researcher (Longhurst, 2003:117). The key element here is the interaction between the researcher and the informants or interviewee. Choosing participants to involve in group discussions is essentially imperative (Ibid: 123). Different group discussions were held with informants. Group discussions were held with the young men under a tree (Plate 16) where they usually converge to rest and discuss issues concerning their lives, and fishmongers (Plate 17) under a coconut tree, as where group discussions is held can make a difference (Ibid:124). There was therefore the need to look for neutral area to enhance effective discussions. This was done using ‘cold calling’ (Ibid), that is,
we called participants and asked them if they would be willing to be interviewed. They were assured of confidentiality and anonymity. The discussions were organised on Tuesday afternoon. This was the time when they were resting and mending their nets. In the group discussions, information like the history and the development of the village, why they settled in Abakam, how they understand the institutions governing the use of the marine and the land resources were acquired.

The criteria for recruitment also took demographic range (Macnaghten and Myers, 2004:69) into consideration as some of the participants were uncomfortable in releasing information due to the presence of their parents. The ages of the youth ranged from twenty one to twenty eight years whilst those of the fishmongers were above forty years. In addition, sexual differences were also taken into consideration in the organization of the group discussions and this enabled the informants to be comfortable in answering the necessary questions which were put before them.

Daniel served as interpreter to enable me acquire the information from them. Daniel’s presence influenced the information gathered in two main ways. Firstly, he knew all the youth who were recruited as some of them were his Junior High School mates. They have lived in the same community since infancy and they also shared common things together as they meet under the tree to discuss football, politics among others. Some of them were also in the same church with him and they were within the same age group. This made the youth to express themselves freely and they were responding to the questions as much as possible. The fishmongers knew Daniel to be the son of the chief, but they saw him as a respected member in the community due to his educational status. As Daniel explained the nature of the work to the fishmongers they considered him as one of their sons who is also learning. However, at certain points in time they would comment like ‘you should have known this since your mother is also a fishmonger and you also take part in this fishing activity’. Nevertheless, the women answered all the questions which were put before them which indicated that his presence yielded a high rate of responses.

The main idea was not for representative sample of the population (Ibid: 68), but to generate talk that extended my thinking about the fishing activities in Abakam and recruitment group were basically fishermen and fishmongers. The information gathered during the group discussions
were written down by me instead of recording it as I observed that some of the participants felt
tensed up when their words were being taped. I tried as much as possible to write all the
conversation that took place to avoid data from being lost even though every transcription leaves
out certain things (Cook, 1995 in Macnaghten and Myers, 2004:73). Nevertheless the group
discussions provided an opportunity for me to explore different points of view from the
informants on the institutions regarding access to and the management of the resources.

Plate 16: Group discussions with the young men
Plate 17: Fishmongers

4.6.3. Case studies

“Case studies are a strategy of inquiry in which the researcher explores in depth a program, event,
activity, process, or one or more individuals”( Creswell, 2008:13). Case study was also one of the
qualitative methods which were used on the field to collect data. This method was used because I
wanted more information on the individuals and also to get better understanding of the activities
in Abakam. It was also relevant to use this method as it draws attention to the question of what to
be learned specifically from a single case (Stake, 1994:236). Although case studies play
important role in fieldwork, however, understanding the critical phenomenon may also depend on
choosing the case well ( Yin, 1989 cited in Stake 1994: 243). Making a proper selection of cases
is more imperative than anything. Two case studies are represented: one female and one male.
Their life histories, how they involved themselves in the fishing occupation, processing of the
fish were some of the information derived. Even though it has been argued that case studies
provide a little basis for scientific generalization (Yin, 2003: 10), these case studies provided an insight into the fishing activities, and also played a supportive role which facilitated my understanding (Stake: 237) of the activities in Abakam.

4.6.4. The interviews and the questionnaire

“There is a method or approach that lies between the survey method and participant observation: the interview” (Eyles, 1988). Based on this, structured and open-ended questionnaires were used to collect the data. The structured- response questions provided data on demographic characteristics, occupational differentials, sexual differences, accessibility to the resources, institutions involved in the regulation of the resources, while the open-ended questions offered detailed insights about the management of the resources, crops cultivated on the farms, causes of disputes among fishers, enforcement of the institutions and their associated sanctions among others. Above all, the open-ended questions created a way for several informal conversations and it permitted the informants to ‘craft’ their individual answers (McLafferty, 2003: 89). The open-ended questions also assisted respondents to articulate their own expressions as they were not limited in answering questions (Ibid). The interviewees were also allowed to feel free and ask questions and also to contribute their own points of view. The combined nature of both the formal and informal structure is a feature of the semi-standardized interview that gives the interviewer to digress, be focused on interesting topics and make other questions to follow-up (Berg 1998:61).

I was assisted by Daniel to administer the questionnaires and the interview was conducted on a face-to-face. This was done by moving from house to house to administer the questionnaires based on the selection procedure. The interviews were done in an open space in the various houses. By this way complex questions were explained and clarifications were sought for vague responses. At times we also interviewed some of the respondents at the beach when the net had arrived ashore. This process was time consuming especially when we needed to ask more questions. At a certain point in time we had limited time as it was getting late and dark, and some of the informants were fed up with us and very busy. However, meaningful answers were sought and higher rates of responses were generated from the respondents. There were at times the informants were friendly to us since Daniel hails from and a native of the same community; however, there were at times some people were skeptical about the aim of this research but after
carefully explaining the study to them they began to appreciate and were ready to give us the necessary cooperation.

4.7. Other sources of data

Secondary sources of information were also derived from articles, textbooks, journals, Internet, published and unpublished thesis, Ministry of Fisheries, and the University of Ghana Geography library.

4.8. The reliability and validity of the data

“Reliability refers to the probability that the repetition of the same procedures, either by the same researcher or by another investigator, will produce the same results, and validity is the accuracy of a given technique, that is, the extent to which the results conform to the characteristics of the phenomena in question” (Briggs, 1996:23). The main aim of reliability therefore is to minimize the errors and biases in the study (Yin, 2003:37).

The most essential problem in the study that might have related to the reliability and validity of data collection was the language barrier which made it mandatory for having an interpreter. Probably it has affected both the procedure of the data collection as well as how the data has been interpreted and analyzed. Eyles (1988) noted that in researching in a different culture with an interpreter can easily lead to misunderstandings concerning the translations and denotations of the questions. In order to prevent this from occurring I discussed the questionnaires with the interpreter prior to the fieldwork, and conferred about how the informants answered the questions before the interviews.

Another key factor that might probably have affected the data could be the chief’s son, Daniel, serving as the interpreter. This could have affected the way the informants might have responded to the questions as they might not be willing to say anything that will affect the chief. In this way the respondents might have kept certain information to themselves. The chief’s son might have also decided not disclose certain things that the chief does which might have affected the fishers in diverse ways. He might have also told the respondents not to give me information about the secrets of the inhabitants. This problem was to a great extend overcome as a result of explaining
to the informants the nature of the survey before the questions were answered. There was no differences in information gathered with my first interpreter, Mensah Doe, and that of the one gathered with Daniel. Besides, the questions were also tested on an Ewe fisher in Duakor, a nearby community to Abakam, to avoid misunderstanding during interpretation of the questions. Changes were not made in the interview guide before the interview in Abakam.

My way of selecting the sample also affected the representativeness and its associated validity of the data. As indicated earlier on there was a gender imbalance in the sample. Also by using simple random sampling means certain categories of households might not be represented in the sample as not all households were selected. This could have an effect on the accuracy of the data gathered.

It must also be acknowledged that the period in which the fieldwork took place might also have affected the reliability and validity of the data. This is due to the seasonal changes in the fisheries activities. The fieldwork took place in June to August, the period which is described as the off or lean season. Not much of the fishing was going on and so could not get the feel of the peak season. This therefore means that an extension of the fieldwork to the bumper season could have helped to get much information on what happens during both the lean and the peak seasons. This therefore might have affected the data collected. However, doing fieldwork in the lean season also has some merits as the fishers were available to be interviewed. The fishers might have been busy all day doing fishing activities during the peak season and interviewing them would have created inconveniences.

From the above discussions, it is obvious that every research has some setbacks which affect its validity and reliability in one way or the other. Hence it becomes imperative for the researcher to recognize these limitations.

4.8. Methods of data presentation

To be able to analyze the data derived from the questionnaire; quantitative method using Statistical Package for Social Sciences (SPSS) was used. In addition, descriptive statistics using frequency tables and percentages were also used in the data analyses and presentation of data.
CHAPTER FIVE: PEOPLE AND LIVELIHOODS IN ABAKAM

5.1. Introduction

This chapter looks at the demographic characteristics of the respondents, gender division of labour, occupation of the respondents, methods of fishing in Abakam, reduction in fish catch, price fluctuation during bumper harvest and concludes with the general problems facing fishers in Abakam.

5.2. Demographic characteristics of the respondents

5.2.1. Age and gender

Most of the respondents in the community were relatively young (see Table 1). From the table below, it is clear that the majority of the fishers were in the ages between 20-29 and 30-39 while the fishers between the ages of below 20 and above 50 were few. In all more than half of the respondents (65.2%) were in their ages from 20-39. When questioned about the reasons for the predominance of the young people in the fishing activities it was noted from the respondents that, fishing and its associated processing are very tedious and therefore require only those who are strong physically. This is due to the nature of the work as the work requires more strength which naturally old people lack. For example old people cannot jump into the sea and effectively drive fish into the net as well as paddling the canoe effectively and also pull the beach seine ashore. The old people play the role of mending of torn beach seine and drying as well. The old people also engage in pulling the beach seine but are usually behind while the young ones are in front. This means that age plays a key role in the fishing activities.
### Table 1: Age and gender

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 20</td>
<td>3</td>
<td>-</td>
<td>3 (6.5%)</td>
</tr>
<tr>
<td>20-29</td>
<td>16</td>
<td>2</td>
<td>18 (39.1%)</td>
</tr>
<tr>
<td>30-39</td>
<td>9</td>
<td>3</td>
<td>12 (26.1%)</td>
</tr>
<tr>
<td>40-49</td>
<td>7</td>
<td>2</td>
<td>9 (19.6%)</td>
</tr>
<tr>
<td>Above 50</td>
<td>4</td>
<td>-</td>
<td>4 (8.7%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39 (84.8%)</strong></td>
<td><strong>7 (15.2%)</strong></td>
<td><strong>46 (100%)</strong></td>
</tr>
</tbody>
</table>

**SOURCE:** Fieldwork, 2008.

#### 5.2.2. Age and education

It can be deduced from the table 2 below that more than half (67.4%) of the respondents had had formal education. The number of the fishers decreases when one climbs the educational ladder. Most of the respondents had basic education while few people have been able to attain tertiary education. However, there is a clear disparity when relating age distribution to the level of education. The majority of the people who had no education were above 40 years and none of the respondents above 40 years had high school and tertiary education. The respondents who were able to attain high school and tertiary education were all within the ages of 20-29. This means that the youth attain higher education than the old people.

The high number of the respondents who have attained formal education may be linked to the educational function played by the Cape Coast town. Cape Coast is noted as one of the towns having a lot of schools. The town has a lot of basic schools and is noted for some of the oldest high schools in Ghana such as Mfantsipim, Adisadal College, St. Augustine’s college, Wesley Girls’ High school, Holy Child High School among others. The town also has Teacher Training College, Nursing Training College, Polytechnic as well as University. Parents might have become increasingly aware of the importance of education and that their children would be better off if they could go to school. They could for instance manage their business for them and relieve them from reliance on memorizing. Due to this parents are making sure that, at least their children gets the basic education.
Another possible explanation for high number of people attaining the basic education could be linked to financial reasons. The basic education is comparatively cheaper than that of the high school. Unlike the high school where parents have to pay school fees every three months or semester especially students in the boarding house, the basic school does not involve school fees in every term so parent can afford to educate their children to that level. The basic school in Abakam (see chapter 2) which was established about 20 years ago might have also helped the people especially those within the age group 20-29 to attain basic education. The school was established at the time those in age group 20-29 were born. This implies that proximity to educational facilities can influence the educational level of people.

Table 2: Age and Education

<table>
<thead>
<tr>
<th>Age</th>
<th>No Edu.</th>
<th>Basic</th>
<th>High school</th>
<th>Tertiary</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 20</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>6.5</td>
</tr>
<tr>
<td>20-29</td>
<td>3</td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>18</td>
<td>39.1</td>
</tr>
<tr>
<td>30-39</td>
<td>2</td>
<td>9</td>
<td>1</td>
<td>-</td>
<td>12</td>
<td>26.1</td>
</tr>
<tr>
<td>40-49</td>
<td>7</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>9</td>
<td>19.6</td>
</tr>
<tr>
<td>Above 50</td>
<td>3</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>8.7</td>
</tr>
<tr>
<td>Total</td>
<td>15 (32.6%)</td>
<td>25 (54.3%)</td>
<td>4 (8.7%)</td>
<td>2 (4.4%)</td>
<td>46</td>
<td>100%</td>
</tr>
</tbody>
</table>


5.2.3. Education and Gender

Table below above illustrates educational levels attained by male and female respondents. There is clear disparity on educational levels attained by male and females. If one calculates the percentage of women who attained no education as against the male, it is obvious that the majority of the women 4 (57.1%) did not attain formal education as compared to the male 12 (30.8%). The remaining 3 (42.9%) of females who were able to attain education ended at the basic level. This implies that women are still marginalized in terms of education. This might be linked to the idea that women’ place is the kitchen and therefore should not be educated to a higher level. It is also the idea that women would get married and would be taking care off by
their husbands. Many claimed that some girls get pregnant when they are sent to high school. So in most cases males are preferred to be educated to the higher level.

Marriage is recognized as important in the Ghanaian society. At a certain age in one’s life the society expects one to get married. Most of the respondents 29 (63%) were married even though the chunks of the respondents were young while 17(37%) were not married. This is linked to the nature of the work as every fisher gives his fish to his wife to be processed and that if one does not have a wife then one might be forced to give it to someone else’s wife for the processing. Also is that the fishers get tired when they return from the sea and so they find it difficult to prepare food which make them get married.

Table 3: Education and Gender

<table>
<thead>
<tr>
<th>Education</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Education</td>
<td>12</td>
<td>4</td>
<td>16</td>
<td>34.8</td>
</tr>
<tr>
<td>Basic</td>
<td>21</td>
<td>3</td>
<td>24</td>
<td>52.2</td>
</tr>
<tr>
<td>Secondary</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>8.7</td>
</tr>
<tr>
<td>Tertiary</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39 (84.8%)</strong></td>
<td><strong>7 (15.2%)</strong></td>
<td><strong>46</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>


5.2.4. Number of children

Marital status is an important factor in population dynamics as it affects fertility. The numbers of children, both men and women, by the respondents were also recorded as it is found in table 4 below. Table 4 shows that some of the respondents have more children than others. This means that the respondents have different perception, views and reasons about the number of children that one should give birth to. Those who had fewer children claimed that bearing many children is expensive as they want their children to get better education and since education is expensive they prefer to give birth to fewer children in order to take proper care of them. Secondly, those with few children were of the view that fewer children mean few mouths to be fed. According to the respondents provision of basic needs such as food, cloths, and medical care to the few children that they have sometimes becomes a problem especially during the lean season and therefore prefer not to have more children. However, some of them admitted that they will give
birth again but not now. This implies that even though they perceive having children to be expensive they still anticipate and are willing to give birth again.

On the contrary the respondents who had more children had a different viewpoint. They claimed that they needed more hands in the fishing activity as more people to pull the nets among others and that the children serve as a source of labour for them. This implies that by using their children in the fishing activity as a source of labour supply not much money is spent on labour cost and by this they would be able to make much profit. Another major reason cited was the prestige involved in giving birth to more children. According to the respondents sometimes they are respected by the number of children that they have. People who are married and are infertile are considered as witches and wizards who have used their wombs for spiritual purposes. In order to break this social stigmatization people give birth to many children to prove their ability to give birth. The respondents also admitted that they had many children as a security net. This means children are regarded as an asset rather than liability. In the Ghanaian society in general children are expected to cater for their parents in their old ages and so the respondents were of the view that the more children they deliver the more secured they would be in their old ages because they would be care for by the children.

From the above, it is deduced that age plays a vital role in the fishing industry. This implies that there is a relationship between age and fishing activities and the reason is that fishing activities is physically demanding especially with the absence of outboard motors in areas like Abakam where everything is done manually. In essence even though fishing grounds are common pool resources not everybody can access it due to the age constraints. The old people are unable to go to the sea as well as children and women. It therefore means that accessibility to fishing grounds is constrained by age and only those who are strong physically can afford to make use of it. In this case the old people cannot transform their endowments into entitlements in order to improve their well-being.

People who are also educated would also be able to maximize their capabilities to improve their lot. This is because they would be able to apply their knowledge both in the management and accessing more resources. Being educated can have a positive effect by diversifying their
capabilities so as to access more resources and utilize it well as such. Children are also relevant in
the fishing industry as fishers use their children as a source of labour and security net as they
would be able to take care of their fishing gear as well as finding other livelihood strategies.

Table 4: Number of children

<table>
<thead>
<tr>
<th>No. of chn</th>
<th>1 child</th>
<th>2 chn</th>
<th>3 chn</th>
<th>4 chn</th>
<th>5 chn</th>
<th>6 chn</th>
<th>Above 7 chn</th>
<th>No chn</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>6</td>
<td>8</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>14</td>
<td>46</td>
</tr>
<tr>
<td>(%</td>
<td>13.04%</td>
<td>17.4%</td>
<td>10.9%</td>
<td>6.5%</td>
<td>10.5%</td>
<td>6.5%</td>
<td>4.3%</td>
<td>30.0%</td>
<td>100</td>
</tr>
</tbody>
</table>


5.3. Gender division of labour

5.3.1. The role of men

Generally, there is a division of labour in the small-scale fishing which is based on gender. Men
fish while women are engaged in fish processing and trade (Ellis and Freeman, 2005:265. Overà,
1998:8). In Abakam, men do the actual fishing activities. These activities include the preparation
of beach seines, mending of torn nets, drying of the nets, dragging of canoes ashore and
anchoring of canoes to coconut trees, repairing of damaged canoes, pulling of the net ashore
(plate 14), among other things. Farming activities are also done by the men. In addition, men are
traditionally the bread winners of their families and so have to provide food, shelter for the
families, pay school fees and medical bills among others. In a situation where the men are unable
to provide these due to financial constraints have to rely on the assistance of women to take up
the role of a bread winner. The situation where men shelve their responsibility as bread winners
often lead to marital problems such as loss of respect on the part of the man as head of family.
This means that honour and respect is given to men who perform their traditional role.

5.3.2. The role of women

The role of the women in the fishing industry is equally essential as that of men. The women cure
or treat the fresh fish to its final stage, store it and finally dispose of it through the marketing
channels. The women process the fish in a number of ways such as smoking, drying, salting and
frying. In addition to the fish processing and marketing the women also make financial
contributions in the form of loan to the fishers to procure items such as nets, ropes among others. Again women perform such role of supplementing the income of the family towards the upkeep of the home as well as acting as ‘bankers to their husbands’ (Odotei, 2002:25). These roles clearly indicate that the success of the fishing enterprise depends heavily on the wives/women in the fishing industry. Women also perform various domestic activities such as cooking, bathing babies, washing and sweeping of compound. Some of the women also engage in other activities including selling of food (waakye, gari and beans, rice and stew etc) to school children, local drinks to fishers, processing of gari among others.

5.4. Occupation of the respondents

Most of the respondents 22 (44%) were into fishing as it is the major activity in Abakam. In addition to fishing other respondents 13(28%) engage in both fishing and farming, women who constituted 7 (15%) of the respondents were into trading (fishmongers), 4 (13%) were into farming. In all, 87% of the respondents were into fishing as their source of livelihood while 13% are into active farming. Those who were combining fishing and farming usually farm during the lean fisheries season. This is the period when the sea is full since it is rainy season in Ghana and this causes high tides, winds and strong waves which can easily sink the canoes. During these periods much energy is also needed to paddle the canoe as they do not have more outboard motors. They then resort into farming as crops do well in the rainy season. This implies that the fishers supplement or diversify their livelihood activity when conditions are not favourable. Those who are not into farming are left idle in their various compounds chatting, playing cards and other activities. In addition, in the lean season others fishers also commute to Cape Coast, Elmina to do other jobs mostly selling of items as livelihood. Others also sell local food such as waakye, banku, gari, and others things like fuel wood. This shows that the fishers find other alternative source of livelihood when fishing is not attractive during the lean season.

5.5. Method of fishing in Abakam

The beach seine fishing is the main method of fishing and it is called yevudor among the Ewes. The Danes are believed to have introduced the yevudor in Keta (Odotei, 2002:40). The yevudor is an Ewe name for the beach seine which means ‘white man’s net’ (ibid) and is used in Abakam and Duakor. The fishers start very early in the morning based on their ‘casting shift system’ (see
chapter six on informal institutions). One of the wings of the seine net is taken out to sea by canoe while the other wing is connected to a coconut tree at the beach. The canoe makes a wide circle and brings the rope linked to the first wing back to the beach. The net is then pulled ashore after a period of time with a careful and accurate handling, involving perfect co-ordination (see plate 18 below).

Plate 18: Fishers pulling the beach seine ashore

The fishing activity is organized into companies. Each company is made up of the canoe or the beach seine owner and crew members (usually 20 in numbers). Nine companies are found in Abakam. The total fish caught is sold to the fishmongers and the money is brought back to the canoe owner. The canoe owner deducts certain amount for maintenance of the canoe and the beach seine. Half of the remaining money is given to the canoe owner while the other half is given to the crew members to be shared among them. The table below shows number of beach seines, canoes and number of fishers in Abakam from 1986 to 2004 Ghana canoe frame survey.
Table 5: Beach seines, canoes and fishers in Abakam from 1986-2004

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Beach seine</td>
<td>5</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>32</td>
</tr>
<tr>
<td>Canoes</td>
<td>5</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>32</td>
</tr>
<tr>
<td>Fishers</td>
<td>167</td>
<td>42</td>
<td>140</td>
<td>150</td>
<td>150</td>
<td>154</td>
<td>803</td>
</tr>
</tbody>
</table>


From table 5 above, one can see that number of beach seines and canoes are the same over the years which indicate that the same fishers who owe the beach seines owned the canoes. Another interesting thing is that there was a drastic decrease in number of beach seines, canoes and fishers in 1989. However, number of fishers dropped in 1989 and had remained relatively low in the subsequent years as compared to the 1986. There is no drastic increase in number of fishers (table 5) over the years in Abakam.

### 5.6. Reduction in fish catch

Daily fluctuation of fish catch is common in the fishing communities in Ghana. Generally, fishers are optimistic in their daily activities that they can make a considerable catch on every trip. However, there are times when catches can be made in considerable quantities while on some days little or no catch is made at all. Fishers in Abakam claimed that there has been a reduction in their daily catches in recent times even though there were no documents to support their claim. Several reasons were put forward by the respondents to explain the sudden change of fish catch.

According to the respondents the major cause of this reduction in fish catch in recent times is the operation of industrial vessels and trawlers. These industrial vessels and trawlers travel long distances along the coast and spend several days on the sea fishing. The absence of outboard motors in Abakam due to lack of capital prevents them from going far into the sea to fish. As a result of this the vessels and trawlers catch the available fish leading to their low catches.
Another key factor identified by the respondents was the use of poisonous chemicals and light by the people of Eture, Elmina and other places (see map 2). The respondents said that poisonous chemicals such as DDT and other chemicals are put into the water by other fishers thereby killing the juvenile fish which affect their catches. In addition, lights are dipped into the sea by some of the fishers, which attract fish. Also, the respondents claimed that some of the fishers in nearby communities use dynamite, and the effect of this explosive is that the fish get scared into the deep seas where they become available only to sophisticated vessels.

The respondents also attributed the reduction of fish catch in recent times in Abakam to the large number of people. They were of the view that the sea is a common pool resource with open access. Because of this anybody who can afford the equipment begins to fish and this has resulted in a substantial sum of canoes and fishers along the coast which has resulted in reduction in recent catches. The activities of fishing vessels and trawlers have led to more nets catching smaller quantities of fish. Currently, nine beach seines are found in Abakam and almost all the entire people in Abakam are involved in fishing. The implication of this is that many people are involved in the fishing activities in the region and possibly this could account for low catches as noted by the respondents. There was a pool of young fishers at Abakam who attributed the present reduction in catches to the fact that the Gulf of Guinea has been depleted of its fish stock due to over fishing on Ghanaian waters and that unless some measures of rejuvenation and control of fishing activity are put in place by the government, daily and annual catches would keep falling and the industry as a whole might be heading towards gradual extinction.

Finally, one person linked the reduction of the fish catch to the poor condition of the beach seine (Plate 19). As a result of insufficient money beach seine which continuously get torn as they get entangled in rocks have to be repaired and continuous repairs render the beach seine very small and weak. As a result the fish easily penetrate through the torn and weak nets and therefore rendering them low catches.
It was also identified by the respondents that reduction in output of fish catch is due to traditional and religious beliefs. They believe that the gods can cause this reduction in fish caught if consistent sacrifice is not performed at the right time. They are of the view that seasonal and annual traditional sacrifice to be performed to increase fish output. This gradual reduction in fish catches has resulted in the downward trend in the income of the fishers.

Even though the fishers claim that there has been reduction in their landings they continue to fish. When questioned about why they still engage in fishing although the catch is not good, the respondents claimed they do not have any other option. According to some of the respondents they were born into fishing and they do not have alternative livelihood than the fishing. However, the respondents admitted that it is not always the case that they have low catches as they claim that at times they have good catch. This implies that the catches are not the same by the various beach seine companies.

5.7. Price fluctuation in bumper harvest

Fishers in Abakam face the problem of lower price for their catch during the bumper seasons and invariably low level of income. A question was asked on the possible causes of the price fluctuation during the bumper season and three major reasons were identified.
The respondents attributed abundant catches to be the main reason for the lower price. It was found out that during bumper harvest period fish is found in abundance in all the landing beaches. The high catch results in abundance of fish supply as against a lower demand due to lack of storage facilities to store the excess. As a result prices are reduced to the minimum level resulting in low income for the fishers. The fishmongers sometimes incur loss when the fish is abundant in the market. Limited buyers were also noticed as responsible for the low prices during the bumper harvest. Some respondents were of the view that during bumper harvest period since the fish are in abundance and they are found everywhere some of the fishmongers do not come and buy the fish. In certain situations the fish becomes abundant when sent to market. This results in a situation where only few fishmongers purchase their fish. The absence of storage facilities compel them to sell at cheaper prices to the few fishmongers around in order to get their daily income. However, some of the respondents were also of the view that the type of fish caught during the bumper harvest also determines the price. To them certain species of fish are caught in abundance during this season while other species are caught in small quantity during the same period. When this happens, lower prices are given to the species of fish which are caught in excess than the other species. This will then affect the price and hence the income of the fishers.

5.8. General problems facing fishers in Abakam

5.8.1. Financial problems (ga nya)

Most of the respondents interviewed identified lack of capital as the major problem facing the fishing activity in Abakam. This has many negative effects on the people at large. The lack of capital has prevented the fishers from acquiring new and safer gear for their fishing activities. As a result they are forced to depend on the old gear, which have undergone wear and tear for a long time. Leaking canoes are sealed with rubber and cotton, which must be purchased. In addition the buying of new canoe costs thousands of US Dollars. The timber which is used for the canoes is transported to canoe carvers for carving or the whole canoe had to be bought at once. Large size canoes sell at between US$3000 and US$4000, a medium size canoe costs between US$2000 and US$3000, while a small size canoes amounts to not less than US$1500 (Amador et al, 2004:7). These very expensive prices for canoes cannot be afforded by an ordinary fisher in Abakam. According to the respondents the cost of Yahama outboard motor is very high (not less than
US$2700). The fuel cost further explains why they do not have outboard motors in Abakam. Most of the fishers sometimes depend on the fishmongers to be prefinanced; who then take charge of the fish landed by these fishers. This means that fishers have small control over their catch as they are forced to sell to the fishmonger as one respondent comments: ‘because of the little money that the fishmongers give to us when we were in difficulty they take advantage over that and cheat us’. The general lack of finance could be attributed to the absence of credit facilities from the rural banks and due to the fluctuating nature of the fishing industry. Bene (2003: 961) noted that access to finances and credit facilities is the fundamental component to ‘poverty alleviation in fisheries’. As a result most of the money saved is consumed during the lean or off season for daily expenses, especially in the extended family system where many people are fed.

5.8.2. Lack of storage facilities

The fishers of Abakam also face the problem of low prices due to lack of storage facilities as noted by the respondents. Since fish is a perishable product, the aim of many fisheries is how to decrease fish spoilage but not increased fishing efforts (Lindqvist and Molsa, 1990:200). In a similar way, fishmongers also face the problem of smoking and drying the large quantity of fish bought from the fishers. The situation worsens when rains set in during the smoking process, thereby speeding up the bacterial decay of the fish. The fishmongers complained that when the catch is plenty, they had to process all and at times they stayed overnight doing the smoking. The fishers have to sell their catch at a very low price to the fishmonger because they cannot store them. In a situation when the market is unfavourable fishmongers themselves have to sell their fish at a low price, as one fishmonger comments: ‘Since we cannot store our smoked fish for long we are also compelled to sell at a low price when we go to the market and people are not buying them’. This means during the bumper season both the fishers and the fishmongers lose as a result of unstable market prices. This then affects their total income at the end of the day.

5.8.3. Operation of foreign trawlers

Another major challenge facing the fishers of Abakam is the operation of foreign trawlers. The respondents are worried about the increasing foreign trawlers and vessels around. These vessels and trawlers use sophisticated machines and nets and able to travel very wide on the sea. The end
result is that they are able to catch large quantities of fish resulting in low output of the fishers in Abakam.

5.8.4. The use of poisonous chemicals and lights in fishing

In their desperation for more fish, the respondents claimed that at times some of the fishers especially the fishers in Elmina resort to the use of poisonous chemicals such as DDT and dynamite as the respondents identified that. This kills the juvenile fish and pollutes the sea water simultaneously. The end result is that fish decay easily and some of the fish also get scared away into deep waters which can only be caught by the trawlers and other vessels. It was also noted that some of the fishers dip lights into the sea to trap the fish. This results in low catch among those who are not using lights. Other related issues include fish waste which is disposed along the sea shores especially during bumper harvest thereby enhancing the breeding of mosquitoes which give rise to explosion of malaria.

5.8.5. Weather conditions

Unfavourable weather conditions such as heavy rains, strong tides and storms destroy the fishers’ net. The informants identified that high tide sometimes causes the canoe to capsize and when this happens lives are sometimes lost. In addition the storms also break their canoes and when this happens the nets get choked and finally engulfed by the sea. This aspect of the fishing industry is very dangerous which affects the sustainability of the industry.

To conclude this chapter, it is clear that fishing activity in Abakam is bisected with many problems. It is also noted that age has effect on who can get access to resources as gender ideology also makes it impossible for women to have access to the fishing grounds. It is also clear that most people in Abakam depend on the fishing activity for living and therefore any activity that seeks to prevent people from getting access to fishing rights would have a multiple effect on the people of Abakam. The next chapter however explains how people get access to fishing rights to enable the inhabitants fish and farm in Abakam as well as the various institutions which regulate fishers behaviour.
CHAPTER SIX: ACCESS TO RESOURCES AND INSTITUTIONS

6.1 Introduction

Agrawal et al. (1999) emphasized that “authority to manage resource effectively” at the local level needs the exercise of authority and control by local actors in three domains: (1) making rules on resource management, conservation and use (who has the rights to create rules); (2) accomplishing the created rules (the rights to control that rules and followed); (3) settlement of disputes which will arise in the application of the rules (the rights to sanction the rules) (ibid:638). Based on the above this chapter considers the findings on differentiated social actors in Abakam, access and right to resources (fishing grounds and land), international and internal migration among the fishers, and institutions governing the use of the resource. The chapter also looks at conflicts among fishers, how the conflicts are negotiated and conclude with sanctions on violation of informal institutions.

6.2. Differentiated social actors in Abakam

It is essential to recognize in the first place that communities are not delimited and homogenous, but socially distinguished and varied (Mearns et al, 1998). Different social actors (individual, household, and group) hold certain degree of power in Abakam and define what, how and when things should be done. Based on ethnicity the Cape Coast Municipality is occupied by different categories of ethnic groups such as the native Fantes, Asantes, Ewes, Gas among other ethnic groups.

The Fantes are the custodians of the land (Cape Coast Municipality) and are powerful when it comes to decision making in the area. The Fantes have their traditional chief (Oguahene), the Osabarima Atta, who is considered as the overall chief (ohene in Fante) in the Cape Coast Municipality and also serves as the overall Chief fisherman (apofohene) in the whole Municipality. He, Oguahene, is also considered as the landlord in the municipality. He rules with his council of elders, the queen mother and other sub chiefs. His decisions influence the area including Abakam.
Authority in Abakam is in the hands and controlled by certain individuals. The chief (*Togbui* in Ewe) Gbagba II is currently the chief of the Abakam community. He is appointed based on patrilineal inheritance. Historically, the first settler, Togbui Gbagba I became the first chief and have been inherited by his lineage. The chief is also the chief fisherman (*fu fia* in Ewe) in the Abakam community. Chieftaincy and the body of customary practices that support it is protected by the constitution of Ghana and Chieftaincy Act of 1971 (Schildkrout, 2006:587). This means that the chiefs’ power and authority to rule is legitimate and protected by the state. The chief controls and rules the community with his council of elders. Togbui Gbagba II settles disputes and conflicts among the inhabitants of Abakam and disseminates information about the community to the inhabitants. He also organizes meetings when the need arises. He is also considered as the custodian of Abakam and honour and prestige are accorded to him. The chief is influential and powerful in decision making in the community and his decisions are respected and obeyed by the inhabitants. He is also responsible for the enforcement of the institutions regarding the resources management.

Power is also controlled by the Assembly man, who is democratically elected, and represents the community at the District Assemblies and represents the government of Ghana in the community. He is influential in terms of decision making and also serves as intermediate between the community and the government. He is also responsible for the provision of the social infrastructure in the community as well as the enforcement of the government rules governing the resources. Beach seine owners/canoe owners are another group of social actors in the community who are also influential and powerful in decision making due to their social status. The beach seine owners who are found in Abakam are respected based on their status as they are considered as wealthy. These beach seines are operated on the sea with the help of canoe leader (*evutor*). Crew members (*vu me vio*) are also a group of social actors and are considered as less influential people in Abakam. They are usually described as the fishers who go to the sea with peoples’ beach seines and canoes and they are being paid for their services by the beach seine owners. They are less influential due to their social status. They are considered as the poor whose lives depend on the wealthy people (canoe owners) and therefore have less power in accessing resources.
Another group of social actors in Abakam is the fishmongers. They are also regarded as less powerful and influential group of people. Fishermen’s Association serves as a mouth piece for them. They are also controlled and influenced by the wealthy/net owners. In addition, farmers are also seen as poor and less influential social actors in Abakam. Their lives are also dependent on the landowners who control the land. The farmers also got their rights to the land in diverse ways. In all, these various social actors in Abakam have the right to fish or to farm in different ways and their activities are guided by the institutions at the formal and informal levels.

6.3. Access and right to resources in Abakam

Fisher migrants have different ways of getting rights and access to fishing grounds when they reach their destinations (see Anyang, 1996). To be able to answer the research questions on how the Anlo-Ewe migrant fishers gain access to fishing rights to fish, agricultural land and the land to settle in Abakam and how this access is maintained, how the inhabitants gained access to these resources were captured.

6.3.1. Fishing grounds

Bene (2003:962) noted that the indigenous population may deny certain group of people access to fishing grounds based on ethnicity. Although fishing grounds are a common resource, often various ethnic groups claim rights over territory of fishing so that people cannot move into other areas and begin to fish without consulting the natives of the area. Certain arrangements are needed before migrants commence fishing at a particular area. The respondents of Abakam identified the way by which they gain the right to the fishing grounds and how they maintain this right.

Fishers in Abakam gained access to fishing rights from the Oguahene, through the Cape Coast Traditional Council (CCTC). That is, the Oguahene should be notified before any canoe begins to operate for the first time in the sea of Abakam, which is under his jurisdiction. In this case special arrangements have been made for that. Before new canoe begins to operate on Abakam’s shore the canoe owner has to give one bottle of schnapp to each of the nine canoe owners operating in Abakam to inform them about his/her intention. These drinks are accepted by the individual canoe owners and they welcome him or her into the industry. As a norm, Togbui then collects
US$20 from the new canoe owner and presents the money to the Oguahene through the CCTC and officially informs the Oguahene about the operation of the new canoe in Abakam. The CCTC then accepts the money and then the canoe can begin its operation. This is done to ensure that all the fishers in Abakam are known by the CCTC and it also serves as mechanism of regulating the number of fishers fishing in the area and monitoring fishing activities along the coast simultaneously. Similarly, one cannot start farming on the land unless permission is sought from the landlords. It also serves as measures to regulate the farming activities for sustainable management of the resources. This arrangement seems good for some of the fishers while others were complaining about the number of bottles of schnapps which are given to the individual canoe owners in Abakam as one respondent comments: “it is very expensive to buy nine bottles of Schnapps because each bottle costs US$10 in Ghana and so the total amount which are spent on the drinks is far higher than the one given to the CCTC.” Even though most fishers do have problem with paying an amount to the custodian of the land some of them have other view about the schnapps which are given to the canoe owners due to the expensive nature to the poor fisher. This indicates the role of traditional chiefs in resource allocation and management. This is also noted by Abdulai (2006:576) who says that Ghanaian chiefs are actively involved in resource allocation, particularly natural resources of which they are custodians.

A question was also asked whether men and women have equal access to fishing rights to go to the sea with the canoe and the respondents were of the opinion that even though both men and women have equal access to fishing rights, women do not go to the sea due to several reasons. The main reason cited was traditional belief. This was related to gender ideology about how the society has constructed the “good and bad ways of being a woman or a man” (Overå, 2003:51). It is the idea that traditionally fishing is not meant for the women and it is a men’s work and that their forefathers who were into fishing did not allow women to go to sea and so they see it as a tradition. This adds to the idea noted by Overå (2003) in fishing communities in Ghana that man is more or less seen as feminine if he engages himself in fish trade and women are perceived by men as “out of place” when they assume the role of canoe owners and begin to manage it (Ibid:52). Another major reason which was cited was the tedious nature of the work. They were of the view that the act of paddling the canoe, pulling the beach seine ashore and anchoring the canoe and the net involve a lot of energy. It was also reviewed that the weather conditions at sea
is not favourable for women. Also the weather is sometimes very cold. They were also of the opinion that women are not brave enough to face storms, high tides and strong waves and would find it difficult to spend the night at the sea. Women therefore become fishmongers and process the fish that their husbands bring and take it to the market. This implies that even though there is equal access rights to fishing grounds women are obstructed by gender barriers which are constructed by the society as well as physical obstacles. Case study 1 below represents how a man after graduation from University gained access to fishing rights and why he got himself involved in the fishing activities.

Case study 1

Edem is a 27-year old who is not married and has no children. He has been living in the community since infancy with his parents and his father is a fisher. He holds a Bachelor degree in Economics from University of Ghana. Edem has been fishing with the father since infancy and he used to take care of his father’s gears in his absence. After University he migrated to the United Kingdom to seek for greener pastures but returned after some years. He decided to invest into fishing and therefore used the little money that he saved whilst in the United Kingdom to purchase canoe, beach seine, and outboard motor. He explains why he decided to go into fishing rather than looking for a job elsewhere: “I entered into active fishing after University because with my experience as a fisher with my father and having spent my childhood life in a fishing community as well as having taken care of my father’s gears in his absence I could be a good fisher”. Edem also entered into fishing for another reason as he puts it: “with my background in Economics I believed that I can manage my own business using my knowledge in cost benefit analysis and can work on my own without any supervision”. According to him “I am into fishing not because I cannot find work elsewhere but because I see fishing as a profitable industry and I prefer to be in it”. He has no plans of leaving the fishing industry for now as he puts it “all that I think about now is my beach seine, canoe, outboard motor, and ropes. I do not think that I will stop this job except maybe conditions change to the extreme that I cannot do anything about it”.

Edem is fishing throughout the whole year. He got access to the fishing rights through his father. According to him: “my father has been fishing for many years and so when I decided to start my own fishing with my gear I had it with ease. I told my father about my intention and we went to the Togbui with the schnapps of which of we gave to the canoe owners. I also gave an amount of
US$20 (as prescribed by the CCTC) to Togbui to be given to the CCTC. He is currently the only person with an outboard motor in the community and owes the largest beach seine and canoe. According to him when catches are good he could make US$2300 per trip out of which he has to pay his crew members, fuel and maintenance of the outboard motor and beach seine. Since he has no wife he divides the catch among the fishmongers in the community who are interested to buy. His present livelihood depends on the fishing and has no plans to stop fishing. The profit obtained from the fishing is being used to reinvest into the fishing (repairing of torn nets, maintenance of the canoe and maintenance of the outboard motor). Some of his profits are also used as his personal savings as well as his family for example helping his father in the payment of his siblings’ school fees.

The above case shows that not all fishers are poor that some live well from the fishing although this might be an unusual case. His knowledge about the local institutions regulating access to and management of the resources were very useful as he claims that “the local institutions like not fishing on Tuesdays is a good idea as it helps the sea to at least regain its fertility even though we lost income every Tuesdays. This means that he understands and recognizes the usefulness and the role of the institutions on the resources and the need to stick to such institutions.

6.3.2. Agricultural land

Even though the government of Ghana is making efforts to improve access to land by initiating Land Administration Project through the World Bank loan facility, with the aim of seeking research into access to land and its impact on investment and productivity (Alhassan, 2006:541), migrant farmers continue to suffer from how to get access to land. Apart from fishing which is done by the people of Abakam, some are farming, while others combine both farming and fishing. The farm land belongs to the people of Elmina (Edina). The respondents (12 out of 46) who were farming gained access to land for agricultural purposes in three major ways.

Firstly, six of the respondents acquired the land through the share-tenancy agreement or the abusa cropping system of farming. In the abusa system of farming, crops cultivated on the land are shared between the landlord and the farmer. This system of farming is called abusa, which means ‘that which is divided into three parts’ (Kundsen, 2007:36) because when the crops are
cultivated it is divided into three equal parts; the farmer takes two-thirds of the whole crops while the landlord takes one-third of the crops cultivated. In this system, the land is released to the farmer for a certain number of years and the land can be reclaimed when the contract terminates indicating the risks of dismissal of the farmer (ibid). In addition, four of the respondents claimed that they inherited land from their fathers. According to them, their forefathers and fathers bought the land from the landlords and started farming on the land. Some of them too were given to them by their fathers even though their fathers are still alive. Two respondents gained their land through purchase or what Sen (1981) described as market channel, from the individual Fante land owners in Elmina. The Fante land owners owe the land privately or the land may belong to one abusua (clan). These landlords sell the land to people who are interested in buying. The price of the land ranges from US$50 to US$80 per acre depending on the site, location and the nature of the land. This means that some of the respondents own land and therefore can decide to do farming or use the land for other purposes.

In all, it can be inferred from the above that although the respondents gained their rights to the land in diverse ways, most of them are into the share cropping system of farming due to its inexpensive nature and this makes it affordable to the individual farmers. It must also be noted that the fact that most of the farmers are into share cropping system of farming shows that migrant farmers are constrained in terms of access to land and there is higher risk of being a farmer (Kundsen, 2007:36).

6.3.3. Residential land

The Anlo-Ewes reside in Abakam and they gained the right to settle on the land through the CCTC. The Oguahene, through the Council gave the land to the Anlo-Ewes when the first group of migrants led by Togbui Gbagba I came to Abakam to fish. This means that chiefs have always been integral part of distribution and allocation of natural resources. As custodians of communal lands, chiefs allocated land to their villages and took charge of the distribution of harvest in the pre-colonial times. The allocation of lands still pertains in modern Ghana. This means that chiefs have the right and authority in allocating resource to people. For Anlo-Ewes to maintain their rights to the land, each household pays a levy of US$2 per annum to the CCTC. This money is collected by the chief of Abakam and the money is handed over to the Council. Failure to pay
means one forfeits his/her right to stay on the land. This implies that there is a strong relationship between maintaining the right to the land and payment of the annual levy. A question was asked about how they maintain these fishing rights and according to the informants traditional religious leaders who are mostly Fantes perform religious rituals before and after fishing seasons. The Fantes through the Oguahene levies each net/canoe owner an amount, normally 20 New Ghana cedi (US$20) every year to perform the sacrifices. Any net /canoe owner who fails to pay the levy is not allowed to fish. This means that the Anlo Ewe fishers are able to maintain their rights to fish in the sea once this levy is paid to the Fantes through the Oguahene. In addition, the fishers also maintain their rights to fish by obeying the formal and informal institutions on the resource management.

6.4. International migration among respondents

International migration has become characteristics of fishers and has gained popularity especially with the introduction of outboard motors (Odotei, 2002:71). The fishers of Abakam especially the youth often migrate both internally within Ghana and internationally to other parts of the world especially within West African countries. Within Ghana they migrate to areas like Elmina, Sekondi-Takoradi, Moree, and Winneba among others to settle either permanently or temporary in order to carry out fishing activities. Externally, Ghanaian ethnic groups of Fante, Ga and Ewe who are fishers, migrate widely in West Africa coastal areas to Mauritania found in the northern part and Congo to the south (Overå. 2005:1). Similarly, the fishers in Abakam migrate to Ivory Coast, Benin, and Togo among other countries. It was noted that 27 out of the 46 of the total respondents, all males, have been migrating to other countries and this is shown in table 6 below.

Table 6: International migration among respondents

<table>
<thead>
<tr>
<th>Destination</th>
<th>Ivory Coast</th>
<th>Togo</th>
<th>Benin</th>
<th>United Kingdom</th>
<th>Other countries</th>
<th>None</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of respondents</td>
<td>11 (23.9%)</td>
<td>6 (13.04%)</td>
<td>6 (13.04%)</td>
<td>1 (2.2%)</td>
<td>3 (6.52%)</td>
<td>19 (41.3%)</td>
<td>46 (100%)</td>
</tr>
</tbody>
</table>


From, table 6, it can be seen that most of the migrants migrate within West Africa countries. The majority of the respondents have traveled to Ivory Coast. It was also noted that the migrants have
been to more than one country. In addition some of the fishers migrate to other countries which include Nigeria, Gabon, and Guinea among others. In all, about 49.98% of the respondents who have migrated outside Ghana moved within West African countries. With the exception of the respondent who traveled to United Kingdom to seek for greener pastures, all other migrants migrated due to fishing activities. The general impression from the table is that the respondents are mobile and that the causes of this geographical mobility associated with the fisher migrants are diverse.

One of the major reasons among the migrants was the idea that they could save more money outside their native residence than inside. Many of the respondents hope to come back with much more accumulated income. This was due to the fact that while outside Ghana not much is spent since their family is not with them and that the money earned from the fishing is accumulated which is then brought back home to Abakam.

Some of the fishers also claimed that they migrate to other countries like Ivory Coast, Benin due to the fact that the prices of fish are comparatively higher in these destination areas than that of Abakam or Ghana. The main aim behind migration among the fishers is quick profit (Jorion, 1988:144). The high prices of fish in other countries make the fishing activities attractive and profitable outside Ghana. They would then move to enjoy such prices with the hope of making more profit and buy fishing gears. The attraction of foreign exchange in order to buy fishing inputs has attracted fishers to migrate to other countries (Odotei, 2002:71). When questioned on the price difference between Ghana and other destinations, the respondents could not give figures to substantiate their claim but they emphasized that the prices of fish are sometimes higher in other areas as compared to Abakam.

The external migration associated with the fishers of Abakam was also linked to the lack of storage facilities and improved landing space. This means that fish become abundance during the bumper harvest which render some fish become redundant and also causing decrease in prices simultaneously. The landing beaches also become congested since fishers are always at the shore. To avoid the risk and the fear of low prices the fishers migrate in order to minimize risk (Jorion, 1988:134). This does not make the fishing activity attractive and therefore are compelled to move
elsewhere with the anticipation of enjoying better conditions. This implies that seeking ‘greener pastures’ is a motivation factor (Amador et al, 2004:8) for fishers to migrate outside their home country and this explains why Ghanaian fishers constitute a chunk of the fishers population in Togo and Benin (ibid).

It therefore seems to me that international migration has become an adaptive livelihood strategy used by the fishers when conditions are unfavourable in their origin areas. This is so because fishers migrate to improve their lots elsewhere when things are not in order in their area of origin. In order to survive when there is a hardship they resort to migration with the anticipation of meeting better conditions because the money earned are brought back to their origin to improve their living conditions. It can be inferred from the above that fishers would not migrate if fishing conditions at home are favourable.

6.5. Internal migration among respondents to Volta Region

Apart from the international migration, the respondents were also questioned whether they go to their hometowns, that is their area of origin in the Volta Region (see chapter two). Migrants often migrate to their hometowns, not for fishing activities but for other social activities.

Most of the respondents visit their hometown to attend funerals. The large numbers of people attending funerals show the importance they attach to funerals. Funerals are highly recognized in the Ghanaian society in general. According to the respondents once a relative dies it is mandatory for the remaining relatives to organize a funeral. During funerals the family and friends gather and mourn with the bereaved family, make donations in the form of drinks and money and show their last respect to the deceased. It is also during this period that disputes among the family members are settled by the fome metsitsi (head of a clan) and elders in the clan. In this case all the members of the clan are expected to gather during this occasion. They do not have any other option than to move to their hometowns to attend the funeral.

Traditional festival was also noted as one of the major reasons for going to Volta Region which also indicates how relevant traditional festivals in their area of origin to them, even if they have never lived there themselves. According to the respondents, during festivals prayers are offered
by pouring libation and ask for prosperity and long life. During festivals development projects are also planned where people donate towards the development of the communities and villages. It is also the period when conflicts and disputes are settled among themselves and also for family reunification. These and other things make the respondents value and cherish such occasion and it also the occasion to bring their relatives to Abakam to start fishing and therefore do not hesitate to be part of such occasion.

Perhaps the frequent movement of people from Abakam to the Volta Region means that information is communicated to the relatives and friends in the Volta Region and this could lead to their relatives often follow them back to Abakam. The movement of fishers to Volta Region indicates a strong bond of kinship and traditional family ties between migrants and their home of origin. Clearly, relatives in the Volta Region who follow them to Abakam use this as a livelihood strategy to improve their conditions of living as they also enter into fishing and farming activities when they arrive in Abakam.

6.6.0. Management of the resources

6.6.1. Formal institutions in resources use and management

Agrawal et al. (1999:637) define institutions as set of formal and informal rules and norms that guide interaction of humans and other nature. In this way institutions can then be examined as an essential device that stipulate the way in which things must be done among people of diverse or similar status, people and natural resources. Similarly, the institutions (formal and informal) on the resource management affect and regulate the activities of the fishers and farmers in diverse ways in Abakam. The formal institutions are the one instituted by the government on fishery resources. Members of fishing communities are worried by regulations which are set by government officials as to how much fish they can catch, where and when they can catch it and also how they can catch it. The marine fisheries sector in Ghana has separate management subsystems for small pelagics, large pelagics, demersals, shrimp and lobsters. Three main elements of management regime in Ghana are: limiting industrial vessel fishing effort by limiting entry into the fishery through a licensing regime; prescribing the mesh sizes to be used in any particular fishery in order to limit the exploitation of juvenile or immature fishes and finally
establishment of Exclusive Economic Zone (EEZ) that extend a nation’s economic interests 200 nautical miles (370km) from the coast (MoF, 2002).

The issue of resource management in the realm of fisheries sector is basically a national development issue (FAO, 2004:65). The main idea of establishing management rules and regulations on the pelagic fishery is the protection of juveniles of sardinella. This means that these regulations are mainly expected to work in order to limit inputs such as mesh size limits which are used by the fishers for the protection of the fish. Efforts are also made to identify and take actions to help predict in order to reduce the often high inconsistency in the abundance and accessibility of small pelagic fish resources. This means that trapping of the small pelagic fish by fishers would then reduce in order to maintain the sustainability of the fish resources. To protect the large pelagic fish, standard regulations are issued through the management regime and these regulations must be complied by all Ghana-based vessels (Ibid). This implies that the main concern here is the enforcement of the regulations to ensure that juveniles escape and survive from nets. This is done to protect fish resources from extinct.

There is also management plan for the demersals fisheries which deals with major culprits for stock depletion: shrimpers and trawlers. The management plan main objective is to the allow stock to recover to a sustainable level, where harvesting could be done with time without end (Ibid). This therefore means that the rationale behind this management practices is for the sustainability of the fish stock. For effective management of the demersals fisheries, trawling activity are not allowed within the Inshore Exclusive Zone (IEZ) while regulations on mesh size are also strongly enforced. This means that these measures are put in place for the management and the sustainability of marine resources in Ghana as whole.

For proper management of fish resources in Ghana many government organizations as well as traditional (local communities) are involved in the management and conservation of the fishing resource including Fisheries commission, Department of fisheries, District Assemblies and Community-Based Fisheries Management Committees. These organizations play key roles in the protection of the marine resources in Ghana. They govern; regulate the behaviour of the fishers as well as providing assistance to the fishers through the government of Ghana.
The Fisheries Commission has the authoritative command to regulate and manage fishery resources and coordinate fishery policy. The main aim of the commission is to ensure that fisheries resources are exploited on a sustainable basis, settle disputes and conflicts among operators, advises government on all matters related to fisheries, and advocates on issues to protect, promote and develop the fishing industry (Ibid). The Department of Fishery (DoF) serves as the implementation secretariat of the Fishery Commission, The DoF performs the implementation function through :(1) preparation of fishery resource management plans by which the various organisations use;(2) development of regulations for the fishing industry; (3) organization of MCs for the national fishery resources and ensuring compliance with national fisheries law; and institutionalizing co-management. District Assemblies (DA), under the Ministry of local Government and Rural Development (MLGRD), are one of the key government organisations which are active in the marine resource management in Ghana. The main responsibility of the MLGRD is to help to establish and develop a vibrant and well-equipped decentralized system of Local Government at the local level. MLGRD is also in charge of managing fishers, fish processors and fishery resources at District and sub district levels (Ibid). The DA has been given the authority to assist fishery resource management by: helping in forming and sustaining CBFMCs; cooperating with the DoF, MCS unit. They also help in the provision of legal and financing support to the CBFMCs; and approving levies which are proposed by the CBFMCs (Ibid). By this the DA are able to contribute meaningful to the sustainability of the fishery resources in Ghana. In addition to above organisations which are into fishery management, there is also a Community-Based Fisheries Management Committees (CBFMCs) in the management of the fish resources in Ghana. These are committees which are found at the local level and are formed in a fishing community. These committees are based on existing traditional leadership authority and local government structures in which power is given to them legally by common Law. The CBFMCs is responsible for the enforcement of the national fisheries laws at community level, as well as to enact and enforce their own by-laws to the same end.

According to the MoF, the overall fisheries management is guided by a general legal framework with the major sections related to the building and importation of motor fishing vessels; licensing
of fishing craft; operation of motor fishing vessel. It also addresses prohibition of the use of explosives such as carbide and dynamics; gear restrictions; and prohibition of the landing of juvenile fish. In addition to the organizations which provide rules and regulations to the management of fishery resources in Ghana, Co-management has also been adopted to help provide the necessary measures to boost the fishery management. Co-management is defined as ‘an arrangement where the government and the various user groups share the responsibility for resource management’ (Sen and Nielsen 1996) and this is one possible solution to the disturbing problems of resource exploitation and for that matter fisheries and land resources in Abakam. The basic idea of the concept of co-management is that for efficient and legitimate management of the resources the user groups need to be involved actively in fisheries management. The main objectives of the Co-management in Ghana are to: reduce the poverty in the fishing communities and also to gain better access to public services through the decentralization process as well as protection of the environment and natural resources of the water bodies (ibid). For any effective fisheries management to be successful the fisher or fisher groups must support its efforts because they are closed to the resource and that such support can only become visible when the fishing communities are certain that regulations are working in their best interests. This means that for effective co-management to exist and function well the individual fishers must actively be involved through understanding and the rules must also benefit them but not only the government. To make the Co-management work effectively in Ghana, there is also a formation of Community-based Fisheries Management Committees (CBFMCs) in co-management. This means that members in a particular community or an area are responsible for the planning and enforcement of fisheries regulations.

The introduction of the Co-management has improved the interaction between fishers in Abakam and government authorities by expressing their concerns and grievances to the government in power. This means that fishers’ voices are heard by the authority through the co-management. Migrant fishers are empowered in the participation in decision-making on the use of the resource. This implies that the fishers of Abakam also take part in the decision making process regarding the resource management at the community level.
6.6.2. Informal institutions in resource management

A country like Ghana’s future depends on the proper usage of its natural resources. This means that proper management measures need to be taken even at the local level for its sustainability. The primary aim of fishery management is to conserve the fish stock (Gordon and Amatekpor, 1999:63). The local people of Abakam have various informal institutions or what Colding and Folke (2001) described as ‘social taboos’ that guide human conduct toward natural environment and for that matter regulate and manage the fishery and land resources. According to Ostrom (1992), institutions are operational rules or rules-in-use by a set of individuals to organize recurring activity that bring onto being results which affect those individuals and possibly affecting others as well (Ibid in Olsson and Folk, 2001: 87). In many traditional coastal communities and for that matter Abakam these institutions tend to regulate access to fisheries resources, when to fish, how to fish and what to fish. These institutions help in conserving the fish stocks at the local level. Below are the various institutions, rules and regulations (se kple gogowo in Ewe) which regulate the use of the resources.

6.6.2.1. No fishing on Tuesdays and farming on Thursdays

The fishers of Abakam do not go to fishing on Tuesdays and farm on Thursdays as a result of various reasons. Some of the respondents were of the view that it was a tradition that their forefathers came to meet. To them it was instituted by the CCTC and it was kept by their forefathers and they also came to meet and therefore obeying it. These days are obeyed not only by the Abakam fishers but also the native Fantes who are also into fishing and farming. Some of the respondents were of the view that Tuesday is a day for the god of the sea, bosombo, and her children to come around to eat and so there is no need of disturbing them. Other respondents linked this day to an old legend that women used to go to sea and a great misfortune happened when all the women perished and this incident occurred on Tuesday; it is thus regarded as a sacred day and this must be respected by all. However, other respondents were also of the opinion that Tuesdays are periods where the fishers rest after the week’s work. During this day fishers mend their torn nets and put the fishing gears in shape. The scientific idea associated with not fishing on Tuesdays is that, the day is often set aside and fishers and the ecosystem are expected to rest (Hens, 2006). The Thursdays which are also associated with non farming activities are also linked to traditional belief. It is also believed by the respondents that the gods
of the land, *asaase yaa*, are also expected to play functions on the land and so Thursdays are set aside for the gods while the farmers also use to rest. The main idea behind this is for the land to regain its fertility which serves as a management or conservation measure. This means that through this informal measure the sea and the land are conserved and fishers’ activities are restricted and regulated.

6.6.2.2. Casting shift system

The fishers have their system of regulating the resource through ‘casting shift system’. This is due to the number of canoes/beach seines in Abakam. There are currently nine canoes/beach seines operating in Abakam. Due to the fact that all the canoes cannot go to the sea at the same time to fish each company has a particular time of casting the beach seine and one cannot cast unless it is his turn. The first company casts the beach seine at dawn, after some time then the second company follows up. Failure to cast the beach seine at a particular time means one’s time is past for that shift and cannot cast till it is one’s turn again. The main idea here is to regulate the quantity of fish catch at a particular time, prevent overcrowding at the shore as well as preventing the fish from extinction. This also serves as a mechanism to regulate competition among the fishers (Lindqvist and Molsa 1990:196). By this way they are also able to protect the aquatic ecosystem for sustainable use. Even though some of the fishers complain about this ‘shifting system’ for preventing them from fishing everyday they also appreciate the other side of the coin in terms of managing the fishery resource as one canoe owner comments: ‘it is good we operate on this shifting system if not we would have been catching almost all the fish at the same time and nothing would be left for tomorrow’. This means that the fishers understand the system of conserving for the future and they believe that the shifting system can contribute toward the sustainability of the fish stock.

6.6.2.3. No fishing during festivals and funerals

Fishing and farming are also not allowed during funerals and festivals in Abakam. Traditional festivals and funerals are occasions which are recognized and valued in Ghana in general and in Abakam as well. During festivals the people pour libation to their small gods and ancestors and ask for long life, prosperity, good catch among other things and therefore everybody is expected to attend the festival for these blessings. Those who are absent would not receive such blessings from their ancestors and this makes it mandatory to attend the festival. It has been observed that
during Homowo festival among the Gas in Ghana, certain periods are reserved for resting among
the fishers and this is to make it possible for the fish to hatch the eggs they have laid (Alhassan,
2006:538). This is to ensure more fish in the community, which will then help the assurance of
human sustenance as well as reducing the depletion of fish stock. The community also organizes
funerals for death. During this period the fishers are expected to attend the funeral to mourn with
the bereaved family. It is expected that those who would be absent during the funeral would not
get any favour from the community when they are bereaved in the organization of the funeral. In
this case they have made it mandatory not to embark on fishing or farming during these periods.
According to the respondents although during such periods income are lost for not fishing they
also recognize relevance of such periods and therefore abide by them.

6.6.2.4. No fishing/farming during conflicts
Conflicts over resources, especially land, are rampant in developing countries including Ghana.
Several land cases end up in judicial services for the settlement. The issue of conflict also arises
in Abakam as conflicts sometimes arise over the sea and land resources usually among the crew
members, among the fishmongers and also between the beach seine owners and his crew
members. It also originates among the fishers and the fishmongers. Conflicts over land in
Abakam usually occur when the landlords are informed that the farmers are cheating on them
especially the abusa system of farming. This results in sometimes the land being taken away
from the farmers. Fishers sometimes also quarrel over issues during fishing. When these disputes/
conflicts arise people are not allowed to fish or farm until it is settled. People who are found
either fishing or farming during these periods is usually summoned before Togbui in the
community.

6.6.2.5. No fighting during fishing/farming
Fighting is one of the institutions that govern the used of the sea and land resources in Abakam.
According to the respondents, Fishers are forbidden to fight during fishing. This is so as they are
of the belief that when one falls into the sea in the course of fighting the person would get
drowned in the sea and might die. When this happens libation and other rituals have to be
performed by the Togbui/fu fia to pacify the small gods in the sea for forgiveness before any
fishing activities would take place. It is also a belief that people who fight in farms have to pacify
the gods of the land for disturbing them and that failure to do that would cause spiritual problems
to the entire community. To avoid this situation fighting has been prohibited during fishing or when at farms. This helps to maintain peace and order in the community.

6.6.2.6. The use of standard mesh size

The beach seine, or what the fishers call ‘seine net,’ is the type of net which is used in the catching of fish in Abakam. The net has different mesh sizes depending on the type of fish being targeted. The fishers agree that the smaller mesh size nets are far more expensive than the large nets. The smallest mesh size is used for landing juvenile fish whilst the larger mesh sizes are used for the big fish. However, unless these nets get destroyed by big vessels or boulders at sea, acquisition of a new net is unusual but sections of the nets are replaced with new sheet netting as and when they wear out. It is a common sight to find the fishers craftily using special needles to repair portions of nets in the afternoons and are preparing for net day’s expedition. Ropes and floats are also replaced as and when required. According to the respondents, standard mesh size is given to them by the Ministry of Fisheries. This mesh size serves as a check to prevent the juvenile fish from being trapped. However, the respondents were of the opinion that some of the fishers do not use the standard mesh size and therefore trapping the juvenile fishes. To ensure effective use of the mesh size the fu fia usually inform the fishers about the need for using the mesh size prescribed to them as this help the sea to regenerate since not all the juveniles fish are caught.

6.6.2.7. The use of explosives and poisonous chemicals

It has been noted that explosives such as dynamites and poisonous chemicals, such as DDT, are being used by other fishers as a method of fishing. This does not only kill the fish but also destroy the juvenile fish in stock as well. In addition, the fish are contaminated when being caught and this results in health related diseases for the consumers. Above all the sea water also gets contaminated due to the poisonous chemicals and as such affecting the fishers and the general public at large. Even though strict regulations are put on the use of dynamites and these poisonous chemicals by the Ministry of Fisheries through the formal institutions most of the respondents were of the view that some fishers still use these methods in fishing. It therefore becomes necessary for the local authorities such as the Togbui and fu fia to consistently remind the fishers about the need to avoid such lethal chemicals in order to maintain good fishing conditions as well as protecting the ecosystem.
It can be argued out that both the formal and the informal institutions elaborated above work together for the sustainability of the natural resources. In all, the formal institutions on the fishery resources by the government seem to focus much on the industrial fishing rather than on the small-scale fishers. This makes the informal institutions become relevant in terms of getting access to fishing grounds and management of the fish resources at the local level. Perhaps without these institutions the natural resources would have been mismanaged and its sustainability would have been in jeopardy. However, despite the existence of these institutions (formal and informal), conflicts arise among the fishers and these need to be looked at. The next sub-chapters explain the major causes of conflicts among fishers, how the conflicts are negotiated and the sanctions met by those who violate the institutions.

6.7. Conflicts among the fishers

Conflicts usually arise among the fishers in Abakam and according to the respondents several people are involved in the conflicts. It was identified from the respondents that the main groups of people who usually engage in conflicts are: among the crew members, canoe owner and crew members, among the fishmongers, landlords and farmers, among other groups. The main forms of conflicts that arise include insults, arguments, physical injuries, and curses among other forms. The major causes of the conflicts according to the respondents are diverse and numerous.

According to the respondents sharing of fish among the fishmongers is one of the major causes of conflicts in Abakam. This normally occurs among the fishmongers and the crew member who is sharing the fish. The fishmongers get the fish in equal quantity with a measuring pan. According to the respondents some of fishmongers are greedy and they complain that some of the fishmongers get certain species of fish or there are a lot of big fish in one of the fishmongers’ pan than the others during measurement and they begin to quarrel with the. This results into hot arguments and may sometimes ends with fighting each other. The insults sometimes extend to their husbands and their husbands also get involve in order to maintain their honour. Another major cause of conflicts is casting across nets and it happens among the fishers. This usually arises when the ‘casting shift system’ is violated. When the fishers violate their shifting time or did not go to sea as they are suppose to go they tend to cast the net across others nets. This makes
some of the fishers lose their catch and this brings about a lot of argument and insults. The situation worsens when they insult each other for a longer time and this results in casting curses on each other.

The determination of price of fish per pan can also results in conflicts according to the respondents. Each canoe has one fishmonger who bargains and determines the price. Once the price is determined all other fishmongers would buy using the same price. The prices do sometime create misunderstanding on both the fishers and the fishmongers and this results into argument and generates quarrels among themselves. Disagreement/misunderstanding between the canoe owner and the crew members also brings conflicts. This happens when one side feel cheated. In each fishing trip, crew members share equally among themselves fish of superior quality but which was not caught in large quantity. If a crew member decides to cheat the other without sharing the catch equally it generates conflicts at the beach. The respondents also identified that at times crew members cheat the canoe owner by hiding some of the day’s catch. This usually happens when the canoe owner is not around when the catch is landed. Also a fisher is entitled to his remuneration even if he is unable to go to sea because of sickness. In situations where the canoe owner does not pay the sick person, generates conflicts between them. At a certain point in time too some of the fishers refuse to pay the annual levy to CCTC. When this happens the Abakam chief orders his people to go round to collect these levies and this also raises issues among themselves. In addition if the CCTC get informed that certain canoes are operating without consulting them it also generates conflicts between the Fantes and the Ewes.

Conflicts also arise between the landlords and the farmers due to the abusa system of farming. This system is usually based on trust that the farmers would divide the crops into three equal parts and one is given to the landlord. The respondents noted that at certain times the farmers do hide some of the harvested crops before they share the rest with the landlord. The conflicts originate when the landlords get to know about how the farmers are cheating them. The fishers sometimes also get cheated by the fishmongers or their own wives. According to the respondents some of their wives or fishmongers buy on credit and pay them after sales. The wives go to market and come back to tell the husbands about low prices from the market and therefore would like to reduce the price which were offered to them. The fishers sometimes find it difficult to
comprehend them and begin to doubt as one respondent comments: ‘we sometimes prefer to sell our fish to other fishmongers than our wives because of the stories we often hear from our wives’. This means that the fishers lose trust in their wives and prefer to sell to other fishmongers. A question was asked why they prefer to sell the fish to other fishmongers than their wives on credit and one commented: ‘with other fishmongers we can collect our money even if they sold them at the market at a loss but with our wives we find it difficult to take the exact money when they tell us stories’. This implies that the fishers trust other fishmongers than their wives in monetary issues and can take the exact money from the other fishmongers but not from their wives. On the other hand some of the fishmongers were also of the view that they sometimes lend the fishers money but they sell the fish to other fishmongers instead of them and this also generates into insults and other forms quarrels. The implication is that conflicts can originate from both parties (fishers or fishmongers).

Case study 2 shows a wife/fishmonger who buys from her husband on credit and how conflicts arise among fishers.

**Case study 2**

Kpuitor is a 45-year old wife who is a fishmonger. She buys her husband’s catch on credit and smokes it. The fish is parched into baskets and is taken to market centres usually Denu, Kumasi, Accra (Mamprobi) and Mankessim by herself. Time spent selling the fish ‘depends on the market conditions’ as she comments: ‘it depends on the clients. If the market is favourable I can return as early as two days but unfavourable market can even make me spend one month. I therefore render account to my husband as soon as I return from the market’. She therefore uses the little profit that she gets from the sales on her children’s education.

Kpuitor has three children and has been able to educate her children with the profits the she gets as one of the children is a Polytechnic graduate while the remaining two are Senior High School graduates. She claims that the low catches in recent times make her unable to get hold of fish to smoke in order to make more profits. Despite this she gives loans to the net owners and crew members when they are in difficulties. As to what the fishmongers do during off season she comments ‘we just sleep just like how you saw as sleeping’.
When questioned on conflicts in Abakam she claims that conflicts sometimes arise in the form of quarrel and sometimes they go fighting each other when there is misunderstanding. She claims that quarrel arises due to struggle in buying the fish. This occurs when they think that one pan is full than the other or one fishmonger is getting more of specific species of the fish than the other fishmongers. She also admitted that she sometimes had little misunderstanding between her husband and her especially when the market was not favourable and she tries to explain to him. Kpuitor claims that the major problem that the fishmongers face is the problem of finances (ga nya). As a result of ga nya she sometimes finds it difficult to buy wire nets, baskets, papers and firewood needed in the processing of fish.

It can therefore be seen from this case that even though she earns small profit from the fish sales, she is able to invest on her children’s education which therefore means that her children’s education is of high priority for her. In this case it is noted that buying on credit is one of the characteristics among the fishmongers in Abakam as the fishmongers do not have the means to buy the fish in case. It therefore means that there is a connection between the economic status of the fishmongers and conflicts with their husbands in the sense that there would not be conflict should the fishmongers have the money and are able to pay the fishers ready money before sending the fish to the market. Getting access to the fish from the crew members or net owners also depends on the economic status of the fishmonger. This is so because fishmongers who offer loans to the net owners and the fishers during the off season or when they are in difficulties are influential in terms of accessing the fish from them. It can also review from the above case that conflicts are parts of the fishing activities and that they emerge from all angles of the industry. Perhaps proper sharing of fish among fishmongers could also reduce the conflict situations among the fishmongers.

6.8. Negotiations of conflicts

For every institution to be obeyed certain structures must be put in place to enforce these institutions. Johannes (2002) identified in Vanuatu that CBMRM was enforced by the village authorities, not the fishery Department (p.318). The situation is not different in Abakam as far as the enforcement of the local institutions is concerned. Although the fishers are aware of these institutions, a question was asked about the implications of breaking the institutions on the
resource management and it was responded that: ‘We are very much aware of the consequences of breaking these rules (institutions) as breaking them has spiritual connotation due to the believe of the existence of the smaller gods and social effects due to how our fellow fishers may perceive you’. However despite the fact that the fishers are aware of these institutions, various enforcement mechanisms are put in place in Abakam for the enforcement on the institutions regulating the access, usage and the management of the marine and the land natural resources as well as negotiation of conflicts in Abakam.

One of such mechanisms put in place to enforce the institutions governing the resources as well as negotiating conflicts among fishers is through the net owners. Conflicts are bound to happen but they are normally solved by various ways. According to the respondents most of the conflicts, especially the quarrels, end at the beach and they do not carry it home. In addition, most of the conflicts are resolved among themselves. However, a situation where the fishers are unable to settle due to the complexity of the issue they involve the net/canoe owners to handle the case. The owners of the canoe/beach seine are aware of the implications of breaking such institutions and so they make sure that during such occasions they do not allow their crew members to cast nets. According to the respondents, the fishers themselves also enforce these institutions by making sure that they do not fish or farm on such occasions.

The case is then transferred to the chief of Abakam and his council of elders if the net owners are unable to solve the problem. Chiefs perform a significant role through intervention in disputes and conflicts which are frequent and multifaceted (Abdulai, 2006:575). Chiefs settle various forms of disputes and involve in conflicts management (Abotchie et al, 2006:109) on land and others even beyond their jurisdiction. The Ghanaian chiefs also play a unifying role in their community (ibid: 115) by maintaining domestic harmony amongst their people. In cases respects accorded to chiefs depend on their ability to handle problems when they occur in the community (Abdulai, 2006:575). The chiefs in Ghanaian society have the power to control and enforce traditions and rules. The 1992 constitution of Ghana states: “The Institution of chieftaincy, together with its traditional councils as established by customary law and usage is guaranteed”. This means that chiefs’ power and authority is recognized in the Ghanaian constitution. In Ghanaian society chiefs are very influential in the traditional setting. Their power and authority is
not challenged. In a similar way, the chief, *Togbui Gbagba II*, who is also the chief fisher, *fu fia*, in Abakam with his elders of the community make sure that fishers and farmers in the community abide by the institutions that regulate the resources. The chiefs are given the legitimate power and authority to rule once they are installed (Akrong, 2006:196). Chiefs play a role by ruling on behalf of the ancestors as custodians of the customs and traditions of society (ibid: 197). This means that it is the duty of the chiefs to protect and enforce customs (institutions) in a locality. They also impose the sanctions and also enforce the payments of the fines among others. It has been noted that the payment of local council’s levies (*lampoon*) has been enforced through the authority of the traditional leaders (chiefs and elders) (Seini, 2006:551). Over the years chiefs have played significant roles to create and enforce institutions. It has been noted that over the years chiefs have representatives on the beach who collect tolls (Odotei, 2002:26). This implies that chiefs play a relevant role when it comes to enforcement of rules in their locality and in relation to resource management.

In circumstances where the case is beyond the chief or situations where the parties are unwilling to make peace prevail the case is transferred to the CCTC where the *Oguahene* and his elders will sit on the case. However, despite all these channels by wish they settle their disputes the respondents admitted that a case hardly goes beyond the chief of Abakam which signifies the respect that they have for their chief. This means that even though disputes usually arise over the resources the above discussed ways are used to overcome the problem.

**6.9. Sanctions on violation of informal institutions**

Sanctions intervene when fishers violate the institutions. According to the respondents several sanctions are put in place in Abakam to enforce the institutions regulating the use of the resources. The major sanction against the fishers who violate the institutions is payment of fines. According to the respondents those who break the institutions are summoned before the chief/chief fisher to explain themselves. They are then advised against such behaviour and are made to pay fines, usually not less than 50 Ghana cedi (about US $50) to the chief and his elders to serve as a deterrent to other fishers. This means that traditional rulers (chiefs, elders among others) play important roles in effective management of natural resources by providing sanctions to people. In certain situations, the fisher is made to dispose the fish back into the sea.
Another sanction against fishers is that he would be prohibited from fishing in the community. However, this depends on whether the same person is found of doing that for a continuous period of time. The respondents claimed that if a particular person continues to violate the institutions they believe that that particular fisher has evil intentions on the fishing occupation and that such person cannot continue to be fishing with them which will then results in a total prohibition from fishing. This has been noted by Alhassan (2006) that people are made to pay fines to the chiefs to “check improper resource management” and that severe cases could lead to banishment and “restraining from using a particular piece of land” (ibid, 534). It must be acknowledged that even though prohibition was mentioned by the respondents there were no case(s) to support that which therefore means that although this sanction of prohibition exist, it has not been applied to anyone before. Another major sanction against those fishers who refused to abide by the institutions is that they are made to pacify the small gods of the land (asaase yaa) and the gods of the sea (bosompo) by performing rituals including pouring of libation and slaughtering of a lamb to ask for forgiveness from the gods and also ask for protection as well. This is done due to the religious aspect of the fishing industry. The sea is seen as a god and this is supported by Ga oral tradition that the god of the sea is the third son of God after sky and earth (Odotei, 2002:26) and therefore must be pacified anytime people offend it. Through this ritual the fisher is cleansed and would be allowed to fish. This means that failure to abide by the institutions damage the rumour of fisher as an honest fisher. In a similar way, the sea and the land are seen as gods and therefore Ghanaians understand that a farmer or fisher who is exploiting the sea or land resources could be punished if he or she offended the land by not using it in conformity to “laid down rules” (Alhassan, 2006:531). In addition, farmers or fishers also enjoy blessings and benefits from the land and sea if exploited according to the prescribed ways (ibid). This suggests that the main rationale behind is for effective maintenance of the fish and land resources and that traditional authorities apply their powers to bring into play the needed sanctions to ensure that environmental resources are conserved for the benefit of all.
CHAPTER SEVEN: THEORY AND REALITY IN ABAKAM

7.1. Introduction

This chapter discusses the findings in Abakam in relation to the theory of the environmental entitlement approach presented in chapter three and the research objectives as well. The main concepts in the theory which are discussed here include institutions, endowments, entitlement, differentiated social actors and capabilities.

7.2. Discussion of the findings

The concept of the environmental entitlement touches on how the formal and informal institutions mediate and regulate the use of the resources. In Abakam, although both institutions exist the informal institutions are the major determinant of the resource management and access to resources. The informal institutions noted by Leach et al (1999), which are supported by the existing chieftaincy, regulate inhabitants actions on what, how and when to do things at certain times. That is, the informal institutions mediate people’s endowment and are able to regulate their capabilities to achieve their well-being. In a similar way in Abakam, these informal institutions regulate the social actors’ behaviour on how the resources are accessed, maintained and used. The use of standard mesh size (informal institutions) in Abakam which regulates the social actors’ behaviour thereby managing the resources. In addition explosive and poisonous chemicals which are used by fishers are also regulated through the informal institutions. The continuous practices of the informal institutions by the fishers and farmers help to restrict their actions which serve as a regulating mechanism to check their behaviour on the usage of the resources.

The non fishing and farming days instituted by the informal institutions serve as management mechanism for conservation of the resources in the sea and to maintain the fertility of the land although the fishers and farmers attribute these to traditional believes and believe that it the gods of the sea and the land which demand that. By these the fishers and farmers are regulated by the informal institutions on how to manage the resources for sustainability purposes. This then adds to Leach et al (1999) idea of the role of institutions on mediating or regulating social actors’
behaviour on resources. It has been noted that the informal institutions command sanctions by customary and traditional rights of access, use and control of the resources through the concept of chieftaincy in Abakam and that of CCTC by imposing various forms of negotiation processes and sanctions to those fishers who violate the rules. These sanctions are used to limit the manner the people of Abakam utilize the natural resources available to them. These institutions have become necessary due to the nature of fishing grounds being a common pool resource. One can say that since fishing ground is a common pool resource, without the informal institutions at the local level the fish resources would have been extinct.

My findings on the informal institutions agree with Haughton’s (1996) claim of insufficient institutional capacity jeopardize the health of fisheries and aquatic systems. The informal institutions in Abakam are to some extent active and are able to control fishers’ behaviour so as to enhance fishing activities in the area and maintain the resource for sustainable use at the same time. This is because the introduction of ‘casting shift system’, non fishing day, and the use of lethal chemicals in fishing help to maintain the aquatic systems. The findings also confirm Odoi’s (1995) idea that the use of chemicals and small mesh size are detrimental to marine resources and this explains why the informal institutions in Abakam place emphasis on the mesh size and the poisonous chemicals.

The use of rituals such as pacifying the gods of the sea and the land when people violate the informal institutions by the chiefs also support the idea already noted by Tvedten and Hersoug (1992) that magic and rituals are integral part of fishers. These rituals are performed seasonally as noted in chapter six by the chiefs and the native Fantes with the belief of restoring unity between the gods of the sea and land and the fishers and farmers so as to have good catches and harvest. The sanctions which are imposed on the individual fishers and farmers such as payment of fines, disposing of fish caught, pacifying the gods with a lamb, who violate the informal institutions serve as a deterrent to others and these indicate that informal institutions regulate fishers’ behaviour on the use of the resources.

Sen (1981) talked about access to resources through market channels while Leach et al (1999) modified the concept by explaining that, there are other ways of having access to and control over
resources through channels like the kinship, marriage, customary laws, conventions and norms, which lie outside the formal legal system. In this study it is shown that access to or the right to fishing grounds in Abakam is obtained through the chieftaincy system which therefore affirms Leach et al (1999). For example the Anlo-Ewe migrants in Abakam are able to get access to fishing rights through the payment of dues to Oguahene and abiding by the informal institutions. This implies that people’s access to fishing grounds depend on the local chieftaincy arrangement in the study area and their practicing of the institutions embedded in the chieftaincy system which are outside the formal system realm of gaining access to resources.. In this case so long as the fishers continue to abide by the informal institutions at the local level and continue to pay the annual dues guarantee their fishing rights and access to the resources.

In relation to access to land, both the market channels which are supported by formal legal property rights noted by Sen (1981) and other channels by Leach et al (1999) are applicable in Abakam. In Abakam, as noted already in chapter six, some of the respondents were able to get access to land resources through purchase while others gained access to the land through the informal ways by engaging in the ‘abusa’ system of cropping and inheritance. These clearly indicate that accessibility to and command over resource could be achieved through formal and informal channels. Therefore, my empirical findings concerning rights and the means to gain access to fishing grounds and land resources add to both Sen (1981) and Leach et al (1999) views of access to resources through both formal and informal ways. This also adds to Berry’s (1989) finding that people can gain access to resources in certain parts of Africa through purchase.

There is gender equality in terms of the legitimacy of accessing the resource, but effective command over the resource is in the hands of men. This is due to the gender ideology and the gender division of labour coupled with the cultural barriers that obstruct the women from going into the sea and farm in Ghana in general. In the western world, women ought to have direct access to fishing rights but the situation in Ghana is different as a result of gender division of labour where women are into fish processing and trading while men are into the actual fishing activity. This implies that the legitimate effective command over the resources is gender biased. In a similar way, age is also a factor in getting access to fishing grounds as children were not
allowed to go sea with canoe. As it has been noted in chapter five the crew members are
generally the youth around the ages of 20 and above making it difficult for certain people under
certain category of age group to get access to resources. This also confirms Leach et al
(1999:233) claim that some social actors are unable to mobilize some adornments to make
effective use of others and that kinship-based institutions may represent power relations which
are structured around gender and age which leave young women to be underprivileged in their
capability to have control over their own labour. Therefore my findings show that women are not
able to utilize their endowment to make direct use of fishing grounds as this is related to local
gender ideology even though women indirectly make use of fish resources through processing
and trading. This indicates that for a woman to get direct access to fishing ground she must
channel it through a man. Women who are able to afford the fishing gears leave them in the care
of men who go to sea with it and render account at the end of the day to canoe or the net owner.

The ability of the inhabitants in Abakam to use their endowments through their capabilities’
depend on the principle of differentiation of social actors. The wealthy (beach seine owners) are
able to diversify their livelihoods and make maximum use of the resources due to their economic
status as compared to the poor (crew members). This means that the rich are able to have more
access to resources than the poor. That is if one is able to acquire more than one beach seine or
canoe one would have more access to the resources than those who are unable to have beach
seine. In this case those who control power and wealth, the Togbui and beach seine owners in
Abakam, are able to transform their endowments into entitlement to improve their lots. This is so
because the beach seine owners have control in terms of wealth and are able to buy other things
like provision of accommodation, payments of children’s school fees and provision of basic
necessity for themselves. On the other hand, the poor who could not afford the beach seine and
canoe have limited access to the resource than the wealthy people and are unable to to transform
their endowments through their capabilities to improve their well-being. This is also in line with
Leach et al (1999) idea that some social actors’ claims are possible to overcome others due to
existing power relations.

My findings reviewed that the chief and the beach seine owners who are wealthy and control
power which makes them more influential and are able to overcome the poor such as the crew
members, children among other marginalized groups in the community. In this way, it has been established that endowment mapping among the wealthy is different from that of the poor where it was emphasized by Leach et al 1999. The poor who are unable to buy fishing gear (like the beach seine and canoe) becomes economically excluded (Bene, 2003:960) and therefore are not able to access the resources. The figures from the Ghana canoe frame survey from 1986 to 2004 which are shown in table 5 indicate that the fishers who own the beach seines are the same fishers who own the canoes as the number of canoes and beach seines over the years are the same. At the time of fieldwork the number of beach seines in Abakam had increased from seven to nine.

The general impression is that there has not been alarming increased in the number of canoes and beach seines over the years in Abakam which therefore indicates that the rich who own the fishing gears continue to exploit the poor who cannot afford the gears to enable them get access to the resources. This therefore means that the rich continue to be rich while the poor still remain poor in the sense that the poor are being exploited since their livelihoods’ depend on the canoe owners (rich).

The class exploitation is institutionalized in that the canoe owner takes half of the total amount of daily catches while the crew members (20 in numbers) also take the remaining half. This means that at the end of each catch the canoe owner gets twenty times what each crew member gets and this clearly indicates a high class exploitation which makes the crew members continue to be poorer. It can also be deduced from table 5 that only few fishers have direct access to the fishing grounds. The implication is that even though fishers gain access to fishing rights provided they abide by the institutions and pays their levies, not every fisher is able to access the fish resources as a result of the problem of acquiring fishing gears. This means that only those who can afford fishing gears would be able to get direct access to the resources in order to improve their well-being. It can therefore be said that although people might have endowments not all would are able to transform their endowments to improve their well-being due to socio-economic problems. Hence different social actors are able to maximize their capabilities through their endowment in different ways to enhance their living conditions.

Accessibility to land in Abakam was acquired in three main ways as noted above and it can be deduced from these three ways that the rich who are able to buy the land from the landlords are
able to improve their lots and diversify their livelihoods since they have control and command over the land. Those who own land are capable of using the land to do other things and can decide to grow different types of crops of which they will not be restricted or could use the land for other profitable ventures. On the other hand, the poor who engages in abusa system of farming is controlled and regulated by the landlord and therefore he is limited in his entitlement. The landlord who does not take part in the farming activities shares the crops with the poor farmer through the abusa system which could mean that the farmers are being cheated in that the farmer who uses his labour on the farm does not get the necessary amount he has to. In this case the farmer is being exploited by the landlords as a result of what Bene (2003) described as class exploitation. This means that the poor farmer is not able to maximize his capabilities in order to improve his social and economic status due to the fear of being ejected from the land by the landlord. The implication is that certain social actors such as the landlords, rich (who are able to buy land) are capable of controlling resources and utilize their endowments as well as making good use of their capabilities at the expense of the poor who do not have the means. This therefore means that people’ economic status in a society becomes essential when it comes to getting access to resources because the poor are unable to have access to the resources because of their status.

The alternative sets of utilities which made up the environmental entitlements by Leach et al (1999) were also applicable in Abakam. These include the fish caught and the crops cultivated which serve as food for their survival. The inhabitants derive several satisfactions from these environmental entitlements as they derive their major protein from the consumption of fish product and the crops grown. As the fishers and the farmers engage in their activities employment also serve as a set of alternative utility which reduces the unemployment rate in the community thereby enhancing their living conditions. It is therefore not a surprise to infer from chapter five that most of the respondents (87%) were into fishing and therefore fishing is the major livelihood activity in Abakam even though the inhabitants also engage in other economic activities such as selling of fuel wood, local dishes, and other petty trading.

The rich (net owners) are accorded with honour since they have been able to transform their endowments to become rich in the community. The individuals who have been able to attain
certain level of financial status are respected and regarded as honourable people in the community as honour has become part of “hierarchical social formations” (Aase, 2002:1) in Abakam. The fisher with the biggest beach seine and canoe is highly respected in the community. This honour and social prestige is given to them based on their status of having the biggest beach seine or farm. For example Edem (see case study 1) is highly respected in the community based on the fact that he is the only person having an outboard motor and having the biggest net (as at the time of fieldwork) in the community with the rest still using wooden paddles.

The market value derived from the environmental entitlement serves as a source of income to the fishers and farmers in the community. These incomes are used for various purposes such as purchasing of basic necessities in live, investing in their children’ education, among others. By these they are able to improve their living conditions and have positive effect on their well-being. However, it must be noted that the income is not evenly distributed which therefore means that some of the fishers (canoe owners who always receive the bulk of the money) are better-off and are able to generate enough income to improve their standards of living than others (crew members) whose income are less.
CHAPTER EIGHT: CONCLUSION AND RECOMMENDATIONS

8.1. Conclusion

This research followed the three objectives put forward as a way of understanding the resource management in the Anlo-Ewe migrants fishing community Abakam in the Central Region of Ghana: How the Anlo-Ewe migrants get access to fishing rights and land in Abakam and how they maintain this access. The institutions involved in the regulation on the use and the management of the resources, and the negotiation of conflicts among fishers.

The actual fishing activities in Abakam are in the hands of the young men to the neglect of women and children which clearly indicates gender imbalance in terms having access and command over the resources and this is due to the gender ideology and traditional practices which are found in the locality where woman and children are relegated to the background in terms of getting access to the fishing grounds.

Access to resources is also linked to the principle of differentiated social actors. The wealthy are able to enhance their well-being by making ultimate use of their endowments and capabilities at the expense of the poor who are constrained by economic and socio-cultural factors.

Diverse institutions, both formal and informal, are pivotal in the maintenance of rights to fishing grounds and land. The informal institutions especially acts to shape and regulate the ways differentiated social actors access, use, manage and derive their well-being from environmental resources in Abakam. The findings showed how informal institutions are involved in resources management at the grass root level through various mechanisms put in place.

The role of chiefs and elders (traditional leaders) in fish and land resource management is crucial in Abakam. This is due to the traditional set up of the area where chiefs’ power and authority is not challenged. The chief’s power is also backed by the constitution of Ghana and so through these they are able to regulate access, use and the management of the land and fishing grounds through local rules (informal institutions). They are also able to negotiate conflicts among the
fishers as conflicts usually emanate among the fishers indicating a strong bottom up approach in resource management in Abakam.

Several sanctions are met by fishers who violate the informal institutions. These sanctions are given to the fishers by the chief. The degree of the sanction depends on the seriousness of the offence and whether the person has continuously been violating the institutions or not. This means that people are not treated equally concerning the sanctions.

Class exploitation is integral part of both fishing and farming activities in Abakam. The rich who are able to afford fishing gears and land employ the crew members and pay them less. This class exploitation is embedded in the institutions existing in the community.

International migration is an integral part of fishers in Abakam as the main reason was to search for new and better fishing opportunities. This was due to the frequent movement of the fishers from Abakam to different countries in West Africa and beyond in search of fishing grounds. In addition fishers use international migration to diversify their livelihoods when conditions become unfavourable at their origin.

Although fishing (small-scale fishing) activity plays a vital role in the lives of the people of Abakam, they are confronted with several problems which hinder the development of their welfare.

8.2. Recommendations

From the above findings of the study, the following are recommended:

Informal laws regarding access to fishing rights and the use of the fishing grounds should be supported by the various fishing communities along the coast of Ghana to enhance effective management on a whole. The degree of the sanctions should also be strengthen as people are not treated equally and be support by fishing communities to serve as a deterrent to other fishers. This will go a long way to enhance the sustainability of the marine resources in Ghana.
Formal laws should be enacted to prosecute fishers who use explosives, poisonous chemicals (like DDT), light in fishing and other harmful fishing methods. This will prevent the juvenile fishes from extinct as well as preventing the sea water from pollution. In addition, regular community meetings and interactions among the chiefs and the fishers are very necessary in management of fish resources. Through regular meetings with the fishers information can be shared on fisheries in general and fishers would be more informed about the need to conserve and manage our fish resources wisely like formal and informal management institutions through the role of the chiefs.

There is the need probably for the government to absorb excess fish from the fishers especially during bumper harvest. This could be done through infrastructure development in order to reduce the fish spoilage and also stabilize the fluctuation in prices of the fish which would then increase the income generated by the fishers and fish traders hence enhancing their livelihood and living conditions.

Banks such as Agricultural Development Bank (ADB) should give credit to the fishers and fishmongers through fisher associations without collateral security to enable them purchase the fishing gears needed.

Subsidies on fishing gear should be given to fishers by the government to enhance their fishing methods. This is so because when the prices on outboard motors, beach seines, ropes, canoes among others are reduced by the government they would be able to carry on with their activities with ease without using paddles which require more energy and strength.

The chiefs should be able educate the fishers and the fishmongers on the need to live harmonious lives in the community. This will help to reduce the conflicts especially the verbal insults and quarrel among them. The gap between the rich and the poor should be reduced. This could be done by changing the sharing of the money arrangement between the canoe owners and the crew members to minimize the class exploitation.
REFERENCES


Food and Agriculture Organisation (1997) UN Artisanal Fisheries Management.


Boundaries”, the seventh annual conference of the International Association for the Study of Community Property, Vancouver, British Columbia, Canada, June 10-14.

Ministry of Fisheries (2002), Regional Office, Tamale, Ghana


APPENDIX
RESOURCE MANAGEMENT IN THE ANLO-EWE MIGRANTS FISHING COMMUNITY
ABAKAM IN THE CENTRAL REGION, GHANA.

QUESTIONNAIRE
The researcher is working on the above topic. Please it would be greatly appreciated if you could
fill out this questionnaire as truthfully as possible. Information given would be treated as
confidential and is purely for academic work. Please tick where appropriate and answer where
necessary. Counting on your kind cooperation.

SECTION A: PERSONAL DATA
1. Age………………
4. Number of children, if any………………………………………..
5. Educational background

SECTION B: INTERNAL MIGRATION
6. How long have you lived in Abakam?:……………………………
a. Since infancy b. 1- 5 years c. 6-10 years d. above 11 years
7. How did you come to Abakam?.............................
   a. born here b. through a relative c. by myself d. Others, specify
8. Why did you settle in Abakam?............................
   a. Fishing b. Farming c. trading d. Others, specify
9. Is it easy to allow new people to come to Abakam?
   a. Yes b. No
10a. Do you sometimes go to your hometown (Volta Region)?
    a. Yes b. No
10b. When do you go there?
    a. Traditional festivals b. Funerals c. Christmas and Easter holidays
    d. Others, specify………………………………………………….
SECTION C: ACCESS TO RESOURCES (SEA/LAND)

11. What do you do for living?
   a. Fishing  b. Farming  c. Trading  d. others  specify …………..

12. How did you gain access to fishing grounds/land? ……………………………
   a. Market  b. inheritance  c. through marriage  d. Others  specify ……..

13a. Are you sometimes in any way restricted on the use of the resources?
   a. Yes  No …

13b. If yes, in what ways are you restricted on the use of the resources?
   i. ……………………………………………………………………………………
   ii. …………………………………………………………………………………..
   iii. …………………………………………………………………………………..

14a. Do men and women have equal access to the resources?
   a. Yes  b. No …

14b. why? …………………………………………………………………………………..

15. How do you maintain this access to the resources? ……………………………

16a. Are the resources easily accessible to new people?
   a. Yes  b. No …

16b. If no, mention some of the mechanisms in place that prevent new people from accessing the resources:
   i. ……………………………………………………………………………………
   ii. …………………………………………………………………………………..
   iii. …………………………………………………………………………………..

SECTION D: INFORMAL INSTITUTIONS AND RESOURCE USE

17a. Are there any norms or rules governing the access to and the use of the sea and the land resources?
   a. Yes  b. No …

17b. If yes, what are some of the norms or rules?
   i. ……………………………………………………………………………………
   ii. …………………………………………………………………………………..

18a. Do sometimes conflicts/disputes emerge?
   a. Yes  b. No

18b. Who are involved when these conflicts arise? Tick as many as possible.
   a. Landlords and tenants  
   b. Canoe owner and the crew  
   c. Fante traditional authority and Anlo net-owners  
   d. Chief fisherman and village elders  
   e. Chief fish trader and fish mongers  
   g. Others  specify

19. What are the main causes of conflicts/disputes? Tick as many as possible.
   a. Casting across nets  
   b. Poor relation between landlords and tenants  
   c. Disagreement between canoe owner and the crews  
   d. Disagreement among the fish traders  
   e. Others  specify

20. What kind of institutions are being activated when the conflicts emerge? Tick as many as possible:
   a. Village headman  
   b. Council of net-owners and elders  
   c. Chief fisherman  
   d. Chief fish trader  
   e. Others  specify

SECTION F: MANAGEMENT OF THE RESOURCES

21a. Are there any periods or areas that you are not allowed to fish or farm?
   a. Yes  
   b. No

21b. Mention some of the periods that you are not allowed to fish or farm.
   i. .................................................................
   ii. .................................................................
   iii. .................................................................
22. What are the reasons why you are not allowed to fish or farm during those periods?

i. .................................................................................................................................

ii. .................................................................................................................................

iii. .................................................................................................................................

23a. Are there any institutions to make sure that people are not allowed to fish during those periods?

a. Yes ☐ No ☐

23b. If yes, mention some of the institutions:

i. .................................................................................................................................

ii. .................................................................................................................................

iii. .................................................................................................................................

24a. In your view, do you think that the rules regulating fishing, farming or other activities are made to favour some group of people than others?

a. Yes ☐ b. No ☐

24b. If yes, which group of people?.................................................................
25a. Do you face any problems as a result of activities of other fishermen, farmers, or fish traders etc?

a. Yes ☐  b. No ☐

25b. What are some of the problems?

i. …………………………………………………………………………………………………………

ii. …………………………………………………………………………………………………………

iii. …………………………………………………………………………………………………………

26. What are the constraints faced by you as fishers/fish traders?

i. …………………………………………………………………………………………………………

ii. …………………………………………………………………………………………………………

iii. …………………………………………………………………………………………………………

27. How do you make your problems known to those in authority?…………………………

28. How do you manage these problems?…………………………………………………………
QUESTIONS FOR GROUP DISCUSSIONS

Identification of the individuals
Personal data
Do you sometimes encounter some conflicts/disputes?
Mention those who are usually involved
Can you explain the role of the following in settling conflicts/disputes?
Chief fisherman
Chief fish trader
Village elders
Village headman
In what ways do institutions limit your access to the marine and land resources in Abekem?
Do you think that it is good for the institutions do restrict your use and access to the resources?
In what ways is it good?
How do people gain access to the resources?
How are the resources managed internally among the Anlo-Ewes?
How are the resources managed externally in relation to the native Fantes?
Do you pay some token to the Fante Traditional Authorities?
In what ways do the Fante Traditional Authorities mediate when there is a conflict/disputes?
What are some of the norms/rules regulating your access to and the use of the resources?