

SOCIO-ECONOMIC RESEARCH REPORT 9

LAKE VICTORIA ENVIRONMENTAL MANAGEMENT PROJECT

**ASSESSMENT OF EXISTING COMMUNITY  
INSTITUTIONS AND PERCEPTIONS TO BEACH  
MANAGEMENT UNITS**



Konstantine Odongkara, Mercy Kyangwa and Jonah Wegoye

**FISHERIES RESOURCES RESEARCH INSTITUTE  
NATIONAL AGRICULTURAL RESEARCH ORGANISATION**

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**Contact Address**

Fisheries Resources Research Institute  
National Agricultural Research Organisation  
P.O. Box 343, JINJA Uganda  
Tel. 256-43-120484  
Fax: 256-43-120192  
e-mail: socio-econ@firi.go.ug

## **EXECUTIVE SUMMARY**

### **General**

1. In order to obtain information to guide the establishment of BMUs on Lake Victoria, a study was carried out to assess the communities' need for a beach-level institution that embraces all fishers at the beach and to examine the formation, roles and performance of the existing Community Institutions (CIs) and related local institutions.
2. Information was collected using key informant interviews with beach leaders and questionnaires with fish producers, processors and traders at selected beaches.

### **The Need for Beach-level Institution**

3. Most fishers expressed the desire to have one community institution that brings together all the fishers at their beach.
4. Different objectives were expressed for having such a body, with most respondents citing enforcement of fishery regulations, promotion of sanitation and resolution of conflicts among the most important.
5. Community members believed that leaders of such a body should be elected by all members. They recommended that leaders should serve for a 3-year term. Honesty was considered the single most important quality in choosing one to the executive committee of the institution.

### **Existing CIs and their Roles**

6. The main existing CIs included Landing Management Committees (LMCs), Task Force Committees (TFCs) and Co-management Committees (CCs).
7. Most of the existing CIs had their members chosen through election by all beach residents in 1999. Most fishers reported that they attended the meetings and also voted in the elections.
8. District Authorities (RDC and Local Councils), through the DFOs, initiated the formation of the CIs committees. The membership of the CIs included fishing unit owners, crew, traders, processors and other people whose activities at the beach had impacts on the lake environment.

9. In choosing one to the CI executive committee, the electorate also considered the following qualities: a person who could unite all community members; a long-time beach resident or worker; one who had fished for a long time or one's past experience of leadership at the beach.
10. The number of posts on the existing CIs varied from beach to beach but included Chairperson, Vice Chairperson, Secretary, Treasurer, Secretary for defense, Secretary for sanitation or mobilization or information. On some of the CIs, the Assistant Fisheries Officer was part of the executive committee as a technical person.
11. At the time of the study, not all the committee members were still around and actively involved in the LSO activities at all the selected landing sites. This was attributed to death, lack of facilitation for committee, migration of office bearers and sometimes conflicts with the Fisheries staff.
12. Most CIs did not have a mechanism of succession given that a majority of pioneer leaders mostly elected in 1999 were still in office.
13. There was a significant interest by fishing communities in the election of CI leaders as reflected by the high participation in voting the existing CI leaders.
14. CIs did not have access and/or lacked the necessary facilities particularly boats and outboard engines to monitor and enforce fisheries regulations.
15. CI leaders were accountable to the Assistant Fisheries Officer at the beach and Sub-county authorities especially in referring cases of illegal fishing.
16. The fisherfolk were aware of the diverse roles of the CIs that included mobilization, conflict resolution, enforcement of regulations and fighting gear theft.
17. The authority of CIs was limited to burning/confiscation of the gear, but did not have the powers to punish the offender, who was normally handed to either Assistant Fisheries Officer or police.

18. Corruption by CI leaders and Assistant Fisheries Officers, political interference by local politician and lack of legal backing were the main factors undermining the effectiveness of CIs.
19. Bye-laws regulating fisheries activities existed at beaches, however, there was little awareness about them among the fisherfolk.
20. The community gave support to CI activities by reporting cases of illegal fishing, attending CI meeting and material support in form of fish or cash.

### **Recommendations**

21. The formation of Beach Management Units (BMUs) should be guided by a well-defined constitution formulated by fishing communities specifying among other things, the eligible electorate, candidature, term of office and roles of BMU leaders focusing on fisheries management.
22. The structure and operation of BMUs should be related to the roles to be performed by the BMUs. For instance, each post on the executive should have defined roles.
23. Prior to the elections of BMU leaders, fishing communities need to be informed about the election process to avoid absenteeism which was the main reason mentioned for not participating in voting.
24. Local Government should facilitate BMUs with the necessary equipment especially boats and engines to enable them enforce fisheries regulations effectively. They should also be motivated through remuneration, which can be from community contributions.

## **ACRONYMS**

BMU	Beach Management Units
CC	Co management Committee
CI	Community Institution
DFR	Department of Fisheries Resource
LC	Local Councils
LMC	Landing Management Committee
NARO	National Agricultural Research Organization
RDC	Resident District Commissioner
SPSS	Statistical Package for Social Scientist
T FC	Task Force Committee

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## **1. INTRODUCTION**

As part of the strategy to strengthen fisheries management on Lake Victoria, the Fisheries Resources Department, with support of the Lake Victoria Environmental Management Project, is seeking to implement a co-management program on Lake Victoria. This is in recognition of the limitations associated with the state-based management regime to conserve the fish stocks and biodiversity that has been in operation for the last few decades. As a contribution to this program, the Fisheries Resources Research Institute was charged with the responsibility of providing the information base required for the process of establishing, monitoring and evaluating the Beach Management Units (BMUs). This is an interim report of the study, aimed at assessing the pre-BMU situation and evaluating the performance of existing relevant beach level institutions that could evolve into BMUs and suggesting modifications, which could allow these units to become more effective in the co-management of Lake resources.

## **2. OBJECTIVES**

The objectives of the study were as follows:

- a) To assess the communities' need for a beach-level institution that embraces all or the majority of fishers.
- b) To examine formation, roles, performance and benefits of the existing Community Institutions.
- c) To suggest recommendations for the improvement of the effectiveness of BMUs.

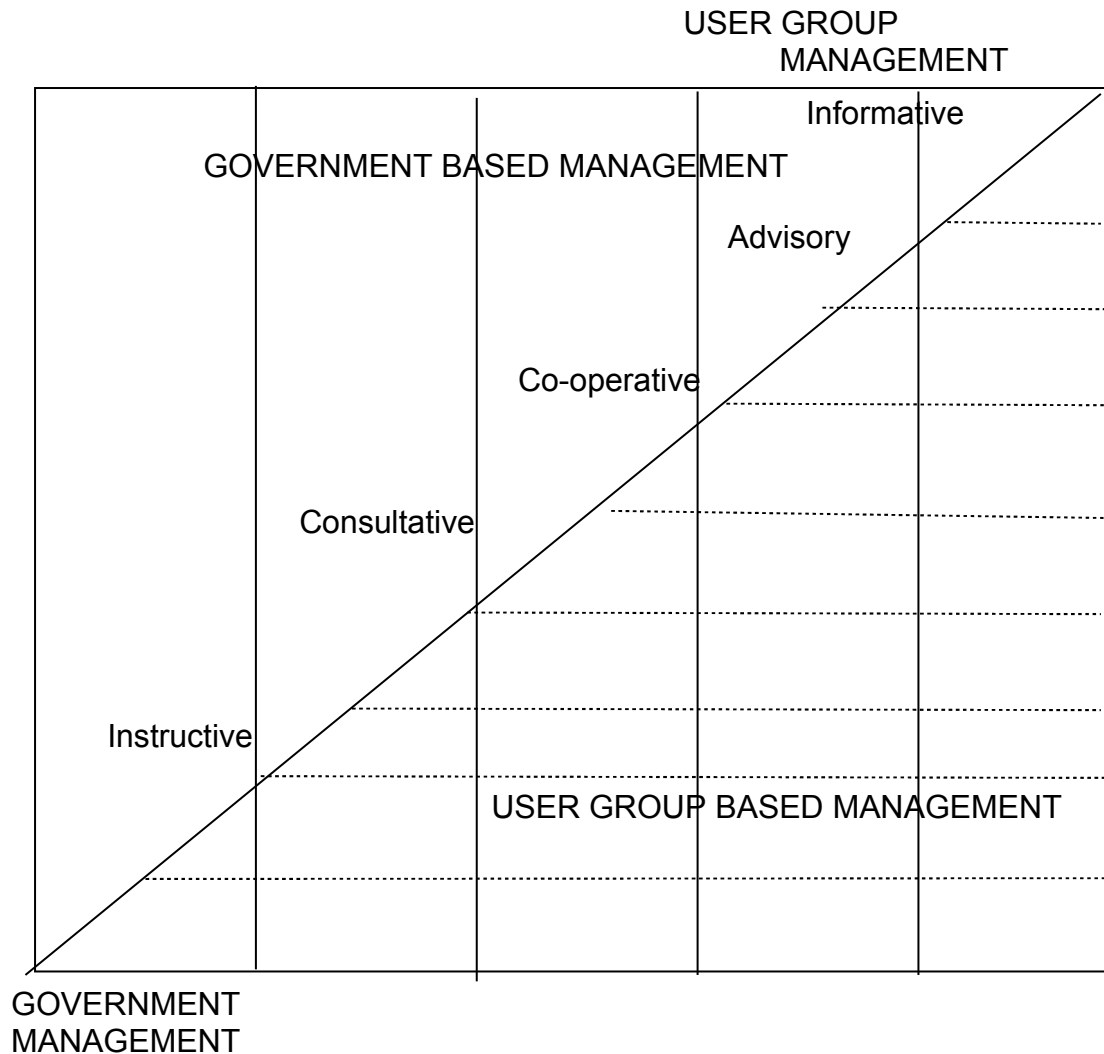
## **3. THEORETICAL CONCEPTS OF CO-MANAGEMENT**

There have been limitations in the management of the fisheries of Lake Victoria, with the result that substantial quantities of un-recommended and banned gears have been in use, as well as catching significant proportions of immature fish. This situation is attributed to the existing state-based management regime, which has been characterized by inadequate logistical support and financial provisions. Other problems included apathy, corruption, low staffing levels on the Fisheries Department, the sheer size of the lake and

low morale among staff. In addition, there has been low involvement of resource users in fisheries management as a result of weak community institutions (UNECIA, 2001).

The concept of co-management is an alternative strategy for more effective fisheries management. It involves shared responsibilities between the state and resource users in managing the resource. Different stages of co-management exist, ranging from the Instructive to the Informative model as shown in Figure 1. Under the Instructive model, the state has the full responsibility for resource management and resource users only comply with the decisions of the state. Under the Informative model, the resource users make the decisions and the state is only informed of what is taking place.

**Figure1: A Framework for Developing a Co-Management Model**



Source: Sen and Nielsen (1996)

For resource users to effectively participate in resource management, however, there is need for an effective community-based institution. Ostrom (1990) and Pinkerton (1989) suggest the conditions that must prevail for successful resource regulation under co-management. The conditions relate to appropriate institutional framework for governing common property resources and to organisation of the user groups for collective action. They include clearly defined boundaries; membership clearly defined; group cohesion; organisations existing; benefits exceed cost; participation by those affected; management rules enforced; local rights to organise; co-operation and leadership at community level; decentralisation and delegation of authority; and co-ordination between government and community. An assessment of these conditions revealed that some of them already exist on Lake Victoria to varying degrees while others would need to be created (Odongkara, 2001).

Finally, an understanding of relationships between individuals in a user-group over a resource is provided by WPTPA (1997), involving a triangle of strategic assets that influence these relationships. The assets include group size, where the smaller size works better; mode of communication, with preference for face - to - face contact; holding of shared norms, particularly if they are cultural; congruency of interests and resources and track record over time.

An effective BMU should, therefore, have the above characteristics, namely clearly defined boundaries, clearly defined membership, promote the participation of the resource users and co-ordinate between government and community, among other characteristics.

#### **4. METHODOLOGY**

Data from primary sources was collected through interviews held with fish producers, processors and traders at 18 selected beaches on Lake Victoria (Table 1.1). A structured questionnaire was used to carry out the interviews resulting into a total of 443 respondents.

Key informant interviews were conducted with the chairpersons/committee members of BMUs of the 18 selected beaches on structure and operation of BMUs.

The primary data gathered from respondents was entered on a data file editor (SPSS version 10.0). Descriptive statistics was used for the display of the data. Measures of central tendency were calculated for the measurement data. With respect to categorical data, the observations were summarized using frequencies, which were generated in percentages or counts.

**Table 1.1: Sampled Landing Sites**

<b>District</b>	<b>Landing Sites</b>
Busia	Madwa
	Majanji
Bugiri	Wakawaka
Mayuge	Lwanika
	Walumbe
Mukono	Busana
	Mpunge
Kampala	Ggaba
Wakiso	Kagulube
	Gerenge
Mpigi	Kamaliba
	Buvumbo
Masaka	Makonzi
	Lambu
	Kamuwunga
Kalangala	Tubi
	Mulabana
Rakai	Kasensero

Secondary data was collected on the existing CIs, covering their formation, membership, objectives and activities.

## 5. RESULTS AND DISCUSSIONS

### 5.1. Respondents' Personal Characteristics

Most fishers (97.1%) were males of ages between 16 and 71 years the mean age being 30 years. A large proportion of respondents (52.7%) were of the Ganda tribe, followed by Soga (10%), Luo (6.7%), Samia (6.2%) and other tribes (24.4%) such as Teso, Gwere, Adhola and Banyole. Of the respondents, 72.0% were married and 61.1% had primary level education, followed by 23.3% who had secondary level education and lastly those who had no schooling at all were 13.6%. Respondents were engaged in fishery related activities for an average of 7 years and had lived at the beach for an average of 7 years.

### 5.2. Need for BMUs

Nearly all the respondents (99.1%) expressed the desire to have a BMU that brings together all the fishers at their beach. Different reasons were given for the need of such an institution ranging from enforcement of fishery regulations (52.8%), provision of financial support (12.4%), resolution of conflicts (7.2%) and mobilization/education of fishers (7.0%), among others.

**Table 5.1: Need for beach management institutions**

Need for Institutions	Frequency	Percentage
Enforce fishery regulations	234	52.8
Provide financial assistance	55	12.4
Resolve conflicts	32	7.2
Mobilize /educate fishers	31	7.0
Promote sanitation	22	5.0
Initiate development	22	5.0
Solicit for loans	19	4.3
Others	28	6.3
Total	443	100.0

Source: FIRRI Survey Data, 2002

Views were solicited on how the BMU leadership should be put in place. Most respondents (98.2%) were of the view that community members should elect leaders to head such institutions.

**Table 5.2: How BMU leaders should assume office**

<b>Methods</b>	<b>Frequency</b>	<b>Percentage</b>
Elected by all fishers	435	98.1
Appointed by fisheries staff	6	1.4
Volunteering	2	.5
Total	443	100.0

Source: FIRRI Survey Data, 2002

The respondents recommended that the term of office for the BMU leaders should, on the average, last 2.8 years although the responses ranged between 1 to 5 years.

A majority of respondents (51.3%) considered honesty as the single most important quality for choosing one to the executive committee of the institution.

**Table 5.3: Desired leadership qualities**

<b>Qualities</b>	<b>Frequency</b>	<b>Percentage</b>
Honesty	220	51.3
Past achievements	91	21.2
Good at resolving conflicts	33	7.7
Lived at the beach for long time	28	6.5
Fished for long time	20	4.7
Owens a number of fishing units	19	4.4
Others	18	4.2

Total	429	100.0
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Source: FIRRI Survey Data, 2002

### 5.3. Establishment of CIs and their Roles

The key informants reported that District Authorities (RDC and Local Councils), through the DFOs, initiated the formation of the committees. Most respondents (49.8%) said that the present BMUs had their members chosen through election by all beach residents, followed by those who said fishers elected them (28.9%). Some respondents reported that their BMU leaders were appointed by DFR staff (1.8%) and LCs (4.5%), while 13.5% of the respondents did not know how their BMU leaders came into office. Most key informants also confirmed that they assumed office through direct election of the office bearers, held in 1999. Voting involved forming queues behind a candidate of one's choice. The key informants, however, said that they had not had elections since then.

For those respondents who reported that their BMU leaders were elected, most (61.0%) said that they attended the meetings and voted in the elections. However, the rest (39.0%) did not vote because they were not around (80.6%) during the elections.

**Table 5.4: Reasons for not voting**

Reasons	Frequency	Percentage
Not around	112	80.6
Not allowed to vote	22	15.8
Not aware about the voting	3	2.2
Not interested	1	.7
Not citizen	1	.7
Total	139	100.0

Source: FIRRI Survey Data, 2002

The number of posts on the existing CIs varied from beach to beach but most BMUs had the following posts; Chairperson, Vice Chairperson, Secretary,

Treasurer, Secretary for defence, Secretary for sanitation or mobilization or information. On some of the CIs, the Assistant Fisheries Officer was part of the executive committee as a technical person.

Some of the CIs studied had an office and a stamp and most of them shared a postal address with the Fisheries Department or the Sub-county. However, they did not own engines or boats that could be used for patrols.

Concerning the CIs reporting hierarchy, some committees reported to Fisheries staff at the beach while others reported to the Sub-county Taskforce Committee which in turn reported to the District Taskforce Committee.

#### **5.4. Roles of existing CIs**

The key informants (CI leaders) mentioned eradication of fish poisoning practice as the main reason why the committees were formed. Other roles subsequently assumed also included:

- i) Fish inspection
- ii) Manual removal of the invasive water hyacinth
- iii) Presiding over formulation and enforcement of bye-laws that governed beach activities

There was also a set of guidelines defining the roles of each committee member for the Landing Management Committees at some beaches, for example Lwanika.

Most respondents (93.8%) said they were aware of the roles of their CIs. They cited enforcing fishery regulations and resolving conflicts as the most important roles (Table 5.5)

**Table 5.5: Most important roles of CIs**

<b>Roles</b>	<b>Frequency</b>	<b>Percentage</b>
Enforce fishery regulations	242	58.9
Resolve conflicts among fishers	88	21.4
Mobilize members for community activities	53	12.9

Enforce bye-laws of the beach	17	4.1
Fight theft of gear	4	1.0
Other	7	1.7
Total	411	100.0

Source: FIRRI Survey Data, 2002

### 5.5. Enforcement of Regulations and Punishment

Beach leaders arrested those who broke fisheries regulations mainly from reports of illegal fishing received from fishers (36.5%), inspection of boats for juvenile fish on landing (40.3%) and lake patrols (17.1%). Nearly 78.7% of the respondents reported that the beach leaders had the authority to punish the offenders mainly by burning of gear (43.7%) and handing over offenders to the police and fish guards (25.9%). This is presented in Table 5.6 below.

**Table 5.6: Punishment of offenders**

Punishment	Frequency	Percentage
Burn illegal gears	118	43.7
Take offender to police	70	25.9
Confiscate the gears	53	19.6
Report to fish guard	13	4.8
Suspend offender from fishing	6	2.2
Others	10	2.7
Total	270	100.0

Source: FIRRI Survey Data, 2002

According to the results, 70% of the respondents were of the view that these measures were effective while the rest cited corruption, political interference, lack of legal backing and social ties as the main factors leading to the ineffectiveness of CIs.

The CI leaders also explained that they were involved in formulation and enforcement of bye-laws that were fishery-related. These focused on the

protection of the lake environment and the fishery, fishing effort, use of illegal gear and control of bad behaviour within the community members, particularly fishers (Appendix 1). They were proposed by the executive committee and passed, disseminated and amended in community meetings. Every new comer to the community was also briefed on the bye-laws. The committees also had sanctions for community members who disobeyed these by-laws. The sanctions included fines and compensation for damage, suspension or expulsion from the fishery, hard labour and referring cases to higher authorities such as DFR staff, LC1 or police.

Most respondents (60.4%) were of the opinion that their CIs had successfully fulfilled its roles. However, those who did not think so (39.6%) cited lack of Government support as the main reason for their failure (Table 5.7)

**Table 5.7: Reasons for failure in performance of some CIs**

<b>Reason</b>	<b>Frequency</b>	<b>Percentage</b>
Lack of Government support	35	21.6
Corruption	32	19.8
Lack authority	32	19.8
Lack of commitment	31	19.1
Lack of support by community members	11	6.8
Inadequate resources	10	6.2
Lack of knowledge for the job	5	3.1
Other	6	3.7
Total	162	100.0

Source: FIRRI Survey Data, 2002

Respondents reported that they supported their CIs as members of the community mainly by reporting cases of illegal fishing but also in different ways, as given in Table 5.8.

**Table 5.8: Community support to CIs**

<b>Support</b>	<b>Frequency</b>	<b>Percentage</b>
Reported cases of illegal fishing	147	34.5
Attended meetings of BMU	107	25.1
Contributed fish towards BMU activities	39	9.2
Abided by the regulations	35	8.2
Contributed cash towards BMU activities	33	7.7
Gave advice	19	4.5
Others	7	1.6
No support	39	9.2
<b>Total</b>	<b>426</b>	<b>100.0</b>

Source: FIRRI Survey Data, 2002

The results show that most community members (70.7%) were kept informed about CI activities through meetings, followed by announcements by C I leaders. Those who were not adequately informed about CI activities attributed this to poor communication (71%), lack of interest (7%) and other reasons (22%).

### **5.6. Problems Faced by CIs**

Not all the committee members were still around and actively involved in the CI activities at all the selected landing sites at the time of the study. For instance, at Lwanika, it wa only the Chairperson, Vice chairperson and the two 'Askaris' who were still actively involved in CI activities. The Secretary for sanitation and treasurer were involved in business activities that did not allow them to serve their electorate. They were usually away from the beach most of the time. At Mpunge, the Vice-chairperson died and the Secretary for mass mobilisation and information left the beach and they had not had bye-elections to fill the posts. At Lambu the Treasurer and Vice-chairperson also left the beach. Besides the above cases, other reasons given as to why some committee members were not actively involved in CI activities included:

- i) Committees were hurriedly put in place to fight fish poisoning, therefore, after fulfilling their original objective some members relaxed.
- ii) The presence of military personnel and army veterans who were reported to have threatened committee members especially at Lambu.
- iii) Lack of facilitation.
- iv) Lack of a schedule to hold elections and bye-elections.
- v) Migration of office bearers.
- vi) Conflicts with the DFR staff.

The CI leaders identified the problems they faced in execution of their duties as follows:

- i) Fishers were hard to change
- ii) Since the community elected them, there was the fear of being ostracised in cases involving severe punishment of fisherfolk.
- iii) Their powers of prosecution were usually challenged by fisherfolk.
- iv) They lacked facilities such as office equipment, bicycles or boats. Likewise they did not generate funds.
- v) The executive committee members mentioned that although they had received training in fisheries management, this was still inadequate.
- vi) Committee members said that they did not receive any remuneration for their work.
- vii) They had no powers to arrest fishers from other beaches who broke regulation at fishing grounds near their beaches.
- viii) Lack of commitment by some committee members.
- ix) No regular elections to make office bearers accountable to their electorate.
- x) Lack of guidelines to define members' roles.
- xi) Lack of continued co-ordination with higher TFCs at the Sub-county/District levels.

### **5.7. Benefits from the CI**

The benefits the community gained most as a result of having a CI were reduced use of illegal gears and improved catches/sizes of catch, among others. (Table 5.9)

**Table 5.9: Benefits of having CIs**

<b>Benefits</b>	<b>Frequency</b>	<b>Percentage</b>
Reduced use of illegal gears	168	39.1
Improved catches/sizes of cash	85	19.8
Good mechanism for conflict resolution	75	17.4
Improved sanitation	35	8.1
Reduced gear theft	14	3.3
Other	7	1.6
No benefit	46	10.7
Total	430	100.0

Source: FIRRI Survey Data, 2002

However, some respondents did not see any benefits of having BMUs and a large proportion of respondents attributed this to their experiences with corrupt and inactive CI leaders (75.6%)

### **5.8. Suggestions to Strengthen CIs**

As community members, respondents suggested that Government should provide financial support as a measure to strengthen the CIs, among others (Table 5.10)

**Table 5.10: Suggestions to strengthen CIs**

<b>Suggestions</b>	<b>Frequency</b>	<b>Percentage</b>
Government to provide financial support	224	52.2
Greater community contributions	58	13.5
Training	50	11.7
Give CIs authority	31	7.2
Hold office for a specified period	18	4.2
Regular meetings	16	3.7

Reshuffling of committee	6	1.4
Other	26	6.0
Total	429	100.0

Source: FIRRI Survey Data, 2002

Leaders of CIs believed that CIs were good avenues through which local communities could participate in fisheries resources management. They gave the reasons as follows:

- i) CIs were the authorities that were always available at the beach, living with the communities.
- ii) They were the authorities involved in fishery management that were democratically elected.
- iii) Not very expensive to facilitate.
- iv) Their activities involved the participation of all community members, such as planning and implementation.
- v) They presented a faster way of resolving conflicts among members of fishing communities.

The leaders suggested the following ways to improve their work in order to allow wider community participation in fisheries resource management through the proposed BMUs:

- i) Remuneration for their activities and adequate facilitation in order to counter the temptation to be corrupt.
- ii) Training of committee members in fisheries management and leadership skills.
- iii) Guidelines specifying the roles of each BMU members to be drawn and they should be given legal backing.
- iv) The activities of the BMUs should be co-ordinated by higher committees at the Sub-county and District levels.
- v) DFR staff at beaches should automatically become a member of the BMU.

vi) Other authorities at the beach such as LCs and 'Gabunga' should become part of the BMUs.

Majority of the respondents (86.7%) reported that they had good relationship with their CI leaders mainly because they complied with fisheries regulations. Other people were unhappy with them mainly because "some were corrupt".

Leaders also reported having good working relationship with beach community members, LCs and 'Gabungas' because all the activities of the CIs involved their active participation. It was only at Lambu Landing Site where the committee members were reported not to have a good working relationship with the DFR staff because of lack of co-ordination of beach activities and contradictions in reporting to higher authorities.

## **6. CONCLUSIONS AND RECOMMENDATIONS**

### **6.1 Conclusions**

There is a significant need for Beach Management Units among fishers at the landings mainly to enforce fisheries regulations, sensitise the fisher folk, initiate beach development and solicit for external financial support.

Most CIs do not have a mechanism of succession given that a majority of pioneer leaders mostly elected in 1999 are still in office.

There is a significant interest by fishing communities in the election of BMU leaders as reflected by the high participation in voting the existing CI leaders.

CIs do not have access and/or lack the necessary facilities particularly boats and outboard engines to monitor and enforce fisheries regulations.

CI leaders are accountable to Assistant Fisheries Officers at the beach and Sub-county authorities especially in referring cases of illegal fishing.

The fisherfolk are aware of the diverse roles of the CIs that include mobilization, conflict resolution, enforcement of regulations and fighting gear theft.

The authority of CIs is limited to burning/confiscation of the gear, but do not have the powers to punish the offender who is normally handed to either Assistant Fisheries Officer or police.

Corruption by CI leaders and Assistant Fisheries Officers, political interference by local politician and lack of legal backing are the main factors undermining the effectiveness of CIs.

Bye-laws regulating fisheries activities exist at beaches, however, there is little awareness about the existence of these bye-laws among the fisherfolk.

The community gives support to CI activities by reporting cases of illegal fishing, attending CI meetings and material support in form of fish or cash.

### **6.2 Recommendations**

There is need for a well-defined constitution formulated by fishing communities specifying among other things, the eligible electorate,

candidature, term of office and roles of BMU leaders focusing on fisheries management.

Prior to the elections of BMU leaders, fishing communities need to be informed in advance about the election process to avoid absenteeism which was the main reason mentioned for not participating in voting.

Local Government should facilitate BMUs with the necessary equipment especially boats and engines to enable them enforce fisheries regulations effectively. They should also be motivated through remuneration, which can be a community contribution.

The structure and operation of BMUs should be modified on the basis of the roles performed by BMUs. For instance, each post on the executive should have defined roles.

Awareness and sensitisation about the bye-laws regulating fisheries activities at the beaches should be carried out by the BMUs to ensure that the fisherfolk can comply with them

Government should take steps to stamp out corruption and political interference in fisheries management, ensuring good governance.

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## APPENDIX 1: **SOME OF THE BYE-LAWS AT THE SELECTED BEACHES**

These are examples of bye-laws put in place by fishing communities through their beach organisations:

- i) Fishers are supposed to land strictly at the landing site to enable BMU members to inspect boats for juvenile fish. At, Lwanika, violators of this bye-law are fined Ushs. 20,000/-.
- ii) Bathing and washing of clothes and utensils in the lake is forbidden.
- iii) Any one below 18 years not allowed to fish.
- iv) Unregistered fishers are not allowed to operate at the beach. Emigrant fishers and traders are required to present the relevant identification to the Beach authorities.
- v) Fishers at Mpunge, except those targeting *mukene* are not allowed to fish at night.
- vi) Fishers, except those targeting *mukene* must land their catches beginning at 7.00 a.m and the gear used to catch that fish must be displayed.
- vii) Every Saturday is sanitation day and every community member present must participate.

**APPENDIX 2 DATA COLLECTION INSTRUMENTS**

**Key informant questionnaire for the leaders of the BMUs at the landings visited**

Background information

- 1) Date: \_\_\_\_\_
- 2) Name of enumerator: \_\_\_\_\_
- 3) Name of respondent: \_\_\_\_\_
- 4) Name of survey site: \_\_\_\_\_
- 5) Zone \_\_\_\_\_
- 6) District: \_\_\_\_\_
- 7) Respondent's post on the executive committee \_\_\_\_\_
- 8) Name of BMU \_\_\_\_\_
- 9) When did it start (*year*)? \_\_\_\_\_
- 10) Who initiated the creation of a BMU at this beach \_\_\_\_\_
- 11) Why was it originally created (*Main objective*)? \_\_\_\_\_  
\_\_\_\_\_
- 12) What are the current roles of the BMU \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Operations and management**

- 13) What is the overall membership of the BMU? \_\_\_\_\_
- 14) How do BMU leaders assume office at this beach?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 15) If elected, who elects you?  
\_\_\_\_\_  
\_\_\_\_\_
- 16) If elected, how often are the elections?  
\_\_\_\_\_  
\_\_\_\_\_

17) If elected, what do you think are the qualities considered to one choose one as a BMU leader?

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18) What are the posts of the executive committee? \_\_\_\_\_

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19) Has the committee got any of the following: [i] Office/office equipment [ii] Bank a/c [iii] Postal address [iv] Bicycle/boat/car [v] None [vi] Other (Specify) \_\_\_\_\_

20) How frequently do you hold meetings as a committee? \_\_\_\_\_

21) Does your committee generate any funds? [1] Yes [2] No

22) If yes, explain \_\_\_\_\_

23) If yes, what do you spend funds on? \_\_\_\_\_

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24) To whom do you report to? \_\_\_\_\_

25) How do you solve conflicts that arise amongst the members of the executive? \_\_\_\_\_

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Are all leaders still actively involved in BMU activities? [1] Yes [2] No

26) If no, why? \_\_\_\_\_

### **Relation to the management of the lake**

27) Are there any by-laws that are made by the committee that fishermen obey?  
[1] Yes [2] No (Go to Qn. \_\_\_\_)

28) If yes, mention them \_\_\_\_\_

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29) How are the by-laws made? \_\_\_\_\_

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30) How are they disseminated? \_\_\_\_\_

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31) What punishments are given to fishermen who disobey the by-laws? \_\_\_\_\_

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32) Has your committee ever received training in fisheries management?  
[1] Yes [2] No

33) If yes, explain \_\_\_\_\_

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34) Do committee members receive remuneration for the work? [1] Yes [2] No

35) If yes, explain \_\_\_\_\_  
\_\_\_\_\_

36) Do you think the BMUs are good avenues through which local communities can participate in the fisheries management? [i] Yes [ii] no (Go to Qn. \_\_\_\_)

37) If yes, why do you think so? \_\_\_\_\_  
\_\_\_\_\_

38) If no, why do you think so? \_\_\_\_\_  
\_\_\_\_\_

39) What problems do you face in execution of you work? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

40) How can offices of BMUs be improved to allow greater community participation in fisheries management? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

41) Comment on the committee's working relationship with the fishermen?  
[1] Good [2] Fair [3] Poor [4] Others (specify) \_\_\_\_\_

42) Give reasons  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

43) Comment on the committee's working relationship with the DFR  
[1] Good [2] Fair [3] Poor [4] Others (specify) \_\_\_\_\_

44) Give reasons  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

45) Comment on the committee's working relationship with the other beach authorities (Specify authority- LC/'Gabungas').  
[1] Good [2] Fair [3] Poor [4] Others (specify) \_\_\_\_\_

46) Give reasons  
\_\_\_\_\_  
\_\_\_\_\_

**QUESTIONNAIRE FOR FISHERS, PROCESSORS AND TRADERS AT THE LANDING SITES**

- 1) Date \_\_\_\_\_
- 2) Name of enumerator \_\_\_\_\_
- 3) Name of Survey site \_\_\_\_\_
- 4) Zone [1] Rakai, Masaka, Kalangala  
[2] Mpigi, Wakiso, Kampala, Mukono and Jinja  
[3] Mayuge, Bugiri and Busia
- 5) District \_\_\_\_\_

**Personal data:**

- 6) Name of respondent \_\_\_\_\_
- 7) Age \_\_\_\_\_ years
- 8) Sex [1] Male [2] Female
- 9) Ethnic group:  
[1] Ganda [2] Soga [3] Samia [4] Nyarwanda [5] Teso  
[6] Mukenye [7] Gwere [8] Adhola [9] Alur [10] Other (Specify) \_\_\_\_\_
- 10) Marital Status:  
[1] Married [2] Single [3] Divorced [4] Separated [5] Widowed  
[6] Other (Specify) \_\_\_\_\_
- 11) What is your level of education? (*tick one*)  
[1] No schooling [2] Primary [3] Secondary [4] Tertiary [5] University  
[6] Other (specify) \_\_\_\_\_
- 12) What fishery activity are you engaged in?  
[1] Fishing unit owner [2] Crew member [3] Processor [4] Trader  
[5] Other (Specify) \_\_\_\_\_
- 13) What is the main fish species that you target?  
[1] Nile perch [2] Tilapia [3] Dagaa [4] Other (Specify) \_\_\_\_\_
- 14) For how long have you fished? \_\_\_\_\_ years
- 15) How long have you been at this landing? \_\_\_\_\_ years

**Need for a Beach Level Institution**

- 16) Would you desire to have one community organisation that is involved in fisheries management at this beach? [1] Yes [2] No *go to Qu*
- 17) If No, why not? \_\_\_\_\_

18) If Yes, what should this organisation do for the fishing community? (List in order of priority)

- [1]
- [2]
- [3]
- [4]

19) How should the leaders of the organisation assume office?

- [1] Elected by all fishers
- [2] Appointed by Fisheries staff
- [3] Volunteering
- [4] Self imposition
- [5] Other (specify) \_\_\_\_\_

20) If elected, how frequently should new leaders be elected? After \_\_\_\_\_ years

21) What is the *single most* important quality to consider in choosing one to the executive committee of the organisation?

- [1] Good at resolving conflicts
- [2] Honesty
- [3] Fished for a long time
- [4] Lived at the beach for a long time
- [5] Owns a number of fishing units
- [6] Past achievements
- [8] Other (Specify) \_\_\_\_\_

#### **Establishment of BMUs (LMC, TFC, CC) and their Roles**

22) How were the members of the present BMU selected?

- [1] Elected by all beach residents
- [2] Elected by fishers only
- [3] Direct appointment by DFR staff
- [4] Direct appointment by LC
- [5] Don't know
- [6] Other \_\_\_\_\_

23) If elected, did you attend the meeting to select the present BMU leaders?

- [1] Yes
- [2] No

24) If No, why not?

- [1] Not aware about the meeting
- [2] Not allowed to attend
- [3] Not interested
- [4] Not around
- [5] Other (specify) \_\_\_\_\_

25) If Yes, did you vote? [1] Yes [2] No

26) If No, why not?

- [1] Not aware about the voting
- [2] Not allowed to vote
- [3] Not interested
- [4] Not around
- [5] Other (specify) \_\_\_\_\_

27) Are you aware of the roles of the BMU?

- [1] Yes
- [2] No

- 28) If yes, what is the most important role of the BMU?  
 [1] Mobilise members for community activities  
 [2] Resolve conflicts among fishers  
 [3] Enforce by-laws of the beach  
 [4] Enforce fishery regulations  
 [5] Others (Specify) \_\_\_\_\_
- 29) How do BMUs monitor the use illegal fishing gears/methods on the lake?  
 [1] Lake patrols  
 [2] Reports from individuals  
 [3] House searches  
 [4] Don't know  
 [5] Other Specify \_\_\_\_\_
- 30) Do BMUs have authority to discipline fishermen who use illegal fishing gears/methods?  
 [1] Yes [2] No
- 31) If yes, what measures do BMUs undertake to discipline offenders?  
 [1] Burning gear  
 [2] Expulsion from the beach  
 [3] Take offender to police  
 [4] Confiscate the gear  
 [5] Other specify \_\_\_\_\_
- 32) Are the disciplinary measures effective?  
 [1] Yes [2] No
- 33) If no, why?  
 [1] Corruption  
 [2] Political interference  
 [3] Social ties  
 [4] Other Specify \_\_\_\_\_
- 34) In your own opinion, do you think the BMU has successfully fulfilled its roles?  
 [1] Yes [2] No [3] Don't know
- 35) If no, why?  
 [1] Lack of support by community members  
 [2] Lack of knowledge for the job  
 [3] Lack of commitment  
 [4] Lack of Govt. Support  
 [5] Inadequate resources  
 [6] Other (specify) \_\_\_\_\_
- 36) How have you supported the BMU as member of the community? (Circle most important)  
 [1] Attended meetings of the BMU  
 [2] Contributed cash towards BMU activities  
 [3] Contributed fish towards BMU activities  
 [4] Report cases of illegal fishing  
 [5] Other (specify) \_\_\_\_\_

37) How are you informed about BMU activities?

- [1] Meetings
- [2] Announcements BMU leaders
- [3] Notices by BMU leaders
- [4] Hearsay
- [5] Direct observation
- [6] Personal initiative
- [7] Not informed (*Go to*)
- [8] Other (specify) \_\_\_\_\_

38) If No, why are you not informed about BMU activities?

- [1] Poor communication
- [2] Lack of interest
- [3] Nature of job
- [4] Others (specify) \_\_\_\_\_

**Benefits from the BMU**

39) What benefit has this community gained most as a result of having a BMU?

- [1] Good mechanism for conflict resolution
- [2] Improvement catches/sizes of fish
- [3] Reduced use of illegal gears
- [4] Reduced gear theft
- [5] Improved sanitation
- [6] No benefit
- [7] Other (Specify) \_\_\_\_\_

40) If no benefit, why?

- [1] Conflicts among BMU leaders
- [2] Corrupt BMU leaders
- [3] Poor community cooperation
- [4] Inactive BMU leaders
- [5] Other (Specify) \_\_\_\_\_

41) As a community member what do you suggest to be done to strengthen the BMU?

- [1] Greater community contributions
- [2] Government to provide financial support
- [3] Regular meetings
- [4] Training
- [5] Hold office for a specified period
- [6] Other (Specify) \_\_\_\_\_

42) Other than state-base regulation, do you have "rules" that are made by the BMU?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

43) Comment on your relationship with the BMU

- [1] Good
- [2] Not good

44) If not good, give reason for your answer \_\_\_\_\_