MODERN FISHERIES AND ITS IMPACT ON ACCESS TO AND COMMON PROPERTY MANAGEMENT: A CASE STUDY OF LAKE VICTORIA FISHERIES-UGANDA

BY

C. ASOWA-OKWE

SENIOR LECTURER,

DEPT. OF POLITICAL SCIENCE AND PUBLIC ADMINISTRATION

MAKERERE UNIVERSITY.

RESEARCH FELLOW

CENTRE FOR BASIC RESEARCH

KAMPALA.

A paper to be presented at East African Symposium on Common Property Management, to be held at the Uganda International Conference Centre, Kampala from 26th to 28th, March, 1996.
INTRODUCTION:

Studies on lake Victoria Fisheries are increasingly getting more diversified in scope and themes. Unlike in the past when the body of literature available were largely products of endeavours by physical scientists concerned with fish species and related issues, today there are texts which attempt to address ecological and socio-economic and cultural changes in the lake Victoria Basin (Kongere, P.C. 1978; Swanta, M. 1986; Gerrad, S. (1991); Asowa-Okwe, 1989; Odongokara, 1991; Bugenyi, 1991; Okaronon, 1991).

These studies indicate that the fisheries of lake Victoria have undergone substantial changes. More importantly, these studies indicate that fisheries has become one of the important source of income and livelihood for the majority of the people in the region. A recent survey estimated that 73,000 persons were engaged in fishing directly and 500,000 depend directly or indirectly on the sector at the secondary and tertiary levels for their livelihood (Ministry of Animal Industry and Fisheries (MAIF, 1989- Fisheries Sector Survey, 1988: Kampala, Uganda).

Obviously, the shift in the focus of issues of social investigation as noted above is a welcome move which has to be encouraged and strengthened. Hitherto, research and management concentrated mainly on biological, ecological and technical harvesting issues, with only token consideration of socio-economic dynamics that are never completely controlled by management activities. This paper has three contentions. First that fisheries involves very much predator-prey associations (man-ecosystem), and yet attention has
often focused only in the prey (fish), thus ignoring problems that develop because the predators (Men) do not sit still either. Secondly, that the establishment of colonisation and its hand maiden market economy set in motion a process which transformed the dynamics of indigenous Lake victoria fisheries. Crucial to this process, were four elements: the state, capital (in terms of finance) and technology, and the burgeoning rural urban population in the East africa and beyond. The interaction between these variables and the fishers of Lake victoria basin led to the commoditisation of the industry. This in turn meant that the techniques of production, the acquisition of fishing crafts and gear, and the production and distribution were subject to the market laws. Thirdly, in the early 1980s market opportunities for the Nile perch developed abroad and the fishing grounds of Lake Victoria were soon transformed into resources for a global economy. During the mid-1980s only some 10-15% of the Nile perch was exported. In the last 8-9 years there has been a rapid increase in the number of processing factories which have been established along the shores of Lake Victoria. Today there are about 50 factories located around the lake. Presently most of the Nile perch is being shipped to Europe, the Middle East, United States and Japan and the level of export has increased every year. The Lake Victoria fisheries is therefore undergoing a dramatic changes due to the fast development of the export industry, and the increasing use of machine- made fishing gear as opposed to traditional ones.

Consequently, the organic link between the fishers and the instruments of production which permeated the pre-colonial fisheries in the lake is gradually but progressively getting eroded. Capital and the state have assumed greater prominence in the control and
management of fisheries and other aquatic resources. This inevitably has resulted into the
centralisation of the traditional people-based institutions of social control and
management, and the dominance of capital and state bureaucrats over the natural and
human resources of the Lake Victoria Basin.

This study ought to be seen as one of the new attempts aimed at providing insights into the
dynamics of Lake Victoria fisheries economy and how new developments have changed the whole question of access to and common property management. The material for this paper are derived from my own research on Lake Victoria as well as other secondary sources available on the subject at Makerere University, Centre for Basic Research Kampala, and Fisheries Research Institute (FIRI), Jinja.

2. HISTORIOGRAPH OF LAKE VICTORIA FISHERIES:

Fishing is one of the oldest economic activities of the people of Lake Victoria region of
East Africa. Traditionally, it was the male fishers who went to the lake to fish. They were also responsible for weaving and fashioning fishing gear (i.e. non-return baskets, Traps, hooks, harpoons, and the construction of fishing crafts (canoes and rafts). The female fishers concentrated on the processing and cooking of fish.  

1 Asowa-Okwe, Capital and conditions of Fisherlabourers of Lake Kyoga and Victoria Canoe Fisheries; Working paper no. 3, Centre for Basic Research Publications, 1989.
Fishing in the lake was conducted in various ways, but mainly by baskets, hooks, and by an
construction of traps along the shorelines. An analysis of the data available indicates that to
the majority of the fisherpeople, the main objective of fish production and exchange was to
obtain use-value products and that elements of commodity production had developed
among the fishers. It also indicates that the bulk of the fishers had access to the lake
resources and instruments of production, and those items which were not produced locally
due to natural (or ecological) endowment and unequal levels of development were,
obtained through the barter trade with the neighbouring people.  

Furthermore, the use of the natural resources of the Lake, and the resolution of social,
economic and political crises of the fishers were subject to traditional councils or clans
assemblies led by a leading fisher person. The authority of these traditional leaders went
beyond the confines of the lake resources. The advent of colonialism and capitalist mode of
production based on modern technology changed all these features. The effects of
colonialism on fisheries varied, depending on resource availability and proximity of the
fishing zone to the newly established colonial economic infrastructures. As pointed out in
the introduction many factors were crucial in changing the nature of Lake Victoria
fisheries. However, the basic technological bridge from the pre-capitalist (subsistence)
fishing to commodity production was undoubtedly the adoption of imported fishing gear
i.e. gill nets, hooks, seine nets, outboard engines, and the introduction of Nile perch and O.

Niloticus. The use of these crafts and gear especially, enhanced and stimulated the

---

2 See Asowa-Okwe, “Pre-colonial Fishing Industry in Lake Kyoga Region of Uganda” in Makerere
capacity of the fisherpeople to exploit fishing grounds in any season of the year. They also made the production of fish for sale a more feasible enterprise as opposed to the pre-capitalist mode when surpluses would be disposed of only in a better than average season.

Historically, the adoption of western manufactured fishing gears dates back to 1905 when the flax gill nets, hoocks, cords, e.t.c. were sold to the fishers of Lake Victoria Nyanza at Sio Port. The recipients were basically the Samia, Luo and Banyala fishers operating from Majanja, Siguulu and Wayasi Islands and the neighbouring landings on the north eastern shores of Lake Victoria. Within a short period these fishers noticed the efficiency and relative durability of these fishing gears in comparison to the instruments traditionally moulded and fashioned by the indigenous artisans.

Linked with these changes was the improvement of transport and communication system, and the development of urban and trading centres, which widened the market for agricultural and fish products in the country through expanding demands. Two other factors which stimulated more changes in the fisheries were the introduction of outboard engines in 1953 and the stocking of Lake Vistoria with several fish species since in 1951.

In Uganda side of Lake Victoria outboard engines were first introduced at Kigungu fish landing. The latter took the lead because of its proximity to the headquarters of Fisheries Department at Entebbe. The engines were introduced with the aim of enhancing mobility and the carriage capacity of the fishing crafts (canoes). The colonial state played a leading

---


4 Interview with Odhambo odinga, a fisherman from Lumuno (Samia - Bugwe) September, 1984. Also see Mann, J.M. "A Resume of the Evolution of the Tilapia fisheries of Lake Victoria up to the year 1960".
role in the diffusion of the outboard motor engines. Fisheries Assistants were stationed at major landings where they encouraged the adoption of the innovation by bringing the engines from Entebbe and showing the fishers how to operate them. 5

However, because of the high cost and heavy running expenses compared to fisher's normal profit margin, the outboard engines were not extensively adopted until in 1957-58. 6 But even then the ownership was confined to a small group of well-do-people with substantial capital outlay.

Fundamentally, the adoption of the outboard engines had two sides to it. On one hand, it “revolutionized” the industry as it facilitated easy transportation of fish from remote landings and islands to the main road-head landings where high prices were offered. But on the other hand, the existing socio-economic relations limited the spread of this new technology so that the “revolution” turned out to be almost symbolic. Indeed up to date, there hardly any fishers using motorised canoes in fishing. The canoes are strictly used for transportation of fresh or processed fish, and passengers from the remote landings and Islands.

Lastly, the stocking of Lake Victoria with Nile perch and other species seems to have “revolutionized” the fisheries in the lake much more than the motorised canoes. According to the colonial historiography, these new fish species were introduced with twin objectives

6 Ibid, p.25
of establishing stocks of commercially valuable species capable of exploiting an ecological niche currently underutilised, and of yeilding adults whose large size would encourage the re-introduction of 5° gill nets. Among the tilapia complex, T. Zilli, T. Rendalli, T. Niloticus ("tuf") and T. Leucostica were stocked and began to contribute to the to the commercial landings. The Nile perch, a predator was introduced amidst great controversy, with a view to crop the presumabbly numerous population of haplochromis (Nkejje) which abound the lake then. Expectedly, the limnologists disagreed over the rationale of the move. Some of the scientists called for precaution and contended that feeding habits of the Nile perch (Mpuuta) could not be predicted with precision and that there were possibilities that the ecological conditions of Lake Victoria, could make the tilapia and other indigenous species the principal diet of the introduced.

However, whether it is the predatory activities of Lates or overfishing which has contributed to the apparent depletion of many species hitherto found in the lake is a subject yet to be resolved. But the fact remains that many of the fisheries up to the 1960s, are no longer cropped in substantial quantities as in the past. Some of these species i.e. alestes (ensoga), laboe (eningu) and ensote (of haplochromis stocks) are hardly harvested today.

To the fishers of Lake Victoria the explanation is obvious, as the decreased population of indigenous species is paralleled by the increased population of the perch, and many a time

7 ibid, p. 25
8 ibid, p. 25
some of the former species are found in the stomach contents of a trapped or netted Nile perch.

In respect to the method of fishing and more significantly the instruments used in production, the stocking of the lake with the perch brought a radical change. Once the perch established itself as the major species in the two lakes, the fishers were compelled to resort to the use of strong and relatively large mesh nets of 26/36 ply. These nets are braided with double-knotting, and are generally very costly. And where there are open, sandy beaches, the fishers preferred seine netting (Kokota, Kragala or Rimba). Others adopted the use of a fleet of multi-hooked fishing lines.

These changes had a wider implications to the state of fisheries as well as the fishing community of Lake Victoria. To the majority of the fishers these changes led to their alienation from the control and ownership of the boats/gear, and, therefore, access to the fishing grounds. Many of these people were now tool poor, and have therefore, lost the organic linkage with the instruments of production as obtained in the past.

However, to the few well-to-do fishers, these changes were positive. The acquisition of seine nets, gill nets of 26/36 ply, and fleet of multi-hooked fishing lines proved great assets. With these inputs, such people were able to harvest more fish and obtain good returns from the sale of fresh or processed fish. To these minority people, the industry became more lucrative, and reliable source of quick and substantial cash income. This partly explains
why Lake Victoria fisheries has witnessed increased investment both in the sphere of
production, processing, and distribution, especially in the post-colonial period.

3. Changes in Mode of Production and Management of Lake Victoria-Uganda

Fisheries

3.1 Modes of Production:

In light of the above discussed developments, two forms of production characterised canoe
fisheries in Lake Victoria in the contemporary period. That is petty commodity
production and capitalist production. In the first form of production, the fishers operate
gill nets, traditional plunge non-return baskets, fixed frame traps (enkwira), and long or
single hook lines as the main instruments of production. It is the ownership of fishing craft
which is open to any one, although in practice few fishers own them. The common
practice is for those with fishing gear to operate as a crew, relying on the canoe owned by
one of them. The production of such fishers tend to be limited, and the income derived
from the sale of fish is minimal hence limiting the scale of capital accumulation.

Under petty commodity production no considerable relations of exploitation exist between
the fishers who themselves are owners of part of the means of production (gear) and have
the entire product of labour at their disposal, save the portion given out to the canoe owner
in return for services rendered to them by the vessel (capital). In addition, under petty

9 These conditions are applicable to other lakes in Uganda according to studies conducted by EEC/UFFRO
(1990-92).
commodity production, even the owner of the vessel (capital) also makes a contribution, as the crafts plays a crucial part in the fisheries. Usually the crew surrender 10% of the catch to cater for canoe services. However, in the event of bad weather and when the catch is very low, the crew are allowed to take home whatever little fish harvested for domestic use.

In the second mode, the fishers operate gill net fisheries (taikuni, kikubo or ponyoka), seine nets, and lighting system for mukene fisheries, on a more or less capitalist basis. Under this mode, the distribution between the owners of crafts and gear (capital) and the fisher labourers is quite distinct. They relate to each other as employer and employee. The former do not engage in fishing. They remain strictly on the land awaiting the catch brought ashore by the hired labourers. Indeed the fisher labourers neither own and control the instruments of labour nor the products of their labour. In essence they are basically wage-labourers (abapakasi) whose participation in the Lake Victoria is primarily predicated upon sale of their labour power to the owners, of crafts and gear (capital).

The above analysis underscores one salient point that contrary to the notion held by many scholars and government officers in „Third World“ countries, that fishery resources is an open-access resource, subject to exploitation by all fishers, entry into fisheries is now subject to economic and legal constraints. It is therefore, no longer a common property subject to common property management mechanisms formulated by the fishing community as in pre-colonial era.
Hence the current fisheries on Lake Victoria Uganda is permeated by the co-existence of these two forms of production. The exception is the mechanised form of fishery recently attempted by the Sino-Uganda fisheries Joint Venture Co. Ltd., operating two-trawling units from Entebbe.  

As pointed out earlier a variety of fishing gear are employed. The most common and by far the most popular is the synthetic gill nets. A large number of beach seines, long lines, castnets and light attraction are also used. Most of the fishing operations take place at night, except for seine nets and cast nets which are operated during the day. The number of fishing crew per canoe is subject to the mode of fishing and the size of the canoe itself. Fishers as a whole usually operate in twos or threes when using gill nets, castnets and long lines, and groups of four or more for seines, depending on their size. A canoe is often an individual fishing unit but several canoes may combine operations when fishing for mukene.

Although the gill net has evolved as the most suitable fishing gear so far on the lake, various circumstances including scarcity and high prices of inputs, and rampant theft in certain areas have led to innovative variations to the normal use of the nets as passive gear, and have also contributed to the upsurge in the use of the "illegal" seines and cast nets. In many areas of the lake the gill net is no longer used as a passive gear but it is set and

---

11 Beach seining and lighting were prohibited by Administrative orders in Uganda in 1987. The ban on light attraction has, however, been lifted and the mukene fisheries is on the increase especially in the islands of Lake Victoria-Uganda.
12 See T. Twongo et.al, 1991 op. cit.
immediately lifted after fish have been chased into the meshes by beating the water with a long stick (the “mwoko”) or a special club (“Taikuni”). Some of the fishers use the gillnet as an enclosure net, setting and lifting it before moving to the next fishing ground. These active methods of fishing allow for the use of only a few (four up to ten or twelve) gill nets in a working fleet, often making catches which are comparable to, and sometimes better than, those made with many nets set passively. 13

The main advantages of active fishing with gill nets and seine nets is that the risk of theft on the lake is considerably reduced. Secondly in the case of gill nets and cast nets, the initial capital input for the gear is also greatly reduced.

However, active fishing methods involving the use of gill nets, cast nets, and beach seines are widely regarded as destructive. For example, apart from the destruction of the physical environment of the beach the seines are notorious for the capture of immature fish, particularly tilapia, Nile perch, bagrus (semutundu), clarias (male), e.t.c.

3.2 Fish Processing and Marketing:

Two traditional methods, namely curing of fish over heat and smoke, and sun-drying, remain the most important means of processing fish on Lake Victoria-Uganda, and indeed for the entire fishing industry of the country. 14 The smoking curing technique has been

13 ibid, also oral interview with Mzee Petero Augo Masiga of Buwonga, Kyagwe, Mukono District, and Jonah Osodo of Busundere Parish, Kyagwe, July 1992.
slightly modified in some places mainly to control heat losses and hence reduce waste of fuel wood. It is currently used for both Nile tilapia, Nile perch, Bagrus (semutundu) and other species, with the final product having a shelf life of up to several weeks, depending on the residual moisture content. Sun-drying is often used on Lake Victoria-Uganda to preserve tilapia split along the dorsal profile before it is spread out in the sun, and mukene. The final product when thoroughly dried is believed to have a longer shelf life than fire cured fish.\textsuperscript{15} Sun drying on grass, rock, or sand is currently the traditional method of processing mukene, whose fishery has assumed considerable importance on Lake Victoria-Uganda over the last decade. The curing of fish over heat and smoke involves the use of a lot of fuel wood, a process which involves the cutting down of forests leading to environmental degradation.

Industrial processing of fish in Uganda is also beginning to acquire greater prominence. Presently, it is mainly directed towards production of high-quality, high-value whole and filleted table fish for export, though there is some use of small-sized fish (mukene) in the manufacture of cereal meal supplements and animal feeds. The Uganda Feeds Ltd. plant in Jinja has been using mukene as an ingredient of poultry and pig feeds since 1980/81.

Usage of mukene by other, smaller animal feed production concerns in Kampala area is on the increase.\textsuperscript{16}

3.3 Socio-Economic Changes in the Fisheries:

\textsuperscript{15} See T. Twongo, et. Al (1991, p. 33)

\textsuperscript{16} In an interview with fisheries officials at the Fisheries Headquarters, April 1992, they indicated that at that time alone there were more than 20 applications awaiting approval.
On the basis of the foregoing analysis and description of the existing structure of the fishing industry, traditional division of labour which leaves production to fishermen, and the processing and exchange of fish to fisherwomen has been undermined. Today division of labour has largely assumed a social perspective. Division of labour is no longer premised on gender as in pre-colonial time. The key variables in shaping division of labour are the ownership of the means of production (crafts and gear) and the means of distribution (i.e. motorised canoes, trucks or lorries which in turn hinges on capital outlay one has at his/her disposal. The concrete reality is that social division of labour is assuming greater significance as both male and female fishers perform duties hitherto considered the preserve of either of the two sexes. Both sexes undertake these duties provided they are assured of cash income and food to sustain themselves. Recent studies of canoe fisheries of on Lake Victoria - Uganda, have discerned social differentiation at the level of production, and distribution and exchange of fish (Asowa-Okwe, 1989; Babikwa, 1993; Odongkara, 1991). In our study of fishing community of Lingira Island, we identified four social classes.

The first, are the fisherlords, which comprise owners of one or more canoes (both motorized and non-motorized) with large fleet of nets. They also own the majority of the grass thatched and mud-walled huts, permanent and semi-permanent house and buildings found on the island and at Masese near Jinja. Such person often invest in land, buildings, livestock and the repair and acquisition of more fishing crafts and gear. They also engage in large scale processing and sale of fresh and smoked fish. In Lingira, they constituted 3% of
the population of the fisherpeople at the time of our research. Second class, is that of middle fisherpeople who own medium-sized canoes and gill nets. This class of people have a dual source of income: family labour and appropriation of surplus labour value from hired labour. They constituted 7.7% of the Lingira fishing community.

Third, are the poor fisherpeople, who owns gill nets and hooks but not fishing boats, and are thus forced to operate as a crew using either a rented boat or one belonging to one of them. Rarely do such people hire labour. They usually dispense with 10% of their catch to the owner of the canoes in the use of which they share. Fourth, and lastly, are the fisherlabourers in gill net, long-line, seine or purse net and mukene fishery. They constitute the largest number of those engaged in canoe fisheries. They own no means of production, and the only means at their disposal is human labour-power, which they have to sell to owners of canoes and gear (capital). Thus their source of income is wage labour. They constitute 86.9% of Lingira fisherpeople. The situation in Lingira Island is a micro-reflection of what obtains in the entire Lake Regions of Uganda. The most recent research findings by Daniel Babikwa (1993) on Ssese Islands do confirm the validity of our findings mentioned above. Furthermore, hired fishers are usually young and single persons.

However, contrary to T. Twongo et.al they do not necessarily come from islands and the adjacent areas. Some of them come from areas quite far from the lake zone. At Lingira at the time of our field work, some of the labourers came from as far as Western Kenya and Rwanda.
The living and working conditions of these labourers is appalling and deplorable. They set for the fishing grounds between 4:30 to 6:30 p.m. every evening and do not return till the next morning. Depending on the weather, the labourers work throughout the night. On average they work between 14-16 hours a day. This includes the time spent on hand propelling the canoes from the landing to the fishing ground and back. Even those who do not go to the lake also operate under similar conditions without basic social amenities i.e. housing and medical care. The labourers are conscious of exploitative environment in which they operate, and respond accordingly. The usually express their dissatisfaction and grievances by stealing nets and selling them to the willing buyers from other fishing zones. Sometimes they sell part of the catch to fish dealers at secret landings or while in the lake.

One other social and economic change that deserves mentioning here is that the changing role of women in fisheries. To a large extent, they continue to perform traditional roles. However, their participation in the processing and selling of fish, assures them of a modicum of leverage in canoe fisheries, as they have money income of their own. The fact that some of these women have money, and at times substantial amounts, reduces the arrogance and chauvinism of the male fishers. Over time there have emerged a group of powerful women with investment in crafts and gear, and fish processing and marketing. Such categories of women now employ both male and female hired labour for wages. "According to Odongkara, up to 10% of the boats at the various landings are owned by women. However, certain cultural forces still prevent them from direct participation in fishing trips (see Odongkara, O.K., 1991)."
4. The Politico-Legal Governance of Lake Victoria Fisheries;

The politico-legal governance of Lake Victoria-Uganda fisheries, along with all other fisheries of country, are provided for under the laws of Uganda through the Fish and Corocodile Act (chapter 228, Revised Ed., 1964), the Trout Protection Act (chapter 229, Revised Ed., 1964). The Law (cap. 228, sec.43) empowers the Ministry of Agriculture, Animal Industry and Fisheries to gazette statutory measures to guide fisheries in the country.

Historically, the application of legal framework in Lake Victoria-Uganda was less coercive in comparison to the Kenyan and Tanzanian experiences (Asowa-Okwe; 1989). Very few restrictions applied to canoes and fishing gear used on the Ugandan section of the lake. However from the 1980s the situation changed decisively as the state resorted to statutory provisions to deal with gill nets operators. For example statutory Instrument No. 15 of 1981, stipulates that the legal minimum size in Lake Victoria for Nile tilapia be 280mm (11inches) and for the Nile perch 440mm (18 inches). Provision, therefore, exist in law to discourage the possession of small-sized fish of these species. Furthermore, the Fisheries Department deploys its personnel to the fishing zones to ensure that the fishing communities comply to these provisions. In practice, the fisheries' officers have failed to fulfill their obligation of educating the people in the modern methods of fishing, how to improve the quality of fish by modern processing techniques, and to regulate the utilization of the natural resources of the lake. The poor working and living conditions of the fish guards make them more vulnerable to bribes. Over time they have forged personal
and direct dependency relations with the fisherpeople, especially the owners of crafts and gear and fish processors and traders. The fisheries officials and other state agents look at these people as sources of extra income, and therefore, ceased to take their managerial and supervisory tasks seriously. Principally, such bureaucrats are a burden and a liability to the people. Furthermore, fisheries officers in the field face role conflicts, as they double as control and extension officer. Things are quite different for the poor people, particularly the fisherlabourers who are often easy victims of marine operations in the lake. Time and again they are arrested and prosecuted for being tax defualters and even for vagrancy.

When arrested and charged in court these labourers end up in jail, as they neither manage to hire services of legal experts nor pay the heavy fines imposed on them. Their employers who have funds always survive such arrests and harassment. The truth is that what characterises the legal position of these labourers “is a blanket of detention-without-trial”.

To make matters worse, the traditional councils or committees which used to deal with social, economic and political problems have been progressively marginalized, to the extent that the local population has little say over the lakes resources. They operate on the basis of dictates of orders from the Ministry concerned, and yet the Ministry officials lack the logistics and moral fibres to perform their duties diligently. More often than not they interpret the control and management of Lake fisheries as the responsibility of the state, and hence ignore the role of the local population who are the actual stakeholders.

Furthermore, these fishers are hardly involved in the formulation and implementation of policies governing the resources on which their livelihood depend a great deal. Indeed no
attempts have been made to identify the traditional modes of the fisheries and other lake resources management. Principally, the fishers are perceived as conservative and underdeveloped people, devoid of wisdom. Hence the belief that the problem in fisheries is lack of capital and technological investments and modernisation. This is where the problem of fisheries lies, and we feel that such a philosophical outlook is wrong, as it fails to give centrality to the role of the people (fishers) in the Lake.

In addition, the Lake Fisheries is no longer open-access resource, to which every other fisher can have access to as in the past. As we stated above, for one to engage in fisheries one must have substantial capital outlay to acquire fishing crafts and gear. On average, a medium-size fishing boat (eryato) costs Uganda Shillings 1 million, while a seine net costs between shillings 1.5 million and 2 millions. Indeed there are few fishers who can afford such costly crafts and gear. In any case one must have a licence to operate in the Lake. It must be added that the assumed role of the state as a custodian of the marine resources, and the continued marginalisation of collective socio-economic role of the fisher community in the management of such resources has equally undermined the common property approach to fisheries resource management. Today the exploitation of aquatic resources within the lake is subject to the market forces as well as state regulations. Such developments have resulted into the proliferation of individualism with the attendant erosion of community based management of fisheries. In conclusion one can observe with justification that the present path of development in Lake Victoria fisheries could lead to the decline in living standards of people involved in the fisheries both in terms of loss of employment and food security. The present level of fisheries harvest fuelled by increased
local and export demand is bound to exceed the sustainable yields of the lake’s fish resources. How to deal with the latter must be a subject of future studies of lake fisheries.

BIBLIOGRAPHY


Ssemakula, S. M., A cost and earning study of the small scale Fisheries of Lake Victoria (Uganda). Fisheries Policy and Planning Branch, Fisheries Department, Entebbe (Mimeo)