# LESSONS LEARNT ON COMMUNITY PARTICIPATION

FINAL REPORT

By

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**OCTOBER 2005** 

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# List of Acronyms

ACORD	Agency for Cooperation and Research in Development
AIDS	Acquired Immune Deficiency Syndrome
BMU	Beach Management Unit
BOSEDA	Biharamulo Organization for Social Environment Development
CAS	Catch Assessment Survey
CBOs	Community Based Organizations
CHAWEDA	
CMU	Conservation Management Unit
CMU	Community Participation Guidelines for LVEMP
CPO	Community Participation Officer
CPT	Cleaner Production Technology
CSOs	Civil Society Organizations
CSPD	Child Survival and Protection Development Program
DMET	District Multidisciplinary Extension Team
DSC	District Steering Committee
FAIDRES	Facilitation, Integrated Development, and Relief Services
FGDs	Focus Group Discussions
HESAWA	Health, Water and Sanitation
HIV	Human Immunodeficiency Virus
HLGA	Higher Local Government Authority
HPI	Heifer Project International
IFMP	Implementation of Fisheries Management Plan
IPM	Integrated Pest Management
LANESO	Lake Nyanza Environmental Sanitation Organization
LGA	Local Government Authority
LLGA	Lower Local Government Authority
LVEMP	Lake Victoria Environmental Management Project
MAFS	Ministry of Agriculture and Food Security
MoU	Memorandum of Understanding
NACP	National AIDS Control Program
NGOs	Non-Governmental Organizations
NSGRP	National Strategy for Growth and Reduction of Poverty
O&OD	Obstacles and Opportunities to Development
PEDP	Primary Education Development Plan
PIC	Project Implementation Committee
PLD	Participatory Learning and Development
PM&EP	Participatory Monitoring and Evaluation Plans

PRA	Participatory Rural Appraisal
PSOs	Private Sector Organizations
RRA	Rapid Rural Appraisal
SACCOS	Savings and Credit Cooperative Society
SIDA	Swedish International Development Agency
SMART	Specific, Measurable, Achievable, Realistic, and Time Bound
TAFIRI	Tanzania Fisheries Research Institute
TAHEA	Tanzania Home Economics Association
TANESA	Tanzania Netherlands Project to support HIV/AIDS Control
TASAF	Tanzania Social Action Fund
TLMP	Tanzania Livestock Marketing Project
ТоТ	Training of Trainers
TTC	Teachers Training College
TZS	Tanzanian Shilling
UNICEF	United Nations Children Fund
URT	United Republic of Tanzania
VA	Village Animators
VEO	Village Executive Officer
VIC	Village Implementation Committee
VIFAFI	Victoria Farming and Fishing Project
WEO	Ward Executive Officer
WMET	Ward Multidisciplinary Extension Team
WWF	World Wide Fund for Nature

# **LESSONS LEARNT: COMMUNITY PARTICIPATION**<sup>1</sup>

## **Executive Summary**

## Introduction

The study was commissioned by Lake Victoria Environmental Management Project (LVEMP) and was conducted from June to July 2005. The main purpose of the study was to generate a comprehensive and analytical report on Lessons Learnt during the implementation of the project by respective LVEMP Components and project as a whole with respect to project's Community Participation aspects. The generated lessons learnt on the aspects of the community participation are intended to; assist the coordination office to inform future interventions; inform the review of community involvement performance; and contribute to decision-making process. Several objectives addressing the following themes were set: Efforts to enhance community participation; Community participation outputs and outcomes; Sustainability of the project; Crosscutting issues; and Collaboration with other partners. Based on the information collected under these themes, lessons of experience and their underlying factors were drawn. The general Lessons on Community Participation have been drawn followed by Lessons by Components.

#### **Approaches and Methodology**

In pursuing the assignment, data were collected from both primary and secondary sources. Seven districts were purposively sampled for this study in order to capture the far located districts, and maximize heterogeneity of community participation activities. A total of 25 villages and 5 urban streets were sampled. Primary data were obtained from the interviews held with several stakeholders including Task Leaders and Coordinators of several Components of the project; some implementation committees, Community Participation Officer; Communities; Relevant Government Departments; and other relevant stakeholders such as Private Sector Organizations, and Non Governmental Organizations, with whom the LVEMP project interacted.

## Major Findings

• The review of literature shows the mandate to pursue community participation to be grounded in the initially produced project documents, one of them being the Community Participation Guide for LVEMP that provides the objectives of community participation, major strategies for meeting project's overall objective, approaches for community participation, and progress indicators for monitoring and evaluation of community participation activities.

<sup>1</sup> Assistance from Mr. Kim Kayunze (Sokoine University of Agriculture, Morogoro), Mr. Adalbertus Kamanzi (Uganda Martyrs University), and Mr. Josaphat Mshighati (SNV) is gratefully acknowledged.

- Several shortfalls were cited in relation to belatedness of community participation activities, and low participatory skills of project implementers.
- The results further show that several approaches were used in involving the communities in planning, executing, and monitoring of various projects. These include: meetings, seminars and conferences, working sessions and trainings for specific community groups, study tours, distribution of pamphlets, and brochures to different beneficiaries, and demonstrations. In the meetings, seminars, and workshops, participatory methodologies such as Participatory Rural Appraisal and Participatory Learning and Development were used to solicit information and plan for activities to be executed.
- Findings on whether the communities have been widely involved in the planning, implementation and monitoring of LVEMP activities and whether their needs have been adequately addressed are mixed with positive and negative responses.
- The indicators set for community participation have been achieved to a greater extent although they have not been monitored in a coherent manner. The major outputs from community participation activities include retention of wetland water levels; regeneration of vegetation cover; formulation of wetland and rivershed management plans; formulation of community participation strategy; community empowerment to take action over environmentally unfriendly measures; reduced water hyacinth load in the Lake; availability of good quality water; support to the drafting of the law; increased fish quality; cleaner beaches and landing sites; formation of financial intermediaries such as Savings and Credit Cooperative Societies; reappearance of fish species that were thought to have gone extinct; and the use of Cleaner Production Technology.
- The nature of activities conducted by the Component determines the strength of the community links, degree of community participation, and degree of sustainability. Thus, some projects such as fish farming, Beach Management Units, soil and water conservation, and income generation activities through groups were found to be much favored and they have high degree of sustainability compared to catchment afforestation, and water hyacinth control projects.
- Collaboration with other stakeholders operating in the study area and in particular Non Governmental Organizations, and Community Based Organizations was found to be weak.
- Further, no formal collaboration plans that stipulate areas of collaboration among Components have been drafted.
- Gender issues have been addressed by the project but only in few cases that was so by design. Other cross cutting issues such as HIV/AIDS have not been mainstreamed in the project.

## **Lessons Learnt**

Several positive and negative lessons have been learnt in the process of implementing community participation activities under LVEMP and they are presented by Component in section six of this report. In the next phase of LVEMP, it is recommended to carry the positive experiences forward and address the shortfalls. It is worth noting that the lessons

presented in section six have a bearing on community participation efforts. Component specific lessons are presented in the Lessons Learnt Report per Component.

## Recommendations

Based on the lessons learnt, the following recommendations are put forward:

## Community Participation Section

- In phase two of LVEMP, efforts have to be made to make Community Participation a fully-fledged Component and introduce it early in the project cycle.
- In scaling up LVEMP activities, baseline studies on indigenous knowledge to conserve and manage environment are of essence. This is important in shading light on what is on the ground and building on it.
- In order to cultivate the spirit of community members emulating efforts of other community members who have been successful, it would be good during the second phase of LVEMP to increase study visits by community members to other areas with best practices.
- Awareness creation should not be a "one shot" activity. Activities on awareness creation should be budgeted for and be inbuilt in the whole project cycle. This is necessary in bringing late adopters and laggards on the picture, and communities" "change of mind set."
- In phase II of LVEMP, we recommend for imparting knowledge on participatory methodologies to all implementers of LVEMP activities, that is, participatory skills should be a prerequisite for the secretariat members; Local Government Officials involved in implementing project activities; and the community at large. Further, the project implementers have to be eloquent on different participatory methodology frameworks/terminologies used by different organization lest they confuse the community with terminologies that might mean the same thing.
- The Community Participation Officer must be involved in the planning of the Components activities especially those with direct bearing on the community such as Wetland Management, Catchment Afforestation, Soil and Water Conservation, and Water Hyacinth Control.
- Clear Exit Strategy has to be drafted in the beginning of Phase II. This will clearly define the potential institutions to take over project activities after phase out. This goes in line with involving the Local Government Authorities at all levels and incorporation of community participation activities in the District Development Plans.
- The role of the community in any project activity (community inputs) should be clearly defined and agreed upon at the inception of the project. Thus, the Community Participation Action Plan should be operational in Phase II of LVEMP.
- As deemed necessary, financial incentive and community micro projects should be enhanced. These are necessary in making some difficult projects take off. As the project matures, and through awareness creation, the financial incentive may

be phased out gradually. A mechanism on how to handle the project after the phase out of financial incentives has to be worked out from the outset.

- The need to conduct a gender analysis of the situation of men and women in the project area is of essence. The findings of such analysis may be used in sensitizing the communities on gender issues through community or village meetings, video shows that carry gender success integration messages, role-plays and use of leaflets.
- Feedback to the villagers in the form of newsletters, brochures, and posters, written in a user-friendly language should be done. These could be distributed and/or displayed in public places for public view. The use of local newsletters and magazines and wide distribution of the same is envisaged. Audiovisuals are also proposed in order to bring on board individuals who cannot read.
- Proper documentation of community participation activities is envisaged. Despite the fact that phase I of the project is ending, one can not find one document that has coherently detailed all community participation activities conducted in the project life time and areas where these activities were executed.
- The list of potential stakeholders in the non-state actors category should be updated. Further, feasible and sustainable modes of collaboration with these non-state actors should be explored. Analysis of major stakeholders operating in the project area, their objectives, root cause of mistrust and conflict among stakeholders, areas of collaboration, modalities of collaboration etc. should be sought.
- Development of well thought Participatory Monitoring and Evaluation Plans for community participation activities is called for. These indicators would then be incorporated in the Project Monitoring and Evaluation Mater Plan.
- Given the HIV/AIDS problem in the Lake Zone and the role of the Lake in perpetuating the spread of the virus, mainstreaming of HIV/AIDS in LVEMP II activities is apparent.
- There is a need to form a sub-committee under the umbrella of Project Implementation Committee (PIC) that will be in charge of identifying Components linkages and synergies and propose a way forward as far as financial and human resource allocation to these areas is concerned.

## Micro Projects Component

• Efforts have to be made to make the District Councils honor their commitments. This is in relation to maintaining the structures built under micro projects, and manning of dispensaries, and medicine stock up.

#### Water Hyacinth Control Component

- Efforts to handle the weevil rearing units to communities, community based organizations and non-governmental organizations should be intensified.
- As an institution of learning in the community, schools are useful entry to water hyacinth control project. This call for involvement of schools close to water hyacinth spots.

- The need to introduce income-generating activities in weevil rearing centers to generate income and make hyacinth weevil rearing attractive have also been echoed.
- The use of Beach Management Units (BMUs) to execute Water Hyacinth Control activities has to be explored.

## Catchment Afforestation

- The communities in the pilot areas accord low priority to catchment afforestation. This necessitates the need for more sensitization/education so that they value and invest on tree planting.
- In order to enhance sustainability of catchment afforestation projects, LVEMP II should consider the possibility of carbon trading as an incentive to farmers participating in afforestation activities. This is a World Bank initiative whereby farmers are given an opportunity for planting trees for carbon sequestration and get paid per trees planted.

## Fisheries Management Component

- Develop mechanisms to: promote good practices initiated by BMUs to other areas in the Lake Basin; promote the culture of saving; and instill self-compliance and sense of ownership of the fishery resources.
- Develop training modules and deliver trainings to fishers on business, leadership, financial, and resource management skills.
- Formulate and enforce bylaws that support and protect the BMUs.
- Establish BMUs Association and Networks from beach level to regional level. These will enhance exchange of information, knowledge, skills and experience among key stakeholders for sustainable fishery resources management.
- The Ministry of Natural Resources and Tourism through the Fisheries Development Funds and/or Fisheries Levy Trust should supplement the BMUs resources.
- District Councils should support the BMUs by contracting them to collect fish levies.

## Fisheries Research Component

- In order to meet the demand for quality fingerlings, efforts should be made to produce then at the community fishponds.
- Explore the advantages and disadvantages of production of fingerlings by private enterprises.
- The fisheries research findings under LVEMP could be disseminated to the villages by the Implementation of Fisheries Management Plans (IFMP) staff where possible, and who will maintain extensive contact with the villages in the foreseeable future.

#### Wetland Management Component

- More and continuos awareness creation is needed before we witness a stop in the practices that have been established to degrade Lake Victoria basin wetlands.
- Together with communities, initiate, advocate for, and implement other sustainable livelihood sources after conserving the wetlandls.
- There is a need for formulation of Wetland Management Policy that will be a catalyst for formulation of localized Wetland Management Plans.
- In order to enhance sustainability of activities around the wetlands, there is a need for searching and establishing proper market for selling handcrafts manufactured from wetland products.

## Intergrated Soil and Water Conservation Component

- Forge collaboration with Catchment Afforestation since both Components are dealing with land management issues. This is essential in tapping the complementarities between them.
- Scale up the soil and water conservation activities beyond the pilot areas. This has a bearing in terms of financial and human resources.

#### Capacity Building Component

- There should be deliberate efforts to engage in applied research that not only produces theses for certification but also leads to positive action at the community level.
- Conduct a needs assessment of the capacity of the stakeholders in the region and which are conducting related activities.

## **1.0 Introduction**

## 1.1 Background

The Lake Victoria Environmental Management Project (LVEMP) is a comprehensive environmental program for the conservation of Lake Victoria and its basin as a whole. It is thus a holistic regional approach to the management of an ecosystem. Three riparian countries—the Republic of Kenya, the Republic of Tanzania and the Republic of Uganda jointly implement the project based on the implementation framework identified and developed by the said partner States.

The Project, which started in 1997, is winding up its operations with a view to phase out in December 2005. The project has had nine components, which are: (1) Fisheries Research, (2) Fisheries Management, (3) Water Quality and Ecosystem Management, (4) Micro projects, (5) Catchment Afforestation, (6) Soil and Water Conservation, (7) Wetlands Management, (8) Water Hyacinth Control, and (9) Support to the Riparian Universities. Understanding that Community Participation plays a significant role to the successful implementation of development projects/programs (see Msambichaka, 1998), Community Participation aspects were woven in virtually all the Components.

Community Participation has been viewed as a process where beneficiaries or stakeholders influence the direction and execution of a development project from the initiation of the project ideas to the planning, implementation, and monitoring and evaluation. This is a strategy to ensure ownership, efficiency, and sustainability of development projects/programs. Thus, Community Participation has been designed to instigate ownership, and enhance awareness and knowledge on sustainable management of Lake Victoria Basin resources. Efforts have been made to involve local communities, and strengthen the capacity of a number of local Non-Governmental Organizations (NGOs), Private Sector Organizations (PSOs), Community Based Organizations (CBOs) and the community at large, so as to empower and enable them to facilitate the process of community participation and ownership. Based on these efforts, it is anticipated that eventually communities that are knowledgeable, capable and committed to sustainably manage resources in the lake and its basin will emerge.

This report provides data and information on how communities have been facilitated to partake and have been partaking in the Lake Victoria Environmental Management Project, and the outputs and outcomes of such participation. Further, mainstreaming of cross cutting issues such as gender, HIV/AIDS, and good governance, has also been explored. Community participation has been considered at three levels. These include:

participation of government officials at different levels in project cycles, participation of institutions such as private sectors organizations, non-governmental organizations, and community based organizations collectively called non-state actors; and participation of the community at large (farmers, fish folks etc).

The report is organized as follows. After the presentation of the background to the study and purposes and objectives of the study in section one, section two presents the background information on community participation activities. Section three presents the approaches and methodology used in this study followed by section four that addresses the major achievements and challenges in implementing community participation activities. Section five presents the emerging issues from the findings whereas section six presents the major Lessons Learnt in implementing community participation activities by Community Participation Section and by Components. It is worth noting that the lessons presented in this section have a bearing on community participation efforts. Component specific lessons are presented in the Lessons Learnt Report per Component. Section seven draws the major recommendations from the study.

## **1.2 Purpose and objectives**

The main purpose of the study is to generate a comprehensive and analytical report on lessons learnt during the implementation of the project by respective LVEMP Components and the project as whole with respect to the project's Community Participation aspects (See Appendix 1 for the Terms of Reference). The generated lessons learnt on the aspects of the community participation are meant to: assist the coordination office to inform future interventions; contribute to decision-making process; and inform the review of community involvement performance. Several specific objectives have been set. However, for consistent presentation of the findings, these objectives are clustered under the following themes:

#### A: Efforts to enhance community participation

- 1. Determine the extent to which the LVEMP has achieved its original aims and objectives of enhancing community participation.
- 2. Review the approaches/methodologies applied to enhance community participation in the process of involving communities in achieving the above objectives.
- 3. Assess the entry processes of the community-based projects and identify strengths and gaps for future improvement.
- 4. Determine the degree, nature, and type of participation (contributions in cash, materials, labor, decision making, etc).

5. Assess the capacity or ability of the components to undertake effective Community Participation issues in their respective areas of operations.

## **B:** Community participation outputs and outcomes

- 1. Determine to what extent community priority needs were met/addressed.
- 2. Outline achievements made by community participation initiatives against output/outcome indicators.
- 3. Assess the extent to which communities have benefited from community related activities (both direct and indirect benefits).

## C: Sustainability of the project

- 1. Assess the project Exit Strategy and the degree of sustaining community activities after phase out.
- 2. Establish institution arrangement appropriateness, including capacity building for community projects.
- 3. Propose possible and feasible scale up of the approaches or technology to other areas within or outside Lake Victoria Basin and its Catchment, and explain why.

## **D:** Crosscutting issues

- 1. Determine to what extent gender concerns were addressed by the project and the degree of gender integration.
- 2. Determine to what extent other crosscutting issues such as HIV/AIDS, and good governance were addressed by the project.

## E: Collaboration with other partners

- 1. Establish the extent to which the project leveraged partnerships with the PSOs, NGOs, and CBOs operating in the project area.
- 2. Give a list of other programs and brief activities related to the LVEMP subcomponent activities in the Lake Victoria basin and its catchments area

## F: Emerging issues

- 1. Identify problems, gaps, and bottlenecks or constraints encountered in the course of implementation of community-based activities (factors that led to successes and/or failures).
- 2. Based on the information collected under the above themes, draw lessons of experience (both positive and negative) and their underlying factors and provide recommendations.

## 2.0 Background to Community Participation Activities

It has been widely accepted that pouring enormous resources in development programs and projects may not necessarily result into a desired change unless the community is actively involved and partake in the whole project cycle. It is in this regard that LVEMP considered imperative that the Lake Victoria Basin community is involved in all stages of the project cycle. To that effect, a stakeholders' workshop for preparation of Community Participation Guidelines for LVEMP (CPGL) was organized in 1998 (Msambichaka, 1998). The CPGL that were developed using the Participatory Learning and Development (PLD) approach answers the following questions:

- *How* can the LVEMP project staff make the communities participate in the project activities?
- *Who* are to participate in the project?
- *When* (at which stage of project cycle) should community participation take place?
- In *which* project activities should community participation take place?
- *Where* should community participation be conducted?

In answering the above questions, the CPGL provides some practical information on how the project staff could go about involving communities in LVEMP activities in an appropriate manner. Community participation concepts have also been propounded in the CPGL. These include:

- (i) Community Involvement: This is defined as a process in which a community actively engages in the entire project cycle. Community members sits together or separately with project agents to discuss problems, needs, and eventually prioritize and set out strategies for implementing the agreed solutions. The approach to community involvement entails community participation and community management.
- (ii) **Community Participation**. This is a process in which a community carries out project activities while the control of the project remains with the relevant government authority. The responsible community takes active part in the implementation of the project in order to achieve the communal goal.
- (iii) **Community Management:** This is a process in which the powers and responsibilities are transferred (devolved) to the community.

(iv) **Community Ownership**: This is a state of acceptance of project responsibilities by a community. The community members feel that they have the obligation of sustaining what they have been involved and participated in making; the project belongs to them; and they have mandate (powers) over the project [See Msongwe, (2005) for more concepts on community participation and participatory process]

The CPGL further provides three types of Community Participation. These include:

(i) Community Consultation (Participation by Consultation): This type of participation usually involves the exchange of ideas with either the leaders of the community/representatives of the community or a group of community members. In most cases in this type of participation, the external agents would define the problems and the solutions, they may listen to the views presented by the community and they may make some modifications to the original views in accordance with the response made by the people, but they are in no way obliged to include them in the project/program.

(ii) Community Contribution: In this mode of participation, communities are requested to contribute in cash or in kind towards the project.

(iii) Community Self Help: Important in this type of participation is that the community participates fully in the identification, design, planning, implementation, management, and monitoring and evaluation of project activities. Communities participate in identifying the problems, and seek solutions from their means—resources, and leadership. The government and other organizations are only there to supplement the people's efforts, not to replace them.

As it will be evident in section four, the three types of community participation have been applicable in different circumstances.<sup>2</sup> The type of activity to be conducted has largely determined the community participation mode/approach.

Other efforts to enhance community participation include: the formulation of the "LVEMP Community Participatory Strategy" (LVEMP, 2004); formulation of micro projects implementation manual focusing on local community involvement; and drafting of field manual to guide facilitators in enhancing community participation in development activities. The manual is written in Kiswahili language bearing a title

<sup>2</sup> It is worth noting that there is no sharp line between the definitions proposed for different community participation concepts and types. Sometimes these concepts and types are used interchangeably.

"Mbinu za Ushirikishwaji Jamii katika Kujiletea Maendeleo." In addition, several studies related to community participation have been conducted namely: Community involvement in fisheries from production to marketing; the status of communities' participation in implementing Lake Victoria Environmental Management Project; the level of awareness and perception of LVEMP in project regions; and the study on how to make Beach Management Units more effective. Achievements and challenges to implementation of community participation activities are articulated in section four.

## 3.0 Approaches and Methodology

#### **3.1 Scope and approach**

This report on Lessons Learnt focuses on Community Participation in all components of the project. The appointed Consultant undertook the review, while the Lead Consultant provided technical support and guided the direction of the study. Component Coordinators and Task Leaders provided requisite technical support while other LVEMP Officers (from both Mwanza and Dar es Salaam offices) coordinated the exercise, and provided the required logistical support.

#### **3.2 Data collection methods**

In pursuing the assignment, data were collected from both primary and secondary sources. As much as possible data were gathered from various documents produced for the project and other documents as considered necessary. Further, interviews with different categories of respondents were conducted.

#### 3.2.1 Secondary data

A desk review of all the internal and external documents of the project was done. Three categories of documents were sought from LVEMP and reviewed. First, strategic plan documents and other project documents including project inception reports. Second, operations documents indicating how the project was implemented such as annual reports and progress reports of various kinds. Third, evaluation reports, including mid-term reviews that are essentially looking back at what was set to be done, and what has been done and how it has been done with a view to drawing lessons from experiences and for the benefit of future work.

## 3.2.2 Primary data

#### A: Field instruments

The main instrument that was used is an open-ended questionnaire—interview checklist/guide containing guiding questions. Several interview guides were designed for different types of respondents. The study was conducted in a participatory manner whereby Focus Group Discussions (FGDs) were mainly used for data collection from the communities. Individual based interviews were mainly held with project Task Leaders

and Coordinators, community leaders/government officials, and the non-state actors such as NGOs, PSOs, and CBOs. The interview process adopted an interactive approach whereby provision for feedbacks during interviews was made. The interviews were accompanied with field verification/observations that were meant to assess some activities done under LVEMP. Interview guides were developed for the following groups of respondents (See appendix 2 for field instruments<sup>3</sup>):

## (i) Interview with Project Coordinators and Task Leaders

A dialogue was held with all project Task Leaders and a few Project Coordinators based on the pre-determined open-ended questionnaire.

## (ii)Interview with Communities/Beneficiaries

A dialogue was held with communities that had been involved in implementing the project. Several community members from villages that had participated in executing different activities aimed at enhancing Community Participation were involved in the interview.

## (iii) Interview with PSO, NGOs and CBOs

Interviews were held with the top management of relevant PSOs, NGOs and CBOs based on the pre-determined questionnaire.

## (iv) Interviews with Community Leaders and Government Officials

Interviews were held with Local Governments Officials at different levels, that is, District, Ward and Village levels using an open-ended interview guide.

## B: The sample

Field visits were made to selected communities located in different districts in the three regions (Mwanza, Kagera, and Mara), in order to gain first-hand information from the communities themselves on their participation in the inception, and implementation of the project and anticipated future participation. Interviews were conducted with Task Leaders and Coordinators of several Components of the project; some members of committees,

<sup>3</sup> The Research Team did not test the study tools due to the qualitative nature of these tools that allows for frequent adaptation in the course of the interview.

for instance, district micro-project steering committees, village project implementation committees etc; Community Participation Officer (CPO); Communities; Relevant Government Officials and Community Leaders; and other relevant stakeholders such as PSOs, NGOS, and CBOs with whom the LVEMP project interacted.

According to LVEMP documents, activities related to Community Participation were executed in 11 Districts [Kagera (3); Mwanza (5); Mara (3)]. In order to have a representative sample, villages were selected from 7 districts (more than 50% of the total number of districts). A total of 3 districts were then selected from Mwanza, and 2 each from Kagera and Mara regions. These are: Biharamulo and Bukoba (Kagera); Ukerewe, Magu, and Misungwi (Mwanza); and Musoma, and Tarime (Mara). Purposive sampling of districts was done in order to capture far located districts, and diversity of Community Participation activities (maximizing heterogeneity).

In order to reduce biasness of the results, villages participating in the project were randomly sampled from each district. Sampling of the villages was also done in such a way that at least 30% of the participating villages per clusters presented in Table 1 were sampled (See Table 2 for sampled villages). Further, in order to reduce bias in the responses, members participated in the FGDs were selected randomly from public places.

Additionally, several other organizations such as Research Institutions in particular Tanzania Fisheries Research Institute (TAFIRI), NGOs, PSOs, CBOs interacting with LVEMP were also sampled. Table 3 shows the total number of respondents in the survey by category whereby Appendix 3 presents the sampled sites respectively<sup>4</sup>.

## 3.3 Data analysis and synthesis report writing

This report presents a synthesis of reviews, and field notes. The interpretative model of analysis, that gives the summary description with illustrative quotes whenever necessary, followed by an interpretation was adopted (Krueger, 1994). Appendix 4 presents the observations made in the field. These observations are used to substantiate the information obtained from the literature and the interviews.

<sup>4</sup> The names of the respondents are available from the author on request.

# Table 1: Communities with community participation activities in the sampled districts<sup>5</sup>

Sn.	Activity	Name of Participating Villages/Industries
	Micro Projects (construction of dispensaries, income	Murutunguru (Ukerewe); Kagunguli (Ukerewe); Bukondo (Ukerewe); Bwisya (Ukerewe); Kameya (Ukerewe); Bwasa (Ukerewe); Mbarika (Misungwi); Ng'wanghande (Misungwi); Isamilo/Chole (Misungwi); Busagara (Misungwi); Mwalogwabagole (Misungwi); Lubiri (Misungwi); Bomani (Misungwi); Kigangamo
1.	generating activities, classrooms construction, road rehabilitation, sanitation projects)	(Magu); Ijitu (Magu); Ihale (Magu); Bweri (Musoma); Mwigobero (Musoma); Suguti (Musoma); Seka (Musoma); Nyarigamba Street (Musoma Urban); Rwang'enye (Tarime); Nyamagaro (Tarime); Nyarero (Tarime); Nyakunguru (Tarime); Bukama (Tarime); Kuruya (Tarime); Nyankunguru (Tarime); Kibuye (Tarime); Nyang'ombe (Tarime).
2.	Fisheries Management and Fisheries Research	Ng'wajombo/Nyahiti (Misungwi); Isamilo (Misungwi); Bwai-Kumsoma/Mwichele (Musoma); Kawawa Street (Musoma Urban); Kamizilente (Bukoba); Kashenye (Bukoba); Rwagati (Bukoba); Nyamirembe (Biharamulo); Kikumbataire (Biharamulo); Katemwa (Biharamulo); Bwina (Biharamulo); Chato (Biharamulo); Gwitiryo (Tarime).
3.	Integrated Soil and Water Conservation and Water Quality and Ecosystem Management	Kalemera (Magu); Itumbili (Magu); Kwibuse (Tarime); Chirorwe (Musoma); Kuruya (Tarime); Kawawa Street (Musoma Urban); Nyabisari Street (Musoma Urban).
4.	Water Hyacinth Control	Ng'wajombo/Nyahiti (Misungwi); Bugabo (Bukoba); Kyaka (Bukoba); Mkendo Street (Musoma Urban); Kawawa Street (Musoma Urban); Shinembo (Magu).
5.	Catchment Afforestation	Masurura (Musoma); Ryamisanga (Musoma); Bukabwa (Musoma); Nyarero (Tarime); Kuruya (Tarime); Kwibuse (Tarime).
6.	Wetland Management	Kwibuse (Tarime); Simiyu (Magu); Kuruya (Tarime); Kirumi (Musoma); Bukabwa (Musoma); Masurura (Musoma); Ryamisanga (Musoma); Kitaji B Street (Musoma Urban).

Sources: Nanai, (2000); LVEMP (2002); LVEMP (2003a); LVEMP, (2003b); Mbwana, (2005).

<sup>5</sup> Table 1 draws from several sources but it might not be exhaustive.

## Table 2: Sampled Villages/Streets per District

Region	District	Village/Street
Mwanza	Misungwi	Isamilo, Nyahiti
	Magu	Bubinza, Ihale, Ijitu, Shinembo
	Ukerewe	Murutunguru, Kagunguli
Kagera	Biharamulo	Chato, Nyamilembe, Biharamulo
	Bukoba	Kanazi, Kyaka, Bugabo
Mara	Musoma Rural	Bukabwa, Bwai Kumsoma, Suguti, Seka,
		Chirorwe
	Musoma Urban	Mkendo, Nyarigamba, Kawawa,
		Kitaji B, Nyabisari
	Tarime	Kuruya, Kwibuse, Nyarero, Gwitiryo,
		Rwang'enye, Nyang'ombe

## Table 3: Total number of respondents per category

Sn.	Category of Respondents	Total Sample
1.	LVEMP Officials	11
2.	Regional Level Officials	2
3.	Local Government Officials	44
4.	Private Sector Organizations	2
5.	Non-Governmental Organizations and Community Based Organizations <sup>6</sup>	9
6.	Research Institutions	1
7.	The Community <sup>7</sup>	136

<sup>6</sup> Community Based Organizations include Savings and Credit Cooperative Societies (SACCOS) and Women Associations such as Chato Women Development Association (CHAWEDA)

<sup>7</sup> These community members were mainly interviewed in FGDs

## 4.0 Achievements and Challenges in Implementing Community Participation Activities

## 4.1 Efforts to enhance community participation

## 4.1.1 Community participation objectives and indicators

The CPGL manual provides the objectives of community participation, major strategies for meeting project's overall objective, and the approach for community participation (for the project agent), that is, strategies on how to involve the community in the project. More importantly, it provides the limitations and some solutions to community participation. These are categorized as beneficiary specific limitations such as the levels of literacy and poverty, cultural and social attitudes, psychological fatigue of the community, and project specific limitations such as inadequate public coordination, lack of strong emphasis on community participation etc (See Msambichaka, 1998 for more limitations). The objectives of community participation as described in project documents are narrated in Box 1.

## Box 1: Objectives of Community Participation in LVEMP

- (i) To raise awareness among the communities on how they can benefit from the Lake Basin resources and environment
- (ii) To ensure that people benefit from the use of Lake Basin resources and the conservation of the environment.
- (iii) To attract communities around Lake Victoria to implement and sustain environmental management activities.
- (iv) To identify interested groups in different components.
- (v) To provide capacity building in terms of appropriate technology and skills.
- (vi) To explore and build capacity on environmental management and eventually to make it a way of life.

Source: Msambichaka, (1998)

Msambichaka (1998) further provided progress indicators of community participation (Box 2). However, the LVEMP (1999) report that shows monitorable indicators for components such as the Water Quality and Ecosystem Management; Wetland Management; Catchment Afforestation; Water Hyacinth Control; Fisheries Research;

Fisheries Management; and Soil and Water Conservation does not show specific indicators set for monitoring the extent of community participation in the project (LVEMP, 1999). There is a need to include monitoring indicators for community participation in the Monitoring and Evaluation Master Plan. These indicators may be included in a separate section or integrated in each Component. Further, while some of the community participation indicators are measured "qualitatively" the indicators for other components are measured "quantitatively." This calls for inclusion of qualitative indicators that are mainly captured by qualitative measures will be undermined. Additionally, there is also a need to review the existing community participation indicators and setting targets against each indicator.

	<b>Box 2: Progress Indicators of Community Participation</b>
	Box 2. 110gress mulcators of Community 1 articipation
(i)	Community awareness
(ii)	New proposals initiated by the community
(iii)	Active involvement of the community in the project
(iv)	Community groups hold frequent meetings
(v)	Attendance to project activities
(vi)	Improved fish catch
(vii)	Operational savings and credit systems
(viii)	Reports from different actors are prepared and tabled for discussion
(ix)	Sightly environment (no weeds in the water, forested areas etc)
(x)	Participatory plans developed and implemented by the community
(xi)	Activity leaders are active
(xii)	In the long run more LVEMP resources are channeled and managed by
	the community
(xiii)	Improved managerial and technical skills of the community
(xiv)	Increased number of community members observing environmental regulations
(xv)	Improved environmental status in the community
(xvi)	Improved socio-economic status of the community

Source: Msambichaka, (1998)

In a nutshell, as vividly portrayed in the next sections;

 (i) All the community participation concepts and community participation types have been apparent in the implementation of community participation activities in different settings.

- (ii) The overall objectives of community participation have been met although there have been some few cited shortfalls.
- (iii) The indicators set have also been achieved to a greater extent although they have not been monitored in a coherent manner.
- (iv) The nature of activities conducted by the Component determines the strength of community links and degree of community participation.
- (v) External factors such as land conflicts, political ideologies, opinion leaders who are reluctant to change, and drought have interfered the implementation of project activities in some areas.

## 4.1.2 Approaches/methodologies applied to enhance community participation

Several approaches were used in involving the communities in planning, executing, and monitoring of various projects. Some of these involved learning by doing. These include:

- (i) Village meetings
- (ii) Seminars, conferences, and workshops
- (iii) Working sessions with specific groups (for instance a trainer from Kenya was brought to Simiyu to provide training on the use of wetland products)
- (iv) Trainings for specific groups such as fisher folks, farmers, tree planters etc
- (v) Study tours to different areas for experience sharing and tapping best practices
- (vi) Distribution of pamphlets, brochures, posters, etc written in user friendly language, and use of various mass media (radio, TV, newspapers), video etc.
- (vii) Demonstration

In village meetings and workshops, participatory methodologies such as Participatory Rural Appraisal (PRA) and Participatory Learning and Development (PLD) were used to identify needs and plan for activities to be executed. For some activities, especially micro projects, villagers conducted PRA to identify their needs, which were then channeled to LVEMP for support. The needs were supposed to be development oriented, that is, needs that aim at poverty reduction.

It is worth noting that the three types of community participation presented by Msambichaka (1998) have been applicable in different scenarios. In cases where the activities to be implemented are technical, the LVEMP technical staff had to sell the idea to the community members (Community Consultation). Examples include the breeding of weevils as a means of controlling water hyacinth biologically, Cleaner Production Technology (CPT), sampling water from Lake Victoria for quality testing, fish farming, tree species relevant for specific areas etc. In most of micro projects, the Community Self Help and Community Contribution modes have been applicable. Thus, there is no

universal type of community participation applicable to all project activities. The nature and type of activities to be implemented influence the type of community participation mode to be employed. In all the cases, efforts have to be made to make communities understand, and appreciate their roles in order to enhance sustainability of the project.

Participatory methodologies have gained momentum in the last two decades as far as community involvement is concerned. The fact that the leaders and villagers were given an opportunity to identify their needs and/or discuss a list of activities and choose from them which one to implement implies that LVEMP applied participatory approaches. Further, introduction of the Opportunities and Obstacles to Development (O&OD) planning approach from 2003 implies that the participatory approach process is being improved. Villagers call it: "*Maboresho ya ushirikishwaji*" meaning "Improved Participatory Approach."

Another approach which is useful but which is sometimes overlooked by project implementers is banking on what is on the ground. Sometimes project implementers assume that the communities have done nothing on specific development areas and that the project is starting a leaf. From the interviews with the project staff and the beneficiaries, it was found that efforts were made to understand the indigenous knowledge on the ground before embarking on project activities. This was done in the form of baseline surveys. For instance, communities were involved in identifying the fish breeding centers in the lake, the species available in the lake, historical trends in appearance and disappearance of certain fish species, type and uses of various tree species, to mention a few. This knowledge helped the project implementers to know what was on the ground and build on that.

Further, it was observed that there were efforts by the communities to conserve environment and in some areas the project banked on those efforts. For instance, in Chole (Misungwi), LVEMP visited the village, introduced their activities to the communities but the community had already established environmental organization. LVEMP started working with this environmental organization. The organization was later transformed into a Beach Management Unit (BMU). LVEMP worked with the unit, conducted PRA to identify problems they were facing alongside the beach. The organization prioritized among others, motorboats for security purposes. This is narrated in the following quote from one of the respondents:

"LVEMP came to us; they worked with us to set priorities. They did not tell us what to do. We identified our major need as security to our lake but our main obstacle was the means, that is, equipment like motorboats. They gave us 9

million shillings to buy the boats that we use even today. Apart from using the boats for security, we also use them for transport as well as taking sick people to Bukumbi hospital (Hamlet Chairman and Chair of the BMU, Chole Village, Misungwi District).

Approaching individuals has also been used in some instances. The Integrated Soil and Water Conservation Component has in some cases worked with progressive farmers who are potential adopters of a new initiative. This was the case with paddy production under ridges and tie ridges, and the use of farmyard manure.

## 4.1.3 Entry processes of community based projects

There is no single entry point for community-based projects. Several entry points are specified depending on the type and nature of project, and in most cases entry has been sequential starting from higher organs such as the Regional level to the lowest level, that is the village. These entry points have included:

- (i) The Regional level
- (ii) Higher Local Government Authority (HLGA)—the District
- (iii) Lower Local Government Authority (LLGA)—Wards and Villages
- (iv) Specific interest groups

In most cases, inception workshops to share information on the intended activities were held at the Regional and District levels. Participants to these workshops were drawn from the regional, district and institutional levels (for example PSOs, NGOs, and Research Institutions). At the district level, and especially for micro projects, the District Steering Committee for foreseeing LVEMP activities and that involved the District Commissioner was set. This is a very good approach to motivate leaders and in particular political leaders to participate seriously in development activities. Further, devolution approach was applied whereby the LVEMP officials sold ideas for initiation of activities to Lower Local Government Authority (LLGA) and for that matter Ward and Village leaders. After the latter became aware and agreed with the LVEMP officials, a Village Assembly was convened and a Village Implementation Committee (VIC)/or team was formed.

It is worth noting that officials from different District Council Departments have been used to facilitate entry into the communities. For instance, the entry point for activities related to fisheries management and fisheries research has been the district fisheries and sometimes community development departments whereas forestry/natural resources department has been used for catchment afforestation and soil and water conservation projects. District officials from these departments have worked with LVEMP down to the Ward and Village governments.

There are a few cases where entry point was a specific group of individuals in the village, for example, the environmental management organization in Chole that was transformed into BMU, and ACORD (Agency for Cooperation and Research in Development) environmental groups in Biharamulo. The Cole BMU latter formed a Savings and Credit Cooperative Society (SACCOS) that is providing financial services to community members irrespective of their initial membership status. In Simiyu, LVEMP facilitated the formation of a handcraft group that uses the wetland products to manufacture several products.

It was however pointed out that for some of the activities, LVEMP worked with village governments only at the initial stages of the project but once projects were identified there have been very little contacts with the communities. Cases were also cited where the Ward level structure was sometimes escaped. In some cases, people mentioned that they were visited by LVEMP officials, asked about their problems but they never saw them again, contrary to what they had promised. This has created a sense of apathy with LVEMP. The Village Executive Officer (VEO) of Nyamirembe village (Biharamulo District), on this very issue of appearance and disappearance of LVEMP officials lamented:

"They came and asked us about our problems; we told them our problems; they discussed with us projects that they deal with and are supposed to be implemented; we gave them our priorities; but to our surprise until now, they have been nowhere to be seen in our villages. We hear they are somewhere in Chato" (VEO, Nyamirembe Village, Biharamulo District).

Interviews with LVEMP officials revel that appearance and disappearance of LVEMP officials could be attributed to the sampling frame. Initially, baseline surveys were done in several communities but few were sampled for implementation of LVEMP activities.

## **4.2** Community participation outputs and outcomes

## 4.2.1 Community needs and priorities

Findings from experiences of project leaders (at activity implementation level), community leaders, and communities at large show that there have been visible and significant results which have been a result of participation of the communities in setting priorities and in implementing project activities. The communities have provided clear

testimony on the role of LVEMP in meeting their needs and enhancing ownership of the project by creating conducive environment for communities to be part of the whole process. This is reflected in the following story from members of Simiyu handcraft group (Box 3).

## **Box 3: Participation in Wetland Management Activities**

LVEMP came to our village in 1998. We were 9 farmers who used to grow maize, tomatoes etc alongside the river. We were educated on the traditional use and management of wetlands for future generation. We were asked if we remember traditional vegetation of the place and we confirmed that the original vegetation were the "mikindu" and we agreed to look for the seeds because they were no longer available around our "shambas." We got the seeds and started growing them afresh. We could not believe that they would grow as we thought only God could make them grow. Later we were taught how to use these trees as an alternative for farming in the area. A trainer was brought by LVEMP who trained us on handcraft. Today we use the same trees to make chairs, tables and other ornaments. We sell by sets from TZS 40,000 to TZS 60,000 per set. Now we can see the importance of managing the wetlands. What we miss is only a reliable market for our products. LVEMP has shown us that when communities are involved in setting activities they own and have authority on those activities. River Simiyu is "ours" and not "theirs." We need to protect it"

(Member of Simiyu Handcraft Group, Magu District).

In addressing community needs and priorities not related to environment but that are a catalyst for environmental management, the micro projects component was initiated. Results from the field on the involvement in identification and ownership of micro projects are mixed. In Magu district, the surveyed communities have a feeling that they own the micro projects. Example cited is the construction of Ihaja dispensary. The two villages (Ijitu and Ihale) were carried through a participatory way of setting village priorities and they came up with health related issues that were solved by constructing a dispensary. Since these two neighboring villages came up with similar priorities, LVEMP facilitated a joint activity for the two villages and a dispensary that carters for the needs of the two villages was constructed. In making the communities accountable, financial management was also vested to the communities. The governments of the two villages coordinated project activities. In addition, a construction committee composing of five representatives from the community and in which one was a woman who was also a signatory to the bank was formed. Constructing one dispensary that is to be shared by two

villages is an efficient way of sharing the available meager resources given the fact that in poor communities the needs outweigh the available resources by far.

In Bukoba, the planning and implementation of several projects involved a lot of community participation. LVEMP officials were mentioned to be keen in asking about the progress and the problems met in implementation of agreed activities. Advices were then provided as deemed appropriate. In Bugabo Village, a fisherman who is a member of a group dealing with water hyacinth control commented:

"I heard about these people who deal with water hyacinth. I looked for their offices in Bukoba Town. ... I was advised to form a group with other people so that we could get advise on how to deal with the water hyacinth. ... We are now friends and we share a lot of knowledge with them," (Group members, Bugabo Water Hyacinth Control Group, Bukoba District).

The Fisheries Management Component set the activities to be implemented by communities after several consultative meetings with the community. These include: Enforcement of Fisheries Act and Regulations; Beach sanitation and hygiene; Collection of statistics on specified fisheries issues; and Information sharing and exchange. Following LVEMP initiative, several BMUs have been formed (See Table 4). The BMUs have been involved in the Fish Frame Survey and Catch Assessment Survey (CAS) that has resulted to availability of more reliable data on fisheries. The use of BMUs in data collection is necessary given the low manning level of fisheries staff at the District Council. BMUs have also been used to monitor the quality of the fish that has resulted to a stable demand from external market.

According to the people in Chato, the problems they have faced with regard to fishing has been fish poisoning with the use of poisons such as *theodan*, use of explosives, and thieves in the lake. There were sanitation and hygiene problems as well since there were no public and private toilets at the lakeshores. Further, there were no structures for disposing wastes from fish. It is the same waters of the lake that faeces and urine were found and the same waters that waste from fish were disposed of. The same waters were used for washing, bathing, drinking, and cooking. The BMUs have been instrumental in beach hygiene and sanitation and are successful because they are near to people.

Despite these positive responses, more need to be done in enhancing community participation. There have been experiences where community participation has been cited to be very minimal. In some cases even people along the lake do not know what LVEMP is. They hardly know even where the offices are, not to mention their objectives. Additionally, despite the fact that micro projects are supposed to be identified by the

communities, in some instances the decision was not made by the community. One leader exclaimed;

"With regard to the repairs of Chato Primary school, LVEMP discussed with the School Committee only and came with its technicians and building materials. Only pupils were involved in carrying water; village members were never involved at all in any type of contribution" (The Councilor, Chato Ward, Biharamulo District).

A women's group, Magugumaji Group Kassambya, that deals with water hyacinth in Kyaka, Bukoba District, mentioned having known LVEMP a few days before this study was conducted, even though there had been another LVEMP group at Kyaka dealing with water hyacinth for almost five years. Additionally, respondents in some villages (Murutunguru and Kagunguli villages in Ukerewe) that were mentioned by LVEMP as participating villages mentioned that they had neither implemented any activity with LVEMP nor undertaken any participatory work facilitated or supported by LVEMP.

Reasons for these types of responses include:

- The mentioned villages may have implemented LVEMP activities but no thorough awareness campaign were made to make all villagers aware of LVEMP activities;
- (ii) There was communication breakdown after the baseline survey/identifying these villages as potential implementers of LVEMP projects, that is, no feedback on sampling was communicated to these communities.
- (iii) Some few community members participated in designing and implementation of activities and the sampled respondents were not among those. This point is validated by the following example: Only 7% and 11% of villagers from Bukabwa and Kirumi villages, respectively, participated in the participatory dialogue for preparing River Mara Watershed Management Plan.
- (iv) Change of leadership, that is, the Village and Ward leaders that participated in the inception of the project are not the current leaders.

## 4.2.2 Major outputs/achievements on community participation

Phase one of LVEMP has been characterized by community involvement in both project preparation and implementation albeit few complaints from some areas as explained above. Table 4 summarizes achievements made through community participation efforts, by Component.

# Table 4: Achievements through community participation, by Component

Sn.	Component	Achievements
1.	Fisheries Management	511 Beach Management Units (BMUs) have been formed
		6 local communities demand driven micro-projects related to fisheries through "self help" were initiated
		53 beach landing sites have been identified
		Local communities were involved in the study on Fish Levy Trust Fund
		141 closed fishing areas have been identified
		600 fisher folks have been trained on quality control and safety assurance
		The project achievements have contributed to the Drafting of the Fisheries Act of 2003
		13 Conservation Management Units (CMU) in five selected satellite lakes have been established
		Formulation of Operational Manual for Community Based Fisheries Collaborative Management (Co-Management in
		Tanzania)
		9 BMUs have been involved in data collection (Pilot BMUs)
		BMUs have been involved in the 2002 and 2004 Fish Frame Surveys
2.	Fisheries Research	Members of beach management Units in 53 beach landing sites have been involved in fisheries data collection
		Communities were involved in several studies such as: How to make BMUs more effective; The impact of fisheries
		activities on resource and environmental degradation; aquaculture potentials of Lake Victoria basin; The contribution of
		fisheries to the national economy; Literature review on socio-economic dimension of the lake Victoria basin; Pilot
		study on Nutrition and Health in Mwanza Region; Surveys of non-trawlable habitats of the lake etc.
		Establishment of community-based hatcheries for production of quail fingerlings
		Quality fish stocked ponds have been established in the regions of Kagera (189), Mara (171), and Mwanza (51)
		400 fish farmers have been trained on fishponds construction
		40 fish farmers have been trained on aquatic practices
		A number of awareness workshops were organized
3.	Water Quality and	Technical staff from 12 industries in the catchment area were trained on Cleaner Production Technology (CPT)
	Ecosystem	Communities in 300 shorelines settlements in Kagera, Mwanza, and Mara participated in a survey on the status of Lake
	Management	hygiene and sanitation
		Several schools and local communities have been involved in rainfall data collection

Sn.	Component	Achievements
		Workers and factory owners participated in a study on classification of industries according to the nature of industry, for instance, fish processing, oil producers, textiles etc. and type of waste products discharged into the Lake/environment
		Local Community in Igogo Ward were involved in a feasibility and socio-economic study for the establishment of the Igogo simplified Sewage System
		Communities along Mirongo River in Mwanza were involved in a study on people's perception on environmental management
		Communities were involved in Component Vision Development
4.	Water Hyacinth	Communities have been involved in the manual removal of water hyacinth in 530 beaches
		Local communities have been involved in the management of 12 weevil rearing centers
		Lake Nyanza Environmental Sanitation Organization (LANESO) have been supplied with manual removal equipment
		28 local communities were trained on weevil rearing and release techniques
		Local communities were taken on a study tour in Uganda for experience sharing on water hyacinth control operations
		Communities were involved in Component Vision Development
		Communities have been involved in the formulation and implementation of the national Water Hyacinth Surveillance
		System
	47 community members were trained on monitoring and reporting of water hyacinth	
		Communities have been involved in development of quarantine regulations on water hyacinth
		The project achievements contributed to the Drafting of the Plant Protection (Control of Water Hyacinth) Rules, 2001
5.	Integrated Soil and	Individuals from 3 communities were trained and implemented soil and water conservation techniques (Kalemera,
	Water Conservation	Itumbili, and Kwibuse)
		Local communities were trained on proper use, handling and disposal of agrochemicals, Integrated Pest Management
		(IPM) concepts and hazards caused by agro-chemicals.
		Members of the community were taken on study tour to Arusha and Shinyanga for experience sharing on soil and water
		conservation techniques
		Selected farmers were trained on rainwater harvesting for upland paddy production (Kalemera)
Communities have been involved in the Component Vision development		
		Students from Sokoine University of Agriculture, University of Dar es Salaam and Tarime Teachers Training College
		(TTC) were trained on various land management measures and environmental conservation in the pilot areas
6.	Catchment	Women groups were trained on the production and use of energy-saving stoves (Kalemera)
	Afforestation	9 commercial tree nurseries are managed by communities

Sn.	Component	Achievements
		350 contact farmers, 14 primary schools, 3 Church organizations, District Councils (Musoma Rural, Bunda, Mwanza,
		Misungwi, and Sengerema) have been involved in tree planting activities
		Local communities have been involved in the integrated management plan for Kwibuse-Mwitore and Kirumi sub-
		catchments of lower river Mara watershed
		5 CBOs have been involved in tree nursery establishment
		3 million trees have been raised by communities out of which 2.3 million have been planted with a survival rate of 60%
		64 villages have agreed to conserve their natural forests
		5 communities have participated in preparing and implementing management plans for conservation
		Communities participated in the assessment of the status of 6 existing forest reserves
		Some communities were taken on a tour of Singida, Mbulu, and Usambara to share experiences on forest conservation
		techniques
		Communities have been involved in the Component Vision Development
7.	Micro Projects	14 District Steering Committees (DSC) have been established
		72 micro projects have been completed and 16 were on going at the time of this assessment (17 on health, 14 on water
		and sanitation, 35 on education, 4 on access road, 12 on fishing, and 6 on tree planting)
8.	Wetland Management	Communities around Simiyu and Rubana wetlands participated in preparing the Village Wetland Management Plans
		Communities have been involved in the process of designing the buffering capacity study
		Pilot activities to demonstrate sustainable use of wetlands to local communities, and strengthen capacity of local NGOs
		and CBOs to undertake wetland wise us activities have been initiated
		Communities have been involved in the Component Vision Development
9.	Support to the	Local communities have been involved in data collection of various scientific studies conducted
	Riparian University	26 University staff were trained at Master Level
		7 University staff were trained at PhD level
		Several staff were trained at diploma level
10.	The Coordinating	Communities, Civil Society Organizations (CSOs) have participated in various workshops, seminars, and meetings
	Secretariat	Seminars for Members of Parliament, District Commissioners and District Executive Directors on the project were
		conducted
		Awareness was created through primary schools competitions (songs, drama, poetry)
		Distribution of several pamphlets, leaflets, and newsletter on various project activities to local community
		Airing of cinemas and TV programs focusing on project activities

Major Sources: Mbwana, S. (2005); LVEMP, (2004); and Nanai and Nyirabu, (2001)

#### 4.2.3 Major visible outcomes

After more than five years of implementation of LVEMP activities some vivid sighs/outcomes on success have been recorded. These include:

- (a) **Retention of wetland water levels:** Knowledge on wetland management was imparted to community members. This knowledge was put in place and some positive results are vivid. In 2002 Mwitore wetland retained water even during the driest part of the year, a situation that had not been experienced for over a decade.
- (b) **Regeneration of vegetation cover**: Vegetation cover has improved on the Kigamba-Bitare hills in Tarime District as a result of LVEMP activities through catchment afforestation interventions.
- (c) **Formulation of Wetland and Rivershed Management Plans**: Wetland Management Plans (for instance Simiyu) and River Mara Watershed Management Plan have been drafted. Different stakeholders conducting activities related to Wetland Management and Watershed Management could use these plans in the future when they become operational.
- (d) **Community Participation Strategy:** This strategy has been formulated<sup>8</sup>. It could be adapted to suit other community participation activities, not necessary environmental related.
- (e) Community empowerment to take action against environmentally unfriendly measures: Because of the awareness on and understanding of environmental management, the Kirumi community has come forward and stopped the Tanzania Livestock Marketing Project (TLMP) from constructing a dip adjacent to Kirumi Satellite Lake (LVEMP, 2002).
- (f) Reduced water hyacinth load in the Lake: This aquatic weed that obstructed transportation in the Lake and interfered with fisheries in the 1990s has been reduced to below economic levels and efforts continue to maintain it there (LVEMP, 2003b). Reduction of water hyacinth load from the lake has eased transport. For example, Chole community members could travel by boats to Bukumbi hospital and take their commodities to markets by boat; Shinembo community members can now travel to Ijinga for business etc.
- (g) **Availability of quality water**: Reduction of water hyacinth from the lake has increased the chances of getting quality water closer. Before the introduction of

<sup>8</sup> There is a feeling among respondents that the Strategy needs to be tested and reviewed to make it more practical (it is too theoretical) before its dissemination. This is because as it is now, it doesn't describe what ought to be done and the process.

LVEMP activities, Nyahiti community indicated to have cases of diarrhea caused by drinking dirty water, and rashes resulted from bathing dirt water.

- (h) Support to the drafting of the Law/Act: The LVEMP activities have informed the drafting process of Fisheries Act of 2003 and Control of Water Hyacinth Rules of 2003 under Plant Protection Act. These Acts have given communities the mandate to implement the environmental management activities.
- (i) **Increased fish quality**: Effective participation of BMUs in fish quality control has increased the availability of fish with desired standards to the external markets. Tanzania was the first country in East Africa to experience a lift of the fish barn by the European market.
- (j) **Cleaner beaches and landing sites**: Effective participation of BMUs in beach sanitation and hygiene activities has resulted to cleaner beaches and landing sites which is a prerequisite for good quality fish, and quality of life of human beings using the beaches for different purposes.
- (k) Formation of SACCOS: These financial intermediaries are providing both saving and credit services to the community. For instance, Chole SACCOS, HISA SACCOS that was formed by Mwanzo Mgumu Women Group in Kalemera, Mshikamano SACCOS in Chato etc.
- (1) **Reappearance of fish species:** Some fish species that were thought to have gone extinct have reappeared. Examples include *schilbe*, *African catfish*, *synodontis*, *haplo chromines*, *burbus*, *brycinas*, *labeo*, *and several tilapiines*.
- (m) **Cleaner Production Technology**: Several cleaner production solutions have been implemented in the enterprises/industries along the lake leading to considerable environmental, financial, and economic net benefits of the initiative.
- (n) **Learning by seeing**: Several students from Universities, colleges and other organizations have been visiting LVEMP sites for learning purposes.

#### **4.2.4 Direct benefits to the community**

Msambichaka (1998) documents the envisaged community participation objectives and approaches. By and large, these were implemented albeit in the later years of the project. The participating communities have benefited directly and indirectly. Indirect benefits include the outcomes described above. For the micro projects, research findings show that community needs have been met because these were the needs expressed by each community in a participatory manner. Construction of schools, dispensaries, access roads, toilets, and income generation activities were all priorities from specific villages.

The micro projects activities designed were intended not only to serve the environment but also to boost the welfare of the participants substantially. For example, the Simiyu small-scale farmers had their priority of getting an alternative source of income. LVEMP facilitated them in handcraft training and they now use material from the wetland they protect and manage. They have a feeling that what they get now pays them more than small-scale farming they used to carry alongside the wetland. When asked to compare their income now with the previous one (when cultivating along the wetland), the handcraft-working group commented as follows:

"Now we get more than before. We used to grow tomatoes for 2 to 3 months and get around TZS 20,000 (in good season). Now we sell one set of chairs for TZS 60,000, which we can make for a week. The only problem is not having a reliable market," (Members, Simiyu Handcraft Working Group, Magu District).

There are three problems identified that were not well thought of in the design of these micro projects: Manning of the dispensaries; medicine stocking, and market for the wetland products. The communities and leaders using the Ihutu dispensary feel that their need is not fully met since there are only 2 staff in the dispensary which makes it difficult to get proper services. Also medicine availability is another problem. These two problems still force women and children to walk long distances to get medical services. Additionally, lack of reliable markets for wetland products discourages the efforts to conserve the wetlands. Participants in the handcraft group have been moving from house to house searching for market. Nevertheless, efforts are underway to establish a common market for wetland products.

The Beach Management Unit members for Chole (Misungwi) have a feeling that their priority is fully met since they are getting extra income from the interest rate accrued from the credit provided to community members, who would have otherwise used poor means of fishing that destroys the lake environment more. They also use the acquired motorboats to ferry other products like tomatoes to the markets as well as assisting transport to sick persons to Bukumbi hospital during emergencies. The Nyahiti BMU has an opposite feeling that LVEMP has not assisted them realize their needs. They have a feeling that LVEMP is using Chole BMU to rule them since they are the ones who have better boats and the government uses the Chole BMU to get wrong doers from Nyahiti without involving the Nyahiti branch. This has created a sense of uneasiness between the two BMU branches in the same district.

There are direct cash benefits obtained from selling tree seedlings. For example, in Bukabwa Village, one respondent who joined the group of tree seedlings producers as a bachelor got cash from the project for bride price payment and got married. He also got cash for buying iron sheets for his house, buying cows for keeping, and capital for starting a business on agricultural products (particularly cassava).

The SACCOS formed by Chole BMU has been a financial intermediary providing saving and credit services to community members irrespective of their participation in the project at the initial stages. The BMU also raises money through ferrying commodities from their communities to the markets in Mwanza. Other direct benefits include increased fish harvest and availability of fingerlings for free.

A farmer in Kalemera who participated in soil and water conservation project narrated his successful story. He has participated in construction of water serving bands for paddy production. He has been able to increase his yields substantially. He had used the proceeds accrued from selling the paddy to send his children to school.

As part of implementation of LVEMP, a soil and water use management activity was introduced at Kuruya Village. One of the beneficiaries who has been taught on how to use farmyard manure in agricultural production has praised the initiative. He said:

"I used to produce little maize without using manure; now, after learning to use manure, I started using it on my maize plot and harvest 15 to 25 bags of maize per acre. *Samadi ni mwanaume* (meaning, "farmyard is a man," which implies that farmyard manure is very important). I wonder where agricultural officers were, I never got anyone to teach me on how to use farmyard manure until LVEMP came to me. Had I been taught that when I was a young man I would be rich by now" (Farmer, Kuruya Village, Tarime District).

Despite this positive experience at Simiyu, wetland degradation has continued to be a challenge in the project area. This means that the awareness that has been raised has not been a catalyst to stop the practices that have been established to degrade Lake Victoria basin wetlands. Awareness alone is not sufficient to protect the wetlands of Lake Victoria basin and a call for a Wetland Policy has been made. From the Policy, Wetland Management Plans could be drawn. Similarly, laws and by laws have to be in palce.

## 4.3 Sustainability of the projects

#### 4.3.1 Sustainability measures

It has been widely advocated that community involvement in the planning, execution, monitoring and evaluation of projects increases chances of sustaining the project activities after exit. This has been supported by several cases and best practices found in the literature (see Msambichaka, 1998). Three indicators measures have been used to measure sustainability of the project activities: Tangible benefits; Community participation and commitment; and Sources of revenue to sustain project activities.

The micro projects like dispensary projects were found to have some elements of sustainability due to participation and ownership vested on communities. However sustainability is in danger, as the communities may not have enough resources to hire more staff in number and quality. Further, not having enough medicines in dispensaries may lead to the loss of morale from communities should there be no intervention from other parties like the Local Government Authority (LGA). It was however noted that it is the responsibility of the Municipal/District Council to ensure staff availability and furniture and this is part of the agreement between District Council and LVEMP.

The Chole BMU has been considered to be sustainable because of is revenue base and good leadership. One source of revenue is the SACCOS that serves the community. The BMU also raises money through ferrying commodities from their communities to the markets in Mwanza. It also has leadership that foresees its activities and works with the village and hamlet government. However, the Nyahiti BMU is exposed to problem of sustainability since it highly depends on LVEMP with complaints that Chole BMU is more favored by LVEMP, which also leads to conflicts between the two neighboring BMUs.

Under a larger umbrella, fisheries management activities have high level of sustainability if the revenue sources such as retention scheme<sup>9</sup> (retention of royalty from export, licensing etc), Fisheries Development Fund, and Fish Levy Trust for Lake Victoria are operational. Further, BMU could be made more liquid if allowed by the LGAs to collect fish levies on their behalf given the fact that BMUs have been incorporated in the village structure, the Defense and Security Committee.

The handcraft group of Simiyu river basin seems to be sustainable since members have seen tangible benefits of protecting the wetlands. They have done a crude cost and benefit analysis and found out that conserving the natural environment around the wetland while using local materials from it is advantageous than farming on that area. The members of the handcraft group appreciate the importance of conserving the wetlands. Further, this initiative is regarded as an alternative for livelihood. The only current threat to

<sup>9</sup> This retention is not backed by the law. It is only a directive form the Ministry of Finance that can be revoked anytime.

sustainability is lack of proper market for their goods. The need to establish or have in place a marketing network for wetland products has been echoed as a forward strategy.

The fish farming activities also show a great sign of sustainability. This is because the communities have identified fish farming as an alternative source of livelihood and tangible benefits have been accrued. Due to high demand for fingerlings in areas such as Tarime, Muleba, and Bukoba, efforts are underway to establish community owned centers for producing them. Some private individuals have shown interest in producing finger lings for sale. However, this has been discouraged given the nature of private business (profit maximization) and the fact that the communities themselves, if assisted, could produce their own fingerlings.

The Bukoba water hyacinth control response is positive. LVEMP has been able to establish different groups that have been educated on the control of the water hyacinth. Apart from some advice that can always be obtained from the LVEMP technical advisors, people know how to deal with the water hyacinth (manual removal, and rearing and release of water hyacinth weevils). Another interesting mechanism to control the water hyacinth in the lake has been educating fishermen and people along the Lake and river Kagera on reporting the presence of water hyacinth weeds. They do report whenever they see a new infestation.

However, the water hyacinth projects may be most vulnerable to lack of sustainability, the major reason being very little tangible individual benefits. In some cases, only 1 - 2 employed staff work full time on water hyacinth control unit but communities are not so much concerned unless there is financial incentive from LVEMP. Another factor may be the fact that LVEMP has trained only the site leaders/managers, which might be a future problem should such persons leave the job.

Other project activities that are most likely to be sustainable due to tangible benefits accrued from them include: the use of farm yard manure; ridge and tie ridge agriculture; manufacturing of energy saving stoves; and Cleaner Production Technology.

It is worth noting that some individuals interviewed were not worried about the phasing out of LVEMP (should that happen) because another project called Implementation of Fisheries Management Plan (IFMP) was mentioned to take over from where LVEMP stopped.

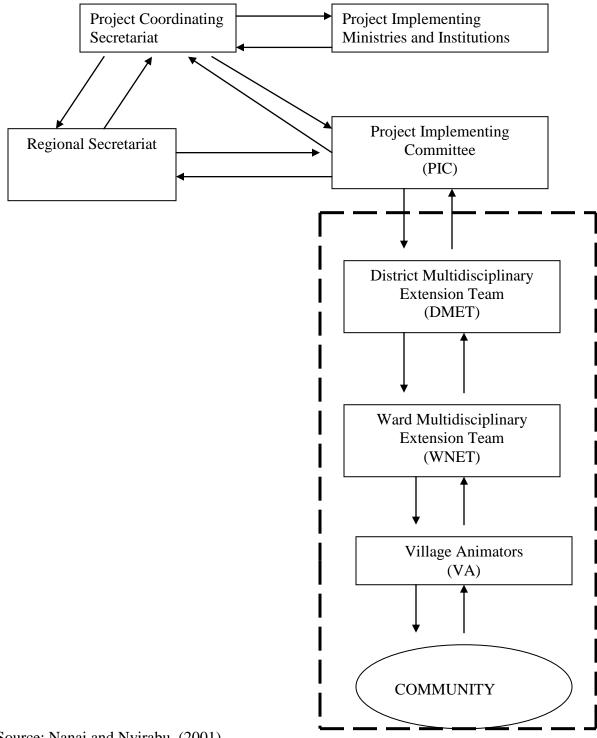
#### **4.3.2** Capacity building for community projects

Univerity of Dar es Slaam was a collaborating higher learning institution but it was not given the mandate to offer specific demand driven community trainings. A total of 26 University staff were trained at Masters Level and 7 at PhD level. Nevertheless, District extention workers, and local communities have had their skills and awareness increased and this has proved useful as it has created extensive participation in conservation issues including law enforcement. While it was the role of Community Participation Section to impart PRA skills, each Component concentrated on trainings that were needed in implementing Componet specific activities (See the Lessons Learnt Report on Capacity Building for specific trainings conducted by Components).

The trainings have been useful in execution of project activities. For example, fisheries staff who have attended short and long courses on fish quality and safety assurance have contributed to the maintanance of fish quality standards through regular inspections at the places of fish processing and exit points. Those who did prosecution courses are now assisting in the preparation of fisheries cases and the prosecution of such cases is now done more effcienty than before LVEMP.

Nanai and Nyirabu (2001) proposed establishment of several Multi-disciplinary Extension Teams at the district and lower levels that will be collaborating with the project secretariat in implementing project activities. These include District Multidisciplinary Extension Team (DMET); Ward Multidisciplinary Extension Team (WMET); and Village Animators (VA) [Figure 1].

# Figure 1: Institutional arrangements for capacity building activities



Source: Nanai and Nyirabu, (2001).

In order to enhance the capacity of these teams to implement community projects, training on participatory skills is proposed. Training of District Multidisciplinary Extension Team will build capacity at the district level to enhance participatory development. Following this is the Training of Trainers (ToT) of the DMET at each district so that they can conduct the same training on PRA methods at the Ward and Village levels with facilitation from LVEMP. At the Ward level, Ward Multidisciplinary Extension Team must be exposed to PRA methods and be responsible to facilitate participatory learning in the Ward. Further, Village Animators must be trained on PRA methods and its application. These are expected to trigger active involvement of communities into rehabilitation of Lake Victoria Basin.

The lead person in the whole training process shall be the Community Participation Officer in collaboration with the Community Development Departments of respective District Councils.

## 4.3.3 Scaling up of LVEMP activities

The scaling up of LVEMP activities was considered at three levels: Scaling along the Lake Basin; to other countries having a stake at the status of Lake Victoria; and beyond the lake to other areas in Tanzania facing the same threats; The problems of water hyacinth have been reported in other areas in Tanzania for instance Pangani River, and some small lakes in Shinyanga. Other aquatic weeds are also becoming aggressive and they are becoming a threat to several water livelihood sources. The need to scale up activities to other areas and to all aquatic weeds is apparent. The Ministry of Agriculture and Food Security (MAFS) has already initiated some activities to control water hyacinth in river Pangani.

The initiative to involve Rwanda and Burundi in the project in the next phase is commended. This is because these countries are the origin of some rivers pouring their water into the Lake and which brings with them heavy loads of water hyacinth (more than 0.2 hectares of water hyacinth per day!) [Mjema, 2005]. These rivers include Nyabarongo River that originates in Rwanda and joins Akanyaru from Burundi forming Akagera River in Rwanda. Akagera River flows to join Ruvuvu at Rusumo and form Kagera River that empties into Lake Victoria. Involving these countries means sedimentation and water hyacinth problems would be controlled from their origin.

Efforts to establish BMUs along satellite lakes, Mtera dam, Nyumba ya Mungu and Lake Rukwa are also underway. Fish farming activities are also promoted in many areas in Tanzania as a potential source of livelihood. Fish farming flourishes more in areas far from the lake because in those areas there is no competition for fish sources.

### 4.4 Crosscutting issues

#### 4.4.1 Participation in implementation of LVEMP activities, by gender

Although gender concerns were not considered in the design of the project activities, gender aspects have been addressed in the majority of project activities. This is evident in the Village Implementation Committees and the bank signatories to funds for implementation of projects supported by LVEMP. Not only that but also the fact that most projects had both men and women as beneficiaries shows the sensitivity of the project to gender. All the visited villages and projects mentioned that in their committees it was obligatory to have at least one woman in the implementation committee. For instance, in the construction of Ijiha (Ijitu & Ihale) dispensary, the construction committee to coordinate the activities was composed of 5 members in which 1 was a woman who was also an obligatory signatory to the bank. For the same project, there are some aspects of gender considerations since during the PRA, it was mentioned that due to absence of health facilities in the two villages, women suffered most due to their biological and physical reproductive roles, that is, they used to travel long distances for delivery services. Constructing the dispensary was associated with reduction of women's reproductive burdens.

Women have also been involved to a great extent in the planning process for LVEMP activities. This is reflected in their involvement in several decision-making meetings on different activities. Examples include participation of women in drafting of the River Mara Watershed Management Plan for six villages located in Tarime and Musoma Rural districts (Table 5). Participation of women in these planning meetings ranged from 20% to 40% of total participants.

Sn.	Name of Village	District	% of Men	% of Women
1.	Kuruya	Tarime	80	20
2.	Kwibuse	Tarime	71	29
3.	Ryamisanga	Musoma (R)	60	40
4.	Bukabwa	Musoma (R)	78	22
5.	Kirumi	Musoma (R)	74	26

Table 5: Participation in the dialogue for preparing River Mara WatershedManagement Plan, by gender

Source: LVEMP, (2002).

A discouraging finding is in relation to "no decision" because of differences in prioritization by gender. In Makojo Village in Bwasi Ward, Musoma Rural District, men and women had different priorities for projects that would have been started. Women accorded high priority to water whereby men gave high priority to the feeder road. Due to the conflict in prioritization, a male Village Leader did not pursue the issue to completion; hence no project was started in the village!

Gender division of labor has been vivid in implementation of project activities, those of men being related to masculinity and those of women being related to their reproductive roles. Beach Management Units in many cases deal with men due to the nature of activities; hunting for illegal and destructive fishing. SACCOS (Chole) is mainly intended to support fishing communities who are mainly men although women also borrow without any discrimination. As expected, the Simiyu handcraft group has more women than men (the group had 50 members in which only 4 were men). More men than women are involved in fish farming because the land belong to men in most cases, and digging the pond needs extra energy. For example, in Gwitiryo Village only 2 of 12 fish dam owners were women.

In both Kyaka and Bugabo hyacinth control groups, it was mentioned that women are important in conserving the lake environment and Kagera River because it is women who use a significant amount of water, especially for domestic purposes. However much as the centrality of women in the use of water, and clean water is pronounced, respondents still expressed some beliefs of women not being wanted in and/or near the lake. Statements like "You would not like to meet a woman before you go for fishing, it could mean bad luck" were echoed by fishermen. Asked on the number of women who participate in the fishing activity, the group in Bugabo unanimously said that there was none because women cannot manage such heavy jobs that have to do with fishing and working at night. They should be at home taking care of children, while men are fishing.

In Chato, however, women involvement in the implementation of different projects that have to do with fisheries and water management was suggested. It was sighted, for instance, that when dealing with irregular fishing the stress has been only on men/fishermen. However, a woman dealing with fish processing in Bugabo pointed out that the centrality of women in the fishing business:

"Men are only involved in catching the fish. Almost all the rest of it is done by women: they sell fish; they cook fish; they dry fish; and they use it to nourish the families," (Woman fish monger, Bugabo Village, Bukoba District). This means that, if interventions for women's participation in the management of the lake were designed, there would be more chances of breaking the chain in the irregular fishing processes.

For the water hyacinth, few gender reflections can be drawn. Respondents linked the reduction of water hyacinth load from the lake with improvement of women welfare (reduction in reproductive roles burdens). It was noted that 3 years ago, it took women hours to get drinking water due to difficulties caused by water hyacinth. Also 3 women at Nyahiti lost life in the lake due to attacks done by crocodiles that used to hide under such vegetations hunting for people who were going to the Lake for various purposes. This happened when these women were trying to go further into the Lake looking for clean water. It is worth noting that on normal days, women are said to be removing water hyacinth from the Lake when fetching water.

Women have also been found to be participating in activities such as: tree planting (Nyarero Women Group has 1.5 hectares of forest trees and they also participate in raising tree seedlings).<sup>10</sup> Women Group at Kalemera is involved in manufacturing and selling improved stoves etc.

The report by Nanai (2000) on the status of community participation activities recommended for conducting a thorough Gender Roles Study in the three regions. LVEMP (2002) report shows that some gender aspects have been studied in the preparation of river Mara Watershed Management Plan. However, the information presented is too scanty to provide any insight on gender roles and responsibilities in the community and in implementing LVEMP activities, in particular the gender-disaggregated data on resources available and accrued benefits by participating in the project. For example, the report shows that shortage of water is rampant in all villages (ranked as number one problem by 4 villages and number 2 problem by 1 village) but gender roles and time spent on fetching water have not been articulated.

## 4.4.2 Mainstreaming HIV and AIDS

Although the national HIV/AIDS Indicator Survey 2003-04 (United Republic of Tanzania (URT), 2005a) shows very low HIV prevalence rates for Kagera and Mara (3.7% and 3.5% respectively) and slightly higher prevalence rate for Mwanza (7.2%),

<sup>10</sup> Nyarero women tree planters also had a new 7 acre farm in which they were growing finger millet at the time of survey.

HIV/AIDS is still a big problem in the Lake Zone<sup>11.</sup> An alternative source of data that is the National AIDS Control Program Report Number 18 shows the prevalence rates to be 8.7%, 7.8%, and 20.7% for Mwanza, Mara and Kagera in 2003 respectively (URT, 2004).

Despite these alarming HIV/AIDS figures, HIV/AIDS related activities have not been mainstreamed in activities implemented by LVEMP, even though in different meetings problems regarding HIV/AIDS have been echoed. In the design of the project, no activities focusing specifically on combating the scourge were envisioned. Nevertheless, in the latter stages of project implementation, HIV/AIDS was made an agenda of every meeting at community level and it has been featuring in meetings and workshops at the district level<sup>12</sup>.

The HIV/AIDS problems in the Lake Basin are real as propounded by one respondent:

"The lake is very dangerous. ... When one loses a husband or wife in our villages, it is easy to run to the islands to engage in fishing and other businesses. ... Hardly anybody knows of one's historical background, and worse that ones partner died of HIV/AIDS back at home. These people enjoy their life, spread the virus, and when they get sick and tired, they go back home to die. ... After all, at their homeland they are not a threat because people know of their health condition; it is the people in the islands who will suffer later when they know that these people were HIV positive," (Fisherman, Bugabo Village, Bukoba District."

The complexities of HIV/AIDS in fishing communities have commanded attention in several studies (see Gillespie, 2005). This is related to migration nature of fisher folks and their sexual behavior. The dangerous situation explained above was countered by another statement portraying HIV/AIDS to be a cause of death just like other causes:

"It does not matter whether you die today or tomorrow. You see, the lake is always there to swallow you, if it wishes, any time you are in it. So, when you tell people to avoid living their lives because they should avoid HIV/AIDS, it is like telling them not to enjoy what they work for" (Fisherman, Bugabo Village, Bukoba District).

Given the importance attached to combating the spread of the virus and mitigate its impacts, HIV/AIDS interventions need to be designed and mainstreamed in LVEMP activities. These may follow the micro projects approach that is aimed at mitigating the

<sup>11</sup> It is worth noting that these figures have been contested given the size of the sample, and the sample selection bias resulting from individuals who refused to be tested (25% in Mara).

<sup>12</sup> LVEMP have been talking about HIV/AIDS but specific HIV/AIDS related activities have not been mainstreamed in the projects.

impact of the pandemic. Ng'weshemi (2001) has narrated the TANESA approach on how to start a response.

## 4.4.3 Good governance

Conventionally, good governance is measured by several variables [See The National Strategy for Growth and Reduction of Poverty (NSGRP) in Swahili MKUKUTA [URT, 2005b]). In this section, only the following are observed: transparency, accountability, participation, representativeness, and democracy. Good governance has been observed at two levels; the LVEMP secretariat and the implementing communities<sup>13</sup>. At LVEMP level, projects promoted good governance measures by involving communities and government (both central and local) to identify problems and setting priorities at their localities (especially the micro projects component). The communities used democracy to elect a few members to represent them in activity committees (representative democracy) who coordinated the joint activities.

To improve financial accountability at community level, LVEMP vested financial management to the concerned communities. This approach is important in sustaining project activities because communities feel that they have power to manage and utilize project funds without external influence/supervision.

Some elements of unaccountable government were observed in some few projects whereby some leaders were constraining communities' participation in some activities. Example is the case of Etaro Ward, Musoma Rural District where leaders submitted a project plan, which they were told to re-write and re-submit but they neither re-wrote nor re-submitted, hence denied their people the chance to participate in LVEMP project. Some other examples were cited where a group of affluent people in the village submitted a proposal to LVEMP in the umbrella of their village but follow up visits found a different situation on the ground.

Members of one Beach Management Unit in Musoma District complained about the reluctance of the District Council in assisting them tangibly in managing the beach. The same Council was said to be biased in giving a tender to collect revenues from the beach. The members feel that they are working hard to eliminate illegal fishing, and they are also risking their lives since illegal fishermen can hurt them, but the District Council is neither giving them an incentive nor any substantive support for the work.

<sup>13</sup> Financial accountability at LVEMP Secretariat level has not been addressed.

#### **4.5** Collaboration with other partners

Over the past decade, numerous non-state actors such as PSOs, NGOs, and CBOs have been participating in development projects, environmental management being one of them. A number of NGOs both local and international were mentioned by leaders and the communities to be operating in the LVEMP areas, and providing more or less the same services (Table 6).

It was noted from the discussions with respondents that there are elements of collaboration with some organizations presented in Table 6 in implementation of LVEMP activities but more needs to be done. A good example is ACORD through the existing ACORD environmental groups in Biharamulo. Among other activities, this NGO deals with environmental management. The organization does baseline surveys, then identify some problems and needs with people. At the implementation of the projects planned, people are supposed to form their own groups whose contribution in the project is on materials that are locally found. ACORD contributes purchasable materials. LVEMP has worked with ACORD through their formed groups. For instance, LVEMP assisted Katete Muganza Group and Kikumbataire group in the construction of a fish processing plant (*jiko la kubanika samaki*). Each plant had a capacity of processing 60 to 100 fish pieces at a time.

Two main measures have been taken in order to avoid duplication of efforts and concentration in one area. These include specializing in some activities, and working in different agreed areas. For instance, while LVEMP finances central tree nurseries in villages in Mara Region, VI-Agrforestry distributes tree seeds and encourages farmers to establish their tree nurseries on their own farms. Moreover, VI-Agroforestry prioritizes tree planting in farmers' own plots (agroforestry), rather than just afforestation (only forest trees). Initially, implementers of soil and water conservation component were operating in the same areas as VI-Agroforestry, which resulted to confusion among the beneficiaries and conflicting interests. In order to iron out these difficulties, it was agreed to operate in different areas. Further, as part of the resolution VI- Agro Forestry provides their staff to collaborate with LVEMP (when needed) in the villages concerned.

Government projects under Primary Education Development Plan (PEDP) and Tanzania Social Action Fund (TASAF) were also being implemented in the project area. It was however clarified that the LVEMP micro project activities were being implemented in areas that had been underserved by these government programs.

Sn.	Name of Organization/	Туре	Activities	Region
	Project/Program			
1.	VI Agroforestry	International NGO	Promotes mixed farming practice and tree planting	Mwanza, Mara
2.	CARE International	International NGO	Promotes improved livelihood sources	Mwanza, Kagera
3.	United Nations Children Fund (UNICEF)	UN Organization	Child Survival and Protection Development Program (CSPD)	Mwanza, Kagera, Mara
4.	Heifer Project International (HPI)	International NGO	Active in livestock and fish farming development.	Mwanza, Kagera
5.	Health, Sanitation and Water (HESAWA) <sup>15</sup>	Project	Support health, sanitation and water related activities	Mwanza, Kagera
6.	Primary Education Development Plan (PEDP)	Program	Supportsprimaryeducationthroughconstruction of classrooms,teachers houses,provisionof books etc.	Mwanza, Kagera, Mara
7.	TanzaniaSocialActionFund(TASAF)	Project	Supports social sector projects	Mwanza, Kagera, Mara
8.	ACORD	International NGO	Supportssocialandeconomicdevelopmentactivities(forinstanceenvironmentandHIV/AIDSrelatedactivities)	Mwanza, Kagera
9.	MOGABIRI	Agricultural Extension Services Center	Provides agricultural extension services	Mara
10.	World Vision	International NGO	Supports social and economic development activities	Kagera
11.	Victoria Farming and Fishing Project (VIFAFI)	Local NGO/Project	Promotes poverty alleviation measures and good governance	Mara

Table 6: Some organizations and projects/program operating in the project area<sup>14</sup>

<sup>14</sup> Table 6 is not exhaustive in terms of stakeholders and activities performed. Stakeholders mapping and analysis is needed in order to establish the list of potential partners.

<sup>15</sup> This project has been closed.

Sn.	Name of	Туре	Activities	Region
	Organization/			
	Project/Program			
12.	Lake Nyanza	Local NGO	Environmental	Mwanza
	Environmental		management	
	Sanitation			
	Organization			
	(LANESO)			
13.	World Wide Fund	International	Environmental	Mara
	for Nature (WWF)	NGO	management	
14.	Tanzania Home	Local NGO	Focuses on improving	Mwanza
	Economics		people's standard of living	
	Association		through improved	
	(TAHEA)		agriculture	
15.	ECOVIC	International	The major areas of work	Mwanza
		NGO	include environment and	
			health (water sector)	
16.	TANESA	Project	HIV/AIDS related	Mwanza
			activities	

The Integrated Soil and Water Conservation Component and the Aquaculture subcomponent have had direct link with MOGABIRI Center in Tarime. Farmers from LVEMP areas are sent to this Center for learning purposes. Another best practice observed is the collaboration between HPI and the Fisheries Research Group and in particular the Aquaculture sub-component in meeting the demand for fingerlings.

In order to improve management of industrial and municipal effluents, LVEMP through its water Quality and Ecosystem Management Component adopted a Cleaner Production Technology (CPT) strategy. The project has been promoting it because it minimizes the use of resources and significantly reduces the wastes discharged to the environment. LVEMP launched the "Cleaner Production Training" and in-plant demonstrations program for industries along Lake Victoria (Tanzania side) with duration of about one year. Twelve industries participated entirely in the whole program 7 (Mwanza), 4 Musoma and 1 (Bukoba). Several Cleaner Production solutions identified in the training program have been implemented in the enterprises leading to considerable environmental, financial, and economic net benefits of the initiative.

The importance of collaborating with different organizations operating in the study area was underlined by one of the respondents in Chato. In considering the issues with regard to who would continue taking care of the projects initiated by LVEMP after phase out, the respondent mentioned that NGOs would do better in this regard because a good number of NGOs have structures in place and are used to community work. However,

since the collaboration was not sought in the beginning of the project, it might be difficult for LVEMP to bring them on board now, should there be no second phase. There are a number of NGOs that deal with a number of things that would be of interest in the activities of LVEMP. For instance, in Biharamulo, Facilitation Integrated Development and Relief Services (FAIDRES) deals with environment and loans; Biharamulo Organization for Social Environment Development (BOSEDA) deals with environment and HIV/AIDS etc.

Little collaboration and uncoordinated efforts of non-state actors have sometimes led to duplication of efforts and/or implementation of contradicting activities in the same area. An example is the project promoted by TAHEA to increase household food security by promoting production of potatoes at the edges of the lake because of water availability in those areas. TAHEA claims that using such areas does not harm the lake because they educate communities not to use chemicals. At the same time, LVEMP encourages conservation of the land near the lake for breeding of fish, and decreased sedimentation in the lake. Another example is farming near the rivershed/wetland that is encouraged by CARE International.

Based on the experiences provided above, the need to forge partnership with non-state actors operating in the project area is apparent. A stakeholders' analysis workshop has to be organized to map out the current stakeholders operating in the study area. Thereafter, sorting out of potential partners and modalities for collaboration will be established.

# **5.0 Emerging Issues**

Several positive and negative issues have emerged from the findings presented in section 4.0. This section describes the emerging issues and the conclusions drawn from the findings.

## 5.1 Community participation concepts and types

The study found out that, all three modes of community participation described by Msambichaka (1998) have been applied in the implementation of project activities, depending on the nature and type of activity. The study argues that using the top down approach does not mean demeaning the community but rather introducing an idea that the communities have not thought of. It may be taken as a capacity building tool. Additionally, asking the community to contribute in kind or in cash was meant to strengthen ownership and a measure of sustainability. It is the "quality" and "degree or extent" of involvement that determines the continuance and hence sustainability of project activities.

Most of the communities and leaders at different levels had a feeling that in any social project (of any scale) participatory methods are very important as they reinforce a sense of ownership and accountability. Community contribution (of whatever kind at all levels or stages) is very vital for ensuring continuation thereafter. Development actors, therefore, need to involve communities even by inviting them to contribute ideas in the initial stages. Communities are open for change if proper education is given to them and if alternative ways of doing things are identified in a collaborative way. The change may take long to happen due to reluctance of some communities to adopt new things, and this calls for continued awareness creation.

## 5.2 Banking on what is available on the ground

From the interviews with the project staff and the beneficiaries, it was found out that efforts were made to understand the indigenous knowledge on the ground and the communities were involved on the baseline surveys. For instance, communities were involved in identifying the fish breeding centers in the lake, the species available in the lake, historical trends in appearance and disappearance of certain fish species, and type and uses of various tree species to mention a few. This knowledge helped the project implementers to know what was on the ground and build on that. Further, there were efforts by the communities to conserve environment and in some areas the project banked on those efforts, for instance, the Chole environment group. This is commended and should be the drive in the next phase of LVEMP.

## 5.3 Community contributions: A disincentive?

In most of the community participation projects, community contribution in cash or in kind was prompted. This was deliberately done to promote sustainability and ownership of the activities among other things. Willingness of the community to contribute to a specific project is a clear testimony of acceptance and ownership of that project. The major form of community contribution was in kinds such as contribution of labor for construction, brick making, collecting water, sand and stones for construction, cleaning the beaches, collecting sea hyacinth, patrolling etc. For Simiyu River farming community, participation was in terms of taking the alternative cost for not farming in the area, investing in seed search and establishing new farms for the traditional tree "Mikindu." They also participated in taking care of the riverbank and basin. In some few cases, communities were requested to contribute financially before accessing LVEMP funding.

As we strive to uproot the notion that the State and donors should provide everything free to its people, community contributions in the form of in kinds or cash should be promoted in all activities involving the community. Findings in this report show that beneficiaries are not merely recipients but potential actors in the whole process.

## 5.4 Emulation by seeing

Whereby some community members have succeeded through participation in certain activities, some other members are still lagging behind but would wish to perform as well as or even better than those who have succeeded. This is corroborated by words from one of the respondent in Gwitiryo Village who ambitiously lamented;

"The people of Muleba District in Kagera Region are ahead of us in fish farming, but we are working hard to beat them" (Fish Farmer, Gwitiryo Village, Tarime District).

The efforts to take farmers to different areas to share their experiences and learn from others are highly praised. In order to cultivate the spirit of community members emulating efforts of other community members who have been successful, it would be good during the second phase of LVEMP to increase study visits by community members to other areas where certain practices are very successful. Such visits were also recommended by women involved in afforestation activities in Nyarero Village in Tarime

District. Farmers from Kenya have visited this group to see their ways of afforestation, but the group has never visited any other place to see how others were doing.

## 5.5 Awareness creation continuum

Some community members were reluctant to participate in some activities, for example, school and dispensary construction thinking that it was the obligation of the Government and/or donors to provide social services to them. Such reluctance also affected, initially, Kwibuse and Kuruya villagers' participation in conservation of Kigamba-Bitare natural forest reserve that is an amalgamation of two forests (Kigamba and Bitare). The villagers were afraid that the government would nationalize the forest hence excluding them from benefiting from the forest products. Later on they were educated by forest officers, and took an active role in the conservation of these forests. The forest's vegetative cover has rejuvenated, and the villagers are enjoying getting firewood, herbal medicines and other non-timber forest products from the forest.

Reflections from these findings entail awareness creation continuum. Awareness creation should not be a one shot activity but should be in built in the whole project cycle. This is necessary in bringing late adopters and laggards on board.

## 5.6 The role of micro projects in sustaining environmental management activities

The micro projects component was designed to support local communities to address some of their priority basic needs. These projects were conceived after wide stakeholders' consultation carried out in 1995 as part of the process to establish LVEMP and which observed among other things, the serious lack of basic social services among the communities expected to participate in the implementation of LVEMP. Such services include water supply, hygiene and sanitation facilities, basic health services, primary schools and access roads. The situation was further compounded by the fact that most of the activities to be implemented under LVEMP were meant to draw communities away from their major source of livelihood and for that matter the lake and other areas to be conserved. For example, closed fishing areas, banning of beach seines, restricted entry to forest reserves, closure of grazing areas, restricted cultivation along rivers and shorelines were all shuttering the needed sources of livelihood. The project therefore thought of a compensatory scheme in the form of support of micro projects but more importantly the project aimed at improving the standard of living of participating communities.

The micro projects have resulted to increased availability of social services to the community as per need. Further, the supported income generating activities have

increased the resource base of the participating communities. For example, increased resource base of BMUs operating a SACCOS and provision of transport services in the lake, selling handcraft goods from wetlands, wood saving stoves, tree seedlings, etc.

Thus, micro projects have been a cementing media for implementation of environmental management activities. Sustainability has been enhanced by the fact that the basic social needs have been addressed and alternative sources of livelihood have been sought.

## 5.7 Inception of community participation activities

The community participation was introduced in LVEMP activities as an after thought, that is, 3 to 4 years after the inception of LVEMP. This had a bearing on subsequent activities planned under community participation. Further, community participation is cross cutting into all Components and it is not a Component on its own. This makes it a component of everybody or nobody. This has resulted to marginalization of community participation activities as Components were found to be concentrating on their core activities. This situation has also been coupled with problems of understaffing—one CPO has been undertaking all community participation activities cutting across all components.

After inception of community participation activities, interactions between the three CPOs from the three participating countries were also found to be weak. These have never met to discuss pertinent issues facing community participation aspects in the three countries, look for areas of divergence and convergences, and learn from the best practices.

## 5.8 Participatory methodologies

Some shortfalls have been cited as far as promoting the participatory methodologies is concerned. From what has been observed, PRA may not have been used prominently in identifying communities' needs. This is caused by two major facts learned from the interviews and from the literature provided.

(i) The disciplines divide: Whereby participatory methodologies are the order of the day for the social scientists, these methodologies are not popular among the natural scientists. Given the fact that the initially conceived activities fall in the natural science category, participatory methodologies were given little attention. (ii) It was noted in the literature provided and in the interviews that LVEMP staff had insufficient participatory methodology skills at the beginning of the project. This has resulted to a slow pace or late take off community participation activities. There were some incidences where a team got very negative response from the community but a different team vested in participatory skills got very positive response from the same community.

Nonetheless, training on participatory skills in particular PRA has been conducted and more trainings are on line (Msongwe, 2005). The interviewed Task Leaders agreed that the training has made a difference on their approach to community participation. The need for applying participatory approaches cannot be emphasized given the fact that participatory development planning processes has been adopted at the district level as stipulated in the planning procedures in the decentralization system, and Obstacles and Opportunities to Development (O&OD) has been adopted for that matter.

## **5.9** Complementary participatory approaches

A lot of initiatives to involve the community have been going on at the project area by different organizations. These are accompanied by different approaches such as Participatory Rural Appraisal (PRA); Rapid Rural Appraisal (RRA); Livelihood Assessment Approach, etc. Throughout this report we have been referring to PRA as the most popular participatory approach. However, the need to harmonize different participatory approaches is of essence. The O & OD approach has been aggressively introduced in some of the communities, and it is currently in use. Some communities praised the O & OD approach as being efficient in enhancing participation. Nonetheless, the tools used under O & OD are basically PRA tools. Thus, project implementers have to be eloquent on different terminologies used for participatory methodologies lest they confuse the community with terminologies that might mean the same thing.

# **5.10 Involvement of communities in the whole project cycle: A panacea to sustainability?**

The results presented in several of the preceding sections with regard to commitment from several communities are mixed. In some cases, communities have been found to be receptive in the inception of the project but as time goes by the enthusiasm fades away. In Shinembo Village (Magu District) the water hyacinth project is in danger despite the fact that communities enjoy what has been done by LVEMP, and it participated very well in the planning and inception of this activity. Further, the community has reaped the fruits of the project but community involvement in project activities has faded over time. In other cases, participatory consultations and planning with the communities have been done but implementation dwindled.

Another example was found in Ilungu village, Magu District. Some farmer groups were provided with water pumps for irrigation as an incentive to protect the wetlands. The villagers identified this as an alternative source of water for agricultural purposes. However, villagers never used the pumps and the same old practices around the wetland are prevalent.

What is concluded from these results is that community involvement in the planning process is a **prerequisite** for continued community participation and thus sustainability of the project but it is **not sufficient**. Community "change of mind set" is essential for sustenance of these projects. Instigating the spirit of self-reliance among the communities to initiate and sustain activities using their means and de-cultivating the ideas that the government and donors will do everything for them is of essence. The on-going O&OD exercise (a variant of PRA) is instrumental to this endeavor. However, it is not implemented in all the villages and the need for the project staff to continue instigating this sense of ownership through PRA/O&OD exercises is of paramount importance.

## 5.11 Gender studies and gender disaggregated data

At best, many components have taken gender issues into practice during implementation of project activities although most of the time not by design, that is, gender responsive activities were not planned from the on set. The level or extent of gender integration has varied from component to component, nature of intervention/activity etc. In some cases, gender issues were integrated in groups, individual activities, and elsewhere in communities at large. In order to fully involve men and women in identification, project planning, implementation and monitoring and evaluation of project activities, detailed gender studies need to be conducted. Msongwe's, (2005) report on training workshop on community participation, gender analysis and stakeholders participation shaded some light on the Harvard Gender Analysis Frame on what ought to be done as far as gender analysis is concerned.

The Harvard Gender Analysis Frame comprises of an analysis of three major elements which are; gender division of labor whereby what is done by each gender and allocation of time in different market and household activities is explored; gender division of resources, that is, who owns and control what, and who has access to what in the household and the community at large; and gender division of benefits, that is, how what is accrued from different activities is divided among different members and availability of opportunities for advancement and constraints facing both men and women. Income analysis has always been a part of resource analysis. However, Blumberg, (2001) stressed the importance of doing a separate analysis for income because income is a crucial resource to women in most gender stratified systems. The reason for this is that women are much less likely to control tangible resources such as land, than they are to earn at least a little income.

## 5.12 Community representativeness

Some communities have been listed to be implementers of LVEMP activities but the interviewed community members denied having any LVEMP activity implemented in their community. Example is Murutunguru Village in Ukerewe Districr (See Nanai, 2000). As explained above, this may be the result of poor representation of community members in meetings and poor feedback mechanisms. In as much as we can not have a representative number of community members because of several reasons two of them being reluctance to attend village meetings, and inactive village leaders, feedback to the villagers in the form of brochures written in a user friendly language should be done. It was noted during the interviews that the Newsletters like Nyanza Review are published quarterly but there is no proper mechanism of ensuring that it reaches a wider segment of the lake zone societies. A study by Musoke and Nyirabu (2004) indicate that only 9.1% and 11.5% of the respondents heard of LVEMP through Nyanza Review and leaflets respectively. These publications should be distributed and displayed in public places for public view.<sup>16</sup> The use of local newsletters, magazines, and posters and wide distribution of the same is envisaged.

## 5.13 Consultation and collaboration with different partners

Consultation and collaboration with other stakeholders operating in the project area was found to be weak; and this is in particular with NGOs. This has been mainly attributed to two main factors one being the mandate of these organizations; and the other one being the credibility of some organizations seeking collaboration with LVEMP. Little collaboration and uncoordinated efforts of non-state actors have led to sometimes duplication of efforts and/or implementation of contradicting activities in the same area. The need to forge partnership with non-state actors operating in the project area is apparent. A stakeholders' analysis workshop has to be organized to map out the current stakeholders operating in the study area. Thereafter, sorting out of potential partners and modalities for collaboration will be established.

<sup>16</sup> A report on mechanisms to distribute the Nyanza Review has been drafted by the Community Participation Officer and submitted to LVEMP Secretariat for attention and action.

#### 5.14 Qualitative versus quantitative indicators

It has been observed that community participation outcome indicators are more of qualitative nature than quantitative. The proposed Community Participation Strategy has proposed a strategic action plan for community participation activities per Component and measurement indicators (LVEMP, 2004). These indicators are mainly quantitative. As much as we agree that indicators have to be SMART (Specific, Measurable, Achievable, Realistic, and Time Bound), we have to acknowledge the challenges in setting meaningful quantitative indicators for some community participation activities. This calls for inclusion of qualitative indicators in the monitoring and evaluation plan (see Msambichaka, 1998). Short of that, component indicators that are mainly captured by qualitative measures will be undermined.

#### **5.15** Components inter-linkages

Components were found to be interlinking in several activities and in some instances the same community members were found to be implementing activities from several components but in uncoordinated manner. There is no mechanism in place to document areas of convergence, and determine best ways to allocate financial and human resources to these areas. For instance, the BMUs were found to be undertaking activities related to fisheries research, fisheries management, micro projects, water hyacinth, and water quality and ecosystem management but in uncoordinated manner. Further, the complementarity on activities conducted under catchment afforestation (forest trees) and soil and water conservation (agroforestry) has not been tapped. Promotion of fruit trees may be a catalyst in participation in catchment afforestation activities since tangible benefits from tree fruits can be vivid in the short run compared to forest products.

As much as PIC acts as a forum where staff from all Components meet to discuss progress and implementation challenges, the need to form a PIC sub-committee in charge of identifying Components linkages and propose a way forward as far as financial and human resource allocation to these areas is concerned is apparent.

## 5.16 Predicaments to sustainability

## 5.16.1 Lack of the Exit Strategy

It was noted during the interviews that no Exit Strategy has been prepared for LVEMP. Some stakeholders interviewed agreed in principle that Exit Strategy should have been part and parcel of the project proposal and it should not be drafted at the final stages of project implementation. This is essential in sustainability of the project because the proposed institutions to handle the project would have known *apriori* what it entails and would have taken a different path in preparing for handling project activities. The views of stakeholders interviewed point to the essence of having the District Councils managing the project activities should LVEM phase out. This is complicated by the fact that lack of clear Exit Strategy at the beginning made the respective Councils not to start integrating projects activities in their usual activities and creating necessary infrastructure especially human infrastructure to undertake these activities.

## 5.16.2 Low involvement of Community Development Department

Some Council Officials do not seem to be well integrated in the project; yet, they are essential in the continuation of project activities. While fisheries department of Magu District Council confirms to have worked with LVEMP, some officials in the Community Development Department have not heard of LVEMP in practice. One Community Development Officer lamented with a feeling of discouragement:

"Community participation is a very important issue in rural and urban development. In the district, such function falls into the practice of our department. LVEMP has never worked with our department which is full of sociological knowledge" (The Acting Community Development Officer, Magu District).

This is also evident in LVEMP literature. Community Development Officers were not invited in the workshop to develop the CPGL (Msambichaka, 1998). However, as their need became apparent, they have been invited in several workshops.

It was however cautioned that, different individuals are invited to attend different meeting. This is not only associated with discontinuity of information flow but when there is no proper mechanism for information sharing and effective feedback mechanism at departmental level, departments may complain of not been involved while in the actual sense different individuals from the same department have been involved.

#### 5.16.3 Lack of clearly defined community inputs

Lack of clearly defined community inputs in some activities resulted to poor performance of some projects especially the water hyacinth control project. This was echoed in the interviews in relation to trainings provided to staff participating in water hyacinth projects. In some areas training on how to manage water hyacinth has been provided to only two or one employed staff in the site and who is paid by LVEMP. The repercussion is narrated in the following quotes:

"Expertise that has been vested to one community member is not a healthy way of instigating sustainability. If I die tonight, the project sleeps!! This is because I am the only one that attended the trainings. I suggest more community members be involved in the future. The community should also be involved in suggesting the names. Since I am the only one who attended trainings, all the activities are left for me; the community participates only when there is money from LVEMP to pay for such labor" (Project site leader, Water Hyacinth Center, Nyahiti, Misungwi District).

"I do all the work at the moment. It is really a very tough job, filling water tanks, scattering and collecting water hyacinth for treatment etc. I do not get any cooperation from the community although community members enjoy the atmosphere of the lake" (Project site leader, Water Hyacinth Center, Shinembo Village, Magu District).

In these communities, as much as community members may be participating in releasing the water hyacinth weevils to the lake, they do not see clearly defined roles for them at the weevil-rearing center. They see the weevil rearing center as a workplace where one can get employed and not the center where volunteerism is needed in conducting the activities.

Given the fact that community participation is cutting across all the components (woven into all components), a common community participation action plan is essentially necessary. Through a participatory process, the workshop participants in the training on community participation, gender analysis, and stakeholders' participation managed to develop a common format for community participation by all Components. This plan aims at setting *apriori* the role of communities in implementing project activities.

#### 5.16.4 Financial incentives versus volunteerism

LVEMP has been providing financial incentive for communities to participate in some environment management activities. This kind of incentive attracts the participants but if the flow of finances dwindles, the participation in these activities declines. This was vivid at Ng'wajombo/Nyahiti whereby as time elapses the rate of cooperation has been declining gradually since financial incentive from LVEMP has also been declining with time. To counter the notion that low level of community participation was caused by dwindling financial incentive, community members were asked if they could volunteer to get trained and work without pay. The Nyahiti communities indicated that to be very possible. This is because volunteerism is something they are used to. This is narrated in the following quote:

"Our community youth representatives have been trained by CARE International (health component), and under Health, Water and Sanitation (HESAWA) project on First Aid. They now participate in different health related activities in our community voluntarily. So if LVEMP did this at the beginning, many volunteers would have come forth for training and participating in project activities" (VEO, Nyahiti, Misungwi District).

However, the volunteerism spirit is not universal. In Shinembo, the community has been reluctant in volunteering to some activities and as such financial incentive would be the only way to motivate community participation in project activities. Further, financial incentives have been a must for some of the projects in particular catchment afforestation projects. A pilot exercise which requires community members to pay for tree seedlings show that less than 10% of the community members were willing to pay for tree seedlings. This is caused by several factors, one being the long term visible benefits from trees, and persistent poverty which makes the opportunity cost of using the money on tree seedling very high. Statements like "We have already planted your trees. What are you giving us in return?" have been always echoed in the ears of project implementers. Such projects may vanish after the project phases out.

#### **5.16.5** Conflict of interests

In some areas leaders are supposed to implement measures aimed at curbing illegal activities. However, some of these leaders were found to be in the front line in participating in such malpractices. Examples include illegal fishing using fishnets having smaller than recommended holes, and fish poisoning. In some cases village leaders who are supposed to lead the operation to stem the illegal fishing practices were also involved in such illegal

practices and it was hard for them to act against their own interests. This delayed implementation of intended activities. In one case (name of the village withheld), having seen that the leaders were being adamant in playing an active role in curbing the malpractices, some villagers volunteered to play an active role in implementation of these activities and these leaders were voted off in the year 2004 elections.

# 6.0 Lessons Learnt in Community Participation

Several positive and negative lessons have been learnt in the process of implementing community participation activities under LVEMP. In the next phase of LVEMP, it is recommended to carry the positive experiences forward and address the shortfalls. It is worth noting that the Lessons presented in this section have a bearing on community participation efforts. Component specific lessons are presented in the Lessons Learnt Report per Component.

#### 6.1 Positive Lessons/Best Practices

## 6.1.1 Community Participation Section

- Using the top down approach does not mean to demean the community but rather introducing an idea that the communities have not thought of. It may be taken as a capacity building tool.
- Asking the community to contribute in kind or in cash was meant to strengthen ownership and a measure of sustainability. It is the "quality" and "degree or extent" of involvement that determines the continuance and hence sustainability of project activities. Willingness of the community to contribute to a specific project is a clear testimony of acceptance and ownership of that project.
- Communities are able to attach ownership to projects and activities if they have been part and parcel of the process. Authoritative statements like "River Simiyu is ours and not theirs" exemplify this.
- Setting priorities together with the communities strengthens ownership of the process and promotes accountability and sustainability.
- Communities have knowledge to offer when an environment/opportunity to do so is given. This is exemplified by the baseline studies. This knowledge helped the project implementers to know what was on the ground and build on that.
- There were efforts by the communities to conserve environment and in some areas the project banked on those efforts, for instance, the Chole environment group. This is commended and should be the drive in the next phase of LVEMP.

- Learning by doing and emulating by seeing have been described to be the best teacher as exemplified by statement like "we thought 'mikindu' can only grow under nature not by people's initiatives."
- Efforts to take farmers to different areas to share their experiences and learn from others are highly praised. This helped communities to tap best practices from other communities.
- Consultation and collaboration among partners reduce the chances of duplicating efforts and concentrating in one area while other areas remain underserved. The agreement between Soil and Water Conservation and Vi-Agroforestry to concentrate in different areas is the reference case at hand.
- Although at the later stage in the project cycle, trainings to impart knowledge on Participatory Rural Appraisal skills and techniques to LVEMP Officers was done by the CPO to all Components but with variation in number per Component.
- Although belated, the proposed Community Participation Strategy has proposed a strategic action plan for community participation activities per Component and measurement indicators.

## 6.1.2 Micro Projects Component

- The micro projects have resulted to increased availability of social services to the community as per need. Further, the income generating activities supported have increased the resource base of the participation communities. This is commended given the fact that most of the activities implemented under LVEMP were meant to draw communities away from their major source of livelihood and for that matter the lake and other areas that were to be conserved.
- Micro projects have been a cementing media for implementation of environmental management activities. Sustainability has been enhanced by the fact that the basic social needs have been addressed and alternative sources of livelihood have been sought.
- Communities can manage funds for development activities, and vesting the role of funds management under them results to fast completion of projects. This has vividly been portrayed in community managed micro projects.

- Provision of facilities for rainwater harvesting has resulted to availability of safe drinking water at schools. This has resulted to increased retention of children at school in a day. Further, construction of toilets and other sanitation measures have resulted to reduced truancy for girls.
- Using the village as an entry point for micro projects resulted to smooth and successful implementation of the project compared to using a Ward or Division. This is associated with the ownership of the project by the village.

## 6.1.3 Water Hyacinth Control Component

• As a measure to ensure sustainability, efforts to transfer rearing units from project to communities/NGOs have been underway and Memorandum of Understanding (MoU) has been prepared between the Ministry of Agriculture and Food Security and LANESO.

## 6.1.4 Catchment Afforestation Component

- Seedlings production from community nurseries is cheaper than central nurseries and has provided incentives to communities and contributed to poverty alleviation.
- The involvement of farmers (villagers) in the management of natural forests "Ngitiri" is a sustainable way of managing natural forests and has to be expanded elsewhere in the Lake Victoria Basin and the country at large.

## 6.1.5 Fisheries Management Component

- The establishment of SACCOS by BMUs has promoted the culture of savings, improved living conditions, and has been a source of capital for small business in the fishing communities.
- Community participation through co-management has reduced illegal fishing practices, improved biodiversity conservation, beach hygiene and sanitation. In addition, it has improved fish handling and fish quality for both domestic and foreign markets.

- Fishery communities have been involved in identification of fish landing sites, fish breeding areas, and managing closed fishing areas using their indigenous knowledge. Indigenous knowledge and skills are important element in the management of fishery resources.
- Economic activities initiated by the fishing communities have a high degree of success when compared to projects imposed by government, donors etc. Kayenze and Chole BMUs are good examples with economic development projects, SACCOS etc.
- BMUs that are well organized have the capacity to manage economic projects. For example, BMUs that have been contracted by District Councils to collect revenue have been able to collect more revenue than private agents. The BMUs have been able to use the profit to establish more economic projects like SACCOS, transport boats etc and this experience should be expanded and is sustainable.

## 6.1.6 Fisheries Research Component

- Community fishponds stocked with quality fingerlings have been established. These serve as a sensitization center for community members on aquaculture. They have provided an opportunity for interaction with the local community as part of learning and "demonstration" of aquaculture technologies.
- Fish farming has proved to be an economic activity that adds income to farmers and is a source of protein to households
- For sustainability, promotion of aquaculture should be done in areas away from the Lake.

## 6.1.7 Wetland Management Component

- Wetlands communities were involved extensively in data collection/baseline studies.
- Communities have started drafting the Wetland Management Plans and some are at advanced stage.

- Sensitization meetings have made the communities aware of importance of preserving the wetlands. As a result, communities are now preserving their wetlands. In Geita, for instance, communities around Mabibu River take measures against small gold miners who drain mercury into the river.
- Communities around Simiyu river did a simple cost benefit analysis and found out that conserving the natural environment around the wetlands while using local materials from it is advantageous than farming on that area. Further, this initiative is regarded as an alternative source of livelihood.

## 6.1.8 Integrated Soil and Water Conservation Component

- Development partners operating in the project area have appreciated the activities done under this component. For example, Swedish International Development Agency (SIDA) requested a farmer from Kalemera to travel to Masaka Uganda to share experience with farmers invited from different parts of the World.
- Neighboring villages have been copying the soil management activities practiced at Ilemela.
- Activities under this Component have been disseminated in the National Agricultural Festivals/shows held each year on 8<sup>th</sup> August.
- The Component has started taking up roles under the Micro Project Component, for instance, development of plans for protection of natural springs.

## 6.1.9 Water Quality and Ecosystem Management Component

- The project has promoted Cleaner Production Technology and this has been implemented by enterprises/industries leading to considerable environmental, financial, and economic net benefits.
- Several schools and local communities are involved in rainwater harvesting and rainfall data collection.

## 6.1.10 Capacity Building Component

• District extention workers, and local communities have had their skills and awareness increased and this has proved useful as it has created extensive participation in conservation issues including law enforcement.

### 6.2 Negative Lessons and Challenges

## 6.2.1 Community Participation Section

- The community participation was introduced as an after thought after the inception of LVEMP. This resulted to late entry of activities planned under community participation, and weak support from Core Components.
- Community participation is cross cutting and it is not a Component. This makes it a Component of everybody or nobody. It has also been coupled with problems of understaffing—one CPO has been undertaking all community participation activities cutting across all Components.
- The demand for services from the Community Participation Officer (CPO) by Components was found to be weak. There is a feeling that some Components tried to keep a distance from Community Participation Officer and did not bother to budget for CPO's support.
- After inception of community participation activities, interactions between the three CPOs from the three participating countries were also found to be weak. These have never met to discuss pertinent issues facing community participation aspects in the three countries, look for areas of divergence and convergences, and learn from the best practices.
- In most projects, awareness creation was not seen as a continuous process but rather a one-time activity that was not in built in the whole project cycle.
- Participatory Rural Appraisal techniques may not have been used prominently in identifying communities' needs because of the "disciplines divide" (these methodologies are not popular among the natural scientists) and insufficient participatory methodology skills at the beginning of the project.

- Several participatory approaches bearing different names have been used by different organizations operating in the study area. This has resulted to confusion among community members.
- Community involvement in the planning process was found to be a **prerequisite** for continued community participation and thus sustainability of the project but it is **not sufficient**. Community "change of mind set" is essential for sustenance of these projects.
- Detailed gender studies and gender-disaggregated data are not available. Yet, these are essential tools in the process of involving men and women fully in identification, project planning, implementation and monitoring and evaluation of project activities.
- Some communities have been listed to be implementers of LVEMP activities but the interviewed community members denied having any LVEMP activity implemented in their community.
- Consultation and collaboration with other stakeholders operating in the project area was found to be weak; and this is in particular with NGOs.
- No meaningful qualitative indicators have been set for measuring achievements in some community participation activities. This has undermined the indicators that are mainly captured by qualitative measures.
- Components were found to be interlinking in several activities and in some instances the same community members were found to be implementing activities from several components but in uncoordinated manner. There is no mechanism in place to document areas of convergence, and determine best ways to allocate financial and human resources to these areas.
- It was noted during the interviews that no Exit Strategy has been prepared for LVEMP. Yet this is essential in creating necessary infrastructure especially human infrastructure to undertake these activities.

- Some Council Officials especially from the Community Development Department do not seem to be well integrated in the project; yet, they are essential in the continuation of project activities.
- Community participation cuts across all the components (woven into all Components), but a common community participation action plan is not in pace. The plan is essential in setting *apriori* the role of communities in implementing project activities.
- Volunteerism spirit was found not to be universal. Some communities have been reluctant in volunteering to some activities and as such financial incentive would be the only way to motivate community participation in project activities. This has made financial incentives a must for some of the projects.
- HIV/AIDS is a major problem in the Lake region, and the Lake has been termed to perpetuate the spread of the virus. However, HIV/AIDS related activities have not been mainstreamed in LVEMP activities.
- Conflicts over land, for instance, in Tarime and Geita was one major external shock to community participation activities.

# 6.2.2 Micro Projects Component

- The major challenge under micro projects has been sustainability in maintaining the structures built, furnishing and manning for the case of health facilities.
- Influential people in the villages and political ideologies have been major external shocks to the project.

# 6.2.3 Water Hyacinth Control Component

• There are no clearly defined and documented community inputs in water hyacinth control activities. Community members may be participating in releasing the water hyacinth weevils to the lake, but they do not see clearly defined roles for them at the weevil-rearing centers.

- In some areas training on how to manage water hyacinth weevil rearing units has been provided to only two or one employed staff in the site and who is paid by LVEMP. This was termed to be a threat to sustainability.
- The need to introduce income-generating activities in line with weevil rearing to generate income and make hyacinth weevil rearing attractive have been echoed as a challenge.

# 6.2.4 Catchment Afforestation Component

- The communities in the pilot areas accorded low priority to catchment afforestation. This necessitates the need for sensitization/education so that they value and invest on tree planting.
- LVEMP has been providing financial incentive for communities to participate in some catchment afforestation projects, for instance, buying the seedlings from the growers. This kind of incentive attracts the participants but if the flow of finances dwindles, the participation in these activities declines.
- Exploration of the possibility of carbon trading as an incentive to farmers participating in afforestation activities was called for. This is a World Bank initiative whereby farmers are given an opportunity for planting trees for carbon sequestration and get paid per trees planted.

# 6.2.5 Fisheries Management Component

- Co-management is a partnership arrangement between the Government and fishers. However, in some cases local leaders in fisheries communities have been a bottleneck in supporting the BMUs because of conflict of interest on the resources and inadequate skills.
- Despite of the efforts by BMUs to curb illegal fishing practices in collaboration with the government, illegal fishing is still a problem. This is attributed to several factors two of them been poor/low self-compliance and sense of ownership on the fishery resources among the fishing communities, and self-interest.
- Several factors are a hindrance to co-management but the major ones are poor leadership skills, absence of financial skills, and business skills.

- In some BMUs, as time elapses the rate of cooperation has been declining gradually since financial incentive from LVEMP has also been declining with time.
- BMUs are part of the village government structure/leadership and some governments experience weak governance/instability or not responsible enough and are sometimes changed or rejected by communities. This might affect BMUs thus causing variation among them in terms of activeness and performance.
- There are several other challenges facing the BMUs. This include to: development of a mechanism to promote good practices initiated by BMUs to other areas in the Lake Basin; promotion of the culture of saving; instilling self compliance and sense of ownership of the fishery resources; and development of training modules for fishers on business skills, leadership and financial skills. Other challenges include; formulation of bylaws, surveillance and resource management skills and development of a mechanism that will make the BMUs more effective and efficient through the establishment of BMUs Association and networking from beach level to regional level; and exchange of information, knowledge, skills and experience among key stakeholders for sustainable fishery resources management.

# **6.2.6 Fisheries Research Component**

- There is a high demand of fingerlings that outweighs the supply.
- Promotion of production of quality fingerlings with emphasis on private fish production ponds/units; and implementation of Aquaculture Development Strategic Plan remain a challenge.
- Several fisheries researches have been conducted in the project area. However, packaging the research information in a way that is useful to and understood by the community and disseminating the same has been and remains a challenge.

# 6.2.7 Wetland Management Component

- Deapite this positive experience at Simiyu, we land degradation has continued to be a challenge in the project area. This means that the awareness that has been raised has not been a catalyst to stop the practices that have been established to degrade Lake Victoria basin we tlands.
- Another challenge is with regard to initiating other sustainable livelihood sources after conserving the wetlandls.
- The Simiyu Wetland Management Plan has been finalized and it is awaiting approval from the Distirct. There is a need for formulation of these plans for other wetlands such as Rubana, Kitaji, Mabubi etc. However, negotiating and harmonizing interests to come up with Wetland Management Plans take time.
- The current threat to sustainability of activities around the wetlands is lack of proper market for selling handcrafts manufactured from wetland products.

# 6.2.8 Integrated Soil and Water Conservation Component

- There is weak collaboration with catchment afforestation although both Components are dealing with land management issues. These Components were also found to be operating in different areas, thus the complementarities between them has not been tapped.
- Communities adjacent to pilot areas have emulated the soil and water conservation technologies and the demand beyond pilot area has increased and outpaced the service providers.
- From the perspective of the Project implementers, transport for monitoring and supervision is inadequate.

# 6.2.9 Water Quality and Ecosystem Management Component

• The challenge in this component is how to actively engage communities in scientific research, particularly at the level of appreciating their role in water quality, noting that it is the community activities that contribute to water pollution and subsequently poor quality.

## 6.2.10 Capacity Building Component

- Several researches have been done by staff from University of Dar es Salaam but they have not been repackaged in a way that is useful to and understood by the community. There should have been a deliberate effort to engage in applied research that not only produces theses for certification but also leads to positive action at the community level.
- A missed opportunity was holding stakeholder workshops involving community, NGOs, industrialists, municipalities, CBOs and extension workers, among others to share research information more extensively to understand the problem and define roles and responsibilities for appropriate action.
- Needs assessment of the capacity of the stakeholders in the region conducting related activities was not done.

# 7.0 Recommendations

Based on the lessons learnt, the following recommendations are put forward:

## **Community Participation Section**

- In phase two of LVEMP, efforts have to be made to make Community Participation a fully-fledged Component and introduce it early in the project cycle.
- In scaling up LVEMP activities, baseline studies on indigenous knowledge to conserve and manage environment are of essence. This is important in shading light on what is on the ground and building on it.
- In order to cultivate the spirit of community members emulating efforts of other community members who have been successful, it would be good during the second phase of LVEMP to increase study visits by community members to other areas with best practices.
- Awareness creation should not be a "one shot" activity. Activities on awareness creation should be budgeted for and be inbuilt in the whole project cycle. This is necessary in bringing late adopters and laggards on the picture, and communities" "change of mind set."
- In phase II of LVEMP, we recommend for imparting knowledge on participatory methodologies to all implementers of LVEMP activities, that is, participatory skills should be a prerequisite for the secretariat members; Local Government Officials involved in implementing project activities; and the community at large. Further, the project implementers have to be eloquent on participatory methodology frameworks/terminologies used by different organizations (RRA, PRA, O&OD, etc.) lest they confuse the community with terminologies that might mean the same thing.
- The CPO must be involved in the planning of the Components activities especially those with direct bearing on the community such as Wetland Management, Catchment Afforestation, Soil and Water Conservation, and Water Hyacinth Control.

- Clear Exit Strategy has to be drafted in the beginning of Phase II. This will clearly define the potential institutions to take over project activities after phase out. This goes in line with involving the LGAs at all levels and incorporation of community participation activities in the District Development Plans.
- The role of the community in any project activity (community inputs) should be clearly defined and agreed upon at the inception of the project. Thus, the Community Participation Action Plan should be operational in Phase II of LVEMP.
- As deemed necessary, financial incentive and community micro projects should be enhanced. These are necessary in making some difficult projects take off. As the project matures, and through awareness creation, the financial incentive may be phased out gradually. A mechanism on how to handle the project after the phase out of financial incentives has to be worked out from the outset.
- The need to conduct a gender analysis of the situation of men and women in the project area is of essence. The findings of such analysis may be used in sensitizing the communities on gender issues through community or village meetings, video shows that carry gender success integration messages, role-plays and use of leaflets.
- Feedback to the villagers in the form of newsletters, brochures, and posters, written in a user-friendly language should be done. These could be distributed and/or displayed in public places for public view. The use of local newsletters and magazines and wide distribution of the same is envisaged. Audiovisuals are also proposed in order to bring on board individuals who cannot read.
- Proper documentation of community participation activities is envisaged. Despite the fact that phase I of the project is ending, one can not find one document that has coherently detailed all community participation activities conducted in the project life time and areas where these activities were executed.
- The list of potential stakeholders in the non-state actors category should be updated. Further, feasible and sustainable modes of collaboration with these non-state actors should be explored. Analysis of major stakeholders operating in the project area, their objectives, root cause of mistrust and conflict among

stakeholders, areas of collaboration, modalities of collaboration etc. should be sought.

- Development of well thought Participatory Monitoring and Evaluation Plans (PM&EP) for community participation activities is called for. The indicators in PM&EP would then be incorporated in the Project Monitoring and Evaluation Mater Plan.
- Given the HIV/AIDS problem in the Lake Zone and the role of the Lake in perpetuating the spread of the virus, mainstreaming of HIV/AIDS in LVEMP II activities is apparent.
- There is a need to form a PIC sub-committee in charge of identifying Components linkages/synergies and propose a way forward as far as financial and human resource allocation to these areas is concerned.

# Micro Projects Component

• Efforts have to be made to make the District Councils honor their commitments. This is in relation to maintaining the structures built under micro projects, and manning of dispensaries, and medicine stock up.

# Water Hyacinth Control Component

- Efforts to handle the weevil rearing units to communities, community based organizations and non-governmental organizations should be intensified.
- As an institution of learning in the community, schools are useful entry to water hyacinth control project. This call for involvement of schools close to water hyacinth spots.
- The need to introduce income-generating activities in weevil rearing centers to generate income and make hyacinth weevil rearing attractive have also been proposed.
- The use of BMUs to execute Water Hyacinth Control activities has to be explored.

# Catchment Afforestation

- The communities in the pilot areas accord low priority to catchment afforestation. This necessitates the need for more sensitization/education so that they value and invest on tree planting.
- In order to enhance sustainability of catchment afforestation projects, LVEMP II should consider the possibility of carbon trading as an incentive to farmers participating in afforestation activities. This is a World Bank initiative whereby farmers are given an opportunity for planting trees for carbon sequestration and get paid per trees planted.

# Fisheries Management Component

- Develop mechanisms to promote good practices initiated by BMUs to other areas in the Lake Basin; the culture of saving; and instill self-compliance and sense of ownership of the fishery resources.
- Develop training modules and deliver trainings to fishers on business, leadership, financial, and resource management skills.
- Formulate and enforce bylaws that support and protect the BMUs.
- Establish BMUs Association and Networks from beach level to regional level. These will enhance exchange of information, knowledge, skills and experience among key stakeholders for sustainable fishery resources management.
- The Ministry of Natural Resources and Tourism through the Fisheries Development Funds and/or Fisheries Levy Trust should supplement the BMUs resources.
- District Councils should support the BMUs by contracting them to collect fish levies.

# Fisheries Research Component

• In order to meet the demand for quality fingerlings, efforts should be made to produce then at the community fishponds.

- Explore the advantages and disadvantages of production of fingerlings by private enterprises.
- The fisheries research findings under LVEMP could be disseminated to the villages by the IFMP staff where possible, and who will maintain extensive contact with the villages in the foreseeable future.

# Wetland Management Component

- More and continuos awareness creation is needed before we witness a stop in the practices that have been established to degrade Lake Victoria basin wetlands.
- Together with communities, initiate, advocate for, and implement other sustainable livelihood sources after conserving the wetlandls.
- There is a need for formulation of Wetland Management Policy that will be a catalyst for formulation of localized Wetland Management Plans.
- In order to enhance sustainability of activities around the wetlands, there is a need for searching and establishing proper market for selling handcrafts manufactured from wetland products.

# Intergrated Soil and Water Conservation Component

- Forge collaboration with Catchment Afforestation since both Components are dealing with land management issues. This is essential in tapping the complementarities between them.
- Scale up the soil and water conservation activities beyond the pilot areas. This has a bearing in terms of financial and human resources.

# **Capacity Building Component**

- There should be deliberate efforts to engage in applied research that not only produces theses for certification but also leads to positive action at the community level.
- Conduct a needs assessment of the capacity of the stakeholders in the region and which are conducting related activities.

# 8.0 References

Blumberg, R. L. (2001). "Using Qualitative Methods in Research on Global Gender Issues." *Perspectives* 21(3):1, 6-7.

Gillespie, S. (2005). *Proceedings of the Conference on the Impact of HIV/AIDS on Food and Nutritional Security*. 14-17 April, 2005, Hilton, Durban, South Africa.

Krueger, A. R. (1994). *Focus Groups: A Practical Guide for Applied Research*. London: SAGE Publications.

LVEMP. (1999). "Project Monitoring and Evaluation: A Summary of Monitorable Indicators and Data Collections Formats." Dar es Salaam: LVEMP.

LVEMP. (2002). "Field Report on Participatory Dialogue for Preparing River Mara Watershed Management Plan. Mwanza: LVEMP.

LVEMP. (2003a). "Micro Projects as an Alternative Strategy for Creating Local Community Assets." *Nyanza Review*. Special Issue, February 2003, pages 6-7.

LVEMP. (2003b)."Editorial." Nyanza Review. Volume 6, page 2.

LVEMP. (2004). "Lake Victoria Basin Development: Community Participation Strategy." Final Draft. Dar es Salaam: LVEMP.

Mbwana, S. B. (2005). "Technical Notes for the Consultant on Micro-Projects Lessons Learnt Report." Mwanza: LVEMP.

Mjema, P. (2005). Verbal Communication. Mwanza: LVEMP.

Msambichaka, D. A. (1998). "Report of the Workshop for Preparing Community Participation Guidelines for LVEMP. Mwanza: LVEMP.

Msongwe, Y. (2005). "Report of a Training Workshop: Community Participation, Gender Analysis, and Stakeholders' Participation." Mwanza: LVEMP.

Musoke, I. K and M. Nyirabu. (2004). "Mass Media/Audience Research Report." Dar es Salaam: LVEMP.

Nanai, N.A.K. (2000). "Draft Report on the Status of Communities' Participation in Implementing Lake Victoria Environmental Management Project: The case of Tanzania." Mwanza: LVEMP.

Nanai, N. A and M. Nyirabu (2001). "Community Particiaption and Sustainability of LVEMP Activities." In S. G. M. Ndaro and M. Kishimba (Eds), *Proceedings of the LVEMP-Tanzania 2001 Scientific Conference*, 6-10 August, 2001, Bank of Tanzania Training Institute, Mwanza, Tanzania.

Ng'weshemi, J. Z. (2001). "Mobilization of Communities and Government Machinery for HIV/AIDS Response." In S. G. M. Ndaro and M. Kishimba (Eds), *Proceedings of the LVEMP-Tanzania 2001 Scientific Conference*, 6-10 August, 2001, Bank of Tanzania Training Institute, Mwanza, Tanzania.

URT. (2004). "HIV/AIDS/STI Surveillance Report Number 18." Dar es Salaam: National AIDS Control Program (NACP).

URT. (2005a). "HIV/AIDS Indicator Survey 2003-04." Dar es Salaam and Calverton: Tanzania Commission for AIDS, National Bureau of Statistics and ORC Marco.

URT. (2005b). "The National Strategy for Growth and Reduction of Poverty (NSGRP)— MKUKUTA." Dar es Salaam: Vice President's Office.

# 9.0 Appendices

## **Appendix 1: Terms of Reference: Community Participation**

## 1.0 Background

The Lake Victoria Environmental Management Project (LVEMP) is a comprehensive environmental program for the conservation of Lake Victoria and its basin as a whole. It is thus a holistic regional approach to the management of an ecosystem. Three riparian countries – the Republic of Kenya, the Republic of Tanzania and the Republic of Uganda jointly implement the project based on the implementation framework identified and developed by the said partner states.

The project is implemented by several components in each country, with Community participation cutting across all components. It is well acknowledged in the Lake Victoria Environmental Management Project document that Community Participation plays a significant role to the successful implementation of the project / program. This explains why the project has community participation woven into virtually every component. It is along this background that efforts are made to involve local communities, strengthening the capacity of a number of local NGOs and CBOs so as to empower and enable them facilitate the process of community participation and ownership. Based on these efforts, it is anticipated that eventually lead to communities in undertaking wise use activities of the resources in the lake and its basin.

#### 2.0 Objective of the consultancy

The main objective of the consultancy is to generate a comprehensive and analytical report on lessons learned during the implementation of the project by respective LVEMP components and project as a whole with respect to project's community participation aspects.

The generated lessons learned report on the aspects of the community participation would assist the coordination office to inform future interventions, contribute to decision-support mechanism and review community involvement performance.

#### 3.0 Scope of work/specific tasks

- 1. Study carefully the Terms of Reference and understand thoroughly the objective, tasks and expected outputs to be sure of what is required. Study careful the relevant project documents and reports such as project appraisal, progress reports, Project Implementation Committee report, Nyanza Review Newsletters, and components' reports with community participation aspects.
- 2. Determine the extent to which the LVEMP has achieved its original aims and objectives of enhancing community participation.
- 3. Review the approaches/methodology applied by components/community participation in the process of involving communities in achieving the above objectives. (This shall include such areas as catchment committees, district micro-project steering committees, village/project implementation committees, and institutional arrangements).
- 4. Assess the entry processes of the community based projects and identify strengths and gaps for future improvement.
- 5. Determine to what extent gender concerns and gender issues were addressed by the project and the degree of gender integration.

- 6. Determine to what extent other cross-cutting issues such as HIV/AIDS, governance, democratization were addressed by the project
- 7. Determine to what extent community priority needs were met / addressed
- 8. Outline achievements made by community participation initiatives against output / outcome indicators
- 9. Identify problems, gaps and bottlenecks or constraints encountered in the course of implementation of community related activities. Under this assignment explain factors that led to the successes and those to failures
- 10. Assess the extent to which communities have benefited from community related activities (pay attention to both direct and indirect)
- 11. Determine the degree and nature of participation (contributions in cash, materials, labor, decision making organs, types of participation)
- 12. Establish the extent to which the project leverage partnerships with other CBOs / NGOs. Explain factors that led to the situation found on ground.
- 13. Give a list of other programs and their brief activities related to the LVEMP subcomponent activities in the Lake Victoria basin and its catchment area
- 14. Assess the project exit strategy and the degree of sustaining community activities after phase out
- 15. Establish institution arrangement appropriate ness, including capacity building for community projects
- 16. Based on the above, draw lessons of experience (both positive and negative) and their underlying factors and provide recommendations)
- 17. Propose possible and feasible scale up of the approaches or technology to other areas within or outside Lake Victoria Basin and its Catchment, and explain why.
- 18. Assess the capacity or ability of the components to undertake effective community participation issues in their respective areas of operations.

#### 4.0 Methodology

It is proposed that the consultant will use the following methods to execute this assignment.

- 1. Deskwork/literature reviews to study various documents/reports.
- 2. Interviews to hold discussions with components, Community Participation Officer, communities and other relevant stakeholders. This will be accompanied by field verification/observations.

A careful and representative random sampling of the study area is recommended.

#### 5.0 Time-frame

Not less than 15 but not more than 30 working days. In addition, the consultant will be asked to prepare her/his plan of work

#### 6.0 Outputs/deliverables

- Inception report
- > Draft report
- Draft final report
- National workshops report
- ➢ Final report

## **Appendix 2: Field Instruments**

### 2A: CHECKLIST 1: GUIDE FOR INTERVIEWS WITH COMMUNITIES

- 1. What do you know about Lake Victoria Environmental Management Project?
- 2. What role do you play in the implementation of LVEMP?
- 3. What approaches/methodologies were used to enhance community participation?
- 4. Comment on the role of the ongoing O&OD exercise and its role in promoting community participation.
- 5. What was the entry point to different communities?
- 6. Comment on the degree, nature and participation of communities in implementing specific community participation activities.
- 7. Did you experience any problems in implementing activities related to Community Participation activities?
- 8. If yes, please elaborate the problems experienced.
- 9. If yes, how did you overcome the problems that you experienced?
- 10. Were there any factors (internal or external) that favored you in implementation of community-based activities?
- 11. What is your perception regarding participation of men, women, and different other vulnerable groups in the society such as the youth and disabled in implementing community participation activities?
- 12. Has the gender roles and responsibilities study conducted in Mwanza, Mara and Kagera regions?
- 13. Please explain how HIV/AIDS related activities were intergraded in the community participation activities.
- 14. Please describe the strategies in place that are aimed to sustain community participation activities after phase out.
- 15. What lessons have you learnt in the course of implementing the community participation activities and that can be used to enrich future project/program design? That is, if you were to implement the community participation activities now, what would you have done the same way or differently?

## 2B: CHECKLIST NUMBER 2: GUIDE FOR INTERVIEWS WITH PROJECT TASK LEADERS/COORDINATORS

- 1. What is the role of your Department in the implementation of LVEMP activities?
- 2. What are your set objectives, what have you achieved so far?
- 3. What approaches/methodologies did you apply to enhance community participation? Comment on the O & OD approach and its difference from PRA approach
- 4. What was the entry point to different communities?
- 5. Comment on the degree, nature and participation of communities in implementing specific activities.
- 6. Did you experience any problem in implementing the Community Participation component activities?
- 7. If yes, provide details of problems experienced.
- 8. If yes, how did you overcome the problems that you experienced?
- 9. Were there any factors (internal or external) that favored you in implementation of community-based activities that fall under your component?
- 10. What is your perception regarding participation of men, women, and different other vulnerable groups in the society such as the youth and disabled in implementing community participation activities?
- 11. Has the gender roles and responsibilities study conducted in Mwanza, Mara and Kagera regions?
- 12. How HIV/AIDS related activities were intergraded in the community participation activities?
- 13. Please describe the available institutional arrangements necessary for conducting LVEMP activities beyond LVEMP life cycle.
- 14. Please describe the project's exit strategy, that is, institutions and strategies aimed at sustaining community activities after phase out.
- 15. Have the LVEMP staff and communities at large been trained on PRA tools to facilitate development process?
- 16. Has Lake Victoria Basin Development Community Participation Strategy being finalized and operational? Comment on the possibility of using such a strategy to effect community participation in other development projects (not only in environmental related projects only).
- 17. Please describe other programs/projects related to the LVEMP sub-component activities in the Lake Victoria and its Catchment area
- 18. Comment on the possibility and feasibility of scaling up the approaches and/or technologies used to other areas within or outside Lake Victoria Basin and its Catchment.
- 19. What lessons have you learnt in the course of implementing the community participation activities and that can be used to enrich future project/program design? That is, if you were to start implementing the community participation activities now, what would you have done the same way or differently?

# 2C: CHECKLIST NUMBER 3: GUIDE FOR INTERVIEWS WITH NON-STATE ACTORS (PSOs, NGOs, and CBOs)

- 1. What approaches/methodologies were applied to enhance participations of non-state actors in implementing LVEMP activities?
- 2. Comment on the degree, nature and participation of non-state actors in implementing specific community participation activities.
- 3. Please describe other programs/projects related to the LVEMP sub-component activities in the Lake Victoria and its Catchment area
- 4. If your organizations participated in implementing community participation activities, did you experience any problem in implementing these activities?
- 5. If yes, please describe the problems experienced
- 6. If yes, how did you overcome the problems you have experienced?
- 7. Were there any factors (internal or external) that favored you in implementation of community-based activities that fall under your mandate?
- 8. What is your perception regarding participation of men, women, and different other vulnerable groups in the society such as the youth and disabled in implementing community participation activities?
- 9. Are you aware of any study on gender roles and responsibilities that have been conducted in Mwanza, Mara and Kagera regions under LVEMP umbrella?
- 10. How HIV/AIDS related activities were intergraded in the community participation activities?
- 11. Comment on the possibility and feasibility of scaling up the approaches and/or technologies used by LVEMP to other areas within or outside Lake Victoria Basin and its Catchment.
- 12. If you participated in implementation of LVEMP activities, what lessons have you learnt in the course of implementing the community participation activities and that can be used to enrich future project/program design? That is, if LVEMP were to start implementing community participation activities now, what do you think would have to be done differently in order to improve the performance of the project?

## **2D: CHECKLIST 4: GUIDE FOR INTERVIEWS WITH LEADERS**

- 1. What do you know about Lake Victoria Environmental Management Project?
- 2. What role do you play in the implementation of activities conducted under Lake Victoria Environmental Management Project?
- 3. What approaches/methodologies were used to enhance community participation?
- 4. Comment on the ongoing Obstacles and Opportunities to Development (O&OD) exercise in implementation of community participation activities. Would you recommend to LVEMP Take Leaders to do things differently after participating in the O&OD exercise?
- 5. What was the entry point to different communities?
- 6. Did you experience any problems in implementing activities related to Community Participation?
- 7. If yes, please describe the problems experienced.
- 8. If yes, how did you overcome the problems that you experienced?
- 9. Were there any factors (internal or external) that favored you in implementation of community-based activities?
- 10. Please describe the arrangements in place that are aimed at sustaining community activities after phase out.
- 11. Please describe other programs/projects related to LVEMP sub-component activities in the Lake Victoria and its Catchment area
- 12. Comment on the possibility and feasibility of scaling up the approaches and/or technologies used to other areas within or outside Lake Victoria Basin and its Catchment.
- 13. What lessons have you learnt in relation to community participation activities and that can be used to enrich future project/program design? That is, if you were to implement the community participation activities now, what would you have done the same way or differently?

# **Appendix 3: Sampled Sites**

# A: Mwanza Region

SN	Village/Street	Ward	District	Project / Activity
1	Isamilo/Chole	Idetemya	Misungwi	Beach Management Unit, Micro
				Credit activity
2	Isamilo/Chole	Idetemya	Misungwi	Beach Management Unit
3	Ng'wajombo/	Igokelo	Misungwi	Water Hyacinth project
	Nyahiti			
4	Ng'wajombo/	Igokelo	Misungwi	Beach Management Unit
	Nyahiti			
5	Simiyu/	Rubugu	Magu	Wetlands management project
	Bubinza			
6	Ihale/Ijitu	Kiloleli	Magu	Micro projects
7	Ijitu/Ihale	Kiloleli	Magu	Beach Management Unit
8	Shinembo	Kahangara	Magu	Water Hyacinth
9	Murutunguru	Murutunguru	Ukerewe	Micro Project
10	Kagunguli	Kagunguli	Ukerewe	Micro Project

# **B: Kagera Region**

Sn.	Village	Ward	District	Project/Activity
1.	Chato	Chato	Biharamulo	Rehabilitation of Chato Primary School
2.	Chato	Chato	Biharamulo	Bwina fisher-people: Village people
				formed "vikundi hewa"; they were
				given loans for fishing purposes but they
				disappeared in the islands of the Lake
3.	Chato	Chato	Biharamulo	Capacity building on sustainable fishing
4.	Chato	Chato	Biharamulo	Chato Dispensary: they were given
				mattresses and beds.
5.	Nyamilembe		Biharamulo	Construction of Dispensary
6.	Biharamulo		Biharamulo	LVEMP joined ACORD to create
				environmental management committees
				around beaches.
7.	Biharamulo		Biharamulo	Women groups were assisted in fish
				business
8.	Kanazi		Bukoba	Magugumaji Group Kassambya. This
				women group had just heard of
				LVEMP.
9.	Kyakailabwa		Bukoba	Water hyacinth weevil rearing unit
10.	Kyaka		Bukoba	Water hyacinth weevil rearing unit
11.	Bugabo		Bukoba	Water hyacinth weevil rearing unit

# C: Mara Region

SN	Village/Street	Ward	District	Project/Activity
1.	Bukabwa	Bukabwa	Musoma (R)	Catchment Afforestation
2.	Bwai Kumsoma	Kariba	Musoma (R)	Mwichele Beach Management
3.	Suguti	Suguti	Musoma (R)	Construction of 4 classrooms and 1
				teacher's house at Suguti Primary School
4.	Seka	Nyamrandir ira	Musoma (R)	Seka Dispensary Construction (8 rooms)
5.	Chirorwe	Suguti	Musoma (R)	Macro water harvesting for rice irrigation using Mara Band Technology
б.	Mkendo Street Lake Shore	Iringo Ward	Musoma (U)	Water Hyacinth Control
7.	Kisasa Beach (Nyarigamba Street)	Makoko	Musoma (U)	Toilets Construction at Kisasa Beach (6 holes)
8.	Mwigobero Beach (Kawawa Street)	Mwigobero	Musoma (U)	<ul><li>(i) Beach Management</li><li>(ii) Hyacinth Control</li><li>(iii) Water quality and ecosystem management</li></ul>
9.	Nyabisari Street	Bweri	Musoma (U)	Rain Water Harvesting at Kambarage Primary School
10.	VI-Agroforestry Project Office	Iringo	Musoma (U)	Agroforestry Information Extension
11.	Kitaji B Street	Kitaji	Musoma (U)	Kitaji Dam (Dump)
12.	Kuruya	Komuge	Tarime	<ul> <li>(i) Spring water in the village</li> <li>(ii) Catchment Afforestation by Hifadhi</li> <li>Mazingira Kuruya (HIMAKU) Group</li> <li>(iii) Classrooms construction and</li> <li>Automatic weather station at Kuruya</li> <li>Primary School</li> <li>(iv) Successful use of farmyard manure</li> <li>at the household level</li> </ul>
13.	Kwibuse	Kisumwa	Tarime	<ul><li>(i) Catchment Afforestation</li><li>(ii) Soil and water conservation</li><li>(iii) Wetland management</li></ul>
14.	Nyarero	Nyarero	Tarime	Nyarero Women Group Tree Planting (1.5 ha)
15.	Gwitiryo	Sirari	Tarime	Aquaculture
16.	TAFIRI Shirati (Mkoma Village)	Mkoma	Tarime	Tanzania Fisheries Research Institute
17.	Rwang'enye	Nyamtinga	Tarime	<ul> <li>(i) Village Dispensary construction (12 rooms).</li> <li>(ii) "Ramshackle" Rwang'enye Primary School due to low participation of villagers in community activities</li> </ul>
18.	Nyang'ombe	Nyamagaro	Tarime	Nyamagaro Secondary School Construction (4 classrooms)

# Appendix 4: Field Observations

Sn	OBSERVATION	WHERE
1.	Dispensary build by community members from two villages with support from LVEMP	Ijitu/Ihale in Kiloleli Ward, Magu District
2.	Forest of "mikindu", traditional trees along Simiyu River.	Bubinza Village along Simiyu river, Magu District
3.	A small BMU office with and few files but with motivated working group	Ijitu/Ihale Village, Magu District
4.	Water hyacinth project site few project tanks	Shinembo village, Magu District
5.	Very active community members in a work environment with fishing and patrol vessels	Chole/Isamilo village, Misungwi District
6.	Paddy production sites with water conservation ridges?	Kalemera, Magu District
7.	Woodlots established by participants under LVEMP support	Bukabwa Village, Musoma Rural District
8.	Natural forests managed by villagers under LVEMP support	Bukabwa Village, Musoma Rural District
9.	Beach Management Practices under LVEMP support	Bwai Kumusoma Village, Musoma Rural District
10.	Four classrooms and one teacher's house built by community members under LVEMP support	Suguti Village, Musoma Rural District
11.	Dispensary built by community members with support from LVEMP	Seka Village, Musoma Rural District
12.	Lake shore area reduced by water hyacinth	Mkendo Street, Musoma Urban District
13.	Kitaji Dam, with hyacinth weed infestation. It is used as a dumping place, hence has off-smell	Kitaji B Street, Musoma Urban District
14.	Well thriving forest established by Hifadhi Mazingira Kwibuse (HIMAKWI) Group	Kisumwa Ward, Tarime District
15.	Kigamba-Bitare Natural Forest conserved by Villagers under support of LVEMP	Kisumwa Ward, Tarime District
16.	Kuruya Primary School, three classrooms just demolished for renovation under LVEMP support	Kuruya Village, Tarime District
17.	Poorly thriving forest established by Hifadhi Mazingira Kuruya (HIMAKU) Group	Kuruya Village, Tarime District
18.	Improved Water Spring that is well managed by community members abiding by by-laws formulated by themselves	Kuruya Village, Tarime District
19.	Automatic weather station established under LVEMP support	Kuruya Primary School, Tarime District
20.	Well thriving school forest in a rather semi- arid environment	Kuruya Primary School, Tarime District
21.	Well thriving forest established by Nyarero Tegemeo Afforestation Group	Nyarero Village, Tarime District
22.	Fish ponds for fish farming	Gwitiryo Village, Tarime District
23.	Fingerlings being raised at TAFIRI	Mkoma Village, Tarime District
24.	Unfinished Rwang'enye Dispensary (12 rooms) under construction under LVEMP support	Rwang'enye Village, Tarime District
25.	A floating barge and three lorries labeled SAMAKI TU (meaning FISH ONLY) were observed.	Bwai Kumusoma Village, Musoma Rural District

Sn	OBSERVATION	WHERE
26.	Two school buildings each with 3 old classrooms and 1	Rwang'enye Village, Tarime District
	teacher's office built with mud bricks. The buildings were	
	nearly falling down, and one of them was no longer used	
	lest it collapsed on pupils/teachers. This observation entails	
	that more support from LVEMP is needed.	
27.	Nyamagaro Ward Secondary School under construction,	Nyang'ombe Village, Tarime District
	with support from LVEMP and other sources	
28.	Ripe maize and already harvested sorghum farm grown by	Kuruya Village, Tarime District
	an individual household using improved seeds and farmyard	
	manure.	
29.	Chato Dispensary: they were given mattresses and beds.	Chato Village, Biharamulo District
30.	Chato Primary School: rehabilitation of the school buildings	Chato Village, Biharamulo District
31.	Some abandoned old broken boats, and fishing nets. These	Chato Village, Biharamulo District
	are some of the remnants of the Bwina fisher people who	
	formed "vikundi hewa", given loan for fishing purposes but	
	disappeared in the islands of Lake Victoria	
32.	Construction of Dispensary: LVEMP and people	Nyamilembe, Biharamulo District
	collaborated in construction.	
33.	Water hyacinth weevil rearing unit	Musoma Town
34.	Water hyacinth weevil rearing unit	Kyakailabwa, Bukoba
35.	Water hyacinth weevil rearing unit	Kyaka, Bukoba
36.	Water hyacinth weevil rearing unit	Bugabo, Bukoba
37.	Magugumaji Group Kassambya—women who have just	Kanazi, Bukoba
	heard of LVEMP and in need of support	