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## Inland Fisheries Co-Management in East Africa

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## ABSTRACT

The importance of inland fisheries resources to the East Africa Community Partner States of Kenya, Tanzania and Uganda is highlighted. Efforts and achievements to improve utilisation and management of fisheries resources for lasting social and economic benefits in the region are examined. Experiences from two projects, the Integrated Lake Management project in Uganda and the on-going implementation of a Fisheries Management Plan project on Lake Victoria are examined. Key achievements are examined and lessons learned for within and beyond the region are identified.

Key words: East African Community, inland fisheries, co-management, governance, LVFO, Lake Victoria,

## INTRODUCTION

The inland fisheries of the East Africa Community (EAC) Partner States of Kenya, Tanzania and Uganda are based predominantly on its major freshwater lakes, the most notable being Lake Victoria, the world's second largest freshwater lake with an area of 68,800 km<sup>2</sup>. Inland fisheries contribute between 2-12% of the GDP in each country and produce fish for domestic and export markets. The value of the catch from Lake Victoria alone is estimated at \$350 million at landing sites with a further \$250 million generated by the export of Nile perch. Other dominant fish species include Nile tilapia, a small indigenous cyprinid (*Rastrineobola argentea*) and various types of catfish. These lake fisheries support the livelihoods of over 3 million people in directly dependent households by providing employment and income and provide high quality food in the form of nutrients and animal protein for millions of consumers in the region.

Rapid increases in human populations have placed increasing pressure on natural resources. In fisheries, this is seen in the considerable increase in the number of people involved in fishing, putting fish stocks under increasing pressure with evidence, in some cases, of stock decline. Additionally, lake waters are subjected to increasing environmental threats from catchment modification such as deforestation, increasing urbanisation, industrialisation, and agricultural expansion. The core problems of increasing human populations and increasingly intensive land-use in lake catchments and shorelines threaten the sustainability of fisheries resources.

Fisheries management institutions in the EAC accept that the traditional centralised, control-and-command approach to fisheries management has failed to safeguard fish resources and the livelihoods of millions of people dependent upon these resources. They therefore adopted a fisheries co-management approach, involving the establishment of legally empowered community organizations called Beach Management Units (BMUs) for planning and management of fisheries resources in partnership with national and local governments. BMUs now provide an opportunity for poor,

marginalised groups such as fishing crew and women to engage in decision-making processes that affect the management of resources upon which their livelihoods are based.

In addition to environmental threats, there is mounting concern over the increasing health threats to fisheries communities caused by HIV/AIDS. Fisheries communities are a major hotspot for HIV/AIDS due to their male-dominated, migratory nature with cash available on a daily basis, limited savings culture, weakening of the normal social norms of a home village, limited recreational opportunities and risky lifestyle. Although there have been recent interventions to increase awareness of communities and promote preventative behaviour, very little assistance has been specifically directed towards fisheries communities in the EAC.

The transition from a centralised to participatory management approach has involved many different initiatives in East Africa in recent years, most of which have been small-scale and a few large-scale. This paper, whilst providing a general description and analysis of the development of inland fisheries co-management in East Africa, draws particular experience from two of the most recent and influential initiatives, the DFID-funded Integrated Lake Management Project (ILM) on Lakes George and Kyoga in Uganda which ended in 2004, and the on-going Implementation of a Fisheries Management Plan project (IFMP) on Lake Victoria, funded by the European Union.

The ILM project ran from 2000 to 2004 and aimed to sustain and improve the livelihoods of poor lake dependent communities through the integrated management of lake resources. The project operated on Lake George (area: 290 km<sup>2</sup>) and Lake Kyoga (area: 2,800 km<sup>2</sup>). The project received annual reviews of progress by the donor and a final independent review. Despite being regarded as a successful flagship project, a request by the project to extend donor support to consolidate the co-management approach and translate institutional achievements into resource based improvements was rejected largely due to the growing donor interest in providing direct budget support. The absence of external donor support to this co-management initiative from 2004 to date, provides an opportunity for valuable lesson learning.

The IFMP project started in April 2003 and is due to end in August 2008 with the possibility of a no-cost extension of up to two years. The aim of the project is to support the LVFO Partner States of Kenya, Tanzania and Uganda in implementing management measures in line with the Lake Victoria Fisheries Management Plan and LVFO Strategic Vision. Lake Victoria being the world's second largest freshwater body, provides an opportunity to examine issues relating to the geographical scale. The project started slowly with an extended start-up phase of 18 months. Its progress accelerated rapidly from October 2004 onwards with support from a newly recruited team of Technical Advisors. The project has received two independent annual reviews and a mid-term review of progress.

The unpinning rationale of the aims of both ILM and IFMP is that improved management of threatened lake resources will lead to a reduction in these threats, a halt in the decline of the resource base, an increase in resource productivity leading to increased benefits for resource dependent people, particularly the poor.

## TARGET BENEFICIARIES

The implementation of a system of co-management for inland fisheries in the EAC has clear poverty reduction aims with direct beneficiaries such as men and women fisheries resource users and their families who are dependent on fisheries for their livelihoods. Of these, the most clearly disadvantaged and poorer groups within communities are the fishing crews and women. These therefore constitute primary targets for poverty reduction and empowerment efforts and make up the large majority (>75%) of the total number of people directly involved in fisheries activities.

Women play a very important role in the post harvest sector through processing and trading but they also have the potential to become more closely associated with fish capture if their role as future boat owners is promoted. There is strong evidence that women must be included as primary beneficiaries if there is to be a positive impact on reducing intra-household poverty.

Since the livelihoods of people in fisheries communities are heavily dependent on the state of fish stocks, these communities have a clear, direct stake in the sustainability of fisheries based on these stocks. The co-management approach has therefore focused on the development of institutional and legal mechanisms to improve fisheries governance through the formation of BMUs to ensure that these stakeholders, particularly the marginalised poor, are able to engage in, and influence decision-making processes relating to fisheries management.

A number of other groups are dependent on fishing and related activities, including boat owners, traders, processors, gear producers and boat builders. These, together with a wider population of fish consumers, are all target beneficiaries who will gain from a more secure resource base and improved facilities and services at fish landings and in associated fisheries communities. There are also other beneficiaries who provide various services to fisheries stakeholders; these include credit providers, shop-keepers and government services involved in the sector.

Principal institutional stakeholders include fisheries departments and research institutes, training institutes and NGOs. These will benefit through either improved physical capacities or enhanced human resource skills, or in some cases through both.

Private industry associated with fish processing and export is also a major stakeholder, including its employees, and one which benefits greatly not only from improved fisheries resources management, fish quality and market

efficiencies but also by being integrated into decision-making management structures.

## ENABLING ENVIRONMENT

Several key factors, ranging from geographical, institutional and political to environmental, social and economic, have positively influenced the development and implementation of a major policy shift towards adopting a fisheries co-management approach in the EAC. These factors are summarised below.

### Geographical

Geographically, Kenya, Tanzania and Uganda are direct neighbours encircling the shared Lake Victoria where the three borders meet at a single point (Fig 1). The lake itself is increasingly becoming a symbol of unity and strong cooperation between the three Partner States. The region also contains other internationally shared lakes with countries bordering the EAC, including lakes Albert and Edward between Uganda and the Democratic Republic of Congo (DRC), Lake Tanganyika between Tanzania, DRC, Zambia, Burundi, Lake Nyasa between Tanzania, Malawi and Mozambique and Lake Turkana between Kenya and Ethiopia. These shared lakes offer the potential for the possible future establishment of regional lake management institutions and geographically wider harmonisation of fisheries co-management approaches and structures. In addition, the coastal States of Kenya and Tanzania provide an opportunity for the spread of co-management structures to marine fisheries.

Fig 1 Map showing Partner States of the East African Community



## **Institutional**

The Republic of Kenya, the Republic of Uganda and the United Republic of Tanzania signed a Treaty for the Establishment of the East African Community in 1999. The formal institutional linkage of these three Partner States of the EAC and the presence of a major shared water body, Lake Victoria, have played a key role in harmonising fisheries policy and legislation both within and beyond the boundary of the lake basin. In November 2006, the Republics of Burundi and Rwanda were admitted to join the EAC. The long-term aim of the EAC is to achieve political, economic social and cultural integration in order to improve the quality of life for people in East Africa through increased competitiveness, value-added production, trade and investments.

On Lake Victoria, the Lake Victoria Basin Commission was recently established to coordinate broad areas of development within the lake basin. Prior to this, the Lake Victoria Fisheries Organisation (LVFO) was formed through a Convention signed in 1994 by the three EAC Partner States out of the need to manage fisheries resources of Lake Victoria in a coordinated manner. The LVFO Convention sets out the structure and functions of the Organisation. The LVFO brings together Heads of national fisheries institutions (management and research) to consult, share ideas and develop harmonised policies, plans and laws not only for Lake Victoria but quite often, nationally. Consequently, a fishery is one of the most closely harmonised of all sectors in EAC and the LVFO is recognised for bringing harmony and efficiency to the very competitive sector of capture fisheries.

The LVFO is the largest and most well known lake management organisation in the EAC. There are, however, other smaller organisations established in different forms in recent years but all basically following an ecosystem management approach. Such organisations are also being considered as possible institutional development options on lakes shared with countries outside the EAC, for example, on lakes Edward, Albert and Tanganyika.

## **Political**

The socialist approach adopted by the national political system in Tanzania provided a broader enabling context for community participation in fisheries management, particularly on Lake Victoria. It is here that the first community fisheries groups known as Beach Management Units were formed. The BMU concept served as a catalyst in developing a fisheries co-management approach in the other Partner States of Kenya and Uganda.

The broad democratic principles of participation, social responsibility, fairness, transparency, accountability and selflessness have been increasingly articulated in national development frameworks, especially in the Poverty Reduction Strategy Papers produced in recent years by each Partner State. The idea of democracy as being not only about political systems, particularly at election times, but also about routine daily life practices, has had a major influence in shaping fisheries institutional development of the grassroots BMUs. During their recent formation or reformation, key fisheries governance concerns about sharing responsibility and powers and setting up decision-

making processes were at the fore of people's attention. In addition, each Partner State was fortunate in having charismatic individuals who served as positive forces for political and policy change at national and local levels.

### **Environmental**

Over recent decades, increasing environmental threats have resulted in both real and perceived negative impacts on fisheries resources and dependent livelihoods. Fishing effort increased dramatically on most lakes, but particularly on Lake Victoria, seen by many as the greatest source of quick revenue generation. With few exceptions, most fisheries are formally open-access with no legal controls in place to prevent entry to fisheries. In addition, harmful, illegal fishing and fish trading practices are widespread putting further pressure on fish stocks. This combination of environmental threats and growing evidence of their negative impacts convinced national authorities that it was time to adopt a new management approach involving communities as partners in management.

### **Economic**

In the late nineties, the EU bans on the Nile perch exports from Lake Victoria had immediate, major adverse impacts on fisheries livelihoods and response to the ban emerged as a significant change event in relation to future community involvement in fisheries management. The marketing bans caused a widespread decline in fish production and a dramatic decrease in many associated businesses at fish landing sites in all three Partner States. In response, the Governments encouraged fishing communities to organise themselves to deter and prevent illegal activities associated with the bans. The communities immediately recognised the need to take action themselves and readily responded to work with Government. Eventually the bans were lifted leaving behind the beginnings of what were to become the Beach Management Units that we see today on Lake Victoria and other lakes in the region.

### **Social**

Without the wish and willingness of communities to engage in a fisheries management partnership with Government, the adoption and spread of the co-management approach would have been impossible. On most lakes, threats were similar and stakeholders expressed concerns for the future fish stocks and their dependent fisheries. The co-management approach offered new hope to effectively address increasing threats.

### **Development Partner Support**

There is clear evidence that the co-management approach would not have been adopted on such a scale and in such a time scale had it not been for support from projects funded largely by development partners. This was, and still is, at a time when the role and future of projects are seriously being questioned and reduced by many development partners and recipient States. The preferred approach to providing developmental assistance now involves centralised budget support, often involving donor basket funding aligned to a

sector wide approach (SWAp) to reduce administration costs and theoretically improve capacity building.

In reality, projects of national and/or regional strategic relevance such as ILM and IFMP provide a very effective and efficient mode of delivery of development assistance with acceptable administrative costs and proven track records of building capacities of both Government and the private sector at many levels. In the case of ILM, this point was clearly highlighted by DFID Advisors in the DFID Annual Review report of ILM, 2003 which stated that "...without the project it is unlikely that advances in policy related to complex issues around common property resource management in relation to the poor, would have been made".

## KEY ACHIEVEMENTS

### **National Fisheries Policies**

In Kenya, a draft National Fisheries Policy has been developed and is awaiting submission for Parliamentary approval. In Tanzania, a National Fisheries Policy was prepared in 1997 but the DoF intends to update and expand it possibly with technical support from the IFMP project. In Uganda, the Department of Fisheries Resources developed a National Fisheries Policy, with technical and financial support from the ILM project. The policy was subsequently approved by Cabinet in 2004. These policies promote, guide and support a co-management approach, setting out roles and responsibilities of key stakeholders including Government, civil society, the private sector and NGOs.

### **PRSPs**

The fisheries sector in each EAC Partner State operates under the wider umbrella of national development frameworks. In all three Partner States, significant developments have taken place through revision and updating of their national Poverty Reduction Strategy Papers (PRSPs). The PRSPs provide the strategic frameworks which guide national development through Medium Term Expenditure Frameworks (MTEF) and national sector plans and budgets. All three States are striving to achieve the Millennium Development Goals (MDGs). Sector plans, and national and regional projects within these plans, must be closely aligned to the wider development objectives and strategies set out in the PRSPs and must clearly demonstrate their contributions to poverty reduction and economic growth.

In Kenya, a new 3-year development framework is set out in the "Economic Recovery Strategy for Wealth and Employment Creation, 2003-2006". This Strategy aims to build a modern, prosperous nation through pro-poor growth supported by improved democracy, empowerment of people, institutional reform and good governance. With regard to capture fisheries, priority actions planned within the Economic Recovery Strategy, include formulating a comprehensive Fisheries Policy, institutional capacity building, close regional cooperation and promotion of bilateral negotiations with the EU and other fish importers. Efficient institutions, secure export markets, increased fish catches

and increased incomes for fisher families are key expected outcomes of the Strategy.

In Tanzania, the National Strategy for Growth and Reduction of Poverty (NSGRP), 2005-2010 focuses on poverty reduction and stresses that economic growth is necessary but not sufficient for poverty reduction. To achieve this equity issues must be addressed under an enabling environment of good governance. The NSGRP recognises the significant contribution that natural resources play in economic growth and poverty reduction and highlights the need to address unsustainable exploitation of these resources and to introduce improved co-management of resources by involving communities. One of the key aims of the NSGRP is to diversify rural livelihoods to relieve increasing pressure on common property resources. An issue of direct relevance to capture fisheries is the need to promote improved utilisation of nutrient rich foods (e.g. fish), particularly in rural areas. This is viewed as being even more urgent given the increased prevalence of HIV/AIDS amongst vulnerable groups such as fisheries communities.

The use of child labour in the agricultural sector is identified as a major concern, again this is of particular relevance to fisheries. The NSGRP is committed to deepening decentralisation, strengthening the capacity of local governments and establishing effective participation of civil society in decision making, equitable representation in institutions, and fair and accountable systems at all levels within and outside Government. All sectors are expected to revisit their respective sector development plans to ensure close alignment and coherence of these plans to national prioritised development goals.

In Uganda, the government has prepared its second PRSP, known as the "Poverty Eradication Action Plan" (PEAP). The Department of Fisheries resources, supported strongly by the ILM project, succeeded in securing the recognition that the fisheries sector is a major contributor to poverty reduction and economic growth and were able to get fisheries priorities incorporated for the first into the PEAP. Areas of key importance requiring priority support included the need to support fisheries co-management, community Beach Management Units (BMUs) and Lake Management Organisations; the establishment and capacity-building of BMUs to co-manage beaches and lakes and improved monitoring and control of illegal practices.

### **Building and Strengthening Civil Society Organisations**

BMUs were first established in Tanzania on Lake Victoria with the support of the Lake Victoria Environmental Management Project (LVEMP) which built on landing site committees established as a result of the EU bans on Nile perch exports in the late nineties. The way that BMUs were set up varied between landing sites and there were no clear guidelines or regulations for their establishment, structure or operation. As a result, BMUs were not socially inclusive, comprised only a small number of people and were not founded upon democratic elections or principles.

In Uganda, the DFR, in partnership with the ILM project, recognised the opportunity that the concept of BMUs in Tanzania and Kenya offered and

began a systematic process to establish fisheries co-management in Uganda based on BMUs. This involved the participatory development of national BMU guidelines and law over a two-year period. As part of the ILM project, over 205 BMUs were formed on lakes Kyoga, George and Edward in accordance with the national BMU Guidelines and BMU legislation. All BMUs received systematic training in how to operate as a BMU and in financial management and fisheries management. Through NGO involvement and donor support, a small number of BMUs were also established at landing sites on lakes Albert and Victoria in accordance with the national guidelines and law.

The experience gained by DFR and ILM in building BMUs in Uganda was later systematically applied by the LVFO, with support from the IFMP project, on Lake Victoria. In 2004, the LVFO agreed to develop harmonised guidelines for the establishment and operation of BMUs on Lake Victoria. The guidelines were supported by the development of national BMU legislation in each Partner State. The Ugandan national BMU guidelines provided a solid starting point for developing the Lake Victoria Guidelines and national BMU regulations in Kenya and Tanzania. The IFMP project went on to support LVFO in reforming BMUs on Lake Victoria in Kenya and Tanzania and forming BMUs for the first time on the lake in Uganda. By the end of 2006, the establishment process was complete and a total of 1,087 BMUs were established on Lake Victoria. This was an historic moment for the lake which paved the way for fisheries co-management. All BMUs were then trained in operating as a BMU and in financial management. BMU training continues under the IFMP project.

### **Reshaping and Strengthening Government Fisheries Institutions**

In Uganda, the DFR and ILM project collaborated closely in developing strategies to strengthen fisheries institutions at all levels and to ensure that they were well-linked at macro-meso-mico levels. It was agreed that at local level, the most effective way to strengthen the public-private partnership between BMUs and Government was to build the capacity of local government fisheries officers in parallel to BMUs and to use them as agents of change in establishing the BMUs. This was undertaken and completed successfully on lakes George, Kyoga and Edward. The same process was adopted two years later at regional level by the LVFO and the IFMP project on Lake Victoria. The process involved training of fisheries officers to serve as change agents as part of an extensive awareness creation programme so that each landing site was reached by a trained officer, usually a fisheries officer, but sometimes officers from other sectors, such as community development.

At a lake wide level (meso-level), DFR and ILM worked with Local Governments in fisheries and other sectors (e.g. wetlands, wildlife, forestry, NEMA) over a two year period to create the first Ugandan lake management organization (LMO) on Lake George called the Lake George Basin Integrated Management Organization (LAGBIMO). This new institution was based on existing institutional mechanisms which allowed district governments to form associations. It went further by incorporating BMUs in all its structures.

Although the process of forming LAGBIMO was supported financially and technically by the ILM project, the resultant structure was decided by its stakeholders. The project cautioned against building a structure too large that it becomes unaffordable but the warning was not heeded (see Section 5.3). The funding of LAGBIMO was agreed to be from contributions by its members, i.e. local governments and BMUs.

The process was later repeated on Lake Kyoga where the Lake Kyoga Integrated Management Organisation (LAKIMO) was formed in 2003. Here, despite being a much larger lake, the institutional building process took less time because of lessons learned from Lake George. A major difference between the lakes was in the number of BMUs, on George there were only 8, whereas on Kyoga there were 192. This meant that BMUs had to form associations at higher levels to enable democratic representation at the highest lake wide level in LAKIMO. These LMOs provide institutional linkages between central and grassroots fisheries management institutions and bring together national institutions, local governments and communities who have a stake in lake resources.

In all three Partner States, there are intentions to reform fisheries management structures at a national level to improve efficiencies in service delivery, retain direct control of revenues raised from the fisheries sector and broaden stakeholder representation in decision-making bodies on how these funds are utilized for management and development. In Tanzania, this process covers only marine fisheries whilst in Kenya and Uganda, it covers inland fisheries.

The ILM project provided technical support to DFR in developing the proposed structure, functions and financing of the Uganda Fisheries Authority (UFA). Technical support was also provided by the IFMP to promote UFA and to help the Department of Fisheries design the Kenya Fisheries Development Authority (KFDA). These new Authorities, when established, will link closely with the LVFO and other lake management organizations. Approval has been given by Government for the establishment of UFA but its legal establishment is dependent on Parliamentary approval of the new Fisheries Bill. The national elections in Uganda slowed progress in presenting the Fisheries Bill to Parliament but this is expected to take place during the coming year (2006/07). There still remain questions on transitional funding of UFA in its first years of operation. In Kenya, The KFDA policy and legislation, developed with IFMP technical support, have not yet been submitted for Parliamentary approval.

### **Developing and Harmonising Enabling Laws**

The development of supportive legislation providing legal identity and power to fisheries institutions at micro-meso-macro levels was regarded by national fisheries institutions, ILM and IFMP as being essential for the establishment of a functional fisheries co-management system. This involved the development of BMU regulations in each partner State, the updating of national Fisheries Acts, developing legal recognition for regional lake management organisations e.g. LVFO through its Convention and, in Uganda, LAGBIMO

and LAKIMO through their Constitutions; legal empowerment of new Fisheries Authorities e.g. UFA and KFDA. With regard to national Fish Acts, Tanzania has developed and recently updated Act in 2003, Uganda is awaiting submission of its Fisheries Bill to Parliament and Kenya is in the process of finalising an updated Fisheries bill for submission to Parliament. ILM and IFMP provided technical support in drafting Bills in Uganda and Kenya respectively.

Legislation empowering community BMUs in Uganda was enacted in 2003, BMU regulations were approved in Tanzania in 2005 and Kenya has developed a very detailed set of highly supportive BMU regulations awaiting submission for approval. The ILM project supported Uganda whilst the IFMP supported Kenya and Tanzania in these legislative developments.

On Lake Victoria, the IFMP project is supporting LVFO harmonise a variety national laws relating to fishing gears, fishing methods, licensing procedures, gazetted landing sites, control of fishing effort in order to improve management.

### **Developing Linked Planning Systems and Plans**

In Uganda, the draft Fisheries Bill sets out the mechanisms for a well-linked fisheries planning system. In this system the national Fisheries Sector Strategic Plan (FSSP) is generally aligned to the PEAP (Uganda PRSP) and provides the umbrella framework for lake management plans e.g. by LAGBIMO and LAKIMO, District Fisheries Plans and BMU plans. Apart from the fact that a national plan is essential for putting policy and legislation into practice, added stimulus to develop such plans came from the new way of acquiring donor support through central budget support and basket funding using a sector wide approach (SWAp). The national strategic plan appears to have become the required entry point for receiving such support. ILM devoted considerable effort and resources in not only helping DFR develop a draft FSSP but also the lake management plans of LAGBIMO and LAKIMO. These plans were incorporated logical frameworks with indicators relating directly to key governance issues. This was a key way to ensure that improvements in fisheries governance were explicitly measured and monitored as part of government planning systems.

Also in the area of local government development planning, ILM was influential in ensuring improved integration of ENR concerns into the final draft of the national Harmonised Participatory Planning Guide for Parishes and in promoting the need for better integration of ENR in development policies and plans within local government. ILM also made important contributions to the national poverty studies by providing clearer poverty environment linkages.

On Lake Victoria, the IFMP project modified its design indicators during the Inception Phase to introduce a set that more closely related to making improvements on fisheries governance issues relating to representation, power sharing and more equitable share of access to and benefits from fisheries. The project focused its support in planning at regional level by

helping LVFO to develop planning structures and systems which have produced many significant outputs in the last two years.

These have included regionally harmonised guidelines for setting up and operating BMUs. The guidelines contain an agreed BMU performance monitoring system with process indicators related to governance issues of participation of marginalised groups in decision-making, and to the transparency and accountability of BMU operations. Other key regional planning documents include MCS guidelines which are particularly important for directing patrol operations; LVFO Standard Operating Procedures for collecting and analysing fisheries and socio-economic information; regional strategies for Communication, HRD and HIV/Aids in fisheries; Regional Plans of Action for IUU and Managing Fishing Capacity. The latter is the first of its kind globally for inland fisheries. All of these regionally harmonised plans and guidelines are being used to guide extensive field activities on the lake in the three Partner States.

### **Collection and Analysis of Information for Planning and Management**

Regular collection of monitoring information to assess the state of fish stocks and understand the environmental, social and economic impacts of management measures is an essential component of any fisheries management plan. The means of collecting such information can vary greatly depending on many factors but size of the system is one of the key influencing factors. On the relatively small Lake George, the ILM project established a fisheries information collection and analysis system which closely involved the communities themselves.

On the very much larger Lake Victoria, a wider range of fisheries surveys were established using regional Standard Operating Procedures for trawl, hydro-acoustic, gill-net, light-fishing and periodic census surveys. Communities were involved in catch assessment surveys but not as closely as on the smaller lake. Lake Victoria also provided a more reliable time series of data upon which to base fish stock assessment. The IFMP project provided technical assistance to develop an innovative Fisheries Management Decision Support Tool (FMDST) to help managers take important management decisions secure in the knowledge that data upon which the decision was based, were collected and analysed in manner agreed across the three Partner States. This was viewed as particularly important by the LVFO given a history, prior to IFMP, of disputed data and conflicting views on stock status.

### **Participatory Control of Access to Fisheries**

With increasing human populations, the open access nature of fisheries has attracted many newcomers to lake fisheries resulting in at least a doubling of fishing effort on many lakes over the past decade. Since the mid-1990s, there have been signs of decline in many of the dominant fisheries, with classic indications such as declining catch per unit effort, a reduction in age/length at maturity, higher mortality, and an increased proportion of immature fish in the catches. The ILM project worked on two very different lakes with regard to access control. Lake George was a “controlled” lake with a limit on the number of fishing boats and nets allowed on it by central government. This

system had been in place since the fifties and there widespread dissatisfaction with the way it operated. In contrast, on the larger, Lake Kyoga there was no limit on boat or gear numbers.

As part of deepening decentralisation, the DFR delegated responsibility for fisheries licensing to local governments and ILM seized the opportunity to help DFR go further by involving BMUs in the licensing process and to use licensing as a local management tool. A system was established that vetted all applicants, provided allocations to women and crew as well as the traditionally dominant boat owners and spread access by allowing only one boat license per household and favoured locally resident households rather than outsiders. The new system had massive impact on peoples' attitudes and perception, and for many people this was the first time that they realized the potential power of the new co-management system on their livelihoods. The new participatory system of licensing positively addressed key governance, poverty and gender issues.

Unfortunately, the project did not have time to establish the same system on Lake Kyoga but the IFMP project and LVFO have realized that a similar approach might provide major benefits on Lake Victoria especially for the more threatened species such as Nile perch. Consequently, the draft RPOA-Capacity document for Lake Victoria included options of using fisheries licensing in a participatory manner as a means of controlling effort and access.

### **Sustainable Financing of Co-Management Institutions**

Sustainable financing of fisheries institutions at all levels is essential for their functioning and survival. Funding by Government is seriously inadequate in Kenya and Uganda, highlighting the urgent need for fiscal reforms within the fisheries sector. In Tanzania, the Fisheries Division established a Fisheries Retention Scheme deriving funds from levies and royalties on fish exports from Lake Victoria (Nile perch) and marine waters. It uses these funds to support priority fisheries programmes.

More recently, a Deep Sea Fisheries Authority has been established in Tanzania which will retain revenue from the marine fisheries EEZ to be used for management and development purposes. In Uganda and Kenya, the national fisheries institutions are intending to establish more autonomous national Fisheries Authorities with powers to directly retain revenue generated by fisheries and use it to fund fisheries activities.

All sources of revenue for fisheries management which are, or will be, generated directly from fisheries will be based on a "User Pays Principle". This principle is being applied to the fish export industry in the three Partner States. Studies on establishing a Fish Levy Trust by levying a fee on the export of Nile perch from Lake Victoria were undertaken with support from LVEMP and a regional synthesis report made recommendations for regional harmonisation. In July 2006, a levy on the export of fish and fish products was agreed for the first time in Uganda but has yet to be implemented. Once implemented, the next step will be to agree on how funds are distributed

between institutions and programmes and who will take decisions on these funding allocations.

The User Pays principle also applies to the revenue generating powers bestowed upon BMUs through regional and national BMU guidelines and national legislation. In two countries, Uganda and Tanzania, in addition to revenue raised by BMUs through charging user fees, the District Local Governments operate fisheries tax collection systems that are tendered out to private individuals as a means of raising local tax revenue. The funds raised in this way are not normally reinvested in fisheries management or development but diverted to other priority development programmes such as health and education.

In Uganda, the DFR and ILM documented many harmful and exploitative impacts of the fisheries tendering system and developed ways to avoid these through legislation in the draft Fisheries Bill. Through the Bill, the fisheries tendering system will be replaced by a BMU-operated Landing Site User Fee (LSUF) which will generate considerable funds not only for the BMU and its higher committees for local fisheries management, but also for Local Governments, and for the emerging Uganda Fisheries Authority. At the same time, it will reduce the tax burden on poor fishermen and traders. IFMP is currently supporting LVFO in examining options for sustainable financing of BMUs and all other LVFO structures.

### **Promoting a Savings Culture in Fisheries Communities**

While fishing has become much more important economically over the past three decades, the benefits have not been equally distributed so that poverty remains high within fishing communities and there is little sign of a savings culture to accumulate any wealth earned from fisheries. The ILM and IFMP projects therefore focused effort on promoting and guiding BMUs in opening and running BMU bank accounts as part of a training module on financial management given to almost 1,300 BMUs. Many BMUs established under ILM subsequently went on to open and run bank accounts supported and guided by local government fisheries officers. The same is currently happening on Lake Victoria under the IFMP project. This is viewed as the first step towards attracting more banking facilities closer to landing sites and the opening of accounts by individuals of BMUs as well as the BMU as an organization.

### **Participatory Enforcement of Fisheries Rules and Laws**

As fishing effort increases and catches per fishermen decline, fishermen often resort to illegal methods and gears to maintain their catches and incomes, inevitably catching smaller, often immature and less valuable fish. Actions to address this issue were similar under ILM and IFMP involving the establishment of transparent, accountable patrol operations undertaken at inter-district level and involving BMU representatives in patrols. On Lake Victoria, given its size and international boundaries, patrol activities were also undertaken at national level. It was, however, realized by the IFMP project that even this participatory approach may not be enough to significantly reduce widespread illegal activities. The project is therefore currently adopting

a “carrot and stick” approach. In addition to the punitive patrol approach, the project is introducing incentives and rewards for achieving local reductions in illegal activities by BMUs and Local Governments. It is also exploring practical and cost effective ways to transform illegal fishing operations into profitable legal enterprises.

### **Securing Fish Resources**

The numerous institutional, social and legislative achievements made as part of developing a co-management approach in the EAC are expected to secure or improve the fish resource base. Monitored fish resources by the ILM project on Lake George revealed no clear evidence of healthier fish stocks or increased abundance. On Lake Victoria, there is also no clear evidence that improved management has resulted in increased fish productivity. It is, however, a little early to expect such major improvements in such a short time on large lakes such as Victoria. What is more clear is that many of the institutional, social and legislative processes are fitting into place to induce improvements in the fish resources.

### **Improving Infrastructure and Services at Landing Sites**

There are few support services available for fisheries communities living at landing sites and associated villages. As a result, education levels are generally low and there are very poor health, water, sanitation services and feeder roads. There is also inadequate fisheries infrastructure for fish handling processing and storage. In response, the IFMP project has directed a considerable proportion of its resources to improving working and living conditions of fisheries communities through improved infrastructures.

### **Reducing HIV/AIDS in Fisheries Communities**

There is an on-going human disaster within the fisheries communities of the EAC caused by HIV/AIDS and the effects are far more prevalent than in most other places in the region. Not only does the disease cause immense suffering to infected individuals and their dependents but also has major harmful impacts on the fisheries labour force as a whole. Sadly, insufficient attention is still being paid to this crucial issue. The ILM and IFMP projects therefore took upon themselves the tasks of highlighting this issue.

Since the design and budgets of both projects did not provide resources to directly tackle the HIV/AIDS problem, the projects actively engaged with agencies to attract interventions and support to fisheries communities. The ILM project attracted a DFID-funded research project on HIV/AIDS in fisheries communities on the major lakes of Uganda. In collaboration with DFR, this later led to the development of a national Strategy and Action Plan to address HIV/AIDS in fisheries communities in Uganda.

Similarly, IFMP supported LVFO in bringing together various organizations to establish a network of institutions which had expertise to address HIV/AIDS in Lake Victoria fisheries communities and a Strategy and Action Plan was developed specifically to address HIV/AIDS in fisheries communities on the lake. This has been followed by a regional initiative under the Lake Victoria Basin Commission funded by SIDA and implemented through a regional

NGO, African Medical Research Foundation (AMREF). As legally recognized civil society organizations, BMUs provide particularly useful institutional entry points for these and other rural development initiatives around lake shores.

## LESSONS LEARNED

### **Resistance to Improved Governance**

Good governance provides the general conditions within which economic growth, well-being and poverty reduction take place. One of the greatest challenges facing the sustainability of a co-management approach is to ensure that policies are actually put into practice in accordance with laws and guidelines, and that they are not “hijacked” by more powerful members in rural society, political leaders or domineering government officials or private individuals whose self interests may overrule sustainable and equitable use of fisheries resources. These are governance issues facing all sectors not just in natural resources management.

A recent assessment of BMU performance on lakes George and Kyoga commissioned by the IFMP project, two years after ILM project assistance ended, found that BMUs have successfully been able to perform most of their functions to one degree or another. It was found that BMUs can effectively:

- Continue to organise themselves, hold meetings, improve social harmony within the fishing communities and act as fora for collective prioritisation of beach development, and conflict resolution between multiple stakeholders.
- Collect some revenues, account for them transparently, and utilise funds raised for effective Beach development and social programmes.
- Ensure some reasonable degree of social inclusion for poorer members, including fishing crew and women, and provide occasional support to poorer members of the community, in times of need, and
- Contribute to the control of illegal fishing gears and methods.

However, there were very few BMUs that had effectively achieved all of the above, whereas quite a number had successfully performed some, but not all of these responsibilities.

The study confirmed that governance needs to be improved, and can only be improved by gradual, determined and concerted local effort, and by making decision-making systems and processes as transparent and accountable as possible. This, in turn, requires the following:

- Expect resistance to change by those who wielded influence and power prior to the change process. These are likely to be from within communities themselves as well as in government and politics;
- Use new legal powers, especially by poor and marginalised stakeholders, to counter any resistance to improved governance and management;
- Keep information of all kinds flowing to relevant stakeholders to allow them to be aware of decisions and events that affect their livelihoods;

- Ensure that the democratic power of the BMU Assembly is not eroded and taken over by a minority in the BMU committee;
- Using information flows, it is imperative to monitor the performance of local leaders in BMUs or government and, when necessary, bring them to account so that any abuse of office or power can no longer be done with impunity. This means tackling malpractice and corruption with more forceful disciplinary measures, paying particular attention to financial processes within communities and government.
- Build strategic alliances to counter resistance to change by informing, engaging and influencing key political leaders from the outset, especially in programmes involving the need for legislative change.

### **Mentoring & monitoring**

The IFMP project learned from ILM experience by setting up extensive BMU mentoring and monitoring programmes. These were considered vitally important to steer and guide the newly emerging civil society BMUs and ensure that improved governance and management were not undermined by illegal activities of local or central elite.

### **Government decentralisation**

With the exit of the ILM project from Uganda, the new lake management organisations (LAGBIMO and LAKIMO) struggled to operate and even survive. This was due mainly to the failure of Local Governments to meet their financial commitments to maintain small secretariats of these organisations and provide support to lake wide activities. Little support to these LMOs was also provided by national government. The evidence indicates that decentralisation does not automatically lead to improved natural resources management and the potential benefits of decentralisation are not always easily attained.

Certainly during the life of ILM, limited capacity in many areas of local government and the slow release of funds and their accountability delayed the implementation activities. In many cases, Local Governments, clearly needed effective guidance from central government on developing and implementing systems, for example, for monitoring and evaluation, community-based planning and financial management. However, ILM did work well with all the local governments on George and Kyoga and would not have been able to implement the approach without their co-operation and dedication.

In light of ILM experience, the LVFO and IFMP are currently considering the potential roles of Local Governments and BMU associations in meso-level structures of LVFO.

### **PRSPs as Financial Drivers of Development**

In Uganda, the explicit intention of incorporating fisheries into the PEAP was to gain the acknowledgement from central budget controllers of the importance of fisheries to the country and to obtain justified increases in budget allocations directed towards prioritized, decentralized, programmes through the conditional grant system adopted by other programmes such as health, education, roads etc. Despite detailed evidence provided in the PEAP

of the significant contributions made by capture fisheries to national poverty reduction and economic growth, there was no subsequent increase in funding to fisheries sector. On the contrary, budget support decreased in the following year. This in turn meant that the DFR could not undertake its duties to adequately promote, guide and support the emerging and vulnerable lake management institutions and BMUs. This experience highlights that continually lobbying is needed to obtain adequate budget allocations even when fisheries priorities are explicitly incorporated in PRSPs.

### **Importance of Projects as Effective Donor Support**

Experiences and outcomes from ILM and IFMP projects clearly demonstrate the effectiveness and efficiencies of the delivery of donor assistance to developing countries. The role of a well designed project, with clear strategic relevance to national or regional policy and development frameworks is currently being downplayed or ignored by many donors and recipients. The abilities of ILM and IFMP to work at all institutional levels – micro, meso and macro – and to ensure linkages were formed and strengthened between all levels with feedback loops to inform further policy and legislative development, are achievements that cannot normally be attained by the preferred donor budget support mechanism.

Continued donor support is crucially important at this transitional stage in shifting from centralised to participatory fisheries management, when institutional development and capacity building costs are high. The pace of change is also not always easy to predict, especially where political reform processes and legislative changes are involved, but clearly a longer than normal time horizon is needed to assure continuity in co-management development, capacity building and implementation.

### **Scale of Co-Management Initiatives**

The approach to BMU formation taken on lakes Kyoga and Victoria was necessarily top-down, based on overarching and supportive policies and laws. It was an approach based not on small-scale management crises but one which required effective and extensive outreach to reach numerous, scattered communities. This is not to say that important lessons were not learned when scaling up the implementation of ILM on Lake George to Lake Kyoga and then to Victoria. On the contrary, many institutional and legislative lessons were transferred resulting in substantial savings in costs and time. ILM experience also proved invaluable in designing and implementing the outreach programme on Lake Victoria. This showed that there was sufficient flexibility in the system to allow appropriate tailoring to suit the needs of lakes of any size.

### **Legal Empowerment of Communities**

A key lesson was the crucial importance in acquiring legal empowerment of community organisations, which, in the EAC are BMUs. Without legal identity and power, these new groups are very vulnerable to local leaders who may not wish to see improvements in local governance and management. Legal identity is also crucial to demonstrating clearly the mandate of BMUs within local government systems. The development of BMU legislation provides a

vehicle for addressing explicitly issues of governance, gender and social poverty through, for example, the legal allocation of places on decision making BMU committees for women and boat crew.

### **Valuation of Fisheries Benefits**

In order to attract Government and development partner investments, and to get priorities embedded in PRSPs, reliable economic evaluations are needed of the contributions made by fisheries to poverty reduction and economic growth and to show how these are shared between different stakeholders.

### **Sustainable Fisheries Financing**

The sustainable financing of fisheries management institutions is a rather obvious lesson but nevertheless a very important one. It is also one that is sometimes ignored during the initial process of developing new institutions or modifying existing ones. It can be a process that often takes longer than expected, especially when legislative amendments are needed, so it is wise to start considering options at the earliest opportunity.

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