# Fisheries legislation on Lake Victoria: present legislation and new developments

K. GEHEB UNECIA Ltd., Lake Victoria Fisheries Research Project, P. O. Box 2145, Jinja, Uganda.

Abstract: This paper provides an overview of fisheries legislation in Kenya, Uganda and Tanzania as far it concerns the administration of Lake Victoria's fishery. It also provides brief comment on the structure of these nations' fisheries departments and how they have evolved in recent years. The administration of Kenya's Lake Victoria fishery has changed very little since the introduction of the 1988 Fisheries Act. In Tanzania and Uganda, however, government policies of decentralisation have had a profound impact on fisheries administration at a local level. This paper examines these changes and speculates about possible future management scenarios for these two countries.

#### Introduction

The first colonial legislation to cover Lake Victoria was the Fish Protection Ordinance, 1908 (Cap.s. 133 Laws of Kenya), which prohibited the use of mesh-sizes of below one square inch (Dobbs, 1927). The Ordinance also introduced licensing and boat registration rules for 'non-native Africans' (Dobbs, 1927). There was, however, little in the way of any subsidiary legislation to ensure that the Fish Protection Ordinance was properly enforced, an oversight that was soon to be reflected in declining catch rates (see Geheb, 1997). As a result, a report on the industry was commissioned (Graham, 1929), which recommended that a 127 mm. minimum mesh-size for gill nets be implemented and enforced. In principle the regulation was accepted and included in legislation in 1933 (Mann, 1969). There was, however, no regulatory authority created to enforce the regulation until 1947, with the establishment of the Lake Victoria Fisheries Service (LVFS) (Mann, 1969). The rules and regulations that the LVFS were charged with implementing and enforcing were embodied in the Lake Victoria Fisheries Regulations of 1951 (EAHC, 1953). Among the first tasks the LVFS set out to do was the licensing of fishermen. They also permitted the use of 635 mm. nets outside the Winam (Nyanza) Gulf (EAHC, 1953), and permitted 30 beach seines to operate within the Gulf. Following concerns, however, that beach seines were having a negative impact on the fishery they were subsequently banned from Winam Gulf in 1954 (EAHC, 1955).

During its period of operation, the LVFS was, in many cases, to distance itself from fishing communities by the sometimes brutal enforcement of fishing rules (Geheb, 1997). Fishers, in addition, while understanding the rules and what they were for, could not imagine that they could ever fish out a lake as great as Lake Victoria (Geheb, 1997). The LVFS was, in addition, hampered by under-funding and under-staffing. In 1953 it had only 3 patrol boats, 6 Fisheries officers and a budget of Kshs. 402,560/-1 to regulate the entire lake (Copley, 1953). With considerable influxes in fishing effort levels, the LVFS was poorly equipped to regulate the increasing use of illegal mesh-sizes.

By 1965, Labeo species had virtually disappeared from influent rivers in Kenya (Cadwalldr, 1965). The comprehensive failure of the colonial fishing regulations to prevent such catch declines, along with considerable increases in illegal net usage, led to the distandment of the LVFS in 1960, and the repeal of net mesh-size restrictions soon afterwards (Garrod, 1961; Mann, 1969). This occurred despite the recommendations of a second report on the lake, urging the imposition and enforcement of minimum mesh-sizes (Beverton, 1959).

Geheb, K. 2000. Fisheries legislation on Lake Victoria: present legislation and new developments. In Geheb, K. and Crean, K. (Eds.) 2000. The Co-management Survey: Co-managerial perspectives for Lake Victoria's fisheries *LVTRP Technical Document* No. 11. LVFRP/TECH/00/11. Jinja, The Socio-economic Data Working Group of the Lake Victoria Fisheries Research Project: 172 - 183.

<sup>&</sup>lt;sup>1</sup>Approximately UK£ 20,128 at 1953 rates of 20/- to £1.00.

Following independence, the riparian states formed fisheries departments. Each state has its own fisheries legislation governing Lake Victoria, which, in some cases, is comparable to that of its neighbouring states, while in other cases differs markedly. Irrespective, sole regulatory authority over the lake is vested in regional fisheries departments. This paper outlines the main tenets of this legislation, considers the stake that fishing communities hold within it, and then elaborates on recent management trends in Tanzania and Uganda and how these appear increasingly reliant on a strong community role in the management of Lake Victoria's fisheries.

# Riparian fisheries legislation

#### Kenya

Fisheries in Kenya fall under the Fisheries Act and the Fisheries (General) Regulations (RoK, 1991). The Act is to be enforced by an authorised officer, being "a fisheries officer, a police officer of or above the rank of inspector, an officer of the Kenya Navy or other armed force or a person appointed by the Minister, by notice in the Gazette, to be an authorized officer for the purposes of this Act..." (RoK, 1991: 3).

The Director of Fisheries has the authority to impose closed seasons for specified areas, species or methods of fishing, closed areas for all or designated species of fish or methods of fishing. S/he can impose gear limitations (methods and mesh-sizes) and limits on the amount, size, age and other characteristics of fish landed. The Director may impose limitations on species landed or the composition of species landed, on fish that may be caught, landed or traded. S/he may regulate fish landings and their management and, if limitations on people, nets and/or gear are necessary, then s/he may impose them through refusal to issue/renew permits, impose special licenses and catch fees or issue preferential licensing in other fisheries.

Generally, the Director must either first obtain the approval of the Minister, and/or publish his/her intentions in the Parliamentary Gazette<sup>2</sup> before any or all of the latter limitations may be imposed. Thus, for example, despite statements in parliament that all trawling was prohibited in the Kenyan waters of Lake Victoria (The Standard, 3.11.93: 3), this could not in fact become law because it has never been issued as subsidiary legislation in the Kenya Government Gazette. The same is true concerning the widespread belief that beach seining is illegal in the Kenyan waters of Lake Victoria, although this has never been published in any Gazette.

The Director of Fisheries is also charged with promoting the development of traditional and industrial fisheries, fish culture and related industries through such measures as:

- (a) Providing an extension and training service.
- (b) Conducting research and surveys.
- (c) Promoting arrangements for the orderly marketing of fish.
- (d) Providing infrastructure facilities.
- (e) Stocking waters with fish and supplying fish for stocking (RoK, 1991: 5).

Other important tenets of the Fisheries Act are as follows:

- (a) The use of explosives, poisons, any other noxious substance and electric shock devices are prohibited forms of fishing.
- (b) Trawling is prohibited within 5 nautical miles of any point of the Kenyan shores of Lake Victoria, or within the Nyanza Gulf.

<sup>&</sup>lt;sup>2</sup> In Kenya, Uganda and Tanzania, all new laws and governmental proclamations must be issued in a Gazette, the mouth piece of their respective parliaments.

- (c) Any 'seining net' of 50 mm or less is prohibited, except for *dagaa* fishing, where the minimum is 10 mm.
- (d) Except for dagaa, Fish landed from Lake Victoria must not be less than 25 mm Standard Length.
- (e) Any gill net of 127 mm and less is a prohibited fishing gear in Lake Victoria.
- (f) "No fisherman, other than a sport fisherman, shall land any fish at any point except at a fish landing station and for purposes of this regulation, the fish landing stations shall be those specified in the Fourth Schedule" (RoK, 1991: 31).
- (g) "[N]o person shall use any vessel for fishing in Kenya fishery waters unless there is in force in relation to that vessel a valid certificate of registration" (RoK, 1991: 20).
- (h) "No person shall fish for *anadromous* or *catadromous* fish species in the river systems or within a three kilometre radius of the river delta and estuary during the period designated by the Director by notice in the Gazette" (RoK, 1991: 33)
- (i) No person shall fish in Kenya fishery waters unless s/he is a holder of a valid fishing licence, s/he is an employee of a licensee and is fishing in accordance with the terms and conditions of the applicable license, or s/he is fishing for his own consumption and in accordance with the Minister's order published in the Gazette" (RoK, 1991: 21-22).
- (j) "No person shall disturb any spawn or spawning fish in a breeding area" (RoK, 1991: 34).

The Fisheries Department in Kenya falls under the Ministry for Agriculture and Rural Development. Its administrative arrangement is vertically integrated, and there is no horizontal integration. The lowest administrative unit in Kenya is the location, at which level there are Fisheries Scouts, followed by Fisheries Department offices at the Division level, the District level, the provincial level and, finally, the National level with headquarters in Nairobi.

#### Tanzania

The fisheries of Tanzania fall under the Fisheries Act, 1970 to which subsidiary legislation has been added (URT, 1970). Under The Act, there shall be a Chief Fisheries Officer who shall be appointed by the president. The Minister may appoint as many Fisheries Officers that s/he feels is necessary for the administration of the Act. An authorised officer under the Act is defined as "...the Chief Fisheries Officer or any fisheries officer or other officer or person authorized in writing by the Minister or the Chief Fisheries Officer to exercise any power or to discharge any duty under this Act or any subsidiary legislation made hereunder;" (URT, 1970: 35).

The Minister is empowered, by order in the Gazette, to ban fishing, as well as the collection, gathering or manufacturing any fish product, marketing fish or fish products, importing or exporting fish or fish products, unless such activities are licensed by the Chief Fisheries Officer (CFO) or any other authorised officer. Any exceptions penalties, terms and conditions of licensing can be imposed as the Minister sees fit. The Minister may, by order published in the Gazette, impose closed areas. The Minister can, with considerable independence, impose limitations on a host of fisheries-related activities, and has more or less complete autonomy to do so.

Section 8 of the Act defines penalties, and offenders may, if found guilty of contravening the Act, be fined Tshs. 500,000/-, be imprisoned for up to 5 years, or both. Where legislation subsidiary to the Act fails to define penalties, then offenders shall be liable to imprisonment of no more than two years, a fine of no more than Tshs. 50,000/-, or both.

The Fisheries Principal Regulations 1989 stipulate the following:

(a) Boats must be registered – while no person may use an unregistered fishing vessel, and no person may allow any other person to use an unregistered fishing vessel (p. 847).

- (b) All fishermen must be licensed, and no fisherman may permit another fisherman from fishing if the latter has no license.
- (c) Anyone selling fish must have a license issued under the Business Licensing Act.
- (d) Under these Regulations, a person may be compelled to destroy any fish infected with an epidemic disease, and be obliged to take any measures the licensing authority sees fit.
- (e) No person may use dynamite to kill fish or possess fish killed in this way.
- (f) No person may kill fish with poison nor possess fish killed in this way.
- (g) No person shall 'wilfully' disturb spawn or spawning fish or the water containing spawn or spawning fish.
- (h) Under these regulations, trawling is permitted on Lake Victoria in waters deeper than 20m. and outside of any bay or gulf (this tenet has since been repealed see below).

Under G.N. No. 317, Fourth Schedule, Regulation 41 of 1989 (URT, 1989), no license is needed to use a rod and line from shore without using a fishing vessel, except for in spawning grounds, trout streams or fish reserves. The same applies to 'small cast nets', 'seine nets for amusement' and other specified gear.

Under the Fisheries (General) (Amendment) Regulations (URT, 1975), no person may export fish or fish products without a license, while The Fisheries (Prohibition of use of specified vessels or tools) Regulations, 1994 (URT, 1994) bans trawling on Lake Victoria, and places a series of limitations on gears, stipulating that no person may use a beach seine, a *dagaa* net of less than 10 mm. or a gill net of less than 127 mm.

The Fisheries (Inland waters) Regulations 1981 (URT, 1982) impose a closed season on the fishery from January 1<sup>st</sup> to June 30<sup>th</sup> inclusive, during which time no person may fish in the Kagera River, Duwafu Bay, Mwiga Bay, Ruiga Bay, Bukome Bay, Butundwe Bay, Nugwe Bay, Njera Bay, Luchiri Bay, Smith Sound, Stullmann Sound nor Magu Bay.

Handlines and scoop nets may be used in rivers during the closed period; *dagaa* fishing may continue, as may fishing with nets of 64 mm and above, provided it is not done from a boat. '*Katuli*' fishing is banned. The Regulations define *katuli* "...in relation to minor waters..." as the beating of the water in order to scare fish towards a net.

The arrangement of the Fisheries Department (or 'Division' as it is sometimes known) differs somewhat from the Kenyan vertical hierarchy. The Division itself, based in Dar es Salaam, falls under the Ministry of Natural Resources and Tourism, and its influence on Lake Victoria ends with three Regional Fisheries Officers. District level fisheries regulation activities, and all other administrative tiers below it, fall under the Ministry of Regional Administration and Local Government (MRALG). The Fisheries Department in Dar es Salaam relates to district level fisheries management via an intermediary National Committee, which functions as an administrative bridge between the Fisheries Department and the MRALG. The role of the National Committee is not entirely clear, but does include attempts to coordinate national fisheries administration and ensure that a technical dialogue between all the various branches of the administration is maintained.

### Uganda

Fisheries legislation in Uganda falls under the Fish Act of 1964, which is issued as the Fish and Crocodiles Act, 1951, Cap. 228 of the Laws of Uganda (Uganda Government, 1964)

Under it, the minister may, 'by statutory order', identify which parts of The Act require individuals to seek a license, or exempt any individual as s/he sees fit from licensing obligations.

A 'fisheries officer' is identified as the Chief Fisheries Officer<sup>3</sup>, a game warden, a fisheries development officer and an honorary fisheries officer, although, at present, responsibility for The Act falls under the Department of Fisheries Resources (DFR), and there is no indication of enforcement powers within its own structure and ranking system.

Any person must have a valid license to fish, to accompany a person who is fishing or who is in a boat used for fishing. The Chief Fisheries Officer may, with the approval of the Minister, limit the number of fishing licenses issued, either generally or specifically to certain waters.

Vessels must be licensed if gill-netting or long-lining is to occur from them; the Chief Fisheries Officer may, by statutory instrument and approval from the Minister, limit the number of gill-nets or long-lines to be carried in a boat, generally or with regard to specific areas.

Without written permission of the Chief Fisheries Officer, no poisoning, explosives nor electric fishing may occur.

The Minister may, by statutory order, ban a gear generally or with reference to specific waters. By the same means, the minister may declare closed seasons generally or specifically to certain waters, and either generally or specifically to certain fish species.

It is illegal to transfer fish or eggs from one water body to another.

The government, 'Federal State' or district administration may issue fishing licenses, provided that they think it is in the public interest to do so. A District Commissioner (DC) can annul a license issued by a Federal state or the government if s/he feels that it is in the public interest to do so. The Minister may remove the rights of Federal states and DCs in this respect as s/he sees fit.

It is illegal to take immature fish, to use under-size mesh-sizes. General regulations specifying what an 'immature fish' is, or what an under-sized mesh-size is, are either unavailable or have not be issued as Statutory Orders.

The Ugandan fisheries administration has also been subject to the decentralisation strategies of its government. The Department of Fisheries Resources (DFR) in Entebbe falls under the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), and is headed by the Commissioner for Fisheries, beneath who are Assistant Commissioners for fisheries production and fisheries regulation and control. Matters of fisheries regulation fall under the latter officer who has a small staff with which to ensure that District Fisheries Officers at every water body in Uganda are upholding the 1964 Fish Act. These latter officers, however, are not necessarily answerable to the DFR, and fall under the Ministry of Local Government who pays their salaries. The relationship between the DFR in Entebbe and the District Fisheries Offices is supposed to be consolidated under National Committees whose roles are not clear.

Neither the Kenyan 1991 Fisheries Act nor the Ugandan 1964 Fish Act give any opportunity for other parties besides the Fisheries Departments to administer their regulations, and equally little opportunity for other parties to formulate or have impact upon the regulations within them. Interestingly, the Tanzanian 1970 Fisheries Act explicitly charges those fisheries resource users, who are legally entitled to utilise the resource, with apprehending those who are not correctly licensed to do so.

The decentralisation policies of Uganda and Tanzania appear to have created parallel hierarchies within their national fisheries administration whose relationships with one another are not clear. The theme of what this means at the local level is the subject of the remainder of this paper.

<sup>&</sup>lt;sup>3</sup> Some of the terminology in the Fish Act has been altered under subsequent legislation. The Chief Game Warden, for example, has been replaced by the Chief Fisheries Officer, who has since become the Commissioner for Fisheries.

# Changing perspectives on fisheries administration on Lake Victoria

In recent years, Ugandan and Tanzanian fisheries administrative systems have sought to change their administrative procedures against a background of considerable concerns for the sustainability of the shared fisheries resource bases. Each of these initiatives is discussed in turn.

#### Uganda

Under the reissued Constitution of Uganda (RoU, 1995), a new system of local government is identified and expounded as a component in a national process of decentralisation. The 'system' seeks to transfer central government powers to districts and, from this juncture, to lower levels of administration, which it anticipates will ensure "...peoples' participation and democratic control in decision making..." (RoU, 1995: 117). The degree of independent administrative power devolved under the system (as it is referred to) is considerable, and "appropriate measure shall be taken to enable local government units to plan, initiate and execute policies in respect of all matters affecting the people within their jurisdiction..." (RoU, 1995: 117). It also includes the right of districts to forge cooperative relationships with other districts, under which "...the councils, trust funds or secretariats formed under the article shall have power to make rules, regulations and bye-laws in relation to the functions assigned to them..." (RoU, 1995: 118). Each local government is to be based on a local council, which is the highest political power within its jurisdiction and will have legislative and executive powers in accordance with the constitution. Local councils are to be elected by adult suffrage through secret ballot every four years. In charge of the local council is a District Chairperson who is similarly elected. Local governments "...shall have the power to levy, charge, collect and appropriate fees and taxes..." (RoU, 1995: 126).

The roles and functions of local governments are further elaborated in the Local Governments Act (RoU, 1997). Here, Local Councils (LCs) are allowed to enact 'bye-laws' as rules, provided these are passed on to the Attorney General who ensures that they are "...not inconsistent with the Constitution or any other law enacted by parliament..." (p. 35). Insofar as devolution of responsibilities held by central ministries to LCs is concerned, the role of central ministries has become one of monitoring the ability of LCs to carry out their duties. What these activities are supposed to be is outlined in the Second Schedule of the Act, which describes responsibilities along the tiers of Government, District Councils, Urban Councils, and Lower Local Government Councils. Thus, Government is indicated as responsible, amongst others, for water resources and the environment. District councils, on the other hand, are held responsible for "[a]ll decentralised services and activities which include but are not limited to (i) crop, animal and fisheries husbandry extension services" (p.116). District Councils are expected to "[r]egulate, control, manage, administer, promote and licence any of the things or services which the Council is empowered or required to do, and establish, maintain, carry on, control, manage or administer and prescribe the forms in connection therewith to fix fees or charges to be levied in that respect" (p. 117). District Councils are expected to 'assist' Government to preserve the environment through the protection of, amongst others, wetlands, lakeshores, streams and the prevention of environmental degradation.

District Councils are expected to devolve certain powers to Lower Local Government Councils (LLGCs), including the 'control of hunting and fishing' (p. 125) and the control of markets and landing sites. In addition, LLGCs are expected to pay salaries for 'support staff', to collect revenue and to repair murram<sup>4</sup> and earth roads.

Under Section 40 of the Act, byelaws created by LCs "...may prescribe fees, or charges or fines not exceeding two currency points<sup>5</sup> in breach thereof" (p. 37). In the case of Municipalities (which are described

<sup>&</sup>lt;sup>4</sup> Murram roads, developed by the British, are essentially economy roads made from a mixture of red earth and molasses.

<sup>&</sup>lt;sup>5</sup> A currency point is 20,000 Uganda shillings, or some US\$ 12 at a September 2000 rate of Ushs. 1,700 = US\$ 1

in the Act as being a part of an LLGC) offences described in enacted byelaws can levy punishments that not only include the fine, but also, or alternatively, a prison term not exceeding six months. If the offence arises as a result of possession of a prohibited article (such as a fish caught in an illegal net) the article must be destroyed. If the offence arises as a result of a breach of license, then the license must be annulled. Much the same applies to ordinances (laws enacted by District Councils).

While the Local Governments Act clearly does devolve a considerable degree of power to districts and below, what is very rarely clear within the Act is the extent to which District and subordinate Councils can assume responsibilities for particular facets of public life and the economy. Indeed, in certain respects, there actually appear to be contradictions. Government, for example, is charged with retaining responsibilities for 'functions and services' relating to water resources and the environment, although it is understood, at the same time, that LLGCs have control over 'local hunting and fishing' and landing sites, and to collect revenue on fishing licenses.

Due to the apparent inconsistencies within the Local Governments Act, a great deal of interpretation has arisen within the fisheries sector as to what The Act means for fisheries administration, a discussion heightened by the ambiguities of the 1964 Fish Act. One recent effort at interpretation is to be found in the draft of the National Fisheries Policy (MAAIF, 2000). Here, the role of the Department of Fisheries Resources (DFR) is defined as "...national fisheries planning, development and monitoring of the resources. It promotes, supports and guides all the programmes within the fisheries local government and private sector" (MAAIF, 2000: 8).

Despite this latter proclamation, the document goes on to say that there will be reduced role of government in areas '...that can be carried out by the private sector', and that 'there will be a move away from the old style of central command and control' (p. 9). Fisheries resources are to be managed through 'devolved responsibility, whenever practical or advisable and under careful regulation'. The policy says that it supports community participation which 'will ensure respect for traditional cultures and knowledge, access to resources, and due regard to gender and equity'. More specifically, the document anticipates community participation in:

- (a) Limiting the number of people who may fish.
- (b) Controlling certain fishing techniques, including mesh-size controls.
- (c) Maintaining fish habitats and enforcing closed seasons and areas for fishing.
- (d) Ensuring that fish is caught and landed '...in a manner that places in the market wholesome and quality products' (p.11).
- (e) Data collection and dissemination.

In connection with this, the government plays an advisory role in monitoring, control, surveillance and extension, although it retains the right to 'set standards and guidelines for fisheries management and development at districts' [sic.] (p.11). In a way that is not explained, the above community roles will operate side by side with similar government roles of:

- (a) Developing appropriate legislation to effectively control over-fishing.
- (b) Encouraging and enforcing systematic fishing regulations through vessel registration.
- (c) Developing a 'property right' system where those dependent on the resource are given (unspecified) rights over management and exploitation.
- (d) Introducing closed areas and seasons for particular fisheries (p. 12).

Without detracting from the draft status of the document, and acknowledging that it is likely to be altered after public debate (of which this paper constitutes a part), the National Fisheries Policy raises many questions about Uganda's fisheries management strategy.

In particular, the scale of operations remains unclear and, without clarification, gives the impression that the state and fishing communities are provided with duplicating and sometimes contradictory management roles.

In addition, while the policy acknowledges the Local Governments Act, it does not make clear what specific roles are to be retained by the state, the district, the Lower Local Government Councils and communities, an ambiguity that arises most clearly in the apparent duplication of roles. Additionally, each of these tiers in the hierarchy is not attributed with powers of, for example, arrest, specific monitoring rights and jurisdictions, fining and/or punishment, nor, indeed, over interpretation and generation of localised bye-laws.

These ambiguities, however, may be intentional, and certainly do provide room for fishing communities to develop byelaws applicable to their own, specific, conditions and fisheries under the Local Governments Act. Whether or not communities will seize this opportunity remains to be seen.

Whatever the case, the Draft National Fisheries Policy is an important contribution to the fisheries administration debate in East Africa, and, supported by the Local Governments Act, the Policy is one of the most liberal and advanced fisheries perspectives in East Africa.

#### Tanzania

Tanzanian directions in fisheries management are laid out in their National Fisheries Sector Policy and Strategy Statement (MNRT, 1997). The document identifies a number of long-term difficulties within the national fisheries sector, including insufficient community empowerment, 'poor interaction between players in community and community related issues and activities', scanty information on traditional/local knowledge of the fisheries resource and unfavourable credit conditions from lending institutions (p. 3). When it involves community 'empowerment', the document elaborates, this refers to their empowerment 'in the management and conservation of the fisheries environment by ensuring responsible fishing principles by all' (p. 5).

Under the document's first policy statement, "[t]o put to efficient use available resources in order to increase fish production so as to improve fish availability as well as to contribute to the growth of the economy" (p.8), the document recommends the following policies that will affect fishing communities:

- (a) To encourage 'self-help' programmes within communities.
- (b) To encourage fishing communities to establish 'Fisheries Development Trust Funds' and credit schemes, as appropriate.
- (c) "To conduct joint surveillance and enforcement in collaboration with other related agencies and communities to ensure effective implementation of the fisheries and related legislation" (p.8).

It is almost certainly this latter statement that is responsible for the Tanzanian understanding of commanagement as a management system in which communities implement and enforce government regulations.

Elsewhere, and under different policy headings, the document advocates that alternative income sources should be developed for fishing communities and that the control or ban of destructive fishing and processing methods are desirable.

In Policy statement 12, community participation is specifically dealt with. The Policy seeks to "[i]mprove the involvement of the fisher communities in the planning, development and management of fishery resources" (p.13), and advocates the following strategies (pp. 13-14):

- (a) To encourage formation of fisher associations, co-operatives and groups and to support their activities.
- (b) To sensitise decision-makers at all levels on the importance of involving fisher communities in the development of the sector's activities.
- (c) To encourage the involvement of the fisher community in policy formulation and implementation through their relevant institutions, i.e. village councils or associations etc.
- (d) To identify issues relevant to community participation in the sector and collaborate with other related sectors to enhance this participation.
- (e) To encourage the formulation of projects which aim at promoting the involvement of communities in the management of fisheries resources.
- (f) To facilitate and promote the sharing and exchange of skills and knowledge through extension services.
- (g) To entrust the management responsibilities of landing sites or other facilities or utilities to fisher communities.
- (h) To facilitate the formulation of village by-laws relevant to the fisheries sector to enhance sustainable exploitation and utilisation of resources.

In the document's annexes, it attributes roles to the various stakeholders identified in the fisheries sector and it is at this juncture that contradictions begin to emerge. The Fisheries Department, for example, is charged with the formulation of policy and its implementation. Fishing communities are not charged with this responsibility in the Annexes, but in Policy Statement 12 are 'encouraged' to contribute to this process. Fishers are expected to be involved in 'management', which may be assumed to include the implementation and enforcement of regulation, a task to be shared with the Fisheries Department. In the Annexes, the law enforcement role of the fishing communities is restricted to 'byelaws', but their role appears to be somewhat broader under Policy Statement One.

The ambiguities inherent in this policy prescription have, to some extent, been clarified in a Lake Victoria Environmental Management (LVEMP) report on 'Co-management in the Mwanza Gulf' (Hoza and Mahatane, 1998). The report argues that because weaknesses exist in the enforcement of present regulations, better enforcement may be obtained from including fishing communities in this process. One vehicle for achieving this is co-management which, the report argues, "...has been found to increase the effectiveness of management by increasing the legitimacy of fishing regulations in the eyes of the fishing communities" (pp. 7-8). Under this interpretation of co-management, the report 'guarantees' wise use of resources, 'guarantees' long-term income earnings and 'guarantees' the rapid recovery of fish species otherwise in danger of extinction (p. 8).

In exercises carried out between May and June 1998 in three Tanzanian lakeside districts (Mwanza Municipal, Msungwi and Sengerema), Fisheries Department Teams created 93 local enforcement units (now called Beach Management Units: BMUs). Members of the BMUs must be resident on a beach or landing site, should be an 'ardent conservator of fishery resources', be honest and truthful, and may be a member of a Tanzanian vigilante group (sungusungu). The BMUs typically comprise between 15 and 20 members, although they may be smaller depending on local circumstances. Each BMU has a committee comprising a chairman, a secretary, a treasurer and two other members of the group. Its responsibilities are to oversee the day to day running of the BMU, although any committee member can be expelled if found not to be trustworthy, and, if found guilty, will be replaced.

The BMU is incorporated into Village Government and is a sub-committee under the village committee for surveillance and security. It has to prepare a 'surveillance programme' on which everyone agrees, and has a jurisdiction, which typically extends to 5 km. on either side of landing sites.

Their duties are to enforce the 1970 Fisheries Acts and its various supplements (described above)

They are expected to generate lists providing details about all the fishers on the beach, the boats, licenses and fishing gear. Unlicensed fishermen are supposed to get their licenses, while illegal gear is supposed to be surrendered to the relevant authorities. The BMU is supposed to maintain a daily record that summarises 'all illegal activities'. At the end of the month, the records are submitted to the ward fisheries officer, who summarises the reports of all BMUs in his/her ward, and then passes the report on to the division fisheries officer and so on up the chain of command. The BMU can issue 'fishermen identification forms' to fishermen who are about to leave for other landing sites which details the number of crew, the type and amount of gear and from where the fisherman has come from.

## Concluding comments

There is little evidence that highly vertically integrated systems of fisheries management have worked on Lake Victoria (cf. Government of the Republic of Kenya et al., 1995; Geheb, 1997, 1999; Riedmiller, 1994). Kenya's present approach is to await research results to determine how its fisheries legislation will change. The decentralisation policies of Uganda and Tanzania, on the other hand, have paved the way for radical fisheries administration change. In the case of Uganda, decentralisation has not only implied the transfer of central government responsibilities to district and local levels, but has presented opportunities for the devolution of responsibilities to local communities. The potential for communities to insert themselves into the regulatory vacuum created by structural changes to the Fisheries Resources Department are, therefore, considerable. The Local Governments Act (RoU, 1997) not only makes provision for local communities to decide upon byelaws, but also for these to be enacted within national legislation, punishable under law, and to be 'nested' within the wider vertical administrative order that characterises Ugandan Government today. If communities are to seize these opportunities, they must be made aware of their rights under the Local Governments Act and the procedures that The Act lays out for the enactment of community-level byelaws. If communities should fail to grasp this initiative, it is probable that future fisheries administration win Uganda will be a lop-sided and apathetic affair, with a central Fisheries Resources Department without the powers they had previously governing a fisheries administration system in which communities play no role.

In Tanzania, the situation is markedly different. Against a backdrop of *Ujamaa* political history, fishing communities are already familiar with the idea that they hold responsibilities for the implementation and enforcement of government administration (Medard and Geheb, 2000). Village Executive Officers, like Beach Management Unit (BMU) Committee members, are elected to office by the communities from which they are drawn. Regulations within these social microenvironments, therefore, are more likely to be the product of negotiation between villagers and their administrative officers. It is probable that the emphasis in these kinds of negotiations will be on the fulfilment of livelihood demands, and not on fisheries management objectives seeking lower effort levels or the reduced capture of fingerlings (Medard and Geheb, 2000).

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