

**Right tool, Wrong Target?**  
**Co-management in the Ugandan Fishery Sector**



**A thesis submitted in partial fulfilment of the Masters Degree in  
International Fisheries Management**

**By**

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*Cover picture: showing a fish landing site in Uganda taken from the cover page of the UNDP Uganda Human development report 2005*

## **Preface**

*I have faced a lot of challenges as a novice social science researcher writing this thesis. Coming to Tromsø as a fisheries biologist and an amateur fisheries manager and being turned into a social scientist and a professional fisheries manager has all been a great but challenging experience.*

*The muddling through process has been made worst by my being a mother. I missed my daughters both day and night. I do not know how many times I have had to cry to my self for what I have done to my children and myself by coming to Tromsø.*

*Hopefully I have added my voice and will be able to add more on the building stones put from Tromsø without compromising my children s interest and m y role as a m o t h e r and w i f e.*

***This work is dedicated to Clarisa Achola and Karen Akwir my most precious gifts and Ronald their dad.***

***Daisy Obel***

***12/May/2006***

***Tromsø***

***Norway.***

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## Abstract

This thesis examines the effectiveness of the co-management approach in the fishery management system of Uganda with specific case reference to the implementation of the Beach Management Units (BMU), an institutional structure for the co-management approach, in the Lake Kyoga and Lake Victoria fishing villages. The theoretical frame work of this thesis involves looking at the concept of co-management, the theory of implementation and a study of the concept of situated knowledge production processes. On the other hand, the empirical assignment consisted of following the processes that led to the implementation of the BMU system and examining the achieved goals so far.

The analytical studies are to weigh the achieved goals of the implementation of the BMU system with the desired or theorised goals of the co-management concept. This is done with specific interest in outcomes related to social equity among the BMU members and the issues with the fisheries resource sustainability. The analysis is done using the sustainable livelihood approach and the institutional analysis frame work. The challenges involved in the implementation process are also highlighted and put into consideration in this analysis. At the same time, discussions in the analysis touch on issues of development knowledge production for the developing worlds with special regards to when such “knowledges” are turned into uniform policies. This discussion, with regard to knowledge production is to ascertain whether such knowledge production systems either heal or escalate the damaged situations in such regions when they are turned into policies.

This thesis argues that the knowledge base of fisheries management like other development knowledge is generated from outside the culture of the society to which such knowledges are later implemented. In this way, the expected results of such are always in contrary to what is expected.

**Key words:** Co- Management in Uganda, Beach Management Units and Fisheries management as societal development.



## **List of Abbreviations and Acronyms**

BMU-	Beach Management Units
DFID-	Department for International Development, United Kingdom
DFO-	District Fisheries officer
DFR-	Department of Fisheries Resources
DR.Congo -	Democratic republic of Congo
HIPC-	Highly Indebted Poor Country
ICLARM-	International Centre for Living Aquatic Resources Management
IFM-	International Fisheries Management
ILM-	Integrated Lake Management
LSC-	Landing Site Committee
LVEMP-	Lake Victoria Environment Management Project
LVFRP-	Lake Victoria Fisheries Research Project
MAAIF-	Ministry of Agriculture, Animal Industry and Fisheries
NGO-	Non Governmental Organisation
SAP-	Structural Adjustment Programme
UFFCA-	Uganda Fish and Fisheries Conservation Association
ECOVIC-	East African Communities Organization for Management of Lake Victoria Resources

## **Interpretation of Non English Words**

Baria-	Poor fishing crew members
Gabunga-	A local fisheries committee chairperson
Lango-	An ethnic group in northern Uganda
Langi-	their language
Bantu-	An ethnic group in central Uganda around Lake Victoria

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My deepest appreciation goes to my commissioner Mr. Nyeko Dick. Mr. Nyeko, I am very grateful that you talked to me about further education from the very moment I joined the Department of Fisheries Resources, Entebbe in 2002. I thought I had already finished school but with your wise guidance, I realised I had not yet learnt at all and immediately I started the search for further education.

The list of personalities, friends, and acquaintances to be grateful to are long but I can not mention all you here. I should however mention my parents for providing me with the foundation that I am managing to built on. The wonderful class mates I had in the 2004 IFM lot are also not forgotten.

# Chapter One

## 1.0 Introduction

Fisheries management and community development have all been goals that have eaten the minds of several scientists and managers alike (Hersoug 2004). In other words, maintaining fish population in the sea and at the same time promoting fisheries development embodied in activities such as feeding the poor, sustaining local communities, providing employment and generating export earnings are all activities that are referred to as hard choices (Hersoug 2004; Kooiman and Bavinck 2005). These hard choices are more complicated with the fact that fish populations, though renewable, are exhaustible. Ascertaining a balance between fisheries development and management becomes a more complex struggle. Economists and biologists have been in the fore front of this fight. The social scientists are a bit late. Although all these disciplinary perspectives have their potential limits, they are still necessary tools. The biological studies has been criticised for paying too much attention on fish and its environment in ignorance to the human aspect of fisheries management which the social scientist argue is an integral part of fisheries management The economist argue that all the problems in fisheries management are reduced with proper property right allocation that fish lacks. Due to the complexities that surround fisheries management both interdisciplinary and intra disciplinary disagreements exist. The social scientists today are advocating for the assignment of this task to the fisher community, a strategy commonly referred to as co-management or community-based co-management (Wilson, Nielsen et al. 2003)

In this thesis I choose the social scientific perspective and focus on fisheries management as a tool for societal development. Development is a discipline of its own that also requires more mind searching. I use the co-management concept as a case theory since it is one of the new tools that are used to achieve fisheries sustainability and promote societal development though promoting equitable distribution of resources. It is also a modern term that has gained a lot of attention.

## 1.1 Fisheries Management Challenges and Possible remedies

Fisheries management the world over are today faced with a number of challenges. These challenges can generally be grouped as issues concerning ecosystem health, social equity and justice, food security and safety, livelihoods and employments (Chuenpagdee, Degnbol et al.

2005). Specifically in Uganda these issues are noted in the high decline in fish catches (Geheb, Crean et al. 2002; Geheb and Crean 2003; Anon 2004) raising concern about the resource sustainability and the high level of impoverishment of the fishing community (Anon 2004). Some of these problems are also highlighted in the National Fisheries Policy document (2004) as uncontrolled access into to the fishery due to high population growth rate resulting in high pollution rate of the aquatic system and the decline in biodiversity due to introduction of non endemic species and the invasion of the aquatic system with the water hyacinth (Anon 2004:10). In this thesis, I focus my study on the problems of resource sustainability and impoverishment of the fisher communities.

Following the world rational view that the lack of property rights in the commons, basically natural resources including fish is not a good idea and above all leads to a tragedy in a commons, fisheries management in Uganda was also centralised, thus given a belonging to the state (Hardin 1968). Today, the role of the state in the centralised approaches to fisheries management is questioned and argued to escalate the problems and challenges in fisheries management (Berkes 1985; Jentoft, McCay et al. 1998; Arthur 2005). Thus to reduce the damages currently experienced, the state is called upon to redirect its participation in management by involving the community and other civil society organisations (Ostrom 1994; Kooiman, Bavinck et al. 2005). This is what is commonly either referred to as co-management, cooperative management, integrated or participatory management (Jentoft, McCay et al. 1998; Pomeroy and Rivera-Guieb 2006).

### **1.1.1 The user involvement recipe**

The cooperative or co-management approach is a some what new dimension to fisheries management stated to have lasted close to twenty years (Jentoft 2004). A huge body of literature has been written both for and against it. It is generally seen to have a number of benefits. Firstly, that it increases the knowledge base for management of the resource. This is so because resource users who interact more with the resource also do possess knowledge that may enhance fisheries science knowledge base and thus lead to more scientific knowledge enlightenment with possibilities of more effective and equitable remedies and solutions to the management problems and challenges (Jentoft, McCay et al. 1998; Wilson 2003). Secondly, participation of users also enhances the legitimacy of the regulatory regime and hence compliance, since compliance and participation are interrelated (Jentoft, McCay et al. 1998).

However, with all these commendable benefits, renowned scholars in this field are continuously warning that the co-management approach is not the solution to all the problems that engulf fisheries today. Jentoft and McCay *et al* (1998) states that *although there are great hopes, about what co-management may accomplish, there are also serious doubts, questions and criticisms regarding its general applicability*. Still more, Jentoft and Mikalsen *et al* (2003) after discussing issues in representation in co-management say that *co-management is no panacea*. Pomeroy and Rivera-Guieb (2006) give a long list of the disadvantages of the co-management approaches in the management of fisheries resources especially with regard to difficulties encountered in the implementation of the management option. Several other authors who are opposed to the idea of involving the community also query the role the community can play in fisheries management given that the management of the resource is not easy even to scientist and government with all its power and resource availability.

Like many other management strategies in fisheries management, the co-management approach thus has several aspects that need to be taken into consideration before its results can be fully realised. Issues like its exact definition, type, scale, design and implementation all need to be taken into consideration before it is applied. Jentoft (2006) while discussing issues whether co-management can serve as a contributory tool in fighting poverty among the fishers say it all depends on its design.

In Uganda, the co-management approach was adopted at a policy level in the early 2000. By 2003; a law to support the major institution of the co-management approach was established. The Fish (Beach Management) Rules, 2003 guide the implementation of the co-management approach in Uganda. Today, the Beach Management Unit (BMU), the co-management institution in the country is in place in lakes Kyoga, George and Edward. As of 2005, the BMU system was being set up in Lake Victoria.

Although it is envisioned to serve many purposes, one of the major objectives of establishing it is to enable it play a participatory role in poverty reduction among the poorest of the poor fishers. In order to assess how much the current Ugandan fisheries co-management arrangement is serving that purpose, I carried out my field work in the fishing villages of Lake Kyoga and Victoria where they (the co-management institution) have been established. In doing that, I divided the fishers into two of their most notable groups that are the boat owning

and non boat owning fishers. To understand the design of the co-management approach, I followed up the processes that led to the establishment of the (BMU) in Uganda. In Uganda, the fisheries industry is a typically regulated open access fishery. Although there are several laws that govern the extraction of the fishery, in most cases the fishery is carried contrary to this laws. Fishing is mainly an employer of the last resort due to the high unemployment rate in the country. Specifically, the fishing industry is more complicated in the number of people who enter the industry because of the political instability both within and outside the country.

## **1.2 Problem Statement**

Fisheries sustainability coupled with equitable distribution of the resources derived from it the world over, present great challenges. In Uganda, this realisation like in the rest of the world led to the search for other remedies. In about between 1994 and 1999, the lakes of Uganda where infested with a noxious and first growing weed called the Water Hyacinth (*Eichornia crassipes*). This drew world attention and the World Bank through the Lake Victoria Environment Project (LVEMP) saw the need to involve the community in combating this weed. Today the weed has subsided but nobody is sure what led to the decline of the weed (Williams, Duthie et al. 2005).

During this same period, a number of investors where encouraged to come to the country and invest in the fishery industry as the new liberalisation policy put its toil on the country. A number of factories that export their fishery products were established in the urban areas around Lake Victoria in Kampala, Jinja, Entebe and Masaka in the Country. This led to the growth of the Nile Perch fishery specifically and generally the fishing industry with negative multiplier effects on the other commercial species and the Perch itself. At home the question of food security where also raised. The decline of the fish species coupled with the gregarious biological life style of the Nile perch all put heavy burden on the government to identify other means of making the situation better.

In the neighbouring countries of Kenya, Rwanda and DR Congo and Sudan, the consumption or demand for Ugandan fish grew tremendously, putting more pressure on fishers to fish more. The use of illegal fishing methods including even lethal means like fishing using poison grew. Non sustainable fishing practices that are prohibited by law like beach seining, boat seining, the use of monofilaments nets and undersized monofilament nets were invented.

During the 1990s when the government adopted the Structural Adjustment Programme (SAP) of the World Bank and IMF, It was mandatory that the number of civil servants should be trimmed. The regional fisheries offices where closed and a number of fisheries staffs where laid off leaving a thin work force on the ground (Ikwaput-Nyeko 1999).

Given all the problems that the fishery of the country found itself in, the co-management approach came in handy. It is envisioned to promote equitable distributions of the benefits derived from the fishery by involving fishers and especially the poorest of the poor fishers. It is also envisioned to promote fisheries sustainability through enhancing the legitimacy of fisheries rule. Nevertheless, during my field trip and my work with the fisheries resources sector, I found out the contrary. In line with the above, I ask this main research question;

*Why doesn't the BMU institution lead to equitable distribution of the benefits derived from the fishery of Uganda and why does it not promote fisheries sustainable practices?*

### **1.3 Research Hypothesis**

Co-management needs some enabling conditions and even if such conditions do exist, it needs careful designing, and institutional implementation. If not, co-management may lead to more deprivation since there is every reason to expect that already wealthy and powerful people know how to make co-management work in their own interest (Jentoft 2006). The weak in society also do not sit and wait to die but they adopt other strategies that enable them to survive or cope. Such actions normally led to more stress of the resource base on which society derives its livelihood (Allision and Ellis 2001). Generally, institutions are prerequisites for effective fisheries management. However, their design, implementation and sustainability present great challenges in resources constrained economies. How this truism manifests in the BMU system is one of the main interests in this thesis. Given the above scenario I will consider these hypotheses to direct this research;

- (i) Fisheries management has also been following world development trend (Hara and Nielsen 2003; Hersoug 2004). Like Jentoft (2004) say co-management in fisheries has become a global issue. However, world trends or global issues are in most cases symbolic (Hersoug 2004). The design and implementaion of the BMU institutions may be one such case.



- (ii) The BMU fails to produce rule compliance because the knowledge base on which the BMU institution is formulated is not grounded in the culture of the implementation bodies and the local people
- (iii) Implementations of public policies themselves present great challenges. The top down nature of implementation of the BMU institutions requires conditions that were not met.
- (iv) The BMU institution is not a new institution. The members who participated in the “illegal” fisheries institution are the same ones in the BMU thus their actions and activities are the same.

#### **1.4 The Theoretical frame work**

This thesis uses the concept of co-management to form a major basis for its discussion. Other theories like the theory of implementation, development knowledge production, and institution are used as supportive theories. The theory of development knowledge productions highlights the cultural gaps that exist in the production of development knowledge and wonders if it could be the reason for the low outcomes of expectations in the BMU institution. The theory of institution is discussed to situate the implementation of the BMU institution and the role the BMU plays in resource sustainability and the distribution of benefits derived from it. The theory of implementation gives the challenges that are involved in the implementation of public policies and specifically the BMU institution.

#### **1.5 Research objective**

One might wonder why we need to look at co-management now as a lot has already been written and talked about it. It should however; and unfortunately, be noted that these discussions have not been directly targeting co-management in Uganda, if they are, again not in the fisheries field. When directed in the fisheries sector, then again not in the Lake Kyoga region. Secondly, the discussions of co-management in the Ugandan fisheries system also seem to be skewed in the sense that the theory's advantages are presented in a way that may be overly magnified. In this a way, there is a seemingly down play of the challenges involved in implementing co-management.

Not only have those two factors permitted a „new“ discussion of co-management in Uganda. To add other factors, much as the co-management approach seems to be a somewhat old

concept and very much discussed in other parts of the world, in Uganda, it is a new concept that qualifies to be said only averagely understood by a few even among people who have fairly taken enough participatory role in its implementation. It is therefore in this line that this thesis sees the need to have an examination of this concept relating it directly in the Ugandan fisheries management system. Doing so, is not only hoped to create avenues for more discussions in this field thus awareness raising but also assist so much in the discussions and questions answering poised in this thesis. Specifically, this thesis seeks to;

- (i) Identify ways to enhance the implementation strategy of the co management approach in the Ugandan fisheries system
- (ii) Present the experiences of the Ugandan co management practices in fisheries management
- (iii) Identify the diverse cultural and economic arena and/or environment upon which universal management and or development policies operate. This thesis believes that such identification may enhance knowledge production systems and allow for fewer contradictions in the implementation of such policies.
- (iv) To inform the fisheries policy making organ that the answers to fisheries management problems may not lie in the current co-management strategies.

## **1.6 Research methodology**

### **1.6.1 Source of data**

This thesis is based on both primary and secondary data. Therefore it examines various documented experiences on co-management from around the world and compares them with the one in Uganda. Specifically, attention is paid to the literatures documenting experiences of co-management from African countries (developing countries). More emphasis is given to those from Uganda, specifically Lake Kyoga, in Lira District, and the new district of Amolatar since it is the main area of the research. Reports, working minutes and any other useful documents from the government, NGOs and the fisher community will be analysed.

The research theme also requires primary data. In this interest therefore, a short term survey, using a research questionnaire with open ended questions was done. The research questionnaires targeted people but were not limited to those who had in one way or another been involved in the implementation of the co management approach in the country. The

major institutions consulted are; Uganda Fish and Fisheries Association (UFFCA), which is a local NGO working for and with fishers to enhance their inclusiveness and participation in matters pertaining to fisheries management in the country. Another NGO that was also involved is ECOVIC<sup>1</sup>. Reports of the defunct integrated Lake Management (ILM) are also analysed.

Several members from the fishing communities were also interviewed; although with so much limitation. Much emphasis was put on the boat owners and non boat owners. No clear cut difference was put among the men and women. Participatory observation method also assisted the research data collection.

The Department of Fisheries Resources was also consulted. Other offices consulted are the Fisheries Resources Research Institute (FIRRI). Several district officers, members of Beach management units were also interviewed. The teaching staffs at the main University in Makerere, Kampala at the faculty of science, fisheries department also supported this field work by answering the field survey questionnaires.

### **1.6.2 Method of data Analysis**

This research divides the fishing sector in Uganda in two major categories that is the fishing communities and the administrations. Both groups have provided data for the research although the focus of the research is the fisher community. The fisher communities are again divided into two groups that are boat owners and non boat owners. The main focus of the analysis of the research is on these two groups of fishers.

The researchers prior knowledge and working experience with the fisheries sector in Uganda may also form a big source of information for the thesis.

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<sup>1</sup> East African Communities Organization for Management of Lake Victoria Resources (ECOVIC) was founded in 1998 in Jinja Uganda and registered in Tanzania in 1999 as an international Non Governmental Organization with its headquarters in Mwanza city. It has Country Chapters in Tanzania, Kenya and Uganda, all of which are registered in their respective countries as national NGOs. Tanzania, Uganda and Kenya Chapters have their head offices in Mwanza, Jinja and Homa Bay respectively.

ECOVIC forms a regional umbrella organization for Civil Society Organizations-CSOs (e.g. CBOs, NGOs and Cooperatives) spread out in the entire Lake Victoria Basin, East Africa. Each Country chapter has a wide range of membership of CSOs engaged in, among other areas, fisheries and forest management, water and sanitation, environmental protection, small scale socio-economic activities and human health related activities.

## 1.7 Field Work Challenges

During this research, these experiences were noted by the researcher and it is worth mentioning them. The kind of questions to be answered in this thesis needs abundant qualitative data. Collecting field data requires time. The official time required for the thesis field work is two months. This was not enough time required for collecting all the necessary information needed for the thesis.

The other major draw-back is the lack of prior social scientific research knowledge of the researcher. The researcher's background of formerly being a biologist and now attempting to handle social issues may hide certain important aspects of this research.

The multilingual aspect of the study group should also be taken as a limitation of the research. The fact that the Ugandan fishing communities do not speak one language put several limits on the researcher to interact directly with the researched in most cases. In most cases, an interpreter was necessary to assist in answering the questionnaires and also explaining informal discussions with many fishers. It is not possible in this case to establish if the interpretations were being done correctly.

Gender limitation can not be overlooked in this context. The fact that the researcher is a female researcher and asking some personal questions to the boat owners, the majority of whom are male was viewed as an insult to the boat owners. The real boat owners are the rich in the society and they do not go out fishing. This fact should be known to all those who associate with fishers. Therefore asking when they were last in the lake fishing rightly makes them uncomfortable and probably insulted. On the other hand, the few female boat owners also do not fish since the women don't participate in fishing directly. They too felt a little bit uneasy when asked when they were last fishing. All these made the research more stressful to the researcher's and the researched.

Many times people who do research are associated with some material benefits by those being researched, especially in relatively poor communities. With this notion, the interviewee always expected money for answering the questionnaires. This also made the research difficult.

## **1.8 Research limitation**

This research covered mainly the districts of Lira and the new district of Amolatar on Lake Kyoga in Uganda. The fishers and fisheries officers of Kampala and Wakiso district were also interviewed. Although the findings may reflect almost a similar situation in the whole Lake region, that is the Lake Kyoga fisheries that covers more than ten districts, this should be applied with caution. With the same voice, a similar statement goes for the reference of the material and/or findings to the whole Ugandan fisheries context.

## **1.9 Scope of the Thesis**

The chapters that follow are;

**Chapter two** gives the background information of the general study area that is the country Uganda. The thesis treats this chapter as its first data set since it gives general information about Uganda in connection with the thesis theme. It specifically highlights the past and modern history of the country with emphasis on the effect of such on the current political and socio-economic life of the people. It also points to the geographical location which is linked to its natural resources base, the good climate and fertile land for Agriculture. This same chapter also points to the major economic activities of the country and positions the fisheries sector in the economic arena of the country.

**In chapter three**, the thesis present the research methods that were used to generate the primary data that formed part of the analytical basis of this thesis. To enforce reliability and validity of the data for analysing the issues raised in the thesis, this chapter also present the researcher in details before giving the various methods used in the data collection.

**In chapter four**, the theoretical structure and frame work of the thesis is examined. It begins with an explanation of the concept of co-management. Co-management, seen generally as the involvement of resources users in management activities is the major theory behind this thesis. This chapter also explain other supportive theories such as the theory of institutions, knowledge production and implementation that together with the concept of co-management assist in the data analysis. The final part of this chapter addresses analytical methods for data analysis like the sustainable livelihood approach and the institutional frame work analysis that form part of the thesis analytical work.

**In chapter five and six** more of the specific field work data is presented. In the fifth chapter the thesis present the co-management style in the Uganda fishery system generally before looking specifically at the BMU system in Lake Kyoga and Lake Victoria. This chapter is intended to give a general idea of the BMU institution. Close attention is paid to its objectives, structure, and roles of the various organs of the BMU organisation. This chapter also give specific information about the Lango sub region together with the people and their specific economic activities and coping strategies. The Lake Kyoga complex is also presented.

**In Chapter six,** the thesis presents third and last data set of the data in this thesis. Here, the thesis presents a verbatim-like answer to the field questionnaire data before summaries of the same is done in the summary section of the thesis. Also presented are summaries of the reports of the various organs involved in the implementation of the BMU system.

**In chapter seven,** the various theories of chapter four is used to discuss the combined data in chapter two, five and six.

**In chapter eight,** the thesis gives concluding remarks and some reflection points for proper policy management in the country

**An appendix** showing the sample questionnaires is in the last end of the thesis.

## Chapter Two

### 2.0 Background Information

Uganda is a well watered land locked country and one of the sub-Saharan African countries situated in the East African region. It has an area of about 241,038 sq km (93,072 sq miles) and it is boarded in the East by Kenya, South by Tanzania, the two countries with which it shares Lake Victoria. Rwanda and DR Congo are located West and Sudan North of it (Anon 2000). Its population of about 26.4 M, according to 2004 population census estimates is generally rural with about 35% living below the poverty line (Anon 2005). Uganda's GDP according to 2004 estimates is about 36.1 m US \$. Agriculture contributes 36.1%, Industry 21.2% and Services 42.8% to the GDP.

Generally the country's landscape is a fertile plateau by geographical description. This plateau is higher in the southern part of the country. This plateau makes the southern part attract more rainfall and has producing much of the country's cash crops. Despite being on the equator, the country's tropical climate is considerably moderate because of its elevation ranging between 600m and 5100m above sea level and local relief. Towards the south are flat topped table like hills and broad intervening valleys mainly containing wet lands. Bordering with the democratic republic of Congo are snow-capped mountains of the moon. Several rivers originate from this mountain and replenish the waters of Lakes George, Edward and Albert in the western rift valley. Besides these mountains, there are also several other volcanic mountains associated with the country.

The main export commodities include coffee, fish and fish products, tea, gold, cotton and other horticulture products. Fisheries contribute 17% of the 19% of its Agricultural export items. Besides fish and fishery products export, the Ugandan fishing industry is a big industry and it employs more than half a million Ugandans directly and indirectly up to 2 million of Ugandan population<sup>2</sup>. In line with the World Bank's promotion of non traditional export commodities, which in the case of Uganda used to be coffee, cotton and copper, the fisheries industry is today one of the biggest foreign exchange earner for the country. In 2004<sup>3</sup> it brought for the country close to 100 M \$ in foreign exchange earnings.

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<sup>2</sup> (Department Of Fisheries Resources, Entebbe)

<sup>3</sup> Unpublished report from the Department of fisheries resources, 2004

Uganda like the rest of the sub-Saharan African countries is one of the poorest countries in the world. The United Nation lists it among first fifty poorest countries of the world. It is also categorised as one of the highly indebted poor countries (HIPC). Since 1987 when a new government came to power, it has adopted the structural adjustment programme of the World Bank. Because of this, it has taken up major economic reforms in support of the “new ” neo-liberal economic policies. Government public properties have been privatised and the civil service has gone towards major reforms and reduction in the number of public servants. Today, the government runs over 50% of its budget on donor support.

All these new economic changes have come with new challenges on the people of Uganda. It is stated that the country has gained remarkable economic growth because of this changes but this may yet have to be made clearer as the wealth has accumulated to the already wealthy and the middle class leaving a huge gap between the rich and the poor. The new liberalisation policies of privatization and decentralisation combined with other factors like low remuneration and poverty among others have all encouraged corruption (Zwart 2003).

## **2.1 Historical Picture**

Uganda got its independence in 1962 from the British colonialists. During the colonial times Uganda was referred to as the pearl of Africa because of her richness in biodiversity and diverse physical features. Before the colonial powers took charge of the country, Uganda had five major traditional kingdoms. The Bantu Kingdom was the strongest and occupied most of the riparian areas around Lake Victoria because of their expertise in agriculture. The Nilotics and the Nilo hermites were cattle keepers and pastoralists that lived in the northern parts of the country. The Bantu kingdoms were the strongest<sup>4</sup>. Today these kingdoms that were abolished since independence time are being restored but with very minimal legal and economic powers to directly influence the countries administration. Their functions therefore seem to be basically symbolic. During the colonial times, the major Kingdoms of Uganda participated in what became known as indirect rule. This means that they took administrative duties with overall oversight from the colonial authorities. However as the colonial system was properly set up, this system was interrupted and the „ formal administrative structures like government ministries were set up.

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<sup>4</sup> [http:// en.wikipedia.org7wiki7Uganda\\_before\\_1900](http://en.wikipedia.org/wiki/Uganda_before_1900)



During colonial rule, Uganda gained a bit of economic growth since by the time the colonialist left the country there were good physical infrastructures and administrative structures in the country. However, this was not to last as a number of post-independent civil wars took its toll on the country. In 1972, a military dictator took control of the country and ruled for eight years. By the time Idi Amin was deposed in 1979, the country was in a sorry political trend. There was high inflation as the Indians who controlled the country's economy were chased away by the dictator. Between 1980 and 1985, the country after having some relative peace again entered another civil war that saw the coming of the current leadership. As if that was not enough, immediately after the end of that war, another war again picked up in the northern part of the country. The Lord Resistance Army Movement (LRA/M) has been fighting the government from northern Uganda and southern Sudan since 1986 to date. This war has affected livelihood in the northern part of the country

I have presented this historical context in this case to rule out the possibilities of the existence of traditional community based fisheries management institutions like the ones that exist in West Africa based on traditional rulers, Kings and chiefs.

### **2.1.2 Diversity amidst similarities**

Uganda is different from the rest of the East African countries in many ways. Geographically, although they are all positioned on the equator, unlike the rest of the East African countries, Uganda is a landlocked country. In terms of size, it is the smallest. In connection with political history, it has a totally different post independence history with the rest of its East African neighbours of Kenya and Tanzania. Whereas those two countries have had rather stable post colonial governments and more stable recent histories, this is not the case with Uganda that has had its last thirty or so years characterised with heavy internal wars (Anon 1998). These wars are persistent up to today. The northern part of the country has been engulfed in a silent but one of the world's most destructive wars since the mid eighties to date<sup>5</sup>. In Tanzania, the socialist government even gave the country citizen much more solidarity under the leadership of Julius Nyerere in the Ujama village projects.

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<sup>5</sup> See the following web pages describing the devastating war-[www.refugeesinternational.org](http://www.refugeesinternational.org)



*Figure 1 Uganda in relation to its neighbours*

### **2.1.3 Contemporary social political and cultural trend**

Uganda is a country with a diverse group of people. There are about fifty six different recognised major tribes or ethnic groups (Anon 2005). The main ethnic groups consist of Baganda 17%, Ankole 8%, Basoga 8%, Iteso 8%, Bakiga 7%, Langi 6%, Rwanda 6%, Bagisu 5%, Acholi 4%, Lugbara 4%, Batoro 3%, Bunyoro 3%, Alur 2%, Bagwere 2%, Bakonjo 2%, Jopodhola 2%, Karamojong 2%, Rundi 2%, non-African (European, Asian, Arab) 1%, other 8%. The southern part of the country is far more developed than the northern. Major towns and the capital city, universities, hospitals and government administrative centres are all located in this region. Kampala the capital city is home to the Bantu tribe of the *Baganda*, from which Uganda derives its name. The western part of the country is home to the cattle keeping *Bahimas* and the *Banyankole*. The northern part of the country is dominated by the Luo niloticus which consists of the Acholi and Langi ethnic groups. These are mainly agriculturalists and also former cattle keepers, a position which they have lost because of political reasons.

#### **2.1.3.1 War in the region and the Lakes taking it all**

Since independence in 1962, Ugandans have not known total peace. Immediately after gaining independence from the colonialist, Uganda become a republican and was headed by a prime minister. The prime minister was from the north and this created tension between the ruling north and south. The northern kingdoms were not very prominent and the ruling prime minister abolished all the kingdoms for causing segregation in the country. This intern caused a spiral political civil strife in the country that has lasted up to date.

This political unrest has set Ugandans in both internal and external migrations. These circumstances have generated enormous diversity in the Ugandan society. Thus this various refugees and other neighbouring influxes are added this diversity may go to infinity. The fisheries sector is not spared in this diversity and instead it may look like the sector suffers more from the wrath of this diversity. Sudan and DR. Congo, Uganda's neighbours on the North and West of the country respectively have all been involved in civil strife. The refugee generated from all these wars find homes in Uganda. On top of these, all these categories of refugees to a lager extend find employment in the fishing sector. This diversity presents greater challenges in fisheries management as the number of the fishers then changes from day to day.

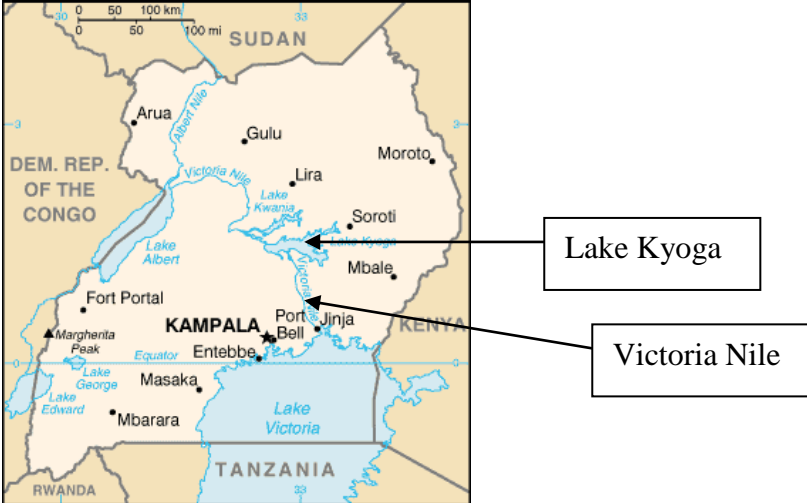


Figure 2 Map of Uganda Showing Major Water Bodies

## 2.2 The Fisheries Sector

Fishing is not an occupational activity that has a strong historical background in the country. To the various tribes in Uganda, fishing used to be done by those who have no specific identity in society, those with no farm lands. Among the *langis*, fishing was only done by those who were considered nobodies. Today the landscape has changed. In between 1987 and 1990, the *Langis* and *Acholis* lost their main source of livelihood, the cattle and this then triggered the move to the lakes.

### 2.2.1 Fisheries in the Ugandan Economy

The fisheries sector in Uganda is one area that is being considered by the government to play a participatory role in promoting the overall development of the country's economy (Anon

2003a). There are several reasons to make one believe that the fisheries industry is a big contributory developmental tool for the whole country. These include: - One, the enormous employment possibilities that the fisheries sector offers. Over one million people in Uganda in one way or the other derive their livelihood from the water resources of the country (Anon 2004). This number is a good contributory factor to development if employment *per se* is a good measure of development.

Two, currently, fish and fisheries product are one of the leading foreign export earners for the country (Oketch 2006). This is being accomplished in line with the World Bank idea of promotion of non traditional export commodities (Kaelin and Cowx 2002). Thus since the mid nineties, the foreign exchange earning generated from the industry has increased tremendously. According to 2004 report from the Bank of Uganda concerning foreign exchange earnings, the export earnings from the fisheries industry were leading even the export earnings from the traditional export commodity, coffee. Coffee is Uganda's major foreign exchange earner. However, despite all these benefits that are derived from the fishery, the management system today has a number of challenges and problems (Anon 2004).

### **2.2.2 Fisheries Administration**

The fisheries sector in the country is managed by the Department of Fisheries Resources (DFR) which is directly under the Ministry of Agriculture Animal industry and Fisheries (MAAIF). The department is the national fisheries management body in the country. The department has a separate state minister as a political head and a Commissioner who is the civil head in charge of all the technical administration. The commissioner is assisted by two assistant commissioners who head the two major units of the countries capture and aquaculture fisheries. Below this rank are several officers of various sub units in charge of several duties under the Quality assurance, Control and regulation, Water bodies, Aquaculture and Statistics. All together the national administration office has a total of about 50 staffs.

Because of the high bureaucracy in government, the Department is on its way into becoming an authority<sup>6</sup>. This move is seen by the promoters as the best way of increasing the efficiency and sustainability of the resource. It is also believed that the formation of the Department in to

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<sup>6</sup> A separate government body with the powers to make its own decisions, although report to government (MAAIF) from time to time.

a separate agent for management of the resource will reduced the burden on government of its treasury share in fisheries management which is seen as a very costly and yet almost unnecessary burden on government. The Authority is believed to generate its own funds after it has been set up by the government with probably donor support funding. In this way, it is also seen as a way in which the country will benefit from the fisheries when the authority begins to generate funds into the treasury

The Fisheries Department then was put under the Ministry of Agriculture but was also in charge of wild games. An Act to govern the extraction, processing and regulation of the fishing sector was enacted in 1964. This position however has changed gradually over time and the latest of such changes took place in around 1997 with the structural adjustment programme removing all the regional offices and leaving a thin staff at the Department(Ikwaput-Nyeko 1999). Further changes are expected to take place when the department finally becomes an Authority with semi autonomous decision making responsibilities. The authority is advocated for in line with the liberalisation policy in the country to allow the department to run like a business agency.

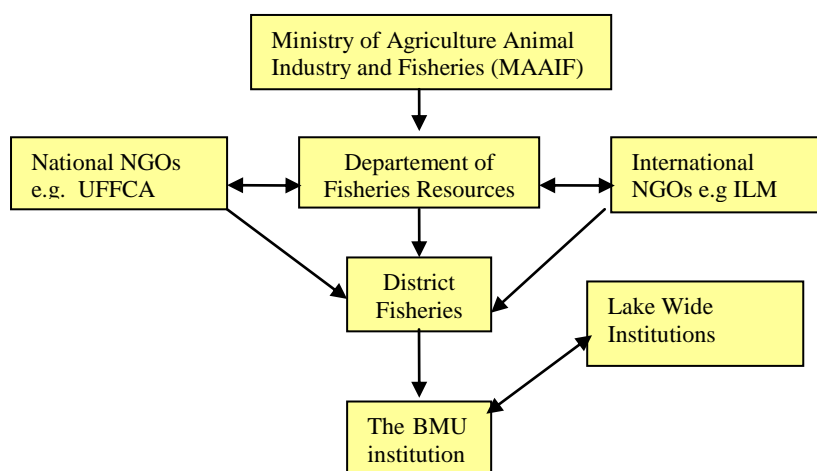


Figure 3 A graphical picture of the fisheries administrative structure

### 2.2.3 Major Fisheries Management Laws

The fisheries of Uganda are managed in accordance to several laws in the country. These include interalia; the constitution of the republic of Uganda (1995) which provide for the state to protect important natural resources including land, water, wetlands, minerals, fauna (Fish) and flora on behalf of the people of Uganda (Anon 2004). The Fish Act,1964:- This law makes provision for the control of fishing, the conservation of fish, the purchase, sale, marketing and processing of fish and matters connected therewith. This is a broad law that has

almost out leaved its usefulness (Anon 2004). Since many of its provision are now outdated and there is a recently drafted law which should replace it, after it has been passed by parliament (Anon 2004). Otherwise it provides for the type of fishing gear to use among others.

The Ugandan fishery industry how ever has several statutory instruments to regulate its activities in place of the archaic fish Act (Anon 2004). Several other laws like the Environment Act and the Uganda Wild Life Authority Act, (UWA Act) and several other statutory instruments notable among them is the Beach Management Rules (BMU), July 2003 regulate fisheries activities. The BMU rule is a new law that has just been passed and it is to assist in strengthening the existence and performance of the of the local institution of the BMU<sup>7</sup>

Uganda has also ratified several international treaties and agreements among which is the FAO code of conduct for responsible fishery, the recent IPOA, and the Convention on Biodiversity together with the Ramseur convention (Anon 2004 : 11) .

D espite the ex istence of these law s and Instrum ents, U ganda s fisheries M anagem ent system is a typical regulated open access fishery. This means that besides the licences issued, fishers enter and leave the fishery at their will. In other words there is no upper limit to the numbers of fishers who can fish at any particular time in all the lakes with a little exception in Lake George which is defined as a control Lake. Kim Geheb (2003) noted that access control on Lake V ictoria s fisheries have very little to do with formal controls on entry while commenting on the same subject. Illegal fishing activities are therefore the order of the day (Anon 2004 : 14).

#### **2.2.4 The main general characteristics of the fishery**

The fishery sector in Uganda consists of both the capture and aquaculture fisheries practices. The Capture fishery sector according to international standard is a small scale tropical inland fishery. This fishery is generally artisanal meaning that they are operated using small wooden hand made canoes, and also operated basically manually. In some few cases these wooden (planked built) canoes are fitted with either outboard or inboard engines. The wooden canoes

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<sup>7</sup> This is a legal entity of fisheries who are group to enhance the arrangement of co-management.

vary in size from about 4m- 12 m in length. According to a study done in 2004, the total number of vessels in the fishery are 17,000 and out of these, about 20% are motorised (Keizire 2004). Other fishing vessels like dugout canoes are also common in some lakes and river fishery. The aquaculture industry is small and mainly done on man made ponds. Thus the greater fishery production comes from the capture fishery. Although because of its high biodiversity, the country has several ornamental species, these are not exploited. Fishing operation is done using various gears. Most commonly fishermen use gillnets, boat and beach seines, and hook and line. In some rural settings, other traditional gears like baskets, traps and mosquito nets are used.

### **2.2.5 The Commercial fishery**

The capture fishery sector is dominated by about three major species on a commercial level. These are the Nile Perch (*Lates niloticus*) which accounts for 60% of the catch by volume. Other major species harvested include; the sardine-like Mukene (*Rastreneobola argentea*), the Nile Tilapia (*Oreochromis niloticus*) and other species like *Bagrus*, *Clarias*, *Protopterus*, *Barbus*, *Synodontis* and several other species that account for close to 10% of the total annual Catches.

During the last 20 years the fishery of Lake Victoria has been completely transformed<sup>8</sup>. From being a locally based fishery with little intervention and capital investment from outside, the present fishery is dominated by national and international capital penetrating the industry. This change is very much a result of the strong demand which has developed in the global markets for the Nile Perch of Lake Victoria. The effects when almost all of the Nile perch is exported to Europe, Japan and USA in terms of local food security and local livelihoods in the fishing communities around Lake Victoria is not ignorable.

### **2.2.6 Fleets**

The fishing fleets of Uganda are generally artisanal. It consists of wooden made boats almost similar to the ones used by the Northern European Vikings many thousand years ago. These vessels are characterised by wooden plank built or flat bottom canoes that have a size range of 4-12 meters. These boats normally are attached with out board engines with horse powers of 15-45. The number of those boats with mechanized engines, mainly outboard engines, has

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<sup>8</sup> .(<http://www.iucn.org/places/lakevictoria/profile.doc>)

however increased over the years especially with the advent of fish export to international markets.

The huge boats of about 10-20 m have normally an inbuilt container filled with ice to cold storage of the catches, mainly for the Nile Perch fishery. This is for the export market Uganda and it is normally what is referred to as the industrial fishing fleet. Approximately 42,500 boats of the nature described are fishing in Lake Victoria. Besides these boats, there are smaller ones which are normally operated by 2 or more fishers. The fishing boats targeting the Nile Tilapia and Mukene fishery falls under this category.

In the much smaller lakes, for example the satellite lakes of Lake Kyoga, the fish canoes are mainly dugout canoes. These are normally operated by individuals and not used for fishing in deep waters. They are small boats of size ranging from 3.5m to 10m in total length.

Because of the diverse nature of the fishery in Uganda, the fishing gears and methods are also quite big. These gears range from simple traps, to much complicated types of gears like the long lining. Trawling is prohibited by law in all water bodies in Uganda.

The most common type of fishing gear is seining. This is normally boat seining or beach seining. This method is however prohibited by the fisheries law in Uganda. Besides the seines, a number of other illegal fish gears are also used by the fishermen. These include the undersized gill nets, those with meshes less than 4", monofilament nets and cast nets.

The Lampara nets or mosquito nets are normally used for fishing the Mukene (*Rastreneobola argentea*) which is a typical sardine like fish. This net has a disadvantage in that it also catches a number of the young of the other species as by catches. In Lake Victoria, the fishery is a little more modernised and according to a FAO document most of the boats are of a fairly big size or at least more than 10meters.

Recent stock assessments conducted by Lake Victoria Fisheries Research Project, LVFRP, indicate that Lake Victoria alone has at least 200 species of fish. 127 of which are cichlids, mostly of the *Haplochromine* stock. Since the introduction of the Nile Perch in the 1950s, the lakes multi species composition has reduced drastically. The stock of Nile Perch, which is



the major export species, is estimated to be of 650,000 metric tonnes in the whole of Lake Victoria. The other species of commercial importance consisting of the Nile Tilapia and Mukene is roughly estimated to consist of 700,000 metric tonnes.

**2.2.7 Markets**

The fish markets in Uganda are divided into three major categories. These include the local markets which consist basically of the domestic market, the regional market which consist of fish trade from Uganda to all the countries within Africa and the international markets consisting of fish going outside Africa. This is what is referred to normally as the export markets. The statistical data for fish export in Uganda does not normally include the value and quantities of fish exported to the regional market and the domestic consumptions.

According to sources from the Fisheries Department in Uganda, the European Union is the major import market of the fish and it accounts for approximately 70% of the total exported quantity of fish from Uganda. The other international markets are Japan, Singapore, Hong Kong, Australia, Israel, United Arab Emirates and USA. These international markets only import fresh chilled or frozen products mainly filleted but some like Israel takes those that are headed and gutted. Notable among the regional markets are Egypt and South Africa for factory processed products of frozen fish. The regional market also includes DR Congo which is very prominent for salted fish, Sudan for sun dried Mukene (*Rastreneobola argentea*) and Kenya mainly smoke products. Rwanda also takes sizable amount of fresh tilapia from Uganda.

<b>Destination</b>	<b>Percentage</b>
European union	65%
Middle East	6%
South, East and South-East Asia	12%
Australia and USA	12%
Africa	5%

*Figure 4 Direction of fish export from Uganda*

According to a 2004 July report on policy research on finding the implication of liberalization of fish trade for developing countries, a case study on Uganda, the fish export market chain in

Uganda is described to begin with the artisanal fishers who commonly use relatively capital intensive fishing units involving larger boats and out board engines and they normally target the Nile perch although some Nile Tilapia is also targeted.

The artisanal fishers sell fresh fish to factory agents normally at a price fixed by the agent. The remaining fish that does not meet factory processing standard is mainly sold to women who normally process it for the domestic market.

Besides the factory agents, a group of middle men who buy fish from fishers and sell to factory agents have emerged at some landing sites. These speed up the process of assembling fish and they charge up to an extra average price of 65ugsh per kg of fish for this.

The fish are then stacked in refrigerated trucks by casual labourers hired by the factory agents and thereafter transported to industrial fish processing factories where it is either filleted or only gutted and or be headed then either chilled or frozen ready for export to the international markets of Europe, Asia and USA. The price in the international market normally goes at an average of 2.78\$ dollars per kg of the perch. In very good seasons especially during summer in Europe, it is about 3.8- 4.0 \$. This price has however been varying a lot since the evolution of the fish export market. For example in 1999 it was 0.40US\$ per kg, 2.78 in 2001 and a dramatic increase of up to 3.25kg in February 2002. This is according to the Department of fisheries resource in 2002.

The fish export market chain is linked to the domestic and regional markets through the fish by product sector. The by products usually account for nearly 60% of the whole fish. It consists of fish frames, skins, trimmings and fat. These are sold in the local markets while fish maws are exported mainly to the Far East. A long side the by products, any other fish that do not meet the international standard of the European Union markets are either salted or smoked for the regional market of DR Congo or the domestic market or still exported to Kenya respectively.

Note that the fish export market is currently being driven by only two species from the fishery. That is the Perch and the Tilapia. The export market is being given a lot of priority because of the returns from the business by both the private sector and the government. The sustainability of the sector however lives a lot of question to be answered. This is because the European market which is the biggest force to the fishery demands the immature fish and this demand

structure in turn force the fishers towards catching this young fish before even their first age of maturity.

The government in trying to regulate and promote the sustainability of this fishery has set the export quota of the fishery at 60,000 metric tonnes per annum. This is supposed to be the maximum total quantity of fish exported from the country. According to the government's own Fisheries Department, this figure has not yet been reached and they say the closest the exporters went was trading 16,046 metric tonnes.

### **2.3 Fisheries Research and Education**

Fisheries Research is the mandate of National Agriculture Research Organisation (NARO) that has a separate body called Fisheries Resources Research Institute (FIRRI) responsible for all the fisheries research. The biggest public University in the country, Makerere University collaborates with the research institute in fisheries researches. The research institute links with the department of fisheries resources in that it is the source of all fisheries management information in the countries.

The major fisheries training institution in the country is Makerere university in Kampala, that offers a direct course in both Bachelors and masters level in fisheries science, other indirect courses such as Bachelor of Science in Zoology and environment courses are also run and the products of the course is absorbed in fisheries management. The country also has one Fisheries training institute situated at Entebbe which is responsible for training those wishing to acquire knowledge at a diploma level in fisheries management, Harvest technology Aquaculture and other fisheries related discipline such as boat building.

### **2.4 Main Characteristics of Fishers of Uganda**

Fishing is an activity which is totally regarded as being rural. It therefore passes that the majority of the fishers are illiterate. Most fishing activities take place along landing sites. Social services in these landing sites are very poor or in most cases non-existent. Schools, hospitals, police stations and other government administrative centres are often miles away.

Besides these facts, the majority of the fishers in Uganda are mobile. This means that their insurable interest in the resource is also very low. They are mainly target workers who want to

earn quick income from the fishery and then do other things. In reality the majority do not meet these objectives thus they hope in and out of the fishery from time to time. However, because of the nature of the fishery, most of them virtually get trap into the business. Whether they are trapped into fishing or not, they still maintain their migratory life style. Several factors account for this behaviour. Notable among which, are hide and seek games with the regulatory authorities and also perceived increase in catches in other fishing territories.

## **2.5 The Lake Kyoga Fishery**

L. Kyoga is a big water of about 1,720sq kilometres. It is located right in the middle of the country although a little more north (see the map above). It is the second biggest lake in the country and joined to Lake Victoria through the Victoria Nile. River Nile passes through this lake as it heads to Egypt. It is a shallow lake with occasional big chunks of land breaking and floating into the lake (Nunan and Scullion. 2004). This is almost something like a big mass of papyrus (a water weed) which is common along the shoreline. These floating Islands in many cases provide temporary settlement to renegade fishers and are therefore prominent fishing villages with all the characteristic of a typical urban centre. Lake Kyoga is surrounded by many riparian districts. Its population are relatively poor compared to those of Lake Victoria. This is mainly because of its geographical position which is far off from the main city in Kampala. By 2004 it had about 10 riparian districts surrounding it. The number of districts has however been multiplying as the government created many more new district in vobe for the decentralisation policy.

## **2.6 The fisheries sector and gender relations**

Generally in Uganda, fish is an activity that is a male dominated field. Specifically among the Langi people around Lake Kyoga sub region women are not allowed to jump over fishing boats or in some instances even come and touch them. Fishing Operations in these communities is then mainly done by men. Specifically among the Langi, in Namasale and Muntu fishing villages done, the men who do the actual fishing are in most cases the ones who do not own their own boats. They are however the majority of the people in the fishing villages.



Figure 5 A typical fish landing site in Uganda, note the near absence of women in the landing site.

Lakes/ Years	1 995	1996	1 997	1998	1 999	2000	2 001
Lake Victoria	103	106,4	106,6	105,2	104,2	105,4	105,8
Lake Albert	16,4	21,9	19,1	19,1	29,1	29,6	29,0
Lake Kyoga	80,2	80,6	80,1	80,2	81,1	80,2	80,1
Lake Edward, George and Kazinga channel	5,2	4,8	6,4	5,6	7,4	7,2	7,4
Other waters	3,7	3,7	3,7	3,5	4,3	4,5	0,19
Total	208,5	217,4	215,9	213,6	226,1	226,9	222,49

Figure 6 Fish catch by water body (1995 - 2001) Catch ('000 tonnes)<sup>9</sup>

The tables above provide data on fish catch by water body for the period 1995-2001. Over 80% of the fish catch is from L. Victotria and L. Kyoga

## 2.7 The structure of fishing Operations in Lake Kyoga

Fishing is done mainly at night time. There are three main important commercial fisheries in these fishing villages. These are the fishery for the Nile Perch (*Lates Niloticus*), the Nile Tilapia (*Oreochomis Niloticus*) and the Mukene, *Rastreneobola argentea*. The fishing operations involves the use of gillnets, beach seines, cast nets and pots among other types of fishing operations and methods. The beach seine, cast nets and gillnets of mesh size of inches less than four are illegal fishing gears according to the fishing laws of Uganda (2005). Pot fishing is only legal if it is done in non fish breeding areas.

## 2.8 Monitoring Control and Surveillance (MCS)

A standard operating procedure is followed while carrying out MCS activities. This a national document that was drafted in 2002 to help stream line fisheries enforcement as many government agencies were being brought in to cooperate and save the fishing sector from collapse especially due to immature fishing activities by carrying out MCS activities.

<sup>9</sup> SOURCE: Fisheries Department, Ministry of Agriculture, Animal Industry and Fisheries

Formerly, fisheries law enforcement was the mandate of only the department of fisheries resources

MCS is done in accordance with the fisheries law and the constitution of the republic of Uganda. Proposals are being made to see to it that there is a joint MCS operation in Lake Victoria involving the three riparian states. This will mean sharing the cost of buying MCS vessels and also all the other cost that go with MCS. It is also believed to solve the problem of states thinking that the other states are not participating in fisheries law enforcement.

## **2.9 Aquaculture**

Aquaculture in Uganda involve the practice of raring fish in man made fish ponds and also the practice of stocking small lakes with fingerlings in order to promote fish production in a particular water body.

## **2.10 Summary**

Uganda is one of the highly indebted poor countries of the world. Because of this condition, it is run in accordance to the text book of the World Bank and International Monetary Fund (IMF) (Tujadeen 2006). Different development models made up in the west have since early independence time been employed to promote economic growth in the country to no effect. The newest of such model is the liberalisation policy coupled with decentralisation (Tujadeen 2006). The structural adjustment programme (SAP) as these policies are fondly referred to have been adopted since the mid 1987. To date, this new policy seems not to however have served its purpose well, almost twenty years down the road. The major symptoms of these are that over 50% of the government budget still depends on donor funding. In these donations come major problems like conditionalities and corruption with the continuous effectual aggregation of uneven distribution of income and high rate of unemployment in the country.

Fish and fishery product is one of the major foreign exchange earnings the country possesses. The promotion of this export commodity by the government in line with the World Bank policy of exporting non traditional export commodity has had its toil in the country s fishery. The EU market that is one of the main destinations for this commodity has created a lot of stress directly on the Nile Perch (*Lates Niloticus*) fishery and also with a negative multiplier effect on the other species. It is argued that the EU market requires immature Nile perch which is tastier and less fatty. This has resulted into a rush for the young fish and thus raising a lot of question about the sustainability of the resource. Coupled with this, the heavy

commercialisation of the Perch has then led a spiral down trend on the tilapia (*Oreochromis niloticus*) which is a delicacy for the people of Uganda and East Africa. Still more, because of the high population growth rate of the country, the issue of food security for the country comes in.

Ugandans fishery management system is a typical regulated open access fishery. This means that although several regulations control the extraction of this resource; there is no law to limit the maximum number of people who can join the fishery at any one time. So long as interested individuals can identify themselves with fishing equipments and pay minimal licence fee, they can enter the fishery with the exception of Lake George (situated in the west of the country) and described as a closed lake because it is located in a National Park.

## **Chapter Three**

### **3.0 The Research Methodology**

In chapter one, the thesis gave a broad abstract picture of the type and method of data collection that I intend to use in the data analysis of this research. In this chapter, I give in detail the various methods that I used in obtaining the data that formed major discussions in the analytical studies of the thesis. This thesis is a qualitative study and it uses both primary and secondary data. I also give the rationale for choosing the specific type of data collection technique. In this connection, I give also the areas from which this data is chosen and why those areas were picked. To show the genius and biases of my data, I also give a background of my self and show especially how I am connected to the fisheries industry in Uganda. I begin with introducing myself before presenting the different data collection techniques that were used.

### **3.1 The Researcher's perspective, justification and biases**

I joined the fisheries sector in Uganda in April 1999 as a district level fisheries officer after completing my degree studies in Botany and Zoology in June 1996 from Makerere University. Before joining the Department, I worked as an unlicensed graduate teacher in Sir Samuel Baker Secondary School in Gulu. Gulu is my home district and it is located about 240 km away from the capital city centre in Kampala. In the district of Lira where I worked for four years, I was involved in general fisheries management duties in the various sub counties that I was deployed in. The sub counties are smaller district administrative units. I was involved in the promotion of aquaculture, carrying out fisheries law enforcements in the lake and markets coupled with regulating and promoting safety fish handling measures among the fishers. In this way, I became very acquainted with the life and workings of fishers in the villages in Lira District and also neighbouring districts of Nakasongola, Apach and Soroti.

In 2002, I left Lira district and joined the Department of Fisheries Resource on promotional interview as a Senior Fisheries Inspector under regulation. My major duties were to enforce fisheries laws. This job took me to the various villages in Lake Victoria including its numerous islands. Perhaps, the fishers were not happy with my working style. The fisheries laws of Uganda stipulate that nobody should be caught in possession of any young fish and still more any part of the young fish. This is maximum protection of fish for if one is caught contravening the law, one is liable to jail for a period not less than two years or a monetary



fine. My job was to enforce this law. This made me very protective about fish and not putting the livelihoods of fishers into perspective as an amateur fisheries manager.

In summary, I have participated in various workshops, meetings and many other activities involving fisheries management in Uganda. All in all, I have associated with fishers in all the lakes in Uganda and specifically the two major lakes i.e. Victoria and Kyoga. A position that I believe give me some stand to comment on the management style that befits the society.

Whether this position makes me more realistic in situating the concept of co-management or biased is difficult for me to judge. I will explain more in this connection.

Since I came to Tromsø in August 2004, my dimension in life has tremendously changed. I should say that while in Tromsø, I have associated so much with the social science students. A good friend of mine Ms. Victoria Phiri, who is from Zambia and an anthropologist, studying Masters in Indigenous Studies initiated me to the social science world before I could attend the fisheries development (social scientific) lectures in the course schedule at the International Fisheries Management Programme (IFM), where I was officially attached. This association made me take two extra courses in the Social Science Department of Community Development and Planning in the University. Becoming a social scientist has had its toll on me as now I have developed much more admiration for promoting social development than protecting fish to the extent that I did before. I know there has to be trade offs and these trade offs seem to have become much more challenging for me as the hard choices of protecting fish and the fishers seem to have become much harder in my case. In short I am much more interested in seeing that the societies that depend on fish get a better livelihood from it than they did before. Since co-management promises to do that, I would like to find out why and how it can do it.

## **3.2 Data collection techniques**

### **3.2.1 Primary data collection**

Primary data in this thesis is taken to mean the data that is resulting from the researchers direct contact with the people that were interviewed in connection with this thesis. The main types of primary data collection technique that is used in this thesis consist of data got from designed research questionnaires, focus discussions, face to face interviews, participatory

observation and photographs. All these data collection techniques have their various weaknesses and strengths. Below, I present in detail each data collection technique that I used.

### **3.2.2 Participatory observation data collection**

Observation as a data collection technique has been used in the social sciences for a long time. Particularly, participant observation has been used in a variety of disciplines as a tool for collecting data about people, processes, and cultures in qualitative research (Blaikie 2000; Kawulich 2005). I particularly use participant observation to mean the process of learning through exposure to or involvement in the day to day routine activities of the fishers in the fishing villages. I used in total one month of my field work time to visit fish landing sites by the day and just sit and talk to the fisheries officers as the fishers carry out their day to day activities.

I used this method of data collection for several reasons. In the fishing villages where the fishers do not speak my native language and their understanding of the English language is also limited this method came in handy. I also used it to validate the information that I received from the other sources of the data collection like the filed questionnaires. This was particularly in Kampala district at Gabba Landing site and Wakiso district Kasenyi fish landing site. This proved a very good method since participatory observation enables a researcher to check nonverbal expression (Kawulich 2005). Sometimes to get details I asked the fisheries officers to explain certain actions that I could not grasp. The fisheries sector in Uganda as I mentioned earlier in the previous chapter is quite diverse. Normally all the major ethnic groups can easily be found in these villages. I particularly was interested in seeing the kind of fishing gears in use and the size of fish that they were landing. In this way, I could assess whether they were practicing sustainable fishing method or not.

### **3.2.3 Interviews**

There are various types of carrying out interviews in qualitative data collection like the one I did. They can be face to face interview, structured interviews, focused group discussions and in-depth interviews<sup>10</sup>. In structured interviews, carefully worded questionnaire is administered; and in-depth interviews, the interviewer does not follow a rigid form. In the former, the emphasis is on obtaining answers to carefully phrased questions. The technique and level of usage of all these interview techniques depend on the expertise of the interviewer.

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<sup>10</sup> [http://www.ehr.nsf.gov/EHR/REC/pubs/NSF97-153/CHAP\\_3.HTM](http://www.ehr.nsf.gov/EHR/REC/pubs/NSF97-153/CHAP_3.HTM)

Interviewers are trained to deviate only minimally from the question wording to ensure uniformity of interview administration. In the latter, however, the interviewers seek to encourage free and open responses, and there may be a trade off between comprehensive coverage of topics and in-depth exploration of a more limited set of questions. In-depth interviews also encourage capturing of respondents' perceptions in their own words, a very desirable strategy in qualitative data collection. This allows the evaluator to present the meaningfulness of the experience from the respondent's perspective. In-depth interviews are conducted with individuals or with a small group of individuals. In my case, it is difficult for me to say which of those various types of Interview I used. I had a questionnaire that helped me during the interviewing but again; I neither restricted the questions to the questionnaire nor have any training in carrying out interviews. So I can say my interview was a mixture of all those various types.

### **3.2.3.1 Challenges and set backs in interviewing**

Interviews generally take place in a wide range of settings. This limits the interviewer's control over the environment. The interviewer may have to contend with disruptions and other problems that may inhibit the acquisition of information and limit the comparability of interviews. In my case, I did the interviews in the various offices or working places of the respondents. Interviews are often conducted with knowledgeable respondents, yet administered by less knowledgeable interviewers or by interviewers not completely familiar with the pertinent social, political, or cultural context. Therefore, some of the responses may not be correctly understood or reported. The solution to such constraints normally is to employ highly trained and knowledgeable staff and also to use interviewers with special skills for specific types of respondents (for example, same status interviewers for high-level administrators or community leaders). To be able to circumvent the above problem, I did the interviewing of personnel in the University, the executive directors of the various NGOs, Fisheries Resources Research institute (FIRRI) and The Department of Fisheries Resources (DFR) by myself. For the various groups of the fishers, I worked together with staffs in the district to help me access data from the various fishers. This was a wise decision given the limited financial support and time that was at my disposal.

Accessing information from various people in Uganda requires a lot of time. I had to use lots of time for fixing appointment, this involved fixing appointments on phone for those I could

get access to their telephone numbers. I used more than a month of fieldwork time visit to fix appointment and meet the various categories of people I wanted to talk to in direct interviews. In the Department of Fisheries Resource getting hold of the officer in charge of co-management activities in the BMU took several days. When I got her, making her sit and talk to me was again another task as she seemed so busy handling her official schedules. She had earlier on asked me if I could leave her to fill a questionnaire and I picked it later, a term which I accepted. She then fixed the time and day on which I could meet her and pick the filled questionnaire. I had a few discussions with her and she was quiet optimistic about the progress being made in the implementation of the BMU institution. She assured me that she was heading for designing and implementing a “model” co-management institution in the African continent, one that would be imitated by the rest, some kind of a demonstration I thought.

In the main university, Makerere University, a bachelor and Master's degree programme is run in Fisheries. My main interest in the University was to see if the studies of co-management were put in the curriculum. It was also difficult to get hold of the lecturers. After several days though, I managed. The meetings in the University turned well since I managed to interview the head of Department in the Fisheries Studies. The lectures that I talked to besides the professor were also very friendly and gave me their views about co-management as quickly as possible.

In the Local and non government office of the Uganda Fish and Fisheries Conservation Association, I needed also several appointments before I could get hold the executive director for interviews. In all these circumstances and in the District of Lira, I used direct interviews or face to face interview I should say.

### **Interviewing fishers**

These fishers do not know how to read and write. In Lake Kyoga, I interviewed these groups of fishers personally in their local languages since they all speak Luo a dialect similar to what I speak. I did not organised a focused group discussion but ones I started talking to them in the landing sites, I normally got more than ten of them gathering around and speaking to me. In Lake Victoria, the situation was different as I had to rely on interpreters. Some of the fishers however could speak understandable English language. I also speak and understand a

little bit of the Bantu language that is spoken in central Uganda. This helped me also in verifying what the interpreters were saying.

### **3.2.4 The ideas behind the research questionnaires**

A research questionnaire is designed to assist in the collection of primary data in this thesis. The questionnaires focused on asking questions such as where the idea about co-management came from, how it was communicated and to who, who initiated the discussions about it, who participated in the initial discussion and what issues were raised, who supported the ideas and why. Who were against it and why? These questions were to assist in ascertaining the processes that led to the implementation of co-management in the country. In this section, both the secondary data from other sources, mainly reports and primary data from the questionnaire<sup>11</sup> are presented.

### **3.2.5 Questionnaire distribution and returns**

Of the one hundred copies of questionnaires printed and distributed, only seventy six were returned. This represents about 76% of the total questionnaires received. Of these, 55% were filled by fishers. About five percent of that total percentage was done by the boat owners and the rest by the fishers who are hired by the boat owners. This was a good distribution because the non boat owning fishers are far too many compared to the boat owning ones. These groupings also well illustrate the BMU system.

25% by civil servants mainly at the local government level in mainly the district of Lira and only one of the questionnaires was filled by a staff from the Ministry head quarters. 10% were answered by fisheries local government staffs and BMUs members in landing sites along Lake Victoria that is Gabba and Kasenyi landing sites. This was done so that a comparison could be made between the BMU in Lake Victoria and those in Kyoga Lake.

The remaining 10% were filled by major NGO players in the co-management arrangement in the country that is UFFCA and ECOVIC together with a few members of staffs from Makerere University. A key NGO, The Integrated Lake Management project, a British organisation under the DFID programme in Uganda should have been interviewed, but since their project closed around the mid 2004, it was not easy to locate their staffs for interviews.

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<sup>11</sup> A sample of the research questionnaire is attached in the appendix section

This is a key NGO because it is the one that spearheaded the formation of BMUs in Lakes Kyoga, Edward and George.

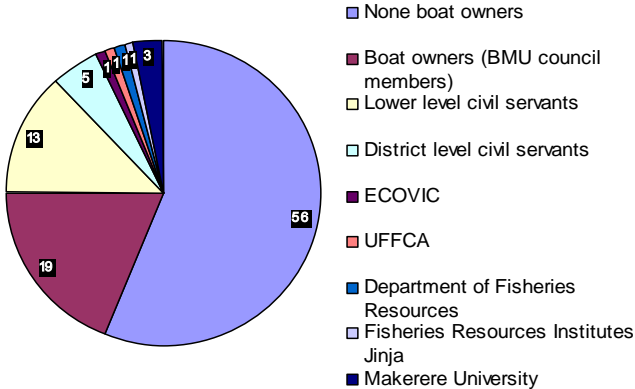


Figure 7 Graphical representation of the questionnaire distribution and grouping

**3.3 secondary data collection**

The main source of secondary data consisted of documents from the department of fisheries resource. This included the national fisheries policy document, the draft fish Act bill, the guidelines for beach Management units in Uganda and reports from Uganda Fish and Fisheries conservation association (UFFCA) and other documents, reports that I retrieved from the web about the activities of the integrated fisheries management (ILM)

**3.4 Rationale for choosing the specific study area**

This thesis bases its study into different fishing Lakes in Uganda, Lake Victoria and Lake Kyoga. This is a good pick since these are the two main source of Uganda's capture fishery and in both Lakes attempts have been made to establish the BMU system. These two Lakes also have the same ecological system, thus also almost a similar fishery. Lake Kyoga is joined by Lake Victoria through the Victoria Nile. The River Nile from Lake Victoria, its source passes through Lake Kyoga on its way to Egypt and finally the Mediterranean Sea. In these two Lakes, the fishery is also almost therefore the same since they share a similar history. The Nile perch which form a bigger part of the Ugandan fishery industry originally existed only in Lake Albert which is west of the Country.

In around the 1950s, the British colonial government introduced the Perch and the Nile tilapia in the waters of Lake Victoria and Kyoga to increase the fishery food base of the country from

Lake Albert. These two Lakes were originally home for many different species of Haplochromine which, are small bony fishes. These small fishes were not very efficient in terms of providing food for the people in the country. The Nile perch indeed has lived to its name as today it is a big fish food industry for the country. However this has not come without disadvantages. Negative ecological and social consequences are experienced because of this move. The Nile Perch has eaten all the Haplochromine and the other indigenous species of Lake Victoria leaving only one hardy species that has proved to be a contemporary march for the perch the Mukene, (*Rastroneobola Argentea*).

In Lake Victoria, I choose to work specifically in Kampala and Wakiso District. These are urban areas. In Wakiso, I choose Kasenyi Fish Landing Site. Kasenyi is a modern fish landing site by Ugandan Standard. The fish that is Landed in this landing sites get their way to the fish processing industries from which they are then destined for the international market. The fish export market in Uganda when referred to as international market then it is taking about countries outside Africa. The African Markets are called regional markets. In Kampala, I decide to stage my research in Gabba Fish Landing site. These locations were convenient for me to access and also I believed it would give me a good ground to compare the performances of the BMU institution in urban centres with those of lake Kyoga that is several miles away from the city thus very rural.

### **3.5 Summary**

This is a qualitative study of the BMU system in Uganda and uses both primary and secondary data in the analytical process. The study is based on both primary and secondary data, perhaps each contributing a fifty -fifty percentage. The field work time was very short to allow for carrying out “enough” primary data collection. The main type of data collection is direct interviews, questionnaire discussion coupled with participatory observation method. The study is based on the two most important capture fishery sources of the country that is Lake Victoria and Lake Kyoga. The two Lakes are chosen because they have a similar historical background and also a similar fishery. They are however sharply contrasting in their social aspect in that Lake Kyoga is much more rural than Lake Victoria which is more urban.

Working with the fisheries sector as a fisheries law enforcement officer has influenced my data collection abilities in main ways. This was both in disadvantageous and advantageous ways. Disadvantageous in that the fishers were not free with me and seem to be hiding a lot of

information from me since they thought I had gone with my former intention of arresting them and their nets. The BMU chairmen like wise where not very free with me while discussing their views about their new institution. My sight in the fishing villages in many cases triggered a reaction on the fishers in moves to hide their immature harvest, illegal fishing nest and gears. In many cases I was left without what to say as I did not know what and where to begin telling them from that, this time my move was different. I was a student/researcher and wanted to know more about their working systems. This kind of explanations were in many cases accepted but with some foreseen reservations

On another angle, the advantageous side, the fisheries staffs that I had worked with while at the districts and those that I met while working in the Department where very supportive in identifying the individuals that I wanted to talk to.

All these factors and my former position of working with the Department and a citizen from a third world country could have effects on the type of data that I was interested in. But all in all, I believe my data is reliable enough to discuss the issues that are raised in this thesis.



## **Chapter Four**

### **4.0 Theories and concepts behind the research**

The empirical work of this thesis involved looking at implementation and co-management in the fisheries management system of Uganda with specific emphasis on the BMU institution. The major research question arises from the noticeable differences and undesirable results between the actual goals of the establishment of the BMU system and the expected or desired goals of the same. This thesis therefore examines in detail the concept of co-management, and the theories behind it such as the theory of institutions, implementation and theory of development knowledge production. The sustainable livelihood approach and the institutional frame work analysis as presented by ICLARM and may form a basis for the data analysis is presented in the last section of this chapter. In this interest, the following sections and the subsequent sections address these issues.

### **4.1 The general concept of co-management**

Co-management draws a lot of support from social theory and cooperative action theory (Berkes 1985; Jentoft, McCay et al. 1998; Wilson 2003). The cooperative action theory dates back to times immemorial when mankind managed their natural resources using traditional methods or in a feudal manner by the ruling class that time (Berkes 1985; Wilson 2003). This practice, though, still exist today in many developing countries and in developed countries among indigenous people who depend on common pool resources, is greatly affected by the heavy commercialisation of the system (Berkes 1985; Charles 2001). The basic idea in this theory is that the state and or management agencies should recognise the traditions and capacities of communities to regulate access to and extraction from common pool resources (Berkes 1985; Jentoft 2004).

In the above, co-management theory assumes that since these societies and communities are dependent on the resources, they will have an inherent “in surable” interest in sustainable use of these resources (Jentoft 2004). This is like to say that the societies depending on these common resources will have an automatic force in themselves to guide their behaviour to exploit these resources rationally for themselves now and for their generations to come. Thus, promote the sustainability of the resource on which they base their livelihood on.

Jentoft, argues that society have norms and values which guide them in their use of natural resources. He argues that these societies adhere to certain norms and values which make them morally committed to their communities. This commitment in turn creates strong solidarity, trust and altruism among the resource users which again help or guide the rules of resource exploitation in society, he goes on. Stressing this point further, Jentoft says the ethical principles, social duties and responsibilities in society serve as guidelines for resource users to exploit resources rationally.

With the same argument, many proponents of co-management theory say that if resource users are involved in the designation, implementation and enforcement of fisheries laws, there is a high probability that they will be more willing to obey these laws as they will consider it to be something of their own (Jentoft, McCay et al. 1998). They will find it easier to accept and enforce them (Jentoft 2000). This is the issue of legitimacy which is brought to the forefront more when these theorists argue that cooperative action only fails when the state intervenes in resource management and fails to recognise the legitimate institutions set by the resource users. Hønneland (1999) points this fact out, by stating that it is mainly due to the fact that traditional knowledge, local commitments and social norms which are enough for sustainable resource management are not taken care of by management agencies today, in this case literally blaming government institutions. Charles (2001) in support of this idea gives examples in Asia in which colonial rule and the eventual introduction of state led management of the fishery system led to the collapse of several fisheries.

#### **4.1.1 The co-management approach in question**

Although the co-management approaches have several expected advantages, it is also noted to have myriads of challenges and shortfalls. Jentoft and McCay *et al* (1998), serious proponent of the co-management approach noted this by saying that the co-management approach has serious doubts, questions and criticisms regarding its *general applicability*. Fisheries management is more complicated than just management and more external factors affect fisheries management. Like Jentoft (2005: 2), puts it, *fisheries management problems often stem from outside the fishing industry and therefore must be solved at the point of origin rather than where they subsequently appear*.

Here, I highlight only two of the major sources of the critics of co-management. One source is on the social theory itself and the second is from the difficulties it puts in practice. In the second part I will compare co-management to decentralisation.

One of the most critical views about co-management come from the actor network theory (Holm 1999). In this theory, the social theories in which co-management relies so much is criticised for remaining in text books thus less prominent and more asocial than the biological and economic management strategies that are seen as more social because of their current popularity among political society. These issues raise more questions about social theories on which co-management rely.

#### **4.1.2 The Main Characteristics and Practicability of Co-management**

Co-management is noted to have no definite definition and thus no uniform method of application, design and implementation. (Jentoft, McCay et al. 1998; Castro and Nielsen 2001; Geheb, Crean et al. 2002; Hersoug 2004), its practice and design is also not definite. The design and practice varies among countries and also within a particular country and still more even within the same fishery. Pomeroy says, it is a partnership (Pomeroy and Rivera-Guieb 2006:7-8), other scholars and fisheries scientists look at co-management as some form of institutional arrangements (Development 1998: 2). The ICLARM/IFM/NARS scientists notable amongst these groups say that co-management is an institutional arrangement between the government and user groups to effectively manage a defined resource. In this case, they view co-management as lying between two policy prescriptions. The basic policies in this case are the centralised policy systems and the decentralised systems/ privatisation policies.

Co-management in practice follows the policies of decentralisation (Anon 1998).

Decentralisation in relation to natural resource management is criticised in many ways. Two of the most notable counts of such accounts are the ways in which it functions and the ways it affect the distribution of benefits (Carney 1995). The functional problems include scale, attitude of centralised authorities, reduction in quality of governance, problems of coordination, problems of coordination and reallocation. In terms of attitude of centralised authorities, decentralisation is argued to create units that are scattered, with the central authority still making a big decision in the design and establishment of new structures thus no effect on the power reduction of the central authority.

Given that scenario, decentralisation like co-management is argued to enrich and increase the quality of decision making. However, critics argue for the opposite that only at the centre are there individuals of sufficient quality and experience to understand the full implications of their decision-making and consequently to learn from the mistakes and successes of others. The result is that at the end decentralisation lowers the quality of decision making. Problems of coordination which arise from lack of coordination and communication between the various different levels of organs can significantly reduce the scope for learning and increase wasteful duplication of effort. It may also mean that central policy guidelines are overlooked, thereby contributing to a distorted distribution of benefits amongst stakeholders.

The other count of problem in decentralisation is the distribution of benefits amongst stakeholders. Most government decisions involve adjudication between conflicting demands, thereby creating winners and losers. Although, conceptually, changes in structure do not directly change the prospects of conflict resolution, critics contend that they increase the overall likelihood of elite domination. Decentralisation like co-management is argued to increase dominance of the elite in all administrative levels for example a small, elite groups of relatively well-endowed individuals may consistently triumph because they can better manipulate the decision-making process. A particular concern is that local governments or bureaucracies might be unwilling or unable to resist the demands of individuals, companies or consortia operating from the centre. Such pressures are most likely to be applied when resources are of high value as for example in the case of the fisheries resources of the world today. Even where elite groups do not dominate; there is a genuine danger that individual leaders (i.e. those who engage with decision- makers) pursue significantly different agenda from those of the other members, especially since groups often do not have effective ways of ensuring internal accountability.

Critics also argue that by multiplying the number of important decision- making points within the government structure and institutionalising greater discretion at a sub-national level, decentralisation opens the way for increased corruption and elite dominance within that structure itself. In summary, the argument for decentralisation like co-management is therefore not clear-cut. A number of preconditions must be met if it is to succeed. An action such as containing the powers of the elite in society, which are, by their nature, minorities and enhancing accountability creates much bigger challenges.

Critics arguments make it clear that the point of departure, in particular the existing configuration of power and interests, will have a profound impact upon the success of the process, measured in terms of the quality of natural resource management and the influence which this ultimately has on rural livelihoods. Systems which are currently over-centralised will benefit most from reform though sometimes centralisation is more nominal than real. If, for instance, the centre has insufficient capacity for control, day-to-day decision-making and operational management might *de facto* be highly decentralised and so the added value of formalising these arrangements minimal. However, it must be recognised at the outset that changing the structure of government to increase demand-pull cannot on its own solve the problems of bad government or poor resource management. Decentralisation increases the probability of informed decision-making but does not guarantee it. In the quest for mechanisms to improve natural resource management it may therefore be neither the most important factor nor the most immediate need.

Co-management has various names. Again, as Pomeroy points out, it can be referred to as participatory management, joint management, stakeholder management, multi-party management or collaborative management. In some instances it can also be called integrated management as in the case of integrated coastal zone management and also integrated Lake Management like in the Ugandan case.

A partnership arrangement with various stakeholders in a diagrammatic form as shown in the fig below also shows the decentralising aspects of co-management.

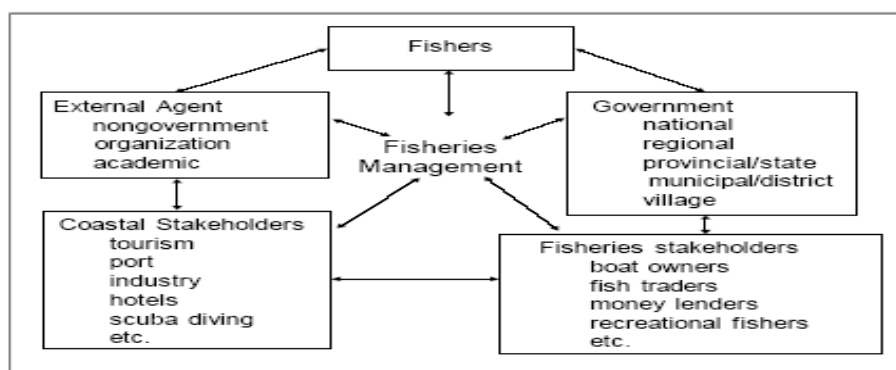


Fig. 1. Fisheries co-management is a partnership.

Figure 8 Illustrating co-management as a partnership<sup>12</sup>

<sup>12</sup> Taken from co-management : A practical hand book by Pomeroy and Rivera-Guieb and illustrated by Sen & Nielsen 1996.

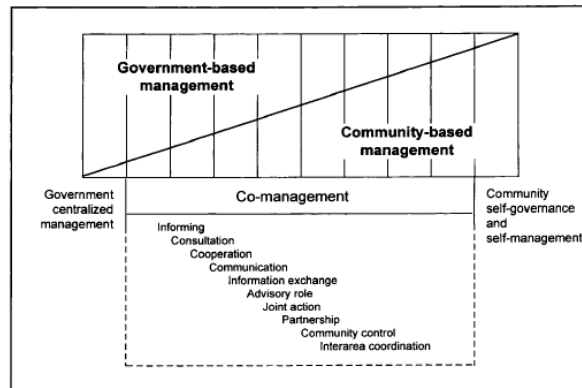


Figure 9 An illustrative diagram showing the various types and continuum of co-management<sup>13</sup>

#### 4.1.3 Types of co-management explained

Co-management also has various types, still stemming from its various different role sharing and responsibilities among its stakeholders. These types are broadly classified as shown in the diagram above and can be enlisted as Instructive, Consultative, Cooperative, Advisory, and Informative (Pomeroy and Rivera-Guieb 2006: 8)

According to Pomeroy *et al*, *Co-management is Instructive* if there is only minimal exchange of information between government and fishers. He explains further by saying that this kind or type of co-management is only different from centralised management in the sense that there exists a mechanism for dialogue with users , but the process tends to be government informing fishers on the decisions they plan to make. It therefore sounds like in this type of co-management the government decides but informs users before taking actions on the decisions made.

He also explains that co-management can also take *a consultative form*. In such a case, the government consult with fishers since there is a mechanism for consultation but the government makes all decisions. In short, no co-management in decision making, nevertheless, there is co-management during consultation. Co-management can also portray *a cooperative arrangement*, in which case the government and fishers cooperate together as equal partners. Still more, a co-management arrangement can take *on an Advisory form*. Here,

<sup>13</sup> Taken from co-management : A practical hand book by Pomeroy and Rivera-Guieb and illustrated by Sen & Nielsen 1996

fishers advise government of decisions to take and government endorse these decisions. The last type of Co-management arrangement is *an informative type* in which the government delegate authority to fisher groups to make decisions and then inform the government of these

Going by the above definitions, one can say that co-management in fisheries indeed has many definitions but in what ever form it is defined, it is definitely talking about involving resource users in the management of the resource. In line with the above, in this thesis, co-management is interpreted to mean user and or stakeholder involvement in resource management. The level of involvements, the roles taken by the different participants and the manner in which it is done, is therefore immaterial. What is important is that the resource users are given some mandate to participate in the management of the fisheries resource.

#### **4.1.4 Co-management as a tool for fisheries management?**

According to many analysts, the situations in the world fisheries today are bad. Several fish stocks are collapsing, environmental degradation is high and the issues with social justice and food availabilities are all not good (Kooiman and Bavinck 2005: 11-12). These issues are argued to be escalated by poor fisheries management methods by state agencies alone. Thus the biggest factorial support for co-management in fisheries comes from the fact that the current government or traditional command and control management style have failed (Arthur 2005: 3). The effect is a necessitating call for other alternative management strategy. An alternative management strategy in which resources users or local communities are „empowered to enhance resources conversation drives amongst other reasons.

Co-management, indeed, has a number of advantages (Pomeroy and Rivera-Guieb 2006:19-20). It is commonly argued that the co-management approach presents a “cheap” long-run management option for a fishery. Cheap long run because the implementation cost with regards to both time and logistics is quiet high in the short run. The issue with cost reduction comes from high management cost mainly arising from enforcing laws in the traditional (government alone) management system. In a co-management arrangement, as mentioned earlier, the fishers are involved in designing laws and or making management decision. The fact that the fishers are involved in the design and implementation of these laws means that they will probably be more willing to obey the laws and therefore less need for government agents in enforcement. If this be the case, then obviously the cost on government of

enforcing this law is significantly reduced. Besides the above theoretical advantages, the co-management approach also presumably is assumed to increase democracy in a management system (2003; 2003; Pomeroy and Rivera-Guieb 2006). The fact that in a co-management arrangement the resource users and other stakeholders share responsibility, authority and power, is therefore in a way showing that they are participating in the management of the resource. The participation in this case is seen as democratisation.

Promotion of research knowledge production is another issue. In many instances fisheries co-management is looked at as a vehicle for improvement in scientific research information gathering (Jentoft, McCay et al. 1998). Fishers by their close proximity with the resources undoubtedly have some knowledge that can be used to enhance fisheries research. The question that lags in the mind is how on earth a fisher group that do not have the basics of life will be convinced to spend their time collecting information for a government system that does what they seem not to understand.

In a nut shell, it can be said that co-management, as a concept, focuses on fishing communities, takes advantage of social value and culture of the local people and definitely a significant alternative of fisheries management or tool box from which fisheries managers, researchers and academicians can learn from.

## **4.2 The theory of Institutions**

According to Jentoft (2003; 2005) institution as a concept has many definitions and interpretations. These definitions can be broad or narrow. The Longman Dictionary of Contemporary English (2003) defines institutions as organisations, systems, buildings, introduced things in relation to laws or place, person or event that are important part of a place for a long time. Technically they are referred to as rules, aspects of culture, systems of norms, humanly devised constraints, instruments that ensure that rules are adhered to (Jentoft 2003).

What ever definition or meaning they carry; institutions like also in other management systems are argued to play a significant role in Fisheries management. For example Jentoft (2003) says “the efficacy of fisheries management is largely a question of institutional design and dynamics”. Barrett and Lee et al (2004) state that *practitioners and scholars increasingly*



*believe that getting institutions right is as important as and inextricable from getting incentives right if sustainable progress is to be made in either the conservation or development arenas, much less both.* Nobel (1999) notes that institutions are particularly important prerequisites to effective co-management since they form the entity from which decisions are made and collective action taken. Thus the role of institution in fisheries management is highly noted

However, with all these known importance of institutions to fisheries management, it is noted that institutions can both facilitate and hinder fisheries management. According to Nobel (1999), the development of co-management has been slowed by institutional constraints. Institutions according to Nobel are important pre-requisites for effective co-management since they form the entity from which decisions are made and collective actions is taken. However, much as institutions are pre-requisites for co-management they can both constrain or facilitate it, Nobel warns. Jentoft (2004: 205) also in agreement says that institutions, as for other sectors, are also crucial for the fisheries sector. Jentoft says among the remedies that we employ when things do not go well are institutions. Again, he also warns that much as institutions in many instances are taken as the solution and at the time, they can be the problem that we need to identify. A number of questions arise in this connection to the way in which the current BMU system is implemented in the fishery system of the country. Such questions can be enlisted as:

1. To what extend does the implementation of the BMU institution take into consideration the community structure of the people in question?
2. What are the major objectives of the BMU institution?
3. How much of these objectives are being met?
4. Is the Ugandan BMU a co-management?

### **4.3 The theory of Situated Knowledge Production and Implementation**

In the previous section, the basic general concept of co-management is presented. That marked the beginning of the theoretical presentation of this thesis. However, this thesis questions the applicability of the co-management approach, as a universal policy means in the solving of all fishery management problems in Uganda, the way it is portrayed by world development agencies. These questions stems from the apparent perceived difficulties of the implementation of this management method in the fisheries system of the Uganda.

Questionable also is the sustainability of impact of the management method where it has to some degree been successfully implemented.

In connection with the above, this thesis discusses the theory of implementation and also discusses the theory of development knowledge production. While presenting the theory of implementation, I pay particular attention to the top down approach of implementation. In the next section I look at an introductory analysis of the theory of knowledge production.

### **4.3.1 Theory of Implementation**

Pressman and Wildavsky (1979) explain the theory of implementation by analysing the processes involved in the implementation of an Economic Development Administration, the (EDA) programme in the US. Their major analysis focuses on identifying the factors that led to the failures to achieve targets, goals and objectives in the implementation of the job creating programme among the ghetto people in the USA city of Oakland. Isaacs (2003) does the same when she analyses the processes involved in implementing a new fisheries policy, the Marine Living Resource Act 18 of 1998 in South Africa, in a doctoral thesis. This thesis will borrow these two methods of analysis to try and understanding the theory of implementation especially with regard to public policies implementation.

This analysis is done bearing in mind that the co-management concept is now operated as a uniform public policy system (Hara and Nielsen 2003). Its implementation is a prerequisite for many public offices to have access to funding in their department (Hara and Nielsen 2003). It is a move, which one could sum up it shows that with a co-management approach, all should go well in a natural resource management system. The question of resource sustainability and social equity is all solved so to speak. But is this the case?

Isaac begins her discussion by pointing out how implementation in a traditional public policy making process has been done and viewed. She says public policy making traditionally takes on three stages, namely, policy formulation and design, policy implementation and lastly, policy evaluation. Isaac drawing on the work of Pressman and Wildavsky (1973), says that putting implementation in this way, hides the fact that it has its own logic, limitations and opportunities. What is most interesting in this study is that the role of government with implementation is not agreed on especially as far as successes and failures are measured.

According to Isaac, Pressman and Wildavsky give the state a pessimistic view whereas other authors such as Sabatier are optimistic as far as this role is concerned. She however identifies three main ways in which public policy implementation can be done namely top- down approach, bottom -up approach and then the dual approach.

The implementation of the co-management approach has taken the top down approach (Nunan and Scullion. 2004). For this reason, this thesis will focus its discuss in detail on only one theory of implementaion i.e. the top down approach although the other types of implementaion like bottom up and dual implantation theories also do exist and may be preferred.

#### **4.3.2 The top- down theory of Implementation**

In the top down approach, according to Isaac, the main focus is on the creation or making of a policy design with the intention of production of perfect implementation policies. In such a case it is assumed that policies are formulated at central government level and implementation is done in a hierarchical level with appropriate agencies, Isaac contains. She explains further that in the top-down approach, implementation is assumed to take place in stages. These stages involve the development of basic laws, setting the policy output or decision of the implementing agencies, examining the compliance of the target group with the decisions and looking at the actual impacts of the policies, both intended and unintended. The final stage involves looking at necessary revisions to the basic law.

In this way, the top –down approach of the theory of implementation requires perfect systems and conditions. This may be one draw back of the theory as perfect administrative systems may rarely occur or fail to exist altogether in some cases. In the case of the administrative system in Uganda this kind of environment may not exist.

The other conditions that is necessary for top- down approaches of implementation theories to produce desirable outcomes as mentioned by Isaac include *inter alia* stable socio-economic and political settings, competent and committed administrative staffs or implementers, few prohibition points, clear and consistent goals, organised support outside the policy domain and political will by the government to implement the policy.

As should be noticed from above, the top-down approach theory of implementation as presented by Isaac has a number of challenges. Notable among which are the limited number of players that should be involve in the design of implementation policies. The private sector and other important actors in the design of implementation are left out. It does not mention issues to do with the resources available for implementation which could also be a key factor on which successful implementaion may lie. But most importantly, it shows the kind of environment necessary for successful implementation of public policies to succeed.

In situating the implementation of the Ugandan co-management arrangement, we could then find out if:

1. the co-management approach is being implemented in a stable environment
2. the implementation of the co-management approach is being done by competent staff as required by the top down approach theory of implementation
3. the desired outcome of the co-management approach is achieved
4. unintended consequences of the co-management approach was anticipated

#### **4.4 Theory of development knowledge production**

From the social science perspective, fisheries management has a number of problems because it has focused so much on fish, as fish the vertebral animal more than on the human fishers (Caddy and Cochrane 2001). There is therefore a wider agreement that if fisheries management is to achieve its goals to a greater extend, then, there is a need to involve the fishers too in the equation solving of fisheries management (Berkes 1985; Caddy and Cochrane 2001; Jentoft 2004). This argument could be valid and well taken. However, fishers differ in scale and time. The fishers in different parts of the world have different characteristics. How then it is that fisheries management is almost given the same treatment and yet their nature varies to a large extent? The allocation of similar management principles could be justified by the near similarities in the end goals of fisheries management. Fisheries management generally has several goals and such goals can broadly be classified as biological, economic and social and sometimes political goals (Simon Jennings, Michel J. Kaiser et al. 2001). In other words, fisheries management can be argued to lead in the direction of bringing societal development in different societies with different cultures and different lifestyles. An examination of fisheries management in a developmental context may help drive this point home.

Degnbol (2004:132 - 155) discusses fisheries management science in a development context. This discussion is interesting in this thesis because of three main reasons. One, it questions the general practicability and universality of the source of knowledge used in the management of fisheries resources. Two, it shows the connection between fisheries management and poverty eradication. Three, it also to some degree answers whether there is a uniform universal correct way of managing fisheries. These issues tally well with the third objective of this research which is to identify the diverse cultural and economic arena and/or environment upon which universal management and or development policies operate. Note that this thesis believes that such identification may enhance knowledge production systems and allow for fewer contradictions in the implementation of such knowledge when transformed into policies. It is therefore worth examining these discussions now before we look at the results of fisheries management methods, especially the current co- management approach in Africa.

In this discussion, Degnbol presents fisheries science in its social context as mandated science in relation to management. Degnbol begins his discussion with a kind of rhetoric when he says:

*The juxtaposition of fisheries science and development immediately raises the issue of the specificity of science and research needs in relation to the social context. To what extent is fisheries science a reflection of the society in which the research is done and what is specific to fisheries science in a development context?*

Although Degnbol answers these questions by mainly focusing on the production of biological knowledge in fisheries management, this talk can logically be extended to the current waves in the production of social knowledge for fisheries management. Degnbol shows how fisheries management is related to politics by its distributing role of societal resources. In doing so, he refers to the colonial times mainly in Africa although he uses the terms developing countries, he gives examples from only Africa. He concludes this discussion by showing how exporting fisheries management knowledge led to the annihilation of the resources users from management roles as research institutions for the production of biological management knowledge were established.

Degnbol is not the only scientist who examines the production of development knowledge in a management context. In *Challenging Situatedness: Gender, Culture and the production of*

*knowledge* (Engelstad and Gerrard 2005), critical essays with „situated approaches to the production of knowledge are presented. Oware (2005: 101-123), one of the editors of the book specifically analyses the issues in the production of developmental knowledge with regard to development policy planning. Oware in this discussion shows how the generation of knowledge basing on only western culture has failed to produce acceptable results in areas where these knowledges are eventually applied. Oware uses the International Monetary Fund (IMF) and the World Bank Agricultural sector reform Programme in Ghana to illustrate his case. This same analysis should be extended to the fisheries field today in the developing world, and especially in Uganda where the same questions may be applied.

The concept of situated knowledge production that Oware uses and as presented by Engelstad and Gerrard (2005), acknowledges the fact that knowledge production especially theory building, methodologies and research practices take place within well defined cultures and societies. This is because the researcher's experiences, roles and statuses as well disciplinary perspectives impact on the production of knowledge. Co-management is a theory that is developed in the western world, and it takes into account the culture and social aspects of the people of the west according to the concept of situated knowledge production. Hersoug (2004), confirms this allegation.

Co-management in the developed world, where the idea was originally designed has to some extent been a success (Hersoug 2004: 71). Hersoug (2004) enlist these comparative successes to the failures in the developing world to preconditions that exist in the developed world in support of the co-management. Such factors he enlists as organised, literate fishers, organised state apparatus and organised co-management institutions. Two questions arise in this case. One, why has the co-management approach failed to produce similar successes in the developing world besides the factors that Hersoug mentions? Two, why is this approach still being promoted, given the undesired results in the pioneer countries in the continent? The analysis of the field data will answer these questions when we examine the where the idea of co-management came from in Uganda

#### **4.5 Effects of development knowledge**

Although Africa is a big geographical area with diverse group and mix of people, there are at least some measurable similarities among the differences. Geheb and Sarch (2002) in the back cover of their book entitled, *Africa's Inland Fisheries The management Challenge*, point

out such similarities when they give a description of Africa as characterised by crippling poverty, high rates of population growth, political instability, runaway inflation rates and often less than integral governments. The point here is that African countries and people are to some degree similar. Given that, looking at co-management in African countries where the practice has been more developed and grounded may help one to situate and compare the one in Uganda more accurately.

Hara and Nielsen (2003: 81- 97) give experiences with fisheries co-management in Africa. In explaining the reasons for implementing co-management in African fisheries, they acknowledge the classic reasons for such a move by mentioning issues such as the failure of governments to effectively manage capture fisheries, the role of co-management in establishing fishing property rights and the ability of co-management in resolving conflict. However, in a more elaborative way, they explain the connection of the implementation of the co-management approach to the Structural Adjustment Programme (SAP) in most African countries. In this way, they not only tie co-management to democratic processes in the continent but also show how it is connected to donor funding priorities. They argue in a retrospective style by drawing on the colonial days and making a conclusion that the current co-management wave through the continent is very similar to the British and French indirect rule systems.

As regards the objective of co-management in the continent, again Hara and Nielsen give a splendid explanation when they state that in most cases, the primary stakeholders (the users and the state in a co-management arrangement share a *broad common goal* and that is the recovery and or sustainable exploitation of the fishery in order to enhance the social and economic benefits of the user communities (Hara and Nielsen 2003). In the real sense, this common objective usually totally contradicts. Where as, the government is interested in ensuring biological sustainability of the resources and maintaining biodiversity, for the fishers, short term economic objectives tend to be inevitably higher because of the dire economic needs.

Hara and Nielsen also link the objective of co-management to demands made by donor communities for political democracy and transparency. They note that although this is a laudable move, in most instances both the government and the user groups are caught unprepared. The result has been that governments accept user participation to supplement

their cash strapped budgets and users remain suspicious as to why governments are turning around and telling them that they have to participate in the management process, at times to the point of being forcefully co-opted.

#### **4.6 The Sustainable livelihood approach**

According to Allison and Ellis (2001), the sustainable livelihood approach to poverty reduction generally advocates for the use of available assets within a community to solve community problems. This approach also realises that access to such assets in any given community are also modified by other factors such as social relations, institutions and organisations among others. Again, it specifies that this access is also done in context of trends and shocks within a particular community. These combinational factors in the community then result in individuals within the community designing livelihood strategies which are composed of activities based on available resources within the community. Such resources can be renewable or non-renewable. The effects that these activities have on the society will impact on their eventual livelihood security and environmental sustainability.

In summary, the sustainable livelihood approach centres on the links between individual, or house hold assets, the activities in which households can engage with a given asset profile and the mediating processes ( institutions, regulations etc) that govern access to assets and to alternative activities (Allison and Ellis 2001: 378).

What Allison and Ellis are saying about the sustainable livelihood approach is that management interventions incite adaptive responses on fishers with well calculated adoptive livelihood strategies. Hersoug (2004) in agreement says it is important that development agencies and knowledges take note regarding rights and redistribution. Otherwise, development interventions like the BMU institution may tilt the balance between the poor and the rich even more in favour of the already rich. Given that, it is important that management decisions are taken while taking into consideration the fact that other component of livelihood strategies, other than fishing also does exist. Thus, it is important that management policies and practices are taken while recognising this complexity of livelihood strategies. While doing so, such policies should recognise the assets that the societies have and actions that put constrain or blockage to the access of such resources should be avoided.



## 4.7 The Institutional frame work analysis

According to Norman and Nielsen et al (1997), co-management is defined as a form of institutional arrangement. Thus an institutional analysis that examines how institutional arrangement affect user behaviour and incentives to coordinate, cooperate and contribute in the formulation, implementation and enforcement of management regimes can be used to analyse it. It is therefore convenient to use a generalised institutional analysis frame work to assess conditions which facilitate or hamper successful fisheries co-management. In this way, institutions are defined as both formal and informal rules which regulate conduct in society. The institutional frame analysis distinguishes between institutions as rules and the strategy of players in an institution. The strategy of the people in an institution is referred to as organisations.

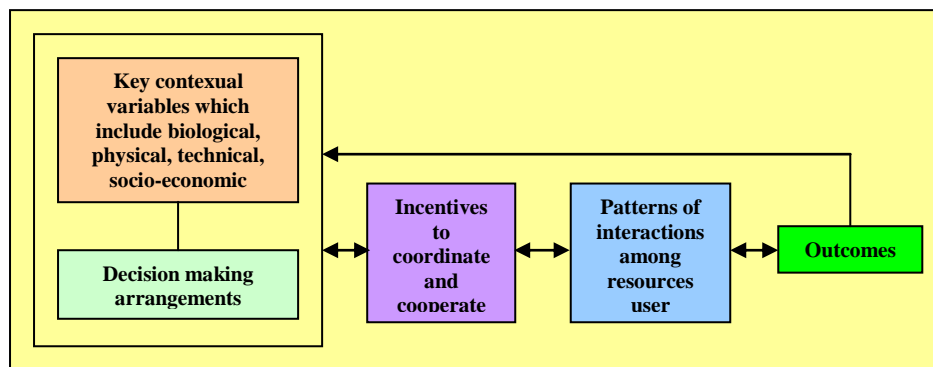


Figure 10 The diagrammatic representation of the institutional framework analyses  
(Normann, Nielsen et al. 1997)

Quoting from Ostrom (1990), Norman and Nielsen *et al* states the connection between rules and rights they explain the connection between rules and right by explaining three main types of rules that is the *operational rules*, *collective choice rules* and *constitutional choice rules*.

In this case, the contextual variables and the decision making arrangements concern how institutional arrangements, rights and rules are made.

## 4.8 Adopting Co-management in fisheries in Uganda; Fades or Fashion?

A number of studies done in the African continent show that the co-management approach, although it is still early to draw conclusions, is far from being successful especially in meeting the goals of fisheries management as part of development (Sverdrup-Jensen and Nielsen 1998; Hara and Nielsen 2003; Hersoug 2004). The co-management approach is adopted later in

Uganda compared to the other countries in the continent. Countries with much earlier experiences in the continent that Uganda may learn from include among others Malawi(1994 ), Zambia, Tanzania and Kenya just to mention a few (Jentoft, McCay et al. 1998; Geheb, Crean et al. 2002; Hara and Nielsen 2003). Two questions arises in this connection. One, what lessons can Uganda learn from the experiences of the rest of Africa and two ,why has then Uganda adopted the new management style in its fishery given its uncertain results in terms of achieving management objectives in the continent?

In answering those two question that highlight the fads and fashion nature of adopting co-management this thesis draws on the work of Hersoug(2004). Hersoug (2004) drawing from organisational theory, explain how effective models for development are formed and used in the developing world. In this explanation, Hersoug points out two modes of recipes, which he explains as a detailed instruction for how to handle development and/or fisheries management as part of development. One type of recipe is what he calls classic rational organisational perspective or the organisational tool perspectives. According to Hersoug, this particular recipe is seen as solutions to real problems experienced in the organisation.

The other type of recipe, he points out is the symbolic recipes. In explaining this type, Hersoug states that an organisation environment somehow demands certain standards with which an organisation has to comply if they are going to survive. He goes on and explains that if the organisations are to be considered legitimate, then, they will have to recognise the institutional expectations and try to live up to those expectations.

However, incorporation of such standards also has effects on the self perception within the organisation in terms of copying organisations that one would like to be resembled and be identified with. Such is a case of typical imitation he states. In such a case, organisational problems may occur after the new recipe has arrived and the searching processes for new solutions is not necessarily rational but it is important to portray oneself and the organisation as rational. The requirement in that kind of environment is often perceived as a demand for continuous change. Such is also looked at as a symbol for of being modern. Thus when old recipes gradually fall in disrepute, it is not because they are bad or did not function well but because they are considered old fashioned and out of date.

Jentoft and Mikalsen (2003: 290) while explaining the issues of representation in co-management had this to say in his concluding remarks. *Co-management in the fisheries seems to have acquired the characteristic of an institution in Philip Selznick's sense of the term : arrangements that are infused with values beyond the technical requirements of the task at hand. As an institution, co-management has come to symbolise participation, collaboration democracy and fairness and for that matter, it seems to prevail almost irrespective of how well it performs.*

In this explanation, Jentoft and Mikalsen *et al* shows how the adoption of co-management has in some cases become symbolic or in the words of Hersoug, fads and fashion.

#### **4.9 Summary**

This thesis bases its argument on the concept of co-management. Thus the concept is presented and discussed because it is a modern phenomenon in fisheries management and assumed to present greater solutions to fisheries management especially in terms of societal development. Here, societal development is taken to refer to equitable distribution of resources from the fisheries and at the same time maintaining resource sustainability. However, as noted in the presentation of the concept of co-management, co-management is broad in both practice and theory. One of its notable characteristics is that it concerns decentralisation of resource management, and puts into consideration the issues of increasing users' participation and power sharing in fisheries management. There are various reasons that are used for promoting fisheries. Some of the most important ones are that improving management strategy through enhancing legitimacy in a management system and thus reducing also management cost. This is then supposed to result in sustainable exploitation of a resource.

Also, the concept of co-management is developed basing on strong social theoretical settings, which are not also without questions. Social practices, norms and cultures vary in time and space. Social equity which is supposed to be enhanced by the practice of co-management may therefore end up being eroded more in the processes of implementation, and institutional building since co-management practices and implementation procedures may not have a strong knowledge base in other communities especially where its original precursor is lacking as shown by Hersoug (2004).

The theory of situated knowledge production advocate for the consideration of cultural differences in the production of scientific knowledge. I have used it in this thesis to highlight the challenges involved in designing development knowledges in different cultural environmental setting and universally applying it in other cultures.

The theory of implementation points at the difficulties involved in implementation of development programmes. The major emphasis from it in this thesis is that even implementaion of public policies requires certain environments that may be lacking in some places.

Institutions are important prerequisites for efficient fisheries management. However, much as they facilitate fisheries management they can also impede it (Nobel 1999). Institutional design and operation needs knowledge but above all financial support. This may be a big challenge to other societies and introduce spiral multiplier effects with more negative impacts on the resource sustainability.

The institutional frame work analysis combined with the sustainable livelihood approach presents an appropriate means for analysing my data because the BMU is presented as an institution.

## **5.0 Chapter Five**

In this chapter, I present the general setting of the BMU system. I give a broad background of how the idea about the Beach Management Unit (BMU) was initiated in Uganda and what it is considered to be its role in fisheries management. I also present specifically the BMUs in the two studied areas. Before that, I will present the Lake Kyoga region. I will specifically look at the lango region and particularly Lira districts together with the new districts of Amolator. To be able to draw a comparative picture, I also present briefly the fishing villages in Wakiso and Kampala districts.

### **5.1 Co-management in the Ugandan fishery system**

The co-management idea was developed in the fishery management system of Uganda around the 1990 s. The main reason put forward for adopting this management method is that the fishery situation found itself in the most unbearable complex critical crises (Ikwaput-Nyeko 1999). The Department of Fisheries Resources which, is under the Ministry of Agriculture, Animal Industry and Fisheries plays a limited role in the implementation of this management approach in all the fishing villages in the country with the support and collaboration of NGOs (Nunan and Scullion. 2004). Since the Department is under funded by the government to effectively carry out its duties, both international and national philanthropist find their role handy in such situations. NGOs have thus been very instrumental in the design and implementation of this management approach.

### **5.2 From Landing Site Committee to BMUs; the birth of the modern co-management methods**

The BMU is a new name but their actions and activities are not very different from the earlier association called the Landing Site Committee (Anon 2003b). The Landing Site Committees that has been replaced by the BMUs were local fisheries institution that consisted of members in a fishing village and were headed by the chairman called a *Gabungu*. They also liaised with the government to enforce fisheries laws and also assisted in other administrative work besides being the leader in conflict resolution (Geheb, Crean et al. 2002). The *Gabungu* institution is something that the fishers themselves initiated. Their appointment is something that is only known by the fishers. However, most fishing villages in Uganda had this arrangement although the idea originally came from the fishing villages around Lake Victoria.

The *Gabunga* however is in several occasions noted to be the richest fisherman and the one involved in the most illegal fishing practices. Normally he has the most undersized fishing gears and is involved in the most illegal fishing methods like seining, using monofilaments nets among the various illegal fishing activities that exist in the fishery.

The main difference between the Landing Site Committees (LSC) and the Beach Management Units is that the members in the committee of the Beach Management Units (BMUs) are democratically elected and a statute has been enacted and passed to make their operation have more legal standing (Anon 2003b). This legal status is given as a way to accomplish the requirements for a co-management arrangement. In this way, it is argued that the BMUs are more organised than their former self, the Landing Site Committees. The issue about democratic elections of the BMUs are not trivial because what is seen in the Ugandan fishery system is that those elected to this office are required by law to have some basic education by being able to read and write. This is a requirement which the majority of the fishers do not have. This, therefore, means that such people are already left out from the beginning of being active participatory members in the BMUs system.

It therefore passes that although the BMU institution is mandated to involve the participation of the poor and disadvantaged members in the fishing villages, this does not happen. Thus the „balanced committee that consist of women, men and the poorest of the poor fishers together with the youth is not actually balanced. The representative members that form the committee are democratically elected by a general assembly. The General assembly consist of all the registered fishers in a fishing Village and those that in a way or the other derive their livelihood from the fisheries for example boat builders, fish mongers and gear dealers. The BMU committee presides over all the assembly of a fishing village. The assembly can be summed up to mean all the people in a fishing village, commonly referred to as landing sites (Anon 2003b).

These committees at the landing site connect with the district organ in that all the BMU committee in a landing site have a chairman who represents their interest to the district. The various chairmen also form a committee which together with other vital offices at the district level, form a national group for national representation (Anon 2003b; Nunan and Scullion, 2004). The vital offices in the district level normally consist of the district fisheries officer,

environment officers and other co-opted non governmental organisation with interest in fisheries cum environmental matters. To form a wider net work, these committees of BMU in the Lake Kyoga region, have then join together to form a bigger lake wide representation through the district administrative leadership. This bigger and more national representation is called the Lake Kyoga integrated Management Organisation (LKIMO) in the case of Lake Kyoga (Anon 2003b; Nunan and Scullion. 2004).

In sum, the co-management arrangement in Uganda are the legal institutions of fishermen that have just been „em powered by the governm ent through the enactment of a new law to support community participation in fisheries management. The Fisheries draft Bill (2005) and the BMU guidelines (Anon 2003b) are the two basic laws that support their activities. The new institutions, the Beach Management Units (BMUs) are made of groups of fishers and fisheries stakeholders at the local level or specifically at the fish landing sites. The BMU has a committee that take the lead to liaise with the government and other stakeholders in representing their various communities in fisheries management. The BMU committee is however dominated by the relative richer members in the landing sites.

### **5.3 The Beach Management Unit: Who they are, what they do and how they work.**

Beach management units form the basis for fisheries co-management in Uganda. The term Beach Management Unit has been adopted through out Uganda, Kenya and Tanzania for community based fisheries co-management institution (Nunan and Scullion. 2004). The fish Beach management rule (2003) provides for the establishment of BMUs in all gazetted fish landing sites in Uganda. All fishers must legally register with the BMUs to legally operate according to this rule. BMUs is envisioned to provide the more marginalised sections of the fisher community with a stake in planning and decision making and also provide an entry point for development intervention in fisheries management (Nunan and Scullion. 2004).

#### **5.3.1 The objectives of the Beach Management Units (BMU)**

The guidelines for Beach Management Units (Anon 2003b), the objective of setting the BMU institution is broadly spelt out and envisioned as; one, provision of a legally empowered institutional frame work that brings together all fisheries stakeholders, including the poor and marginalised , and actively involve them in decision making for the sustainable management of fisheries resources.

Two, providing fisheries stakeholders with an officially recognised organisational role in partnership with local governments and the state in the co-management of fisheries resources in accordance with prevailing policies and laws . Last but not least, The BMU institution is also foresighted to improve the welfare and livelihood of people in fisheries dependent communities through improved planning and resource management good governance, democratic participation and self reliance.



Figure 11 A poster for promoting the BMU institution but most importantly to show the country s poverty connection goal to fisheries management

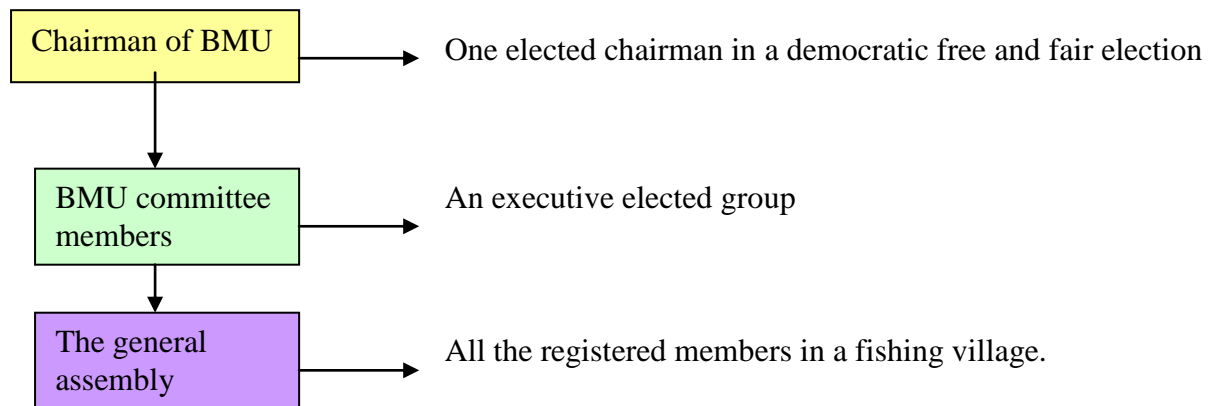
### 5.3.2 The structure of the BMUs

Under the guidelines for beach management units in Uganda (Anon 2003b), Chapter six, all the people engage in fisheries –related activities at any officially gazetted or designated fish landing site will organise themselves to form a Beach Management Unit (BMU). The terms and conditions for being a BMU member are further stipulated by the same document as follows; One, the stakeholders in a BMU will include boat owners, fishing crew members ( the non boat owning fishers) also called *barias*, fish mongers, artisanal fish processors, local gear makers and repairers, boat builders fishing input suppliers and industrial fish processors agents.

Besides having those characteristics, to become a BMU member, a person must register and be vetted by the local authorities at inception, as stipulated by the BMU guidelines (Anon 2003b:17). If one is a new entrant to a fishery, such must apply to the BMU committee for approval to operate at a landing site. In an open access fishery like Lake Kyoga, such persons, then may apply for a boat licence. For none Ugandans, they must apply to be in a BMU committee and such applicants should have valid work permit as stipulate by the Immigration laws of Uganda. In such cases, the local government must be involved in the processes



leading to such registration. Besides this, such none Ugandans must also comply with the statutory instrument no.73 of 2001.



*Figure 12 Structure of the BMU institution in hierarchical orders*

### **5.3.3 The Beach Management Unit committee**

BMU communities are guided by an elected committee. The committee is called a BMU committee and their election is done by the BMU members that are referred to as a general assembly in accordance to the BMU guidelines 2003. The committee consist of 9 to 15 members and their membership will be drawn from all the landing sites included in the BMU area. To ensure that the committee is well balanced, the BMU guidelines States that 30% in the BMU committee should consists of boat owners, 30% non- boat owners, 30% the other fisheries stakeholders in the landing site except the fishmongers that take 10% of the positions in the BMU committee.

### **5.3.4 The role of the BMU committee**

In accordance to The Fish (Beach Management) Rules (2003:45 - 47) section 10 (a-v), The BMU committee perform the following duties; One, maintain and keep in collaboration with central or local government register of all boat owners and their equipment and also register of all the members in a BMU. The committee will also participate in selection of boat owners for licensing and vetting of the fishers in collaboration with the local authorities. They will also ensure that licences for fishers and vessels operating from the beach are issued in collaboration with designated authorised licensing officers.

Together with central and or local governments ensure safety guidelines for fishing operations in accordance with the fisheries laws of the country. They will also enforce Fisheries Quality and assurance rules and sanitation guidelines as per the BMU rules. In addition to those responsibilities, they will also give authority through by laws for fishers operating from the beach to fish in a particular area, for a particular species using recommended and legal fishing gears and methods. The Committee will also record, inspect and grant permission to visiting boats with their crews and equipment to land at the beach. In collaboration with the central and or local government, prohibit fishing in certain zones for specified periods for purposes of fisheries management.

### **5.3.5 Is the Ugandan BMU system Co-management and a new Institution**

Co-management come in different forms and as Pomeroy and Jentoft say there is no formula for applying co-management. Other scholars say this present a major weakness in the way it is then designed and applied. Due to these problems, others then argue that it should be given a broad definition to make it more fitting where as others argue for a narrow definition to narrow. Still more, others just request for it to be given proper definition (Hersoug 2004).

The scientist of ICLARM and IFM look at it as an institutional arrangement, Pomeroy say it is a partnership between government and stakeholders in a given resource. Jentoft gives it a narrower definition that it has to be a partnership in which resource users can make decision. Given the entire above scenario, it is difficult to say whether or not the BMU institution in Uganda is a co-management. However it is considered one and named as a community based co-management.

### **5.3.6 The Lango Sub Region of Lake Kyoga**

In this section, I give an introduction of the Lango sub region of Lake Kyoga, highlighting on the geography, economic activities and the general socio- political life style. I first give a background of the general Lake Kyoga region. Given also is a brief look at the fishery system in that region. As an introductory part, I present the whole general picture of Lake Kyoga<sup>14</sup> before specifically looking at the Lango sub region.

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<sup>14</sup> Information source:

[http://www.fao.org/documents/show\\_cdr.asp?url\\_file=/docrep/005/T0473E/T0473E11.htm](http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/005/T0473E/T0473E11.htm)

### 5.3.6.1 Lake Kyoga<sup>15</sup>

Lake Kyoga is a large shallow Lake complex of Uganda, about 1,720 km<sup>2</sup> in area and at an elevation of 914 m. The Victoria Nile flows through the lake on its way from Lake Victoria to Lake Albert. The main inflow from Lake Victoria is regulated by the Nalubaale Power Station Formerly Owen falls dam in Jinja. Another source of water is the Mount Elgon region on the border between Uganda and Kenya. While Lake Kyoga is part of Great Lakes system, it is not itself considered a Great Lake. The lake complex is nowhere deeper than about 5.7 meters, and most of it is less than 4 m in depth. Areas less than 3 m deep are completely covered by water lilies, while much of swampy shoreline is covered with papyrus and water hyacinth. The papyrus also forms floating islands that drift between a number of small permanent islands. Extensive wetlands fed by a complex system of streams and rivers surround the lakes.

46 species of fish have been recorded in Lake Kyoga, and crocodiles are numerous. Excessive El Nino rains in 1997-1998 have resulted in exceptionally high water levels, causing large islands of papyrus and water hyacinth mats to become dislodged on the lake and to accumulate at the lake's outlet into the Victoria Nile. This blockage has caused the water level to become even higher, flooding about 580 km<sup>2</sup> of the surrounding land (DWD 2002) and resulting in population displacement and severe socioeconomic damage. In 2004, the Egyptian government granted Uganda a gift of 13 million US\$ to streamline the flow the Nile at Lake Kyoga. As of 2005, the outlet is still for a large part blocked.

Lake Kyoga is the second biggest water body in the country. The Lake is a complex in that it is a group of small lakes joined together by swamps. It is located at 1°–2°N; 32°20'–34°20'E on an altitude of 1,033 m. Its geographical data size of surface area is between 1,720 km<sup>2</sup> to 2,700 km<sup>2</sup>. This is because the actual size varies with time and season. During the rainy season the lake expands and the swamps are joined together. It is also noted that during years of high water level (i.e. 1965–71) the entire Kyoga complex becomes a confluent sheet of water; during years of low water (i.e. 1983) the complex breaks up into numerous distinct lakes. The major Lakes and swamps that form the Lake Kyoga catchments areas consist of Lakes Kwana, Lakes Kyoga itself and Nakuwa. These three are among the biggest part of the lake. Smaller lakes include Lakes Bisina (= Salisbury), Opeta, Nyaguo, Nyasala, Adois,

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<sup>15</sup> [http://en.wikipedia.org/wiki/Lake\\_Kyoga](http://en.wikipedia.org/wiki/Lake_Kyoga)

Kadika, Kondo, Namasajeti, Naragaga, Nabigaga, Nawampasa, Nakuwa, Kawi and Lemwa. The main swamps are Sezibwa Naigombwa, Umpologoma and Manafwa Lwere Small lakes & swamps, Swamps of Lakes Kwania & Kyoga Swamps between Olya and Lake Kwania.

### **5.3.6.2 The fishery**

The complexities of the geographical setting of Lake Kyoga shows in the way the real fishery is also complicated. These realities in complexities manifest in the numerous remote and secluded landings situated in the swampy and indented shorelines of the Kyoga complex. These bring about shifts in access channels to fishing grounds and landing points. In this complexity also come the marked seasonal variations in fishing activity due to migration of fishermen both between different landings and between the fishery and other economic pursuits. The Kyoga fishery was characterised as one which was in a stage of gradual development in the eighties. Major information, which are necessary for proper fisheries management like the landing statistics and other precise information on all landing site locations and activity levels are generally lacking.

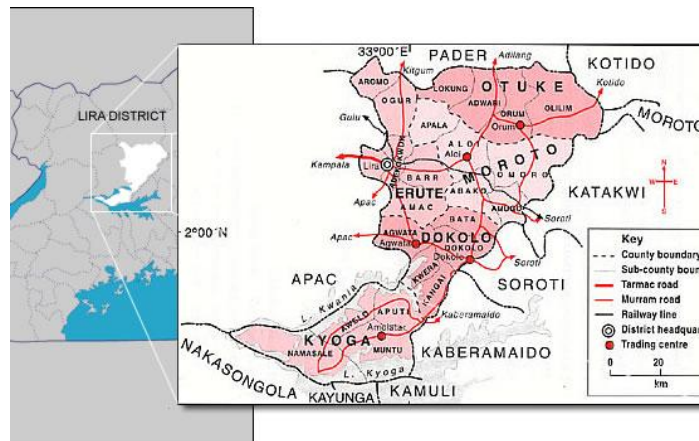
### **5.3.7 The Lango Sub Region of Lake Kyoga**

The Lango sub region is located at the Northern part of Lake Kyoga (see fig). The Lake Kyoga fisheries management is based on information acquired through fisheries officers based at the sub-county administrative headquarters. These fisheries officers are commonly referred to as fishguards. The actual fish landing sites are often miles away from the sub-county. In such a context, any guess about the contribution of fisheries management information from areas not covered by the fishguards is bound to be crude and of uncertain accuracy. The fishguards are not guided by any objective programming of their visits. A realistic guidance for estimating the total number of fishing days or the seasonal variations at any given centre presents a big challenge. The fisheries management data used to rely on catch data from the markets. However, this also has a weakness as there is also the possible danger of double counting when arrivals at the primary markets are added to catches determined from records at the landing points. At landing points that are located close to primary markets, there is a possibility of some landing activity even on non-market days which is not presently accounted for. The present way of documenting fish statistics also do not provide for breakdown of total catches by seasons, regions or type of gear.



### *Socio-political status*

The Lango people have often been victims of the volatile politics of Uganda. The first Ugandan prime minister and two time president, Milton Obote, is a Lango. During the 1970s, state inspired violence by the Government of Idi Amin was used to decimate the elite of the Lango and their neighbours the Acholi. Together with the Teso and Acholi, the Lango have often been victims of attacks by Karamojong cattle-rustlers. The current 19-year rebellion against the government of Uganda by the Lord,s Resistance Army (LRA) is behind a massive population displacement in this region. Rebels continue to attack camps for displaced people, burn homes, loot, abduct children, rape and kill, in a brutal campaign of violence. The lake Kyoga region which is situtaed in the rather soutern end of the country absorbs most of these displaced peoples (See the map Lira district).



*Figure 14 The location of Lira District in connection with Lake Kyoga.*

### *Lira District*

Lira is located in Northern Uganda. It is 347 km from the Capital City Kampala and is bordered by the districts of Pader in the North, Kotido, Moroto and Katakwi in the East, Kaberamaido in the South East, Kamuli and Kayunga in the South, Nakasongola in the South West and Apac in the west. It lies between the longitudes  $32^{\circ} 51''\text{E}$ ,  $34^{\circ} 15''\text{E}$  and  $1^{\circ} 21''\text{N}$ ,  $2^{\circ} 42''\text{N}$ , with an average altitude of 1,170 metres above sea level. Lira district was formed in 1974 when the then Lango District was split. Its native inhabitants are the Langi, who remain the main ethnic group in the district. The district has a total area of 7,251 sq. km of which 1,100 is wetland, and 6,151 sq. km. land. Lira district comprises of the six counties and they are Erute, Dokolo, Kyoga, Otuke, Moroto and Lira Municipality. The district has a population of 751,129 according to the 2002 population census. This puts its national population share at

3.1 percent. The distribution is at 380,127 female and 371,002 male. Annual district population growth rate is 3.5 percent per annum.

In 2005, because of political reasons hidden in the policies of decentralisation, the district of Lira was divided into three districts. The sub counties of Kyoga and Dokolo became districts of their own. The Kyoga new district is today called Amolator.

Income levels in Lira are low, with average per capita income standing at Ush 170,000 per annum and households below the relative poverty line at 53 percent. Those living in hardcore (absolute) poverty are 33 percent. Central government transfers fund 87.4 percent of the district s budget. The annual rainfall range is between 1,200-2,000mm, which peaks in the months of April, May, August and October. The average temperature is 30<sup>0</sup>c but there are various variations: Average maximum is 25.50c; Average minimum is 25.50c; and Absolute maximum is 33.60c. Wind runs during the rainy season stands at 1-4m/sec, compared to the dry season run of 4-8m/sec. The average altitude is 1,170 metres above sea level, with the highest point being the Peak of Otuke (5,214ft).The vegetation is mostly savannah, with a few stretches of tropical savannah woodlands. These give the district large tracts of flat land with potential for large scale mechanized agriculture.

#### *Economic activities and natural resources*

Lira district is one of the largest producers of oil seeds, which include simsim, sunflower and shea butter – the latter an important crop that is only starting to gain ground in the district as a major income earner. Over 28 percent of the district is under agricultural use. 0.8 percent is under forest cover, which is 9,099 ha. 14. 4 percent is under water – hence providing much potential for rice production. The average land holding per person stands at 0.54 ha.

Cattle are a major livestock item, and stand at 118,337 heads. Goats are by far the most numerous animals at 285,000; pigs at 7,805 and sheep 12,000. Chicken is reared in abundance and the last count put it at 1.4 million. Lira is piloting six major government programmes aimed at increasing agricultural productivity and diversifying the crops grown. The latest is the National Agricultural Advisory Services (NAADS) and the Information and Communication Technology (ICT) project codenamed ADMIN-NET. The district has 86 primary societies that group farmers and small traders with the intention of improving crop production and marketing. There are 24 commercial farms in the district and the population in the subsistence economy is 81 percent.

### *The fisheries sector*

The fisheries sector although known to contribute tremendously to the district tax base is not reflected in many districts documents. Fisheries activities are located in the most rural parts of the district and road access to fishing villages is always a night mare. Travelling from Lira to various the fishing villages in the Lake Kyoga areas can take more that eight hours by trucks and not less than four hours by bus. There is one bus that leaves the furthest end of the Landing site at four in the morning and reaches Lira town by about ten o'clock. For those transporting fish and travelling this may be the only source of transport for the day. Lake Kyoga is located about 150Km away from Lira town. The near by capture fisheries sources are not productive enough.

### **5.3.9 Summary**

Co-management in Uganda came in as an alternative tool in fisheries management. The department of fisheries resources because of its limited financial and human capacity plays a minimal role in the implementation and all the activities involved therein. The bigger part of the task is done by NGOs and local umbrella non government organisations also still with the support of international donors.

The lango sub region of Lake Kyoga in which this study was done is one of the most remote rural areas of Uganda. The fishing villages are not easy to access due to poor road infrastructures and transport availabilities. Social services like government hospitals, schools and government administrative centres are miles away. These conditions make the suggestions for investing management responsibility of the fisheries resources even more appealing.

The Langi people together with their neighbours have lived with war that has seen a tremendous trek to the lake. The BMU institution in Uganda is a new name but not a new practice. The only different between the BMU and the other organisation that existed in the landing site is that the BMU has been given a legal standing. However, the new members, and



leadership are the same individuals and personalities that were in the “illegal” Landing Site Committee (LSC).

## Chapter Six

In this chapter, I present the questionnaire information that I gathered. Here, I point out the various views of those who participated in the implementation processes of the co-management approach in the Ugandan fisheries system. The questionnaire information is also intended to show the way the implementation of the BMU was done. This is a diverse view that includes those of the different categories of the people who have participated in the implementation of the co-management arrangement in the fishing villages at national, regional and local level. This section will also show the degree to which the co-management concept is understood at home (in Uganda). Linked to this, is also the reflection of how the idea of co-management is attached to donor funding. Other issue like disgruntlement among fisheries officers and their new “contemporaries” the BMU executive members is also pointed out.

For purposes of simplicity and also in line with my arguments, I group the questionnaire data under the following headings and present them as a summary after first presenting the almost verbatim part of the questionnaires answers. In the summary section, the questionnaire data is presented under the following sub titles; (1) Origin of the knowledge base (2) Events that led up to the formation of the BMU (3) Missed up issues (4) the effects/ outcome of the implementation of the BMU .

### 6.1 Voices of the non boat owing fisher

*Non- boat owning fishers; who are they?*

These are fishers with no fishing capital like gears, fishing vessels and any such fishing capital but with enormous fishing skills. They are the majority of the fishing lot. The majority of them are between the ages of 15-28 years and are boys, not exceptionally. A few of them are older men and some too in the middle ages. I stated earlier that fishing operation in Uganda is normally done by *barias* or fishing crew members. These are the ones being described. In the Lake Kyoga region, the actual fishers who do the real activities of fishing and going to the sea are in most cases different from the boat owners. The majority of these types of people that I interviewed in Lake Kyoga are refugees. Fishing operation is mainly done at night. The fishers land very early in the morning about five to six o'clock. The majority of them go straight to sleep but some of them begin feasting , partying until about

three o'clock in the afternoon before retiring to catch some sleep and then going back in the Lake about seven, eight or nine o'clock depending on the weather. The non boat owning fishers do not have education in most cases.

Here, I present a summary of what these fishers give as answers to the various questionnaire questions. All of these say they do not know where the idea about co-management came from. One anonymous such fisher however, lamented that the introduction of the BMU system has tremendously increased the number of supervisors in the fisheries sector. When asked for a general comment about the BMU system. He went on and alleged that before the BMU system, when he went fishing, he did not have to seek permission from so many leaders. But, since the management arrangement changed, he now has a bigger lot to pay tribute and allegiance to. This makes him not respect the fishing laws as he is literally forced to even catch immature fish to be able to meet the demands of all those waiting for him on land.

*“What is BMU? They are just fishing net sellers and grabbers*

One anonymous such fisher put rightly, lamented that the introduction of the BMU system has tremendously increased the number of supervisors in the fisheries sector. When asked for a general comment about the BMU system. He went on and alleged that before the BMU system, when he went fishing, he did not have to seek permission from so many leaders. But, since the management arrangement changed, he now has a bigger lot to pay tribute and allegiance to. This makes him not respect the fishing laws as he is literally forced to even catch immature fish to be able to meet the demands of all those waiting for him on land.

From my personal observation, it could be seen that this man was not in support of the idea about BMUs. His feelings seem to be similar to the one expressed by the majority in this group. He sort of acted as a spokes person for this group. He went further in showing me this when he sighted for me an incidence in which a BMU chairman in the opposite district of Nakasongola was killed because he had his own laws that the fishers were to meet before going fishing. Specifically, he had a fixed amount of money that the fishers were suppose to pay him before entering the waters.



*Figure 15 Young fishing barrias going by their duties (Lake Kyoga)*

## **6.2 Voices of the Boat owners**

These are the fishers who own boats and they are the rich among the poor. They have taken a lion's share of the leadership role in the BMU system and from the own set, it looks like they are much more comfortable with this new arrangement. Some among them double their new role with other political official responsibility, as they are council members in the district. Their comfortableness can be seen in their talks, and way of life. They now command more respect among the people since they are the custodian of the laws. They decide what the fishers can use for fishing and, they take the lead in participatory workshops together with government staffs.



*Figure 16 An old barria (non boat owner) and a BMU council member with a book collecting fisheries statistic Lake Kyoga.*

On the question of where the idea about co-management came from, they say broadly that from the government of Uganda. On the training workshops form and how it was communicated, they know that it is to the BMU committee members through training workshop.

At Gabba landing site, Kampala District, the Vice chairman of the BMU with an educational level of senior four and a boat owner had the following to say. UFFCA initiated the discussions about co-management through sensitisation of the all the people around the landing site. Such discussions were both formal and informal, He answers.



*Figure 17 A BMU vice chairman Sekitoleko Steven*

According to him, all the people in the landing site participated in the initial discussions about co-management and the issues raised were those concerning elections especially who to be elected for BMU offices and why. Who supported the idea and why? On this he says

*„Everybody accepted the idea because „Operation Clean was not good because fishers were beaten and sometimes shot at by the operatives of „Operation Clean . Now , through the BMU system things are okay since local fishers know how to handle people.*

Operation Clean that Sekitoleko is referring to is a code name for a paramilitary group that was called upon to stem the rampant illegal fishing activities around mid 2003 by the government.

### **6.3 Voice of Lower level Civil servants**

These are the fisheries officers who work at the sub county administrative level. They therefore may interact in many cases with the fishers on a day to day basis. The majority of them have some education on fisheries management science, mainly up to a diploma level although today, some of them have degrees. In these survey, a few of them where consulted and this is what they had to say. On the issues with the origin of the idea of co-management, they all say it was from the Department through the integrated Lake Management Project

(ILM). The DFO was used to communicate to them about co-management they say. Some of them do not know who initiated the discussions on co-management but some of them say it was ILM. Some say such discussions were formal while others say it was both formal and informal.

According to these officers, the people who participated in these initial discussions were various stakeholders, both at the national and district level. The fishing communities supported the ideas because they thought it would relieve them from the arms of the law. However, some fisheries staffs were against it because they thought that empowering the communities would dilute their powers and autonomy. In some sub counties, they report that about five meetings took place before agreements were reached and all these took place in a period close to one year.

Experts were consulted by the DFID, ILM project they say. The situation in the fishery was in a crisis but the BMU institution has made it worse because they have so many illegal fishing gears. Some of the important lessons that can be drawn from the process of the formation of the BMU institution are that the powers given to the BMUs need to be revisited with a view of reducing some of their powers, they say.

At Kasenyi fish landing site in Wakiso district, one of the assistant fisheries officer said no BMUs have been formed in the landing site. However, the fisher communities have been sensitised about the BMU institution. The reasons according to him for this failure are many but most notable are the disagreement or conflict between fish traders, middlemen fishermen and labourers. This disagreement is mainly stemming from the law stipulated in the BMU. Kasenyi landing site is one of the biggest and busiest landing site in the country. It is also one of the fish landing site that is allowed to export fish to EU markets.



*Figure 18 Kasenyi Fish Landing Site on the shores of Lake Victoria.  
A fish labourer (Barria) going by his duties transporting fish to the truck (2005)*

#### **6.4 Voice of District level Civil servants**

At the District level, the DFO says the idea about co management came from MAAIF, meaning the department of fisheries resources. The communication of the ideas was through workshops and seminars and it was initiated by ILM he also agrees that such discussions were both formal and informal. Again, the people who participate in the discussions were local government leadership, at all levels together with the fishing communities. Most support in the idea came from the fishing communities especially the local leaders in such communities, mostly referred to as *Gabbungas* because they were being empowered. Many fisheries staff do not support it because their power was reduced. About three years they say was taken before agreements were made the DFO says.

According to the DFO, seminars were held, experts were consulted agreements were signed but only that they were done in a hurry, with the end result that many stakeholders did not grasp the idea about co- management. He says the fishery was in a crisis but the co-management system has resulted into more conflicts and over exploitation of the lake resources using illegal fishing gears.

*“There were conflicts but co-management has resulted into more conflicts and overexploitation of the Lake using all sorts of illegal gears”*

He says the important lesson learnt is that the processes needed more time. This according to him would allow the different stakeholders to understand their roles, and also the ILM the donor project by the ILM ended so soon before the stakeholders had fully grasped their roles. The new BMU institution needed financial support for at least a period not less than five years for them to be able to carry out their duties well the DFO recommends.

In the view of the same DFO, other elements and factors that should be considered before a co-management arrangement is considered includes the cultural beliefs of the communities, the political setting in the area and peoples attitude towards the management system. Together with that, Alternative sources of livelihoods need to be identified by the government before implementing a co-management system.

This DFO contains that the idea about co-management is a good one but requires many years of financial support before it may be effective. Otherwise, the way it is now, it is not sustainable and reports reaching his office shows that the BMUs are not holding meetings and also the Lake wide associations formed have totally disintegrated. The BMU institutions from his field reports have also escalated the use of illegal gears and thus created more conflict in the fishery.

## **6.5 International Assistance**

The Integrated Lake management project (ILM) is one NGO as mentioned earlier that was involved in the implementation of the co-management arrangement in the fisheries system of Uganda and in particular lakes George and Edward and Kyoga. A summary table showing the performances of the BMU from their end of year report of 2004 is presented below.

In most cases, these NGOs recruit and hire their staff from outside the government staffs. Thus the collaboration of their activities and that of the government is also very slim. In some instances, there is even a problem of activity duplication. However, despite the above facts, the Lake Kyoga, Edward and George fishery BMUs have been largely put in place by a DFID project called integrated fisheries management (ILM). In the real sense then, what passes for co-management is an arrangement where national NGOs, local fisheries organisation and the fishing communities that are organised into groups called Beach Management Units work together with the fisheries department to manage the fishery resource, with most direct and financial control coming from NGOs.



Before the end of their project in 2004, they commissioned a survey to establish the performance of the newly created BMUs. Below is a summary table showing the performance of the BMUs in Lakes Edward, George and Kyoga. In summary, I focus on Lake Kyoga, in general where it shows that 69% of BMU are holding meetings, 15% carrying out booking keepings of the funds they are entrusted to collect, 54% were collecting fisheries information and 48% reducing illegal gear use.

Specifically in Lira district in the fishing villages that I visited, these activities where no longer being carried out. No meetings were taking place and the use of illegal fishing activities were the order of the day.

Lake	No. of BMUs sampled	Percentage (%) of BMUs				
		Holding meetings	Recording views of Women & crew	Bookkeeping	Collecting fisheries information	Reducing illegal gear use
Edward	5	100	100	40	100	80
George	8	100	88	25	100	50
Kyoga	186	69	53	14	52	48
Total	203	69	55	15	54	48

Figure 19 Performance report of the BMU from ILM

The integrated Lake Management Project (ILM) identified goals of establishing the co-management arrangement in Lake Kyoga as shown in their management plan which is illustrated in the box below.

**Lake Kyoga Management Plan**

*The vision to be achieved through the implementation of the Lake Kyoga Management plan is;*

*Good standard of living, free from poverty, within Lake dependent communities by using and sustainably managing productive natural resources in a clean and healthy environment.*

1. Management institutions with improved capacities and operating effectively
2. Information for planning, management and development available and used.
3. Delivery of and access to, services improved (including infrastructure, sanitation and drinking water, HIV/AIDS support services and education).
4. Fisheries production sustainably increased and equitably accessed
5. Environment and natural resources sustainably managed.

Figure 20 Identified goals of establishing the integrated management plans

## **6.6 ECOVIC Experience**

East African Communities Organization for Management of Lake Victoria Resources (ECOVIC) was founded in 1998 in Jinja Uganda and registered in Tanzania in 1999 as an international Non Governmental Organization with its headquarters in Mwanza city, Tanzania. It has Country Chapters in Tanzania, Kenya and Uganda, all of which are registered in their respective countries as national NGOs. Tanzania, Uganda and Kenya Chapters have their head offices in Mwanza, Jinja and Homa Bay respectively.

ECOVIC forms a regional umbrella organization for Civil Society Organizations-CSOs (e.g. CBOs, NGOs and Cooperatives) spread out in the entire Lake Victoria Basin, East Africa. Each Country chapter has a wide range of membership of CSOs engaged in, among other areas, fisheries and forest management, water and sanitation, environmental protection, small scale socio-economic activities and human health related activities.

It is important to present findings from the ECOVIC group because they have some contribution to the co-management activities in the fisheries system of Uganda. Most notable of such contribution is the role they have so far played in establishing and supporting community participation in the Landing site of Gabba in Kampala on the shore of Lake Victoria, where part of this research fieldwork also took place.

According to the executive director, the idea about co-management in Uganda came from the DFR. He answers in the questionnaire that the department initiated the discussions and such discussions were both formal and non formal. On the participants in these initial discussions, the ED says the ECOVIC members at the district level attended. The issues raised he summarised to proportions of contributions, policy frame work and benefit sharing. The kind of people who supported the idea included Staffs from the DFR, and other civil society organisations. The major reason for support being expectation for wider participation and also those other resource users not directly in fishery activity never saw direct benefits from co-management. His comments on meetings that took place before agreement was reached is that several meetings and several reports and minutes were taken in both informal and formal ways. He then says the all processes took close to three years.

His comments on the preparations that were carried out before co-management was implemented is that several sensitisations was done by NGOs like ECOVIC and UFFCA. A lot of consultation also took place, he says. FIRRI, LVFO and Makerere University where all consulted. No agreements where signed in the beginning he says but only lately are agreements being signed with the formation of BMU on Lake Victoria.

The situation in the fishery was worst and in crisis and that there were many resource conflicts he contains. The important lessons that can be drawn from the process include that it would have been important for all the stakeholders to have been involved from the very beginning. Other stakeholders like women and the youth are just being brought in now, he argues. The other element that should be taken into consideration before co-management is implemented include, sensitisation of BMUs, training of BMUs highlighting the benefits of co-management and sensitising the BMU institutions on major fisheries documents like the National fisheries policy and the BMU guideline documents.

## **6.7 Local fisheries Institution**

UFFCA, which stands for Uganda Fish and Fisheries Conservation Association, is a national local NGO working together with fishermen s organisation . They are also mainly donor supported and currently are getting financial support from The Netherlands government. UFFCA, in their reports of 2004, do not show that they have worked much with the fishers of Lake Kyoga. Nevertheless, since their report describes the fisheries system in Uganda and they represent a national NGO, it is important that their report is presented and analysed in assessing the fisheries BMUs systems in Lake Kyoga.

In their 2004 end of year report, in chapter four pages 27-30, they acknowledged that the BMU system has so many important roles it plays in enhancing fisheries management goals. However, in a retrospective style, they state that *the current context is seriously characterized by increasing impoverishment of the poor lake dependent communities and a widening gap between the „haves and „have nots* . To explain further, the report says the reality on the ground is that the poor, meaning the lake poor are in danger of loosing even the little that they have been able to win through their bitter struggle. The result has been an increase in the use of illegal and destructive fishing gears and methods for survival means resulting into depleted fish stocks and hence poor fish catches and poor incomes to the resource dependent poor.

They go a head and say in the same report that given the circumstances, there is a need to re-evaluate the performance of the BMU system as a vehicle for community organisation.

UFFCA in the same report accepts that as an organisation, it has also made a number of errors in the implementation of the BMU system in the so far sixteen fishing villages around Lake Victoria and Albert that they have accomplished. Notable among such mistakes has been two key factors. Firstly, what they call a tendency to impose structures prematurely rather than to build them in action. Here, the structures are presumably the BMU management system. Secondly, extensions of the legitimacy of the BMUs so that broad layers of the community recognise the BMU structure as key vehicles for change.

In explaining the first mistake, UFFCA says during the BMU electoral processes, communities chose „known individuals who were often over committed and thus were unable to devote the time needed to lead the organisation. The result has been that the current BMU system only represents the interest of a tiny minority of the community. They say with hindsight, it has become clear to them that the BMU structures were built prematurely. They made the communities to choose leaders before they (the leaders) could prove their potential in practice. *They say that their biggest draw back in that case has been a concentration on the planning process in a situation where there was insufficient capacity to develop plans that could confront the issue of powers.*

Further more, despite the enormous amount of capacity building that UFFCA has done, the BMU structures have continuously become weak and de-motivated. UFFCA has however realised that to achieve their original goal of promoting the communities,

*“There is a need to focus on organising the different sectors or section within the community around their needs.”*

They also say in their change of strategy plan, they now need to begin focusing more consistently on enabling communities to access their rights through the popular education programmes amongst other thing.

The executive director of UFFCA (ED) while answering the research questionnaire says the idea about co-management in Uganda came from UFFCA in 1994. He narrates that while

working as a fisheries assistant in the offshore areas of Lake Albert, he realised that the communities has enough potential to participate in fisheries management. UFFCA made the initial move by contacting the Department of Fisheries through the Ministry headquarter minister. The fishing communities themselves made the initial discussions in Lake Albert as they were seeking for ways to stop the escalating net theft situation then. Such discussions were mainly formal as the fishers would come to his office at that time with verbal complains.

Although the government did not support the idea in the beginning the director alleges, the initial discussion involved the government officials at the local level (District local government officials). The fishers in Lake Albert however overwhelmingly supported the idea with a back side argument that government fisheries officials are corrupt. Several meetings were held and when the issue of fish poisoning came in, then the government put in more support as they (the government) searched for means and ways of combating the deadly fishing method. That he says was in 1998 when the community was thought of as a means to end fish poisoning.

On the issue of the preparations that were carried out before the co-management approach was implemented, the executive director says, no feasibility studies were carried out, no expert were consulted, no agreements were signed until the around the year 1999. In 1999 when the countries fisheries challenges had climax, with the fish poisoning method mentioned earlier, then community task forces were formed and thus the government involvement noticed. The fishery situation was thus in a great crises by the time the co-management approach was introduce.

While commenting on the elements and issues that should be considered before co-management is implemented in a fishery, the ED says there is a need for, clearer policies especially those concerning conflict resolution among the fishing communities, community illiteracy since the illiteracy rate among the fishers is too high and the issues of corruption in the fishing industry that needs to be examined. Above all, he concludes that there is need for altitude change among the fishing communities. A part from those factors, the ED is convinced that the co-management approach is the way forward in fisheries management although there is need for greater participation by the fishers. When asked to mention at least one successful BMU structure, the ED sights the case of Butiaba on the shore of Lake Albert where the fishing community have a vibrant BMU structure. This is because according to him,

the community have put a an improved sanitation system in the name of an Ecosan toilet, repaired roads to a stretch of one kilometre, built car packing shades and notable among issues with the fish is the decline in the landings of immature fish.

## **6.8 Research Perspective**

According to Mr. Odongkara, a fisheries socio-economist at the national fisheries research institute FIRRI, the idea about co-management came to the country through various sources as early as the early 1990s. It was communicated in various workshops, publications and projects such as the Swiss Ecoton Project. The discussions about co-management were mainly initiated by donors according to him. The EU project that operated from the late 90s started it and it was later taken over by other donors like the World Bank project under LVEMP. Such discussions were both formal and informal he says.

## **6.9 Department of Fisheries Resources (DFR)**

At the DFR, the coordinator of co-management had the following comments. On the idea where co-management came from, she says it came from different angles. The Lake Victoria environment Project, LVEMP initiated it and later she herself took it up when she had completed her m aster s studies in 1999 .

In what form was it communicated and to whom? She says .``*The World Bank review mission to LVEMP in 1999 communicated to the three east African countries the renaming of Law Enforcement sub component to co-management sub co-management .This was done in an AID Memoir*``

The law enforcement sub component she is referring to is one of the units of the department whose direct responsibility is to enforce fisheries laws. In the strength to make the co-management aspect of the fisheries show to, it was argued that the unit should be renamed from enforcement to co-management. The point here is to show that the co-management ideas indeed came with donor funding in the country.

She says DFR and LVEMP initiated the discussions about co-management and that these discussions were formal. Major participants in such discussions were DFR, LVEMP, ILM, UFFCA and LVFRP on the question that who supported the idea and why? She answers, all supported. How many meetings and discussions took place before an agreement was reached

and how much time the whole process took? *Co-management is a process which takes time and it has been ongoing since 1999 and the full structure has not been concluded, she says.*

The kind of preparations that took place before co-management was implemented include seminars which were conducted for fisher communities and district leaders and also research on co-management was conducted by Ikwaput Nyeko in 1999 and LVFRP in 2000.

Comments on the situations in the fishery from her views go like this.

*„ Fishery in U ganda has been w itnessing decline both in term s of biodiversity and catches. There was deliberate disregard of regulations by fishers assuming the resources belonged to governm ent and hence governm ent responsibility to m anage it.*

In hindsight, what were the important lessons that could be drawn from your process? What proved to be a good starting move and what would you have done differently? Her answer is that this is a learning process and adjustments are made as the situations changes. She reviews her statistics and says so far 290 BMUs are established in Kyoga, George and Edward has about 330 and in Victoria already over 600 is established.

The elements and issues that should be considered before co-management is implemented in fisheries in her views include identification of the relevant stakeholders, legal backing, financial resources to start up the process and willingness of stake holders to participate. And her general comment on the performance of co-management in Uganda goes like this,

“It is a model which is likely to be copied by other regions. It has taken off well although the sustainable funding to support the activities of the BMU is still a problem .”

## **6.10 Summary**

### **6.10.1 Origin of the Knowledge base**

According to the various categories of people, the idea about the implementation of the BMU did not originate from within Uganda or in the local communities. A part from the executive director of Uganda fish and fisheries association, all the different categories of people do not point inside for the ideas that generated the BMU institution. At the national level at the

Department of Fisheries Resource, it is said that the idea about involving the communities in fisheries management came through the World Bank. In around 1994, the Lake Victoria Environment Project (LVEMP) that was supported by the World Bank brought the idea. At the district in Lira, the various categories of fisheries officers say it is either the Department of Fisheries Resource through the Integrated Lake Management Project (ILM) or vice versa that gave birth to the idea. At the Fisheries Research Institute (FIRRI), this same opinion is voiced

*“This idea about co-management mainly came through donors- e.g EU project that extended in the early 2000-2001 and later the World Bank took it up under LVEM P”*

### **6.10.2 Events that led to the formation of the BMU**

According to many sources interviewed, the ideas about co-management were transferred in many forms. Generally it was through formal and informal means. At the Fisheries Research Institute (FIRRI), the socio economist says the formal means included workshops and educative publications and many other often contain that the formal means exceeded the informal means. It can be generally be said that experts where not consulted and no research was carries out. The socio-economist in The Fisheries research says the only research data that they generated has not been applied.

### **6.10.3 The missed up issues**

These I consider to be issues that were left out in the implementation of the BMUs. The District Fisheries Officer (DFO) of Lira summed it all up that;

*“ Cultural beliefs, political setting and people s attitude together with alternative sources of livelihood could have been considered before implementing co-management.”*

In the views of ECOVIC, there is need to continue sensitising BMUs in order to achieve better results. This according to him, this would involve training BMUs and popularising the two major fisheries documents that is the National fisheries Policy and the BMU guidelines. At the University, a lecturer contains that the BMUs need to identify solid means, methods and sources of funding to ensure that their existence is sustainable. This same view is also seconded at the district and lower district level. At the Department of Fisheries Resources, the officer in charge of the BMU activities identifies missing up issues as identification of the relevant stakeholders, legal backing, financial requirements and willingness of stakeholders to



participate. At the fishing villages in Wakiso district the fisheries staffs feel left out and they have not participated much. At Makerere University, the ability of the fishers is questioned as regards the management of the resources. All these raise issues of gaps in the implementation processes.

#### **6.10.4 The effects/ outcome of the BMU institution**

Different personalities give different opinions about the out come of the BMU institution. One of the lectures at the main university argued that co-management has not given expected results in the Ugandan fisheries system. At the department, the officer in charge argues that co-management is a process that has been ongoing in the country since 1999 and thus it is still difficult to tell the exact outcomes. In Lira district, one of the fisheries officers laments the immense conflict it has generated in the management of the fisheries. At the fish landing sites the effect of co-management in the fishing villages in Lake Kyoga has generated mixed feelings. The BMU chairpersons are excited about it because it has given them so much power. The fishing *barias* that were the target are left out in all ways. The sustainability of the fisheries resource is also still at balance as the fishers use of illegal fishing nets seems unchanged. The sight of small fish is also common at the landing site. All these show that the BMUs are not effectively promoting fisheries sustainability.

## Chapter Seven

### 7.0 Theory Verses Practice: Actual Situation on the Ground

In this chapter, I present a broad discussion of the issues that have been touched upon in the implementation of the BMU institution in connection with the various data that was gathered. I address the major research questions that why doesn't the BMU institution lead to equitable distribution of the benefits derived from the fishery of Uganda in general and specifically in the studied areas and also why does it not promote fisheries sustainable practices? In the introductory part of the thesis, the thesis hypothesis had envisioned and suggested that the BMU fails to meet those objectives because of the following broad issues;

- (i) Fisheries management has also been following world development trend (Hara and Nielsen 2003; Hersoug 2004). Like Jentoft (2004) say co-management in fisheries has become a global issue. However, global issues or world trends are in most cases symbolic (Hersoug 2004). The design and implementation of the BMU institutions may be one such case.
- (ii) The BMU fails to produce rule compliance because the knowledge base on which the BMU institution is formulated is not grounded in the culture of the implementation bodies and the local people.
- (iii) Implementations of public policies themselves present great challenges. The top down nature of implementation of the BMU institutions requires conditions that were not met.
- (iv) The BMU institution is not a new institution. The members who participated in the "illegal" fisheries institution are the same ones in the BMU thus their actions and activities are the same.

In analysing these data, I will focus mainly on two groups of fishers that are the boat owning and non boat owning fishers. I already described these categories of fishers before and see no point in doing the same here (see Chapter six). My analysis will also focus on looking at Uganda broadly as a target for co-management; I do this to show the unsustainable practices of the co-management approach in the BMU system. This unsustainability of the BMU then generates a multiplier effect on the fisheries resources with the result of an eventual inequitable distributional effect of the benefits derived from the resource. This is all done with

supportive arguments from the institutional frame work analysis and the sustainable livelihood approach.

### **7.1 Uganda, a wrong target for co-management?**

The fact that the rate at which the commercial fish stock of the country is declining is undeniable (Geheb, Crean et al. 2002). The fishers talk about it, and the most recent stock assessment done in the country also documents it. A study of the relative rate of catch increase (RRCI) from yield data, confirms this statement. The figures indicate that the fishery of the perch is now heading towards the senescent stage. This is a biological description of a fishery moving towards commercial extinction. This means that if management is not put in fast then the fishery will indeed soon collapse. The RRCI is now at zero after fluctuating in negatives. It is possible that the change towards a larger positive relative rate of catch increase is induced because of the tough control measures the Department put in the 1990 s. The crisis in the fishery therefore called for an alternative management method and rightly, the co-management approach qualifies.

The co-management approach offers a number of advantages as a management method in the fisheries of the world, Uganda inclusive. To just say the least, it has an envisioned enormous ability to enhance the management responsibility of the government since in it; the government can share such responsibilities with the resource users. In this case, it even works as a double edge sword in that as the resource users are participating in management responsibilities, they are also empowered through the same arrangement. It also allows for formation of more organised fishers that can be easily managed as in the way the BMU has been formed (Nunan and Scullion. 2004).

However, as warned by several proponents of co-management, these advantages do not come easy and may not be easily generally or universally applied (Jentoft 2003; Pomeroy and Rivera-Guieb 2006) . Co-management comes with responsibilities such as the question of sharing power, organisation of fishers and institutional buildings and designed among various other issues. This responsibility is argued to present greater challenges in communities that are more heterogeneous, resource constrained and the fishers do not have easy access to alternative jobs. The Ugandan society as has been made explicit in chapter two of this thesis is a mixture of various ethnic groups, the economy of the country is bad and the fishers do not have alternative employments. This diversity in ethnicity is even more sighted in the fishing

villages. Presented with these conditions, the implementation of co-management presents greater challenges. Coupled with those factors there are also other issues that impact on a country's ability and level for organising such existing conditions.

Hersoug (2004) pointed out to the conditions that make co-management fail or succeed. Among the necessary conditions he mentions issues such as organised fishers not only locally like in the case of the BMUs but also regionally and nationally. He points further to the literacy level of the fishers, organised state apparatus and organised and formalised structures. Uganda being one of the poorest countries in the world definitely lacks those conditions. Uganda's historical colonial background destabilised the existing traditional kingdoms that formed a basis for a more organised and easy to govern society thus creating more challenges on the proper application of co-management institutions. Together with these issues, the recent or modern Uganda has been characterised with war that has seen a huge migratory tendency toward the Lake. All these contributory factors put more stress on the implementation of co-management in the country.

Co-management as an alternative management strategy has been supported and questioned both in the developed and the developing world (Holm 1999; Hara and Nielsen 2003). The co-management theory is derived from social and cooperative theories that are developed in contrast from the rational choice theory filled with economic ideas of presenting human beings (society) as opportunistic individuals and not as a society thus being asocial. In the developed world, co-management is criticised for advocating for giving the most powerless in society the biggest responsibility of managing resources instead of just being individual self seekers. In this questioning it is also argued that such responsibility has defeated the most powerful in society like governments and scientists with wonders (Holm 1999). This is the same questions that are raised today in Uganda.

This is because the co-management approach needs certain pre-conditions to exist in a system to which it should be applied before attempts are made to apply it. Uganda as one of the poorest countries of the world lacks the entire major institutions and relies so much on donor funding. Donor funding have conditionalities that may have other objectives than those that are explicitly stated. In this connection, the implementation of the co-management arrangement in the fisheries system of Uganda followed the new liberalised policies coupled with decentralisation.

Co-management in natural resource management has two inhibitory disadvantages namely functional problems and distributional problems thus creating both losers and winners (Carney 1995). These disadvantages come from the reliance of the management method on the decentralisation policy. Decentralisation as a policy has been criticised in many different ways. Carney groups these critics in two broad ways that is functional problems and problems with distribution of benefits.

In the BMU system in Uganda, these issues show up in the implementation of the BMU system. Whereas the central authorities are supposed to share their power with the resources users in the fishing villages, unfortunately it is such centralised authorities which must usually design and establish the new structure. If they see in it a damaging loss for themselves they may be tempted to include mechanisms which mitigate its effects, such as a continued reliance on donor funding that may hide the objective of co-management from the actual acceptance of donor funding as conditionality for alleviating the budget constraints in the ministries. All donor money flows through the centre. If this is the case the transfer of authority will be more nominal than real.

How ever, to justify the first hypothesis, the data set I got about the origin of the ideas of implementing the modern co-management approach in the Ugandan fisheries sector, it is confirmed that it was through world donors, in the names of the World Bank and /or other development partners like the various NGOs. I argued that world development trends are in most cases symbolic thus even when they meet the objectives for which they are established or not they just continue to exist and spread.

*(i) The issue with sustainability of the BMU institution*

The implementation of the BMU system relied heavily on donor supported funding as I mentioned earlier. The idea behind was that with time, the BMU should be able to generate its own money through indirect means by getting money from fishers as they (the BMU) issue them with fish movement permits (a document for transporting fish from the landing sites to the markets) that give them authority to leave the fishing villages and go to the markets to sell their fish. Since donor supports are always unsustainable, the BMU institution is also unsustainable. These were issues that seem to have been overlooked in the implementation of the BMU institution: To continue in existence, The BMU organisation obtain money from

the poor fishers using illegal means like arresting, selling and re-arresting the fishing nets. To keep up with money demand of the BMU chairmen and council members, the fishers fish more using illegal fishing means. This creates sort of a vicious circle that goes on and on with a negative effect on the fisheries resource.

## **7.2 The BMU institutions enhancing inequality?**

One of the major goals of implementing the co- management arrangement in the fisheries of Lake Kyoga is to help reduce or play a participatory role in poverty reduction in the fishing communities, address the problem of marginalisation and vulnerability by promoting social equity among the fishers (Anon 2003a; Nunan and Scullion. 2004). This is in line with the government policies on decentralisation and poverty eradication action plan (Anon 2003a). Thus, the co-management approaches, which, although are viewed very differently in both theory and practice and are continuously being promoted as a means to enhance the achievement of social equity among fishers world wide (Jentoft and McCay 1995; Jentoft 2003; Anon 2004b) is being used.

This thesis seeks to find out the change caused by the implementation of the BMU system, an institution for the co-management approach in the fishing communities. This change is more focused on the issues with social and economic equity in the BMU systems. Thus, to accomplish the above task this thesis uses the sustainable livelihood approach method of analysis. The sustainable livelihood approach can be used in different ways in accordance to a particular goal or programme of study. Since, issues with social and economic equity in the BMU system is a development practice, this thesis uses this approach as a process tool to enable development participants identify key constrains and opportunities for development intervention (Allison and Ellis 2001). The livelihood approach is also chosen in this analysis because of two other reasons. One, for its emphasis on the diversity and complexity of the ways in which people (members within the BMU system) attempt to reduce their livelihood vulnerability within the particular constrain of their situation. Two, it also pushes fisheries researchers to examine the degree to which fishers depend on fishing for their livelihoods and the social and political divisions that make co-management contentious (Johnson, Bavinck et al. 2005 : 83-84).

### **7.2.1 The Current BMU in the eyes of the Sustainable Livelihood Approach**

To put the discussion of the livelihood approach in the context of this thesis, it suffices to remind ourselves of the BMU system. Firstly, note that the BMU system is composed of a community of fishers which like any other community are diverse groups of fishers with diverse interest and means of achieving such interest (Chapter 5). Secondly, in the quest for emulating democratic principles, it is a representative system in that the BMU has an elected chairperson and an elected committee that leads the rest of the fisher community which are referred to as the BMU general assembly in the BMU statute and guidelines (Anon 2003b). From the field data and the reports from UFFCA, it is established that the most influential personalities are elected into these representative offices. Jentoft and Mikalsen et al (2003) explain how co-management inevitably takes on representative democracy in preference of participatory democracy. In this argument, Jentoft and Mikalsen et al draws a comparative analysis of representation in a democratic process and points out the immense wastage of time and resources that would be involved if participatory democracy, which is better than the representative one is opted for by society instead of the representative one. Thus, basing on the same rational, the BMU electoral system is instituted.

According to the BMU statute and guidelines (Anon 2003b), the BMU institution acts like an access institution into to the fishery of the Kyoga Lake. Johnson and Bavinck et al (2005), like Allison and Ellis (2001) basing on the livelihood approach explain that livelihoods are shaped by access institutions. Basing on this same explanation, Johnson and Bavinck et al show how access institutions create access restrictions by installing access rights. They also explain that such access restriction limit use rights to certain areas, species, technologies, activities possibly for certain times, for certain groups or individuals. In this, Johnson and Bavinck et al also make explicit the fact that access rights constrain the livelihood options of some but protect those of others. How does the BMU institution limit use rights of other fishers and enhance those of others? Thus create inequity in the system contrary to the goals of the implementation of the institution.

One, according to the BMU statute (Anon 2003b: 42) to be a member in a BMU committee, one has to have a minimum educational level that qualifies one to be able to write and read. The majority of Ugandans fishers especially in the Lake Kyoga and in particular Namasale and Muntu fishing villages do not have this qualification. They have not gone to school and thus, many of them can not read and write. In fact, most of the non- boat owning fishers

referred to as *barias* in the BMU statute fall in this category thus they are left out of the leadership positions in the BMU. In the context of the livelihood approach, they have a low human capital in the livelihood platform. Their access to the fishery is therefore limited by this low capital and hence, they have to design other strategies to meet their livelihood

Secondly, one of the roles of the BMU committee is to enforce fisheries laws (Anon 2003b: 45). The BMU committee has interpreted this as allowing those who can pay their way out to fish and those who can not pay are stopped as being illegal as noticed in the field reports. In this way they promote inequity in the fishery.

### **7.2.2 The processes of implementation of the BMU system**

According to the data from the field work survey and interviews, and the reports of the ILM 2004, the implementation processes of the co-management approach in the Lake Kyoga fishing villages inevitably took the top –down approach (Nunan and Scullion. 2004). This is also the overall world trend or view implementing a management method. At the department of fisheries resources (DFR), the co-ordinator of the co-management approach says that a World Bank team brought it up in 1999. Likewise, the same answer was received in the fisheries research institute (FIRRI). At the district and the fishing community level the source is the DFR and/or the NGOs involved in the implementation. According to the theory of Implementation as presented by Pressman and Wildavsky (1979) and analysed by Moenieba (2003), the top down approach of implementation of public policy presents a number of disadvantages. One notable disadvantage is that it requires a perfect administrative system. These administrative structures are non existence in Uganda.

Secondly as argued by Hersoug (2004), the top down nature of implementation of co-management presents a management system that is not any different from the government centralised approach to resource management.

### **7.3 Fisheries management and the issues with institutions**

The co-management theory or the user involvement recipe is advocated for as an alternative to the current centralised approaches to fisheries management. In this argument, the co-management concept deconstructs the rational choice theory of economist and instead



replaces it with social theory and argues that society is composed of society not individuals. Thus the creation of property rights as argued for by economist is not necessary. The economic ideas that are so much disputed led to the formation of the current centralised management system when it noted that society could not take care of natural resources and instead external agents like the government should step in. In this way, government fisheries institutions were created.

The modern co-management approaches today do the same. In the case of the fishing villages in Uganda, the BMU institutions were created as a major solution to the crises in the fishery (Anon 2003a; Anon 2003b: 12-16). In line with the general theory of institutions, and basing on the sustainable livelihood approach and the institutional frame work analysis, it is made clear that institution of all natures increases the opportunities of others in the access of resources and also limits the opportunities of others. The BMU institution like the government centralised system in this case does the same things. There is a possibility that the government Department could do better since it is far away unlike the BMU institution that is now with the fisher in the fishing villages of Kyoga day and night.

## **Summary**

In this chapter, I have discussed and shown that the co-management approach to fisheries or natural resource management requires certain conditions. These conditions are not seen in Uganda thus posing more challenges in the implementation of the management method in Uganda.

I have also shown that the current BMU system has not promoted equitable distribution of the fisheries resource because of its unsustainable nature. The implementation was based on unsustainable donor funding. However to continue in existence, the BMU personalities have vented their anger on the powerless in society thus aggravating the situation in the fishery system the more. I argue that basing on the theory of situated knowledge production these are issue that were promoted in Uganda without consideration of the cultural or way of life of the Ugandan fishers.

## Chapter Eight

### 8.0 Conclusion

#### 8.1 Addressing exogenous or factors outside the fishing sector in the BMUs

According to Umar and Kankiya (2004), Hersoug (2004: 51-54), Simon and Donda (1995) and BÉNÉ (2003) there is a connection between poverty, food insecurity, alternative jobs and natural resource degradation or fisheries overexploitation. Umar and Kankiya explain that the poor and the food insecure are always in desperate circumstances thus with no option, they engage in unsustainable manners of natural resource exploitation. Such moves bring some kind of a vicious cycle as the resources are degraded. These are conditions that explicitly manifest in the fishing villages in Uganda generally and specifically in the fishing villages of Lake Kyoga.

In connection with the above, Arthur (2005) suggest that since there is a no one fit for all co-management arrangement, creating a successful co-management from a policy perspective is more about creating and supporting the conditions and processes that are most likely to result in successful local management arrangements. He explains further that this means using policies at the national and sub national level to create what is often referred to as an enabling environment for local management. This description is near to the situation found on the ground, therefore, this thesis suggest the following options for improving the current co-management strategy currently being implemented.

One, creating policies and actions towards reducing stakeholder vulnerability is necessary. The very poor among the BMU members are most vulnerable because of their conditions. Arthur state that in many cases for the implementation of a co-management arrangement to reduce the gap between the desired and expected results, it will be necessary to ensure that there is coordination within policies to ensure that poverty, vulnerability and marginalisation of stakeholders groups is addressed. Arthur stresses this point further by saying that only when this occurs is these groups likely to feel that they are able to consider the sustainability of the fishery and engage in co-management. He cites examples from Vietnam and Bangladesh where there has been an increasing divergence between the policy objectives and the actual outcome of resource use due to conflict and the exclusion of the poor people from access to the fishery (Arthur 2005: 5). He says the role of fisheries in the livelihoods of these

groups which is one such aspect should be examined and options for livelihoods diversification may be considered. In the case of the BMU in the studied areas, these provisions are still non existence thus, one of the probable reasons for the undesirable results of the implementation strategy currently noticed.

The fishers in these villages seem not to have any alternative employments thus they turn to fishing as a last resort source of livelihood. This is similar to the case in other developing world (Hersoug 2004) and particularly Malawi as presented by Simon (1995: 1). Simon in arguing for alternative employment for the fishers says that fisheries act as an employer of the last resort.

*„ Fisheries generally have low entry barriers and relatively high exit barriers. Because of this factor, the sector concentrates individuals with low opportunity costs. This low opportunity cost is a contributory factor as is the disequilibrium of opportunity cost due to the physical and emotional immobility of the work force. The only available method for increasing incomes thus seems to be increasing the opportunity costs by developing alternative employment opportunities.*

This is the same message that this thesis carries to the policy making organ of the government of Uganda, world development agencies and all stakeholders for the improvement of the livelihood status of the fishers of Lake Kyoga fishing villages in particular and Uganda in general.

Two, ensuring meaningful participation in the management process (Arthur 2005: 7) of the Beach management Units. Here, Arthur argues that participation in both level and type will depend upon a number of factors. Such factors may include the scale of the resources system, the available capacity, financial resources, administrative level, existing institutional arrangements and willingness of potential participants to bear the cost of participation. However as Arthur points out, the challenge is to ensure in this case that stakeholder groups are identified and involved or legitimately represented and that there is a commitment to providing resources to support participation, develop capacity and empower these groups.

In the case of the BMU in the Lake Kyoga fishing villages, the more affluent or well off fishers dominate the management positions that existed before the creation of the BMU and even after. This has come from the requirements stipulated in the BMU statutes for leadership participatory roles. This leadership code as mentioned earlier advocates for members in leadership roles to be able to read and write, which is of course an advantage as these can record fisheries statistic and carry out other administration roles more efficiently. However, the fact that the meaningful participation of those without such ability is still then not addressed. And thus, this thesis request for the address of such by either initiating impromptu adult literacy courses in such fishing villages for the older fishers or building several training institutions to address future similar problems.

## **8.2 Carrying out more home base research in the co-management system**

Hersoug (2004) gives a broad discussion of fisheries management in a development context. This is also the silent voice in this thesis. In his concluding remarks, he acknowledges the importance of continuous research that may influence the policies and planning in fisheries management. This thesis with the same voice calls the government of Uganda to put more emphasis on home base research on co-management models to achieve acceptable results in the fishery on the country.

## **8.3 Addressing the missing link in the implementation**

Co-management is argued to be a pluralistic approach in which the government, resource users and other partners like academicians are involve in the management of the resources (Pomeroy and Rivera-Guieb 2006). In the Ugandan case, the fisheries staff, and other government staffs especially at the lower level are left out. This has therefore left a gap in which the staffs feel hat they do not have any role to play. These issues need to be addressed for the issues in co-management to be more entrenched.

The millennium development goal (MDG), and the World Summit on Sustainable Development (WSSD) have all defined dates for eradicating poverty from the face of the world. The issue of time as far as realisation of acceptable results with regards to any management method and / or policy implication, as always, is therefore of the nature of urgency. The work of achieving these objectives requires basing on knowledge whose source and results are seriously questionable. The co-management approach may be one of the best

undeniable tool of attaining most of these objectives as far as recirculation of the benefits of effective management back into the local communities is concerned (Nobel 1999). However, in the case of Uganda and in particular Lake Kyoga, even with the co-management approach, the options are still limited as the co-management approach has literally not succeeded to produce acceptable results<sup>17</sup>.

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<sup>17</sup> Refer to the pictures and the data presented in the text in the previous chapter

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## **Appendix**

### **Summary of the nature and type of questions that were in the research questionnaire**

1. Where did the idea on co-management come from?
2. In what form was it communicated and to whom?
3. Who initiated the discussions about co-management?
4. Where these discussions formal or informal?
5. Who participated in these initial discussions, and what were the issues raised?
6. Who supported the idea and why? Who were against it and why?
7. How many meetings /discussions took place before an agreement was reached? How much time did the whole process take?
8. Preparations were carried out before co-management was implemented. e.g. were seminars held, were experts consulted, were agreements signed, were capacity signed and were feasibility studies conducted?
9. How was the situation in the fishery when the idea came? e.g. were there conflicts between user groups
10. In hindsight, what were the important lessons that could be drawn from your process? What proved to be a good starting move, and what would you have done differently?
11. What other elements and issues should be considered before co-management is implemented in fisheries
12. General comment about the performance of co-management system in Uganda?

### **Structured Questions regarding fishing operations and activities to fisher**

- I. How often do you go fishing?
- II. What fishing methods do you use?
- III. What else do you do when not fishing?
- IV. What do you say about your income now?
- V. How much did you use to earn before the BMU system?
- VI. Do you use your own boat?
- VII. How much do you pay for hiring?