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GOVERNMENT OF CHINA

FINAL REPORT

INTEGRATED SOLUTIONS TO GREAT LAKE BASIN SUSTAINABLE DEVELOPMENT



Office of Mountain-River-Lake Regional Development Committee of Jiangxi Province (MRLDO) March.13, 2021

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Project information

Type of project: Interregional

Title: Integrated Solutions to Great Lake Basin Sustainable Development

Project No. INT/18/K04

Beneficiaries: Local NGOs and rural communities in the watershed area of Lake Victoria, Tanzania and Kenya

Duration of project: two years

Estimated starting Date: June of 2019 to June of 2020

Team leader: Ms. Chen Kui (chenkui0129@hotmail.com)

Team members: Ms. Mao Yuting (maoyuting@tom.com), Miss. Huang Haiqin (58902885@qq.com)

Authored by: Ms. Mao Yuting

Address: Office of Mountain-River-Lake Regional Development Committee of Jiangxi Province (MRLDO), North One Road 14, Provincial Government Complex, 330046

Telephone: 86-791-88915136

Fax: 86-791-88915136

Abstract

The project's aim is to enhance the institutional capacities on Lake Victoria basin sustainable development with special emphasis on the exchange of appropriated technologies and management. 2 NGOs from Kenya and Tanzania was benefit from an experience-sharing on the Integrated Watershed Management of Poyang Lake of China. Therefore, two subprojects were planned and implemented in the area of Lake Victoria Basin, utilizing the methods of Integrated watershed management. The capacities on Lake Victoria basin sustainable development of the participating NGOs will be further improved when consultant mission of Chinese experts is proceeding in the two countries around the Victoria Lake. With the assistance of Chinese project managers, demonstration model/policy suggestion/project proposal for Lake Victoria basin sustainable development have been developed and proposed to corresponding organizations and stakeholders.

1. Background and rationale

Lakes and wetlands are among the world's most easily accessible nature source which cause most developing countries develop their economy around the lake. Lakes are dynamic aquatic ecosystems; simultaneously providing large quantities of fresh water, food and recreation for humans, in addition to sustaining habitats for thousands of species of animals, birds and plants. Accompany with a ring of industrial urbanization creeping closer and closer to the lake, how to reviving the lake watershed is becoming bigger and bigger challenge while reconciling the chaotic impacts of inappropriate industrial infrastructure destroying watershed ecosystems.

The Poyang Lake (Poyang-Hu, max. surface 5,100 km²) is the largest freshwater lake in China, which is situated in the Northern Jiangxi Province, and the lake drains directly into the lower Yangtze River, thereby acting as natural flood-buffer for the lower Yangtze hydrological system. Having experienced poverty and the devastating degradation of its natural environment in the Poyang Lake Watershed until the 1980's, the Jiangxi Provincial Government has initiated the Mountain-River-Lake program(MRL-Program) to alleviate the poverty and rehabilitate the natural environment in order to achieve the future prosperity of the lake watershed. MRL-Program pays attention to the interdependency of ecological degradation, poverty, and livelihood-security with the philosophy of --Based on ecology and having economy in mind, the Poyang Lake Basin is to be developed in a sustainable way: To manage the Lake, the rivers must be harnessed; to harness the rivers, the mountains must be developed; to develop the mountains, poverty must be alleviated. As an experience-rooted, internationally linked, and scientifically grounded think-tank, policy-counseling agency, MRLDO has been engaging in the best practices for the Poyang Lake Watershed Sustainable Development through providing counseling, developing demonstration models, introducing IDRM concepts, promising advanced technologies on the aspect of participatory land-use planning, sustainable livelihood security, watershed management, micro-credits, renewable energy production, CDM, climate change adaptation and mitigation strategies, eco-tourism, and circular economy, and so on. Now, the eco-civilization construction is becoming the national policy and Poyang Lake Watershed is recognized as a good case on the Charming *China* due to the MRL program harmony the Nature and economy.

The Victoria Lake with an area of 68,800 km² is the second largest freshwater lake in the world after Lake Superior in America, and the largest lake in Africa. It is a trans-boundary lake shared between Kenya, Uganda and Tanzania in the ratios 6%, 45% and 49% of the surface area respectively. The Lake Basin extends to five countries namely Rwanda, Burundi, Uganda, Tanzania and Kenya. About 35 million people live in the Lake Victoria basin. In the Victoria lake basin, the highest poverty rate (below 1 USD/day) is 65-60% in Western Kenya, Burundi and Rwanda and the significantly lower poverty rate is 32-36 %in Uganda and Tanzania. Over the last four decades, the Victoria Lake has faced a number of environmental problems, including pollution, biodiversity loss, habitat destruction and soil erosion while economy has been developing. It is estimated that the lake ' s indigenous fish species have been reduced by 80% and over 70% of the forest cover in the catchment area has been lost. In addition, the water quality in the rivers flowing into the lake continues to carry increasing amounts of silt and nutrients, which adds to the problem siltation of the Lake Victoria Lake Basin.

2. Objectives

The project's aim is to enhance the institutional capacities on great lake basin sustainable development with special emphasis on the exchange of appropriated technologies and management institution.

3. Activities

Compared the situation between the Poyang Lake basin and the Victoria Lake basin, both of them are facing the challenge on balancing the development and conservation. China, especially the Mountain-River-Lake Program in Jiangxi Province, has done a lot effort on the sustainable development, and gained a lot of experience and lesson on the lake watershed sustainable development. Some appropriated technologies and management institution in Poyang Lake Basin could be introduced into the Victoria Lake Basin. Through the exchange on policy advocacy and demonstration model on the lake watershed sustainable development, Chinese experts will help the correspondence partner organizations develop a project on the lake watershed sustainable development for the Victoria Lake.

In this project, MRLDO made 4 aspects to help the partners to improve their capacity on lake watershed sustainable development:

1. *Information exchange and sharing.* Mutual experience and technologies sharing with the partners NGOs who have been engaged in the Victoria Lake watered sustainable development, to facilitate technical exchange and understanding.

2. *Requirement analysis of the demand for capacity building.* Through the analysis of the demand for institutional development, finding out the interest points of partner NGOs in the integrated watershed management, to further clarify the objectives and curiosity of partner NGOs. MRLDO and NGOs jointly design the sub-projects to ensure the feasibility of the project.

3. *Sub-project implementation.* MRLDO paid attention to the progress of the project and gives timely help and guidance to the problems in the process of the project. The institution capacity improvement of partner NGOs on integrated watershed management projects will be improved by implementing the sub-projects.

4. *project investigation and consultation.* A Chinese Delegation carried out consultant mission in the participating countries, to have a closer investigation on the Victoria Lake Watershed Sustainable Development, and then have a seminar with local stakeholders.

Target Beneficiaries:

This project will mainly target on:

NGOs on the Victoria Lake Sustainable Development

Communities around the Victoria Lake.



Chart.1 shows the each steps (activities) to meet the objectives

4. Implementation

The project is composed of two sub-projects: one is Fact findings study for implementation of ecological conservation agriculture to conserve the Lake Victoria catchment area implemented by CESOPE of Tanzania, the other is a demonstration project of WASH interventions improving lives implemented by OSIENALA of Kenya.

CESOPE and OSIENALA are NGOs who are devoted to environmental protection, Following are the introduction of the two NGOs:

CESOPE:

Civic Education is A Solution to Poverty and Environmental management (CESOPE) is a registered Non-governmental Organization (NGO) with a mission of creating awareness to rural communities on environmental conservation, good governance, gender education and Human rights.

Since its establishment, CESOPE have worked to conserve the natural environment and Flora and Fauna of Manyoni Districts in Singida, Bahi, Kondoa and Chemba districts in Dodoma.

OSIENALA:

The friend of Lake Victoria (OSIENALA) is an non-profit organization, established in 1992 as a national NGO with its head office in Kisumu City in Kisumu County. OSIENALA has rich working experiences on community development, and good relationship with local government, institutes and colleges.

OSIENALA endeavors to strengthen capacities within the communities for sound management, optimization of resource utilization and improvement of the social and economic status in the region.

OSIENALA owns Radio Lake Victoria 92.1 FM which is a main outreach tool to the lake side communities, and more important, OSIENALA has good working relations with the Ministry of Agriculture, Bondo University College and has staff who are trained in Agronomy.

4.1 Sub-project-1: Fact finding study

CESOPE organized a 4 person investigation team to conduct a baseline study (Fact Finding Mission) for the purpose of implement an Ecological Conservation Agriculture in 3 regions (Mara, Mwanza and Geita) and 7 districts from the respective regions.

The objectives of the sub-project is to find out imminent challenges that the Lake Victoria basin is facing in Mara, Mwanza and Geita Regions, using the methods of information analysis on previous Interventions done by other actors such as Government or Non-governmental organizations and field investigation on livelihood activities carried out around the respective regions, to bring out the policy suggestion for the development of Lake Victoria basin.

CESOPE adopted the methodologies of date review, focus group discussion, structured questionnaire, key informants and direct observations and photographs, to investigate the stakeholders of Lake Victoria basin, including 7 District Environmental Officers, Lake Victoria Basin Water Board, 14 Environmental Conservation committees from 7 districts, Cleaner Production Centre of Tanzania (CPCT), Fisheries Division and Lake Victoria Benefits are threatened by environmental degradation resulting from various activities within the lake, littoral areas, from the basin and outside the basin combined as environmental stresses within the lake:

♦ Over-fishing –rising population and expansion of fish market worldwide

- ♦ Oil spills on accidents and normal operations
- ♦ Untreated liquid wastes from marine vessels not facilitated with waste holding facilities
- ♦ Poor/Lack of sanitation facilities in Lake Victoria Islands direct lake pollution (liquid and solid waste
- ♦ Water hyacinth in flow and resurgence abstraction of marine vessels and reduce dissolved oxygen
- ♦ Extended draught and over -abstraction of water from the lake

Propose 4 policy suggestion:

- ♦ Reduction of excessive use of river water for irrigation and industrial use.
- Monitoring of water level is done only at Jinja in Uganda. There should be a monitoring system developed for Kenya, Uganda and Tanzania. We should not only rely on Foreign Agricultural Service (FAS), a Global Reservoir Monitor, to inform us about the level of our lake.
- ♦ Communities can also be involved in measuring river water levels and even lakes. River water gauges can be manned by trained community volunteers.
- ♦ EIA should be done to all major projects to be implemented in the Lake Victoria basin. The EIA should be discussed and accepted by all East African Countries before implementation begins.

The detailed fact finding report is attached in **Annex 1**.

4.2 Sub-project-2: OSIENALA WASH interventions improving lives

Under the project dubbed Community-Based Strategy for improvement of Environment in the Lake Victoria Basin sponsored by MRLDO. OSIENALA's has sensitized and capacity built the community members on Water, Sanitation and Hygiene (WASH) interventions that seek to save lives, prevent diseases, promote dignity, and support access to better living conditions and livelihood opportunities. OSIENALA has carried out this interventions, in collaboration with Village Environmental Committees (VECs), which are community based groups, and through partnerships with other like-minded CSOs. The mode of operation chosen by OSIENALA depends primarily on the WASH needs of the targeted beneficiaries, and the quickest and most effective way to meet those identified needs. For example, for ferro-cement tank (shown in figure below) used for rain water harvesting, OSIENALA is co-financing with the community based groups who provide 60% cost of the material used in the construction.



Fig.1 A ferro-cement tank constructed in a home in Kajulu



Fig.2 OSIENALA team inspecting an Ecosan Toilet constructed in a school

Through the project sponsored by MRLDO whose aim is to build the capacity of the communities in order to protect the environment while at the same time improving their economic and social well being within the Lake Victoria Basin, the OSIENALA's WASH activities focuses on five thematic areas:

- Capacity building and promotion of the construction of ferro-cement tanks for water harvesting to provide safe water for drinking, cooking, personal hygiene and household cleaning to communities living within Kasagam village of Dunga and Nyamasaria.
- mobilizing and training of village environmental committees to promote safe hygiene and health-seeking behaviours, and to empower local community members to take an active role in WASH operations.
- capacity building on active disease surveillance and increased vigilance on water quality and sanitation practices during disease outbreaks.
- capacity building and sensitization on solid waste management and site drainage activities, to reduce standing water and garbage where disease-carrying mosquitos or vermin breed

So far, the project has trained 35 artisans on the construction of Ecosan toilets in Kisumu and Homa Bay Counties in Kenya, trained 30 artisans on the construction of ferro-cement tanks for primary and Secondary schools as well as for households in Kisumu County. The project has also registered success in the other activities such as several stakeholders

consultative meeting for lobbying and advocacy on Ecosan Technology and rehabilitation of two springs for provision of safe water to communities living within Kasagam village of Dunga and Nyamasaria communities. As much as the project focuses on the low-lying Dunga wetland communities, the upstream Kajulu community and the peripheral communities, degrading activities resulting on catchment, rivers, river banks and wetlands destruction through deforestation, sand harvesting, unsustainable agriculture, pollution, eutrophication, siltation, burning and over-harvesting of wetlands papyrus are still ubiquitous. Thus the need to upscale these interventions and widen the coverage to reach both upstream and downstream villages impacting on greater Dunga wetland.

Based on the implementation of the above projects, OSIENALA improved the institutional capacity and wrote the project proposal of the community-based strategy for the implementation of environment in the Lake Victoria base project. See **Annex 2** for the project proposals.

4.3 consultant mission

During 8th to 16th of December, 2019, MRLDO assigned a delegates of 2 project managers to Tanzania and Kenya to carry out a consultant mission, the objectives of which was to promote the management and technologies of Poyang Lake integrated watershed management, to enhance the understanding of corporation in sustainable development, and have an intuitive understanding of the upcoming sub-projects. The activities of consultant mission included several seminars with the local governments, communities and NGOs, and field investigations for Mwanza of Tanzania and Suba district of Kenya in Victoria Lake Basin.

Seminars

Arranged by CESOPE, Chinese delegation have a very significance experience sharing with the environmental department and the University of Dodoma of Tanzania. The seminar with the officers of environmental government, managers of NGOs, professors of university of Dodoma, exchanged the challenges and experience of balance development of environmental protection and economic growth, which made an foundation for the next cooperation.



Fig.3 the Seminar with environmental department of Tanzania(left), and the university of Dodoma(right)

Arranged by OSIENALA, the Chinese delegation held a small seminar with the executive chairman and project manager of OSIENALA to exchange the concepts and technologies of Integrated Watershed Management in Jiangxi Province. The Chinese delegation had a better understanding of OSIENALA's recent works and future development needs, which laid a foundation for further and extensive cooperation. Also, the Chinese delegation also met

with the principal officials of the Ecological Environment Bureau of the Suba region, and had a deep understanding of their recent work in banning fishing, poverty alleviation and sustainable alternative livelihoods.



Fig.5 the seminar with OSIENALA(left), and Ecological Environment Bureau of the Suba region in Kenya (right)

Field investigation

In Tanzania, the Chinese delegation visited the CESOPE Office, investigated the projects of CESOPE in the remote rural areas of Mwanza, such as fish raising, cattle and sheep raising, beekeeping, etc., and held a discussion with local community staff.

Through the investigation, Chinese delegation found out that the remote rural areas of Tanzania were still in tribal state, and the farming are mainly in corn planting with low efficiency output. The living conditions of the farmers are extremely poor, and the houses they live in are made by Earth embryo, with a simple clay stove and rare furniture in the house. Because of the disordered development of mining and logging industries in the upstream area, the soil and water loss is very serious. Local farmers are often affected by flood, so that the basic survival of farmers is difficult to guarantee. Local NGOs, mainly CESOPE, attach great importance to ecological protection and sustainable economic development. They have investigated and written many research reports on local ecological environment issues, put forward many constructive policy suggestions, implemented pilot demonstration of small-scale agriculture and aquaculture, and they hope to get more project funding support and promote the publicity and promotion of pilot demonstration projects.



Fig.6 Visiting CESOPE Office



Fig. 7 Investigating on the demonstration site of cattle and sheep raising of CESOPE



Fig. 8 Investigating on the pilot projects of beekeeping, fish raising and cattle raising in CESOPE



Fig.9 Communicating with local community staff about local situation

In Kenya's Suba rural areas, OSIENALA has actively organized various community volunteer associations, such as Village Environmental Committees (VECs), women's self-help organizations, forest protection self-help organizations and so on. OSIENALA has established training centers for these rural community self-help organizations to carry out some skills training.

A kind of energy-saving clay stove is very popular in the local area. The stove is made from local clay with low cost, having the advantages of saving woods and producing rare smoke during combustion. The workers in the stove's workshops are all local women, which has solved the employment problem of some women. OSIENALA was promoting the WASH project and the clean toilet project in the local community. The WASH project collects and stores rainwater for irrigation, cleaning and sanitation, so as to improve the life of the local

people. The clean toilet project is to establish a dry toilet to separate feces and urine, and the urine can be used for fertilization.



Fig. 10 Energy-saving clay stove project of OSIENALA



Fig.11 Living conditions of rural residents in a community in Suba, Kenya



Fig. 12 local dry toilet project



Fig.13 Investigating rainwater storage projects (left) and discussing with members of local self-help organizations (right)

5. Finance

Activities costs of this project were strictly based on the financial budget. The cost mainly included the international flights for international experts, international and national consultancy fees, domestic trip, and two-projects implementation and so on, details shown the table below.

The expenditure is including SSDC and MRLSD's contribution. SSCD's expenditure was directly disburse to activities of the project. MRLSD's contribution is mainly used for the project preparation and post-project activities. MRLSD allocated the two parts of funds rationally to achieve the purpose that the project expenditure is basically consistent with the budget.

The allocation for the funds of SSDC: the expenditure of the international consultants, training and exchanging for the two participant NGOs is \$5000. and international travel around US \$11000, national consultant was used for the technique consultant and two sub-project evaluation. The 4000 dollar for the sub-project with the NGO participant of Tanzania includes \$3000 subcontract and \$1000 reporting costs, the 5000 dollar for the sub-project with the NGO participant of Kenya includes \$3000 subcontract and \$2000 reporting costs.

Descriptions	SSDC(US Dollar)	Local contribution(US Dollar)
International consultants	1,000	2,000
International travel	11,000	15,000
National consultant	1,000	2,000
Subcontract A	3,000	3,000
Subcontract B	3,000	3,000
Training and exchanging	4,000	0
Reporting costs	3,000	1,000
In total	US\$26,000	US\$26,000

6. Next step planning and expectation

1. Strengthening work exchange and sharing. Regularly carry out work exchange and experience sharing with NGOs of Tanzania and Kenya by email and online video.

2. Carrying out project cooperation in depth. On the basis of the achievements of this project, proposal new projects together with the two NGOs and actively carry out project fund-rising.

3. Summarizing the experience of international cooperation and exchange. Summarize the good aspects and problems in the international cooperation, so as to lay a foundation for better international exchanges and project cooperation in the future.

Annex-1. the sub-project outcome of CESOPE

Please see next page.



BASILINE STUDY/FACT FINDING MISSION

FOR

IMPLEMENTATION OF ECOLOGICAL CONSERVATION AGRICULTURE TO CONSERVE THE LAKE VICTORIA CATCHMENT AREA

P.O Box 4124, Dodoma, Tanzania Email: cesopetz@gmail.com Web; <u>www.cesopetz.org;</u> Tel.: 255 26 2323342 Cell: +255 753340690

Prepared By; Mussa Mbuya Development Support Network (DESUNE) +255 745231832, +255 622 635032 Ongorojr01@gmail.com mosesmbuya@hotmail.com

1. Background

Civic Education is A Solution to Poverty and Environmental management (CESOPE) is a registered Nongovernmental Organization (NGO) with a mission of creating awareness to rural communities on environmental conservation, good governance, gender education and Human rights. CESOPE since its establishment we have worked to conserve the natural environment and Flora and Fauna of Manyoni Districts in Singida, Bahi, Kondoa and Chemba districts in Dodoma.

CESOPE intends to conduct a baseline study (Fact Finding Mission) for the purpose of implement an Ecological Conservation Agriculture in Lake Victoria Catchment area. Lake Victoria is the second largest freshwater body in the world. Over the last four decades, however, the lake has faced a number of environmental problems, including pollution, biodiversity loss, habitat destruction and soil erosion. It is estimated that the lake's indigenous fish species have been reduced by 80% and over 70% of the forest cover in the catchment area has been lost. In addition, the water quality in the rivers flowing into the lake continues to carry increasing amounts of silt and nutrients, which adds to the problem siltation of the Lake Victoria. The life-support systems of the riparian communities are increasingly threatened due to ecological degradation.

The ecological integrity of the lake's ecosystem as a source of freshwater is increasingly threatened. A plan of action to redress the situation is imperative. Several conservation and management initiatives have concentrated on the lake itself, but little has been done on catchment basins. Most of the challenges facing the Lake Victoria basin are a result of human activities that are carried out around the Lake Victoria basin. These activities range from farming, fishing, cattle grazing, Major and artisanal mining and deforestation or cutting trees for various economic purposes. These activities have contributed to the loss of biodiversity in Lake Victoria basin and hence jeopardize the future of the lake itself.

1.1 Objectives of the Baseline

- 1. Investigate and Document livelihood activities carried out around and along Lake Victoria catchment area in Mara, Geita and Mwanza
- **2.** Collect information on previous Interventions done by other actors such as Government or Non-governmental organizations.
- **3.** Document the imminent challenges that the Lake Victoria basin is facing in Mwanza, Mara and Geita Regions.

1.2 Deliverables

This consultancy has the following deliverables:-

- 1. Final detailed report of the baseline with recommendations, pictures and illustrations to be submitted to CESOPE
- 2. An Annex of list of potential stakeholders identified in the project area to submitted to CESOPE

1.2: Scope of the Study

The exercise was conducted in 3 regions Namely Mara, Mwanza and Geita and 7 districts from the respective regions.

Districts covered by Region

Mara Region

Musoma Mjini Council Musoma Rural District

Mwanza Region

Nyamagana - District Ilemela District Ukerewe District Magu District

Geita Region

Chato District

The study involved;



The study facts findings focused on the following key areas

- Threats to the Lake Victoria Benefits
- Causes of Pollution and Sedimentation of the Lake Victoria
- Lake Victoria wetlands
- Waste water discharges from industries

- Water hyacinth resurgence
- Fisheries status in Lake Victoria
- Interventions by LVEMP II
- Challenges
- Recommendations

1.3 Methodology

The study methodology comprised of inclusive and highly participatory processes as required by the assignment. The consultant ensured active engagement with the identified partner organizations, Project Steering Committee, Regional Agencies, National Focal Points, collaborators, and beneficiaries at each level of the exercise. The Consultant used; Focus Group Discussions, Key Informants Interview, Observation and Photograph as a method for data collection. The team of evaluators also reviewed secondary data and information obtained from the field visits. See the diagram below;



2.0 Findings of the Basiline Study/Fact Finding Mission



Lake Victoria It is the Second largest fresh water lake in the World and it is surrounded by three East African States: With 6% in Kenya; Tanzania 52% and Uganda 42%. It is Located at 0:210 North and 3:000 South of the Equator Lake Victoria has a total length of 3,440 kms and 240 kms wide from East to West and is 1,134 meters above sea level with maximum depth of 82m. Its surface area is 68,870 km2, catchment area of 180,950 km2 Generally shallow with maximum depth of 84 meters and mean depth of 40 meters.

Major Ecological and Economic Importance of Lake Victoria

Ecological importance of Lake Victoria

- 1. It supports a wide diversity of flora and fauna
 - a. Important warehouses of fisheries resources both in diversity and numbers.
 - b. harbor around 200 different fish species

Economic importance of Lake Victoria

- 1. Supporting a large fishing industry for export and local consumption (197,000 fishers and 600,000 fish trader)
- 2. Lake transportation
- 3. Hydropower generation
- 4. Source of domestic and industrial water supply
- 5. Food security, and supports the livelihoods of appr. 3m people
- 6. The fish resources provide foreign exchange: US\$300 –400 million.
- **7.** Contributions to the GDP: Kenya, 2%, Tanzania, 2.8% and Uganda, 3%.

The Satoyama Initiative is a global effort, first proposed jointly by the United Nations University and the Ministry of the Environment of Japan (MOEJ), to realize "societies in harmony with nature" and contribute to biodiversity conservation through the revitalization and sustainable management of "socio-ecological production landscapes and seascapes" (SEPLS). The United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS) serves as the Secretariat of the International Partnership for the Satoyama Initiative (IPSI). The activities of the IPSI Secretariat are made possible through the financial contribution of the Ministry of the Environment, Japan.¹

The Satoyama Initiative can provide broader global efforts in ensuring the great lakes around the world are well conserved.

2.1 Threats to the Lake Victoria Benefits

LV Benefits are threatened by environmental degradation resulting from various activities within the lake, littoral areas, from the basin and outside the basin combined as environmental stresses within the lake.

- Over-fishing –rising population and expansion of fish market worldwide
- Oil spills on accidents and normal operations
- Untreated liquid wastes from marine vessels –not facilitated with waste holding facilities
- Poor/Lack of sanitation facilities in Lake Victoria Islands –direct lake pollution (liquid and solid waste
- Water hyacinth in flow and resurgence –abstraction of marine vessels and reduce dissolved oxygen
- Extended draught and over -abstraction of water from the lake

Littoral areas;

¹Satoyama Initiative Thematic Review vol. 3 - Sustainable livelihoods in socio-ecological production landscapes and seascapes 2017

- Construction and farming on shoreline
- Input of sediments and agrochemicals
- Removal/destruction of buffer zone
- Conversion of wetlands
- Removal of vegetation
- Poor/Lack of sanitation facilities in Lake Victoria Islands –direct lake pollution (liquid

and solid waste Poor solid wastes management

- Discharge of partially or untreated waste water –industrial and municipal, hilly areas
- Both construction and farming along sensitive littoral zone without adequate environmental mitigation measures reduces filtering ability and natural protection hence increased pollution loads into the Lake and result in loss of aquatic habitat

2.2 Causes of Pollution and Sedimentation of the Lake Victoria

- Pollution mainly from fuel and oil spills, solid waste and discharge of partially or untreated municipal and industrial waste.
- Pollution by rivers and streams that are polluted by raw or partially treated municipal and industrial effluents, contaminated urban surface runoff, unsanitary conditions of the shore line settlements
- Pollutants carried by eroded sediments mainly nutrients, coliforms of faecal origin, oxygen demanding substances and residue pesticides
- Land degradation and increased pressure on land due to high population growth, poverty and unsustainable agricultural practices, overgrazing contributed significantly to soil erosion in LVB.

Land degradation by mining activities

Sanitation of the lake and shores



For example in Kenya HOPELVB Advocacy started an initiative - Building Support for the Integrated Population, Health, and Environment Approach: ²

Increasing Support for the PHE Approach

Since the launch of the Health of People and the Environment in the Lake Victoria Basin (HoPE-LVB) project, staff and partners have engaged key district, national, and regional health and environment officials in Kenya and Uganda. The goals:

- 1. Increase stakeholders' understanding of the interconnectedness of population, health, and environment (PHE) issues and the benefits of the PHE approach;
- 2. Increase the capacity of key stakeholders to communicate the PHE approach;
- 3. Provide platforms for policy dialogue to influence regional and national stakeholders to integrate PHE into their programs; and
- 4. Raise the profile of the HoPE-LVB project

The Sustainable Development and Water Security in the Lake Victoria Basin Building Bridges between Lake Victoria and the Baltic Sea - Lake Victoria / Baltic Sea Seminar Stockholm, August 12, 2001 this can as well provide more insight on developing more sustainable models.³

2.3Lake Victoria wetlands

Play critical role to the lake ecosystem such as

- Support wide biodiversity of flora and fauna including fish breeding sites.
- Buffer the lake from pollutants -Improve water quality
- Fertile soil for agriculture and good for livestock grazing during dry season
- Food including fish and other social economic functions

Threats to Wetlands

- These have been threatened by developments and conversions for other uses
- Estimated that 75% of the wetlands have been affected significantly while 13% is severely degraded
- Conversion is aggravated by lake water level recession due to extended draught in some years

S/N	Type of Wetland	Area Covered /ha	%
1	Permanent swamps,	58,000	14
	mainly reeds or Papyrus		
	spp		
2	Seasonal	308,000	73
	swamps/floodplain		
3	Tree swamps	33,000	8
4	Open water, mainly inland	23,000	
	lakes		
Total		422,000	100

² HOPELVB Advocacy - Building Support for the Integrated Population, Health, and Environment Approach 2016

³ The Sustainable Development and Water Security in the Lake Victoria Basin Building Bridges between Lake Victoria and the Baltic Sea - Lake Victoria / Baltic Sea Seminar Stockholm, August 12, 2001



Lake level recessions and extended draught resulted into;

- Serious conversion of wetlands into farming land
- Degradation by livestock coming from upper basin
- Erosion/Destruction of facilities on beaches



2.4 Waste water discharges from industries

Waste water discharges from industries contribute to the overall quality of Lake Victoria water due to the fact that most of these do not meet discharge standards.

Adoption of resource efficient and cleaner production options have shown significant benefits in terms of reducing pollution, improved health and safety of the workers and financial savings.

2.5 Water hyacinth resurgence

Causes of water hyacinth resurgence

- Continued entry of nutrients into the lake and other water bodies
- Other invasive weeds in the lake chest nut (Trapanatans) 12,8 ha (2010)
- Control measures applied
- Biological control –weevils (Neochetina eichhorniae, Neochetinabruchi), mites (orthogalumnaterebrants) and fungal



 Manual removal: High reduction of WH cover mainly contributed by biological and manual control activities conducted by LVEMP II communities subprojects CDDs). The occurrence of new fungal pathogens at the western part of the lake (Rubafu) may have contributed to reduction



Environmental Problems and Poverty Eradication In The Lake Victoria Basin The Case of Lake Victoria Environment Management Project LVEMP – Tanzania - By Mr. Abubakar R.M.S. Rajabu presentation.⁴

2.6 Fisheries status in Lake Victoria

- It supports world inland fisheries of commercial species; Nile perch 27.3%, Dagaa55.4%, Haplochromines 8.0% and Tilapiines6.5% amounting to 834,217.30 metric tons where 58.4% is from Tanzanian part (LVFO-CAS, 2014).
- The total catch value at beach for Tanzania is estimated at USD 360,720,681 contributing significantly to the economy of Tanzania.
- 2014 103, 540 total number of fishers
- This is an increase of 2,290 (2.3% increase) fishers compared to 101,250 reported in the 2012.
- Gender distribution of fishers in 2014 whereby male fishers were 99.60%

2.7 Interventions by LVEMP II

Interventions by LVEMP II the objectives of the Project are to contribute to:

- The improvement of the collaborative management of the transboundary natural resources of the LVB among the Partner States; and
- The improvement of environmental management of targeted pollution hotspots and selected degraded sub-catchments for the benefit of communities who depend on the natural resources of LVB.

Achievements Reduction of lake pollution and improve sanitation

- Promotion of cleaner production technologies to date trained 118 enterprises and 81 adopted CP options
- Constructed sludge treatment facility for Bukoba Municipal
- Rehabilitation of Mwanza City abattoir and construction of waste water treatment facility (artificial wetland integrated with bio digester
- Lateral and house connection to main sewer line for approx. 1,000
- Construction of 14 toilets at schools in Mwanza
- Constructed 47 public toilets in the basin -beaches, schools, markets
- Procurement of 3 Cesspit Emptier in the process

2.8 Challenges

- I. Low awareness of environmental issues and their management
- II. Weak integration of institutions

⁴ Sustainable Development and Water Security in the Lake Victoria Basin Building Bridges Between Lake Victoria and the Baltic Sea - Lake Victoria / Baltic Sea Seminar ,Stockholm, August 12, 2001

III. Lack/expensive of alternatives of environmental degrading demands e.g. for cooking

IV. Weak enforcement/inadequate facilitation on natural resources management

3.0 Respondents Opinions

Respondents	Challenge Faced	What Can Be Done
Water supply authorities	 Protection of water sources -Adequate Information on protection Measures as established by the laws -Limited legal enforcement capacity 	 Support in development of simplified version law requirements measures IECs Advocacy on Policy/Laws reforms
Fisheries Department,	-Collaboration -Data/Information sharing	Coordinated Planning
Local Government Authorities (LGAs)	-Collaboration -information sharing, -Capacity building	 Strengthening LGAs capacity to the identified challenges
Media	-Capacity building -Information sharing	- Information sharing

4.0 CESOPE Strategic Areas of Interventions in Relation to the Findings

From the findings above, CESOPE and its strategic partners for ensuring that the study is put on use, depending on resources both financial and human can engage in;

1. Major Ecological and Economic Importance of Lake Victoria

Throughout the study it was quite clear that most of the communities are only looking at Lake Victoria specifically from an economic point of view (Fishing and Transportation), most of the respondents did not understand what the Ecological benefit of the lake are.

Such can be done through;

- i. Awareness Creation through radio and television programmes (It addresses the 2.8 Challenges bullet I)
- ii. Designed IECs materials
- iii. Public Awareness Meetings with communities along the Lake Victoria
- iv. Capacity building to established water committees

2. Threats to the Lake Victoria Benefits and Causes of Pollution and Sedimentation of the Lake Victoria

Stakeholder's engagement is important in this aspect to ensure there is a well designed plan/mechanism to address ways to reduce threats;

Key stakeholders;

- I. Districts authorities surrounding the lake
- II. Nile Basin Authority
- III. Lake Victoria Authority
- IV. Vice Presidents Office
- V. Water Supply authorities in each region along Lake Victoria
- VI. Transportation Industries/ Companies operating in the lake
- VII. Fisheries along the Lake Victoria
- VIII. Small Miners
- IX. Farmers along the Lake Victoria

5.0 Stakeholders' Analysis

The Stakeholder Analysis is the process of identifying and analysing stakeholders, and plan for their participation (MacArthur, 2011). The basin has several stakeholders, who play different roles in pollution control and prevention, water resources utilization and management. Some have the roles in water uses (water users) while others may led into pollution of water sources. There is another group of stakeholders who want to collaborate with the Board to address some of the challenges in the basin.

The analysis is important in order to recognize each stakeholder's efforts in the business of Water Resources Management and to avoid duplication of efforts and improving leverage and synergies (nexus). The wise use of stakeholder analyses can help to initiate the baseline issues that are solvable in ways that are technically feasible and politically acceptable and that advance the common good (Bryson, 2007).

In the process of developing this Strategic Plan, a Stakeholders Analysis was done during stakeholder's workshop whereby information was collected based on the: types of Stakeholders, their Expectation from the Basin, as well as the Impact to the Basin Board if we do not meet their expectations. The participants were able to discuss and agree on what is going to be written. Table 4 below provides the summary of the Stakeholders Analysis that was done.

No.	Stakeholder	Expectations	Potential Impact

1.	Water supply authorities	- Protection of water sources	
		- Hydrological information	Increased Non-Payment of water use
		(quality and quantity)	fee.
		- Issue water use/Discharge	
		Permit	
		-Ground water potential	
		information (quality and quantity)	
2.	Irrigators, Mining	- Protection of water sources and	-Will affect sustainability of water
	companies, Aquacultures,	provide hydrological information,	sources
	Industries, Fishermen,	-Issue water use/Discharge	-Make them not to comply.
	Marine transporters,	Permit	-Water Use Conflict
	Private domestic water	- Ground water potential Maps	
	users and Hotels.		
3.	Ministry of Water	-Adhering to Water Policy,	- Loss of credibility
		Legislation and guidelines.	- Interference of the Board's work
		-Enforcement of Water Act.	- Restructuring of Basin Water
		- To provide Reports	Board.
		-Promptly/timely conflict	
		resolution.	
4.	Fisheries Department,	-Collaboration	-Loss of credibility
	NEMC, Research	-Data/Information sharing	-Uncoordinated Planning
	Institutions, TMA,		
	Universities		
5.	Local Government	-Collaboration	-Depleted water sources

	Authorities (LGAs)	-information sharing,	-Failure to incorporate WRM issues
		-Capacity building	in their plans.
6.	Water Users Associations	-Capacity building,	-Increased Non-compliance.
		-Timely Registration	-Timely conflict resolution
		-Timely conflict resolution	- Depletion of Water Resources
		-Information (hydrological and	
		hydrogeological	
7.	Catchments Water	-Capacity building	-Depleted water sources.
	Committees	-Collaboration.	-Uncoordinated planning
8.	Media	-Capacity building	- Information sharing
			- Ignored Imbalanced reporting/
		-Information sharing	distortion
			-Wrong image

6.0 Recommendations

- Reduction of excessive use of river water for irrigation and industrial use
- Monitoring of water level is done only at Jinja in Uganda. There should be a monitoring system developed for Kenya, Uganda and Tanzania. We should not only rely on Foreign Agricultural Service (FAS), a Global Reservoir Monitor, to inform us about the level of our lake.
- Communities can also be involved in measuring river water levels and even lakes. River water gauges can be manned by trained community volunteers.
- EIA should be done to all major projects to be implemented in the Lake Victoria basin. The EIA should be discussed and accepted by all East African Countries before implementation begins

7.0 Overall Conclusion of the Study - Implementation of Ecological Conservation Agriculture to Conserve the Lake Victoria Catchment Area

1: Relevance

As observed Lake Victoria is of importance to the lives and other needs for the people and ecological aspects, the study remains relevant to CESOPE and other Key stakeholders in the to ensure adequate measures are established to conserve the lake for future generations.

2: Implementation

- I. The implementation of any project to address issues/findings of the study will require a well coordinated plan involving the very key stakeholders in this report. Since it requires collaboration of the many stakeholders to have the right message and information delivered.
- **II.** Implementation process can be phased;
 - a. Awareness Phase Programme Conduct Massive Campaigns about strategic areas of intervention and how all can be involved
 - Ecological Conservation Phase It will require well established models, tested and proven in other parts of the world which can then be adopted and scaled across the countries harboring Lake Victoria.

References

Sustainable Development and Water Security in the Lake Victoria Basin Building Bridges Between Lake Victoria and the Baltic Sea, Lake Victoria / Baltic Sea Seminar, Stockholm, August 12, 2001

Building Support for the Integrated Population, Health, and Environment Approach, HOPELVB Advocacy 2016

Satoyama Initiative Thematic Review vol. 3, 2017

Eric O. Odada Daniel O. Olago Washington O. Ochola; Environment for Development: An Ecosystems Assessment of Lake Victoria Basin Environmental and Socio-Economic Status, Trends and Human Vulnerabilities

The World Bank - Lake Victoria Environmental Management Project III (P165352)

Mission Report Tanzania Scoping Mission Marine Fisheries Tanzania; Authors: Luc van Hoof and Marloes Kraan Wageningen University

Midterm Review of the LVEMP II Civil Society Watch project of the East African Sustainability Watch Network Final Report

Annex-2. the sub-project outcome of OSIENALA

Please see next page.

COMMUNITY-BASED STRATEGY FOR THE IMPROVEMENT OF ENVIRONMENT IN THE LAKE VICTORIA BASIN

(January - April 2020)

A PROJECT PROPOSAL

Submitted to Association for Mountain-River-Lake Regional Sustainable Development

Contact Person Dr. Obiero Ong'ang'a Executive Director OSIENALA (Friends of Lake Victoria) Dunga Beach P.O. Box 4580 Kisumu Kenya

Email: <u>oonganga@osienala.net; ogonda@osienala.net</u> Website: <u>www.osienala.net</u>

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1. <u>Purpose Statement</u>

Lake Victoria is the world's second largest freshwater lake and the largest lake in Africa, with a total catchment of 250,000 square kilometres. The Lake Victoria Basin (LVB) area crosses five countries: Tanzania, Kenya, Uganda, Burundi and Rwanda. The East African Community considers the Basin to be critical to the region's development, and has thus established the Lake Victoria Basin Commission (LVBC) to coordinate the sustainable development agenda of the LVB. LVBC's stated vision is to ensure "a prosperous population living in a healthy and sustainably managed environment providing equitable opportunities and benefits." The populations in the area have a vested interest, and a critical role to play in protecting the area's rich biodiversity and ecosystem integrity. The interconnection and interdependency between human activities and the environment calls for a regional, integrated response to properly manage existing and emerging threats to the vulnerable biodiversity of the entire LVB area, and associated ecosystem services. It is against this background that OSIENALA (Friends of Lake Victoria), is requesting \$5,000 over three months to implement the Community-based strategy for the improvement of environment in the Lake Victoria basin project to develop a set of coordinated and sustainable activities that address the interconnection between human life and the LVB ecosystem.

Currently, unsustainable rates of fish harvesting (e.g., overfishing) and destructive fishing practices (e.g., use of illegal gear), poor agriculture practices and forest clearing, compounded by rapid population growth and inadequate government policies, regulations and provision of services, are the driving forces behind a rapidly changing and degrading ecosystem. In addition, ongoing activities such as discharge of untreated sewage and other pollutants into the lake are causing harm to the water quality; nutrient runoff from agriculture practices is causing eutrophication; and siltation from the erosion of deforested watersheds further threaten the health and livelihoods of the millions of people who depend on the lake's natural resources. Rapid increase in populations, rural to urban migration and the shrinking arable land, has put more pressure on environment. Out of a population of 43 million the World Bank estimates that the rate of extremely poor has dropped from 47% in 2005/06 to 39% in 2012/13. However, current and future expected changes in climate are likely to reverse this positive trend unless effective mitigation and adaption measures in both rural and urban areas are put in place. Food security and the local and national economy is expected to be affected.

Estimates from Stockholm Environmental Institute¹, indicate that the region will lose up to 3% of its annual GDP from climate change by 2030 and states that *'Future climate change will lead to additional and potentially very large economic costs. These are uncertain, but aggregate models indicate additional net economic costs that are equivalent to a loss of 1- 3% of GDP each year by 2030 in the region. These arise from potential threats to coastal zones, health, energy, infrastructure, water resources, agriculture and ecosystem services.'*

¹ The Economics of Climate Change in East Africa, 2009

This project will focus its efforts in two counties adjacent to Lake Victoria, namely Kisumu and Homa Bay counties. The Lake Victoria basin itself supports the livelihood of about 12 million Kenyans. Despite the region's high agricultural potential, recent soil degradation has led to incidences of abject poverty for 30 to 50% of the rural households and current natural resource management practices are no longer adequate to meet food needs or maintain the resource base in the region. Population densities are high in large parts of the counties adjacent to Lake Victoria. There are some parts in the rural areas that can be described as peri-urban, however, they have serious planning and resource challenge.

According to the National HIV Surveillance Report 2010, the national prevalence rate stands at 6.3 per cent, Nyanza Province 15.3 per cent, Kisumu 11.2 per cent, where Kisumu town has a prevalence of 15 per cent and Kisumu Rural 8 percent (See Figure 1 Below).



Estimated Adult HIV Prevalence in Kisumu & Homa Bay Counties

Figure 1: Average HIV figures

In the health sector, most resources have been diverted to the prevention and treatment of HIV/AIDS leading to a strain on the resources meant for development. Consequently, HIV/AIDS is hindering the efforts to create wealth and employment by draining both national and county economic resources. Many students continue to drop out of school to either care for the sick or their young siblings leading to an increase in the rates of school drop-outs.

Homa Bay County is divided into two regions namely the lakeshore lowlands and the upland plateau. The lakeshore lowlands lie between 1,163 – 1,219 m above the sea level and comprise a narrow stretch bordering the Lake Victoria especially in the northern parts of the county. The county is drained by a number of rivers namely Awach Kibuon, Awach Tende, Maugo, Kuja, Rangwe and Riana rivers, most of which originate from Kisii and Nyamira counties. There are two rainy seasons namely the long rainy season from March to June and the short rainy season from August to November. The rainfall received in the long rainy season is 60 per cent reliable and ranges from 250 –1000 mm while 500 –700 mm is received in the short rainy season. The county receives an annual rainfall ranging from 700 to 800 mm.

Ecologically, Homa Bay County can be divided into seven agro-ecological zones of which four classified as Upper Middle (UM1-4) and the others are known as Lower Middle (LM1-4). The former supports crops such as coffee, maize, tea, sunflower, pineapples, tomatoes, soya beans, sugarcane, etc. The Lower Middle zones are agriculturally marginal and partly semi-arid. It supports crops such as green grams, millet, sorghum, tobacco, sunflower, sugarcane, beans, pineapples, sisal and groundnuts, grain legumes, sweet potatoes, sunflower, *simsim*, green grams, rice and vegetables as well as livestock. The LM (1-4) zones border the lakeshore where fishing, livestock and farming are the prominent activity and major means of livelihood and income.

Fishing is a prominent activity for the county engaging over 18,300 people and 3,600 families. The county has 151 landing beaches managed by 133 beach management units (BMUs) in Mbita, Suba, Rachuonyo and Homa Bay Sub-Conties. According to the 2010 Frame Survey report (KEMFRI 2010), the county had a fish catch of 12,000 tonnes valued at Kshs. nine billion².

Kisumu County can be divided into 3 topographical zones namely: the Kano Plains, the upland area of Nyabondo Plateau and the midland areas of Maseno. The flood prone Kano Plains lie on the floor of the Rift Valley and lies averagely at an altitude of 1,835m above sea level. Within the county there are three major rivers flowing into the Winam Gulf namely: the Nyando, Kibos and Sondu which are heavily silted, resulting in the extensive formation of lakeside swamps including the Nyando river wetland. The sandy and clay soils which are characteristic of the Kano Plains and the county in general. The western part of the plains are dark cotton soils commonly associated with the swampy landscape. Sugarcane, rice and cotton are the main cash crops in Kisumu County while sorghum and several grain legumes is the base of subsistence farming here. Generally the county rainfall pattern is bi-modal with varied intensities depending on proximity to the hilly landscapes with the long rains occurring in March and May while the short rains occur in September to November. The lowland area of the county receives a mean annual rainfall of 1,000-1,800mm with the peaks generally falls between March and May and September to November. The mean annual maximum temperature ranges 25-35°C and minimum 9°-18°C.

Soil erosion with continued loss of fertile soils and siltation of rivers and water ways leads to frequent flooding especially in the lowlands which are found in Nyakach Sub-county. The unorganized sand harvesting activities in some parts of the county threatens to contribute further to increased soil erosion.

Although there is a large labour force amongst the women and youths in Kisumu County, the total unemployment level in the County is estimated at 12.5 per cent (15% for females and

² Homa Bay County development plans for 2013-2023

10.6% for males) who are unemployed. Youth unemployment in the county is mainly due to lack of start up capital and entrepreneur skills. The literacy levels are fairly high in Kisumu County with an estimated 80 % capable of reading and writing. The secondary school gross attendance ratio for the county is 36.5 and many more people are at tertiary and university level of education.

The county government has proposed several new water projects. However, a majority of the population is still water insufficient and even depend on untreated open water systems. Kisumu County is yet to design and develop suitable waste disposal systems to help manage its sprawling large quantities of solid waste (garbage) and effluents. Provision of sanitation facilities in urban and local fishing areas of the county is inadequate. The mushrooming of informal settlements in urban areas and local beaches exacerbates the already poor sanitation.

2. Project Description

OSIENALA will aim to give underserved communities the knowledge and skills to conserve the environment and to reduce levels of poverty through improved and/or more secure livelihoods, and increase their capacity to sustainably manage natural resources in the LVB. In view of these identified shortcomings, challenges and issues affecting LVB, OSIENALA believes that there is much that need to be done by all stakeholders to the development of environmental protection practices which must not only be pushed to a sustainable level but also address key issues such as health, income generation activities and general social welfare. Doing this would ensure that the people exploit the available resources prudently. The proposed project is therefore inclined to enhance mitigation and adaptation measures to the impact of climate change thereby reducing the vulnerability of local communities. This project will respond to the needs of the community by offering access to clean energy options, safe water provision as well increase the food security.

The project will work in Kisumu and Homa Bay counties of Kenya. Thus the **Goal** of project will be: **"Enhanced capacities of communities for environmental protection and improved livelihoods in the Lake Victoria basin ".**

Objectives:

The overall objective of project is to build the capacity of the communities in order to protect the environment while at the same time improving their economic and social well being within the Lake Victoria Basin".

In order to achieve the broad objective, the project will seek to accomplish the following specific objectives:

1. To build the capacities of local community based organization to conserve and protect the environment within Lake Victoria basin.

2. To promote information dissemination and the development of environmental protection messages through radio programs

Objective 1: To build the capacities of local community based organization to conserve and protect the environment within Lake Victoria basin

OSIENALA (Friends of Lake Victoria), cognizant of the fact that lake conservation requires multi stakeholder approach, is proposing to build the capacities of the community members on environmental protect and on alternative livelihoods

Village Conservation Teams (VCTs)

The project will leverage existing networks of Village Environmental Teams – community volunteers who provide education and deliver messages to the communities at the village level. These lay people live in rural communities and are trained in the in conservation to design and implement outreach events to disseminate critical integrated information, education, and communication messages and materials, as well as trained in alternative conservation agriculture practices.

The project will also work with VCTs and CBOs to conduct community mobilization activities, for example organizing international conservation days and other outreaches

Community-managed Conservation and Improved Livelihoods

The project will establish tree nurseries as businesses to motivate and improve the livelihoods of VCTs. In order to generate income, aimed at increasing the sustainability volunteer activities, VCTs will be given tree nurseries to manage.

Beach Management Units

The fishing communities around Lake Victoria are organized through the formation of legally empowered Beach Management Units (BMUs), community-based organizations that bring together everyone involved in fisheries at a beach to work with government and other stakeholders in managing fishery resources and improving the livelihoods of the community members. Guidelines on BMUs now require that women serve on all BMU Committees and that BMUs incorporate the concerns and priorities of women in planning and decision-making. Thus, the project will meet with BMU members, along with the trained VCTs, to engage both men and women in a full range of integrated conservation behavior change activities.

Community Agro-Forestry

The project will foster sustainable land use, conservation agriculture, and water-shed management to improve water quality by reducing the amounts of nutrients in sediments being released into the water, which contribute to problems of eutrophication. OSIENALA will conduct community training sessions on conservation agriculture. OSIENALA will work with participating women's groups, farmers, and VCTs to develop community action plans on improved land and water management in order to restore degraded lands and improve productivity and sustainable livelihoods.

Objective 2: To promote information dissemination and the development of environmental protection messages through radio programs

The project will improve the access to general information on environmental conservation through the use of radio programs. The targeted communities through increased access to information through radio programs will benefit from the talk shows as well as invited experts who will capacity build them on various issues. In order to achieve this objective the following activities will be undertaken:

- 1. Hold talk shows to sensitize communities on how to identify and start small scale sustainable income generation activities
- 2. Develop radio programs to train communities on business management/small scale farming plans (drafting of business plan, demand/supply assessments, book keeping and other financial literacy trainings).
- 3. Hold talk shows on ecological sanitation and hygiene.
- 4. Hold talk shows on identification and rehabilitation of natural springs.
- 5. Hold radio programs on wetlands and natural resources monitoring and evaluation

Project Management

OSIENALA will be the principal recipient and overall implementing agency. The Executive Director of OSIENALA Dr. Obiero Ong'ang'a and OSIENALA's Deputy Director Dr. Godfrey Ogonda, will be the Project Managers. Dr. Ogonda has over 12 years experience implementing related project and natural resources management. Dr. Ogonda holds a PhD in Environmental Information Systems from the University of Stuttgart and Masters' and Bachelor's degrees in Engineering from the University of Nairobi. As the Program Manager for the proposed project, Dr. Ogonda brings broad-based and hands-on experience in the various sectors and extensive advocacy experience around the issues of Renewable energy, water, sanitation and sustainable exploitation of natural resources across the Lake Victoria Basin.

OSIENALA management structure

OSIENALA is a professional NGO committed to protection of the environment of lake Victoria and its basin. It has a Board of Directors that reflect local, regional and international representation. The secretariat is headed by an executive director, assisted by two deputy directors in charge of programs, and administration and finance.

OSIENALA's working policy

In achieving its goal, OSIENALA is committed to working closely with the governments and civil society organizations using gender-sensitive approaches and partnerships that would ensure effective implementation of all activities. Consequently, OSIENALA strives to serve as a forum for exchange of views and experiences on environmental matters affecting the region and also build the capacity of various CSOs through seminars, workshops, trainings and other community interaction fora in order to effectively address environmental and resource management problems. In order to establish its own database to justify its corrective and

remedial actions, OSIENALA carries out research and information exchange programmes in collaboration with other institutions that are working in the same areas. Over the years, OSIENALA has brought together experts of different backgrounds to provide consultancy and capacity-building services to local NGOs, CBOs and other development institutions on various issues such as financial management, fund-raising, NGO/CBO management and Environmental Impact Assessment. Concerted efforts are also made to lobby and advocate for policies that would encourage environmental conservation. International dimension is embraced through exchange visits and personnel attachments founded on the principle of mutual benefits to both parties. These activities have culminated into the establishment of a resource centre on matters and issues related to the lake and the general environment. In addition, collaborative linkages with organizations having similar objectives have been established in order to encourage judicious exploitation of the resources.

Internationally, OSIENALA has been partnering with other institutions and NGOs to conduct research and implement projects across the Lake Victoria Basin. This has helped to create synergy as well as ensuring that all stakeholders are involved in addressing environmental challenges affecting Lake Victoria basin.

OSIENALA-stakeholder interactions

One of OSIENALA's primary objectives was to build the capacity of the communities to effectively become custodians of their own environment and conserve it. This has been the foundation on which OSIENALA has based its activities since its inception. OSIENALA has achieved a lot in this respect through successful sensitization of the communities that has resulted into spontaneous development of suitable community structures for effective management of local resources. These structures are now part of management linkages to the grassroots and OSIENALA is now working well with them to reach all stakeholders at the grassroots. Although this has been mainly done on the Kenyan side of Lake Victoria, the original idea was to extend to the whole Lake Victoria region by unifying the grassroots organizations that are working towards the conservation of the Lake.

Main areas of focus

OSIENALA has over the years developed high level expertise in specific environmental issues by identifying and pursuing critical environmental problems in the region. In this regard, it has, since its inception addressed the followings areas:

- Environmental rehabilitation and conservation programme: This covers rehabilitation and conservation of water bodies (Lake Victoria, satellite lakes and rivers), wetlands, and resources (fisheries, wildlife and birds).
- **Capacity building:** through seminars, training workshops and training courses and radio programmes in various relevant topics.
- **Energy conservation:** Biomass is a major source of energy for rural communities and its conservation through regeneration initiatives and use of energy-efficient devices are

vital for its sustainability. Activities envisaged include tree planting and promotion of efficient charcoal and wood stoves.

- **Research:** Professional personnel within OSIENALA and those in research institutions conduct collaborative research in various areas (water quality, biodiversity, role of wetlands etc).
- **Lobbying and Advocacy:** Relentless effort is made to use every forum, whether organized by OSIENALA or not, to lobby and advocate for environmentally friendly policies and the establishment of institutional frameworks that promote environmental protection.
- Information dissemination and community Education: Done through regular issues of bulletins, newsletters and FM radio programmes.
- **Climate change:** Reinforcement of climate change adaption and mitigation measures to reduce vulnerability of communities in the Lake Victoria Basin.

Given the wide range of issues of concern that needed to be addressed, OSIENALA developed a comprehensive **Strategic Plan** for the period 2015 to 2020 to guide its operations and keep it focused on its mandate.

Linkages, affiliations and partnerships

OSIENALA has in recent years developed close links with a number of international bodies. It is a member of the Living Lakes, which is an international partnership organization that promotes protection and restoration of lakes and wetlands all over the world. Currently, Living Lakes consists of 42 member/partner organizations that support one another through exchange of knowledge, technology and strategies for lakes' management. OSIENALA was introduced to the Living Lakes by Global Nature Fund (GNF), which is one of its founder members. Linkages with international institutions have also been realized through exchange of research students. Over the years, several graduate students have visited OSIENALA, on attachments, to carry out research leading to the award of Ph.D and/or Masters Degrees by their own home institutions. In particular, institutions from Sweden, United Kingdom and United States of America have, in the past, strongly recommended and continue to recommend OSIENALA to their students. In addition to GNF and the Living Lakes, there have also been close partnership with MS-Kenya – a Danish organization operating in Kenya with whom OSIENALA has implemented some projects.

National and regional partnerships

Although one of OSIENALA's desires has always been to work in collaboration with like-minded organizations in the efforts to improve community welfare, it was not until after the restructuring process that a framework for partnership relationship was established. With this formal arrangement, OSIENALA was transformed from a membership organization to a partnership one in which major activities are implemented in collaboration with partner organizations.

Regional collaboration

Since its inception, OSIENALA has successfully implemented numerous programmes to address the condition of the Lake Victoria. Locally, OSIENALA, working in collaboration with various institutions and has initiated and implemented many programmes that directly or indirectly address the problems of this important lake. Regionally, the reconstitution of the East African Community (EAC) has played a key role in improving the management of Lake Victoria. The EAC established the Lake Victoria Basin Commission (LVBC) which is expected to closely work with the wider Nile Basin Initiative (NBI) in preserving the lake and Nile-related resources through formally and mutually agreed arrangements. OSIENALA is working with LVBS and NBI in their efforts to conserve the Lake Victoria Basin and its resources. OSIENALA in collaboration with Kenya National Cleaner Production Center (KNCPC) and networking with other similar organizations in the region, is also having activities that focus on the problems facing Lake Victoria and its basin.

5. Anticipated Outcomes

Annex C identifies the outcomes anticipated as a result of this project and the indicators that will be used to measure them. Targets will be determined after the initial assessments.

Illustrative Outcomes

PROJECT is designed to deliver the following outcomes that collectively cover the overall objective. These are:

- 1. Effective use of ecological sanitation facilities.
- 2. Improved community hygiene
- 3. Enhanced organic home farming (kitchen gardens).
- 4. Reliable source and supply of clean and safe water amongst communities.
- 5. Increased food security amongst communities.
- 6. A healthy and productive society
- 7. Enhanced and efficient environmentally sound land use practices.
- 8. Environmentally enlightened community in the Lake Victoria Basin.
- 9. Enhanced knowledge on climate change issues in the region.
- 10. Increased community resilience and Improved adaptability to the impacts of climate change.
- 11. Improved cooperation amongst the communities in resource and environmental management.
- 12. Improved working relations between CSOs,CBOs and County Governments in resource and Environmental Management.
- 13. More enlightened communities in income generation .
- 14. Better informed and organized communities.

Cross-cutting

- Increased number of CBOs facilitating better interventions outside their traditional sectors
- Dissemination of lessons learned from the project
- Strengthened collaboration on project initiatives

Annex A: Pressure, State, and Response Framework

	Pressures (Human activities that threaten ecosystem)	State (Ecosystem Health)	Response (Policies and Actions)
Agriculture	Fertilizer run off Poor farming methods	Eutrophication Soil erosion and siltation	Eco-agricultural practices Animal husbandry and aquaculture introduction for alternative livelihoods
Forestry	Deforestation (for energy and agriculture)	Forest cover decline	Agroforestry Energy saving stoves and other renewable energy resources Community tree planting
Fisheries	Overfishing Destructive fishing practices	Fish yield decline Fish species extinction	Beach Management Units Sustainable fish farms Sustainable fishing practices
Pollution	Discharge of untreated sewage effluents	Eutrophication	Water and Sanitation committees Sanitation facilities Hygiene education

Annex B: Workplan and Timeline

		2020		
Activity	January	February	March	April
Train Village Conservation Teams (VCTs) on group formation				
and dynamics	Х	Х	х	
Hold project briefing meeting with community members in				
the target areas	Х	Х		
Training communities on business management/small scale				
farming plans (drafting of business plan, demand/supply				
assessments, book keeping and other financial literacy				
trainings).	Х	Х		
Conduct community trainings on sustainable land use and				
watershed management		Х	Х	
Conduct trainings in biodiversity and environmental				
conservation	Х	Х	Х	
Conduct trainings on conservation agriculture, horticulture,				
and agro-forestry practices		Х	Х	
Facilitate communities' development of conservation action				
plans		Х	Х	Х
Train community conservation teams in the management and				
maintenance of community tree nurseries		Х	Х	Х
Distribute tree seedlings to beneficiaries for planting		Х		Х
Construct improved water sources		Х	Х	Х
Development and airing of radio programs on various				
conservation themes		Х	Х	Х
Conduct outreach meetings with key government officials and				
stakeholders to share information and strengthen				
collaboration		Х		

Project Description	Measurable indicators	Means of	Risks and
		Verification	Assumptions
Goal: Enhanced capacities of communities for environmental protection and improved livelihoods in the Lake Victoria Basin	 Management plan Trainings Cross visits 	 Community survey Development reports Observation 	 Availability of funding Positive attitude of the communities Political goodwill
Objectives/purpose			
 To build the capacities of local community based organization to conserve and protect the environment within Lake Victoria basin 	1.1.Number of trainings held1.2.Number of community groups trained1.3. Number community members trained	1.1. List of participants1.2. Registration forms	5.1. Good collaboration with the partners5.2. Peace and security
2. To promote information dissemination and the development of environmental protection messages through radio programs	2.1.Number of radioprograms aired2.2.Number of radioprograms developed2.3. Number communitymembers reached throughradio	2.1. List of radio programs2.2. Radio studio logs	2.1.Community participation2.2.Political good will2.1. Communities adopt the technology

Annex C: Project Logical Framework

Annex D: Proposed Project Budget

	Unit Cost	UNITS	Total Cost	Total
	KES		KES	US\$
Activity				
Objective 1: To build the capacities of local community based organization to conserve and protect the environment within Lake Victoria basin				
Activity 1.1: Train Village Conservation Teams (VCTs) on group formation and group dynamics				
Procurement of assorted stationery	1,000	1	1,000	
Hall hire	4,000	1	4,000	
Transport reimbursement for the participants (40pax)	40	500	20,000	
Refreshments (40pax)	40	50	2,000	
Transport for the staff (2pax)	2	2,000	4,000	
Project staff per diem (2pax)	2	1,500	3,000	
Telephone and coordination fee	500	1	500	
Total budget for Activity 1.1			34,500	345
Activity 1.2: Hold project briefing meeting with community members in the target areas				
Transport reimbursement for the participants (70pax)	70	500	35,000	
Refreshments (70pax)	70	50	3,500	
Transport for the staff (2pax)	2	2,000	4,000	
Project staff per diem (2pax)	2	1,500	3,000	
Telephone and coordination fee	500	1	500	
Total budget for Activity 1.2			46,000	460
Activity 1.3: Train communities on business management/small scale farming plans (drafting of business plan, demand/supply assessments, book keeping and other financial literacy trainings).				
Procurement of assorted stationery	1,000	1	1,000	

	1 0 0 0		1 0 0 0	
Hall hire	4,000	1	4,000	
Transport reimbursement for the participants (40pax)	40	500	20,000	
Refreshments (40pax)	40	50	2,000	
Transport for the staff (2pax)	2	2,000	4,000	
Project staff per diem (2pax)	2	1,500	3,000	
Total budget for Activity 1.3			34,000	340
Activity 1.4: Conduct community trainings on sustainable land use and watershed management				
Hall hire	4,000	1	4,000	
Transport reimbursement for the participants (40pax)	40	500	20,000	
Refreshments (40pax)	40	50	2,000	
Transport for the staff (2pax)	2	2,000	4,000	
Project staff per diem (2pax)	2	1,500	3,000	
Total budget for Activity 1.4			33,000	330
Activity 1.5: Conduct trainings in biodiversity and environmental conservation				
Transport reimbursement for the participants (20pax)	20	500	10,000	
Refreshments (20pax)	20	50	1,000	
Transport for the staff (2pax)	2	2,000	4,000	
Project staff per diem (2pax)	2	1,500	3,000	
Telephone and coordination fee	500	1	500	
Total budget for Activity 1.5			18,500	185
Activity 1.6: Conduct trainings on conservation agriculture, horticulture, and agro-forestry practices				
Transport reimbursement for the participants (20pax)	20	500	10,000	
Refreshments (20pax)	20	50	1,000	
Transport for the staff (2pax)	2	2,000	4,000	
Project staff per diem (2pax)	2	1,500	3,000	

Telephone and coordination fee	500	1	500	
Total budget for Activity 1.6			18,500	185
Activity 1.7: Facilitate communities' development of conservation action plans				
Transport reimbursement for the participants (20pax)		500	10,000	
Refreshments (20pax)	20	50	1,000	
Transport for the staff (2pax)	2	2,000	4,000	
Project staff per diem (2pax)	2	1,500	3,000	
Telephone and coordination fee	500	1	500	
Total budget for Activity 1.7			18,500	185
Activity 1.8: Train community conservation teams in the management and maintenance of				
community tree nurseries				
Hall hire	4,000	1	4,000	
Transport reimbursement for the participants (40pax)	40	500	20,000	
Refreshments (40pax)	40	50	2,000	
Transport for the staff (2pax)	2	2,000	4,000	
Project staff per diem (2pax)	2	1,500	3,000	
Total budget for Activity 1.8			33,000	330
Activity 1.9: Distribute tree seedlings to beneficiaries for planting				
Procurement of assorted seedlings from Kenya Forest Institute in Maseno	400	100	40,000	
Procurement of assorted seeds from Kenya Forest Institute in Maseno	30	150	4,500	
Transport costs	10,000	1	10,000	
Total budget for Activity 1.9			54,500	545
Objective 2: To promote information dissemination and the development of environmental protection messages through radio programs				
Activity 2.1: Development and airing of radio programs on various conservation themes				
Develop a radio programme on environmental conservation and protection	20,000	1	20,000	

Airing of the radio programme on environmental conservation and protection	40,000	1	40,000	
Total budget for Activity 2.1			60,000	600
Activity 2.2: Conduct outreach meetings with key government officials and stakeholders to	34,000	1	34,000	340
share information and strengthen collaboration				
Hall hire	4,000	1	4,000	
Transport reimbursement for the participants (40pax)	40	500	20,000	
Refreshments (40pax)	40	50	2,000	
Transport for the staff (2pax)	2	2,000	4,000	
Project staff per diem (2pax)	2	1,500	3,000	
Total budget for Activity 2.2			33,000	330
Totals (activity costs)	TOTAL		383,500	3,835
Other Costs				
Internet and WIFI	32,000	1	32,000	320
Water and electricity costs	33,300	1	33,300	333
Vehicle repair costs	31,900	1	31,900	319
Communication costs	19,300	3	19,300	193
Totals (administration costs)			116,500	1,165
GRAND TOTAL			500,000	5,000

1.1 Budget Notes

The proposed budget has a ratio of approximately 70% direct and 30% indirect costs.

Annex-3. the agreements with CESOPE and OSIENALA

Please see next page.



Civil Education is the Solution to Poverty and Environmental Management (CESOPE)

P.o.box 4124, Dodoma, Tanzania web; www.cesopetz.orgEmail: cesopetz@gmail.com, cell: +255 753 340 690

Service Level Agreement For Implementation Of Project titled:-

 Project Name:
 Fact Finding Mission on the ecological status of the Lake Victoria Catchment area in Mwanza, Geita and Mara region

 Implementing Organization:
 Civil Education is the Solution for Poverty and Environmental Management (CESOPE)

Between

Civil Education is the Solution for Poverty and Environmental Management (CESOPE)

And

Promotion Association for Mountain- Rever-Lake Regional Sustainable Devolopmeny {MRLSD}

Terms of Reference for this agreement

This contract is an agreement between the Mountain-River-Lake Development Committee of Jiangxi Province (MRLSD) and Civil Education is the Solution for Poverty and Environmental Management (CESOPE) collectively agree with (MRLSD), the "Parties" wherein the former will employ the latter to implement a project titled Fact Finding Mission on the ecological status of the Lake Victoria Catchment area in Mwanza, Geita and Mara region. The Project will cover the following activities:-

Activities

- 1. Data collection on environmental challenges of Lake Victoria Basin
- 2. Identification of key Stakeholders for the planned projects of "Eco-agricultural Techniques for the Development and Protection of Lake Victoria Basin"
- 3. CESOPE will conduct Field Visit and Networking with Local Government leaders in the project areas of Mwanza, Mara and Geita
- 4. Write and Submit a final report to (MRLSD)

Deliverable and Project Output

Submit a final report to MRLSD on the key findings of the project. This report will be a working tool for the planned project of "Integrated Solutions to Great Lake Victoria Basin Sustainable Development" between CESOPE and MRLSD.

Budget and terms of Payment

	BUDGET FOR THE FACT FINDING PROJECT ON THE ECOLOGICAL	TATUS OF LAKE VICT	ORIA BASIN	1. S.
SN	ACTIVITIES	CALCULATIONS	TOTALIN	USDs
	1 Field Visit and Networking with Government Leaders in the project areas		1.00	-
	Fuel		\$	600.00
	Accommodation and Meals	2Pplex30USDsx10	5	600.00
	2 Data collection exercise in Mwanza, Mara, and Geita			
	Renting Car for the researcher for 14 days	10daysx50USD	S	500.00
20-20-00	3 Consultancy Fees		100	
	Consultancy Fees		S	2,000.00
	ADMINISTRATION		\$	300.00
	TOTAL	5	\$	4,000.00

The funds (4000USDs) will be paid to CESOPE in one installment. CESOPE will submit an expenditure report with supporting documents for the expenditure such as receipts, invoices, contracts etc for accounting purposes.

Bank Details

- Name of the Bank EQUITY BANK DODOMA BRANCH
- Name of the account holder: CIVIL DUCATION IS THE SOLUTION FOR POVERT AND ENVIROMENTAL MANAGEMENT(please write as its because the bank makes mistake during registration to a collect way so please write at its)
- Account No.: 3009211396741
- Swift code: EQBLTZTZ
- location: UHINDINI DODOMA
- Branch code: 3009



Signatures



Man Rudy!

Anthony Lyamunda Executive Director/CESOPE

AGREEMENT OF COOPERATION/CONTRACT

Between

OSIENALA (Friends of Lake Victoria) P. O. Box 4580-40103, Kisumu-Kenya Email: <u>osienala@osienala.net</u> Website: <u>www.osienala.net</u>

and

Promotion Association for the Mountain-River-Lake Regional Sustainable Development (MRLSD)

North One Road No. 14 Jiangxi Provincial Government Complex, Nanchang City 330046, P. R. China Email: <u>myt@mrlsd.org.cn</u>, <u>mydomimi@qq.com</u> Website: www.mrlsd.org.cn

Regarding implementation of the project COMMUNITY-BASED STRATEGY FOR THE IMPROVEMENT OF ENVIRONMENT IN THE LAKE VICTORIA BASIN

[January - April 2020]

AGREEMENT OF COOPERATION / CONTRACT

This agreement of cooperation / contract ("this agreement") is made and is effective this [date] OSIENALA (Friends of Lake Victoria) (Hereafter called "the Implementing Partner P. O. Box 4580 – 40103 Kisumu-Kenya Tel.No: +254-20-3588681 Fax.No: N/A E-mail: osienala@osienala.net Web-site: www.osienala.n et

AND:

Promotion Association for the Mountain-River-Lake Regional Sustainable Development (MRLSD)

North One Road No. 14 Jiangxi Provincial Government Complex Nanchang City 330046, P. R. China Email: <u>myt@mrlsd.org.cn</u>, <u>mydomimi@qq.com</u> Website: www.mrlsd.org.cn

Have agreed as follows:

1. SUBJECT OF THIS AGREEMENT

The subject of this agreement is to implement and complete the Project defined as COMMUNITY-BASED STRATEGY FOR THE IMPROVEMENT OF ENVIRONMENT IN THE LAKE VICTORIA BASIN in accordance with *the Project proposal submitted*

2. DURATION OF THIS AGREEMENT

The term of this agreement shall commence on [1st January 2020] and terminate on [30th April 2020], unless terminated by mutual consent by the parties or in accordance with the provisions of this agreement.

3. FUNDING

The implementing Partner is responsible for the administration of [US 5000] equivalent to [KES 500,000]. Exchange rate used: 1 US = [100 KES]. The amount includes activity costs, personnel costs and administration costs. The partner budget is submitted with the proposal.

The amount granted by [MRSLD] is fixed in [US\$]. The total amount in local currency to be received by OSIENALA may vary from the amount indicated above because of fluctuating exchange rates between US\$ and local currency. The total Project expenses in local currency and the equivalent amount in US\$, calculated on the basis of a weighted average exchange rate, must not exceed the approved budget in [US\$].

4. DUTIES AND RESPONSIBILITIES OF BOTH PARTIES

Both parties agree to make their best effort and in the spirit of partnership and cooperation to carry out the activities according to the approved Project and budget. Changes regarding general time

frame, strategies and activities must be based on a dialogue between MRSLD and OSIENALA and require advance approval by the MRSLD.

5. DUTIES AND RESPONSIBILITIES OF THE IMPLEMENTING PARTNER

The implementing Partner (OSIENALA)

- holds the primary responsibility for the implementation of the Project in accordance with the approved Project document, activity plans and budget;
- shall submit request for approval of any changes or reallocation of funds;
- holds responsibility for regular communication with MRSLD on issues of concern for the Project implementation and is obliged to notify MRSLD if it proves necessary to change strategy and activity plans, or in case of delays or essential changes in the conditions for implementing the grant;
- is responsible for securing that the Project activities are carried out in conformity with international human rights conventions ratified by the State, national laws and regulations;
- shall ensure that the salary level of Project personnel corresponds to the average salary level of similar staff working for NGOs in the country where the office is situated and that staff do not receive double payment;
- shall immediately notify MRSLS if there appears to be financial or other irregularities in the Project;
- shall in all information material about the Project state that the Project has been carried out in cooperation with MRSLD
- has agreed that the granting of loans and advanced salary to any person, staff or entity shall be absolutely prohibited..

6. **RIGHTS OF MRSLD**

MRSLD

7.

- have the right to perform a complete audit and to access and inspect all accounts and vouchers related to this Project, at any time they deem necessary, or upon request of the auditors of MRSLD;
- have the right to carry out regular reviews and evaluation missions;
- can at any time request the OSIENALA to inspect accounts and records of suppliers, contractors and their partners, relating to the fulfilment of this agreement;
- can request the OSIENALA to, either indefinitely or for a specified period of time, bar firms from contracts financed by donor funds, if the Implementing Partner or the MRSLD determine that the firm is engaged in corrupt or fraudulent practices.

BANK INFORMATION AND TRANSFER OF FUNDS

OSIENALA will use an internationally well-reputed bank.

Name of Bank:	EQUITY Bank
Address:	OGINGA ODINGA STREET
Account number:	0290296768250
SWIFT-code:	EQBLKENA
Holder of Account:	OSIENALA (Friends of Lake Victoria)
Contact person:	Dr. Godfrey Ogonda, Deputy Director, ogonda@osienala.net

OSIENALA shall calculate and pay all bank-charges and fees imposed on keeping the accounts and performing the disbursements in relation to the Project.

At the expiry of the agreement, the Implementing Partner shall return all unspent funds, including accumulated interests and foreign exchange profits as well as profit deriving from the sale of inventory, unless otherwise approved by MRSLD.

8.

COOPERATION OUTCOME

OSIENALA will be responsible for reporting and monitoring of the Project and will submit the following reports to MRSLD:

• Project Completion Report no later than 1 month after end of project.

The report will cover the following Objectives and Activities:

Objective 1: To build the capacities of local community based organization to conserve and protect the environment within Lake Victoria basin

Activity 1.1: Train Village Conservation Teams (VCTs) on group formation and group dynamics Activity 1.2: Hold project briefing meeting with community members in the target areas

Activity 1.3: Train communities on business management/small scale farming plans (drafting of business plan, demand/supply assessments, book keeping and other financial literacy trainings).

Activity 1.4: Conduct community trainings on sustainable land use and watershed management

Activity 1.5: Conduct trainings in biodiversity and environmental conservation

Activity 1.6: Conduct trainings on conservation agriculture, horticulture, and agro-forestry practices

Activity 1.7: Facilitate communities' development of conservation action plans

Activity 1.8: Train community conservation teams in the management and maintenance of community tree nurseries

Activity 1.9: Distribute tree seedlings to beneficiaries for planting

Objective 2: To promote information dissemination and the development of environmental protection messages through radio programs

Activity 2.1: Development and airing of radio programs on various conservation themes Activity 2.2: Conduct outreach meetings with key government officials and stakeholders to share information and strengthen collaboration

9.

ANTI-CORRUPTION CLAUSE

No offer, payment, consideration or benefit of any kind, which could be regarded as an illegal or corrupt practise, shall be made, promised, sought or accepted - neither directly nor indirectly - as an inducement or reward in relation to activities funded under this agreement, incl. tendering, award or execution of contracts. Any such practise will be grounds for the immediate cancellation of this agreement/contract and for such additional action, civil and/or criminal, as may be appropriate.

11.

TERMINATION OF THIS AGREEMENT

In general, termination of the present contract should be viewed as an absolute last alternative, and it presupposes that both parties have put serious efforts into solving any kind of complications in relation to the cooperation and Project implementation.

11.1 Termination by notice

This agreement may be terminated by either party hereto by three (1) month written notice. Such termination shall become effective on the first day of the month following the expiry of a period of one month after the date of receipt of notice of termination by the other party.

11.2 Termination by default

Either party may with immediate effect terminate this agreement by giving written notice, setting forth sufficient facts to establish the existence of such event, to the other party (defaulting party) in any of the following events:

- 11.2.1 a material breach by a party of an obligation contained within this agreement, and such breach is not cured within 14 days after the written notice is given to the defaulting party;
- 11.2.2 in case of proven unsatisfactory Project progress or performance;
- 11.2.3 the inability on the part of one of the parties hereto to pay its debts as and when they fall due;
- 11.2.4 if a petition is filed in any court to declare one of the parties bankrupt under the bankruptcy law or any similar law or such petition is not dismissed within 14 days or if a Trustee in bankruptcy is appointed or a similar entity is appointed for one of the parties;
- 11.2.5 the liquidation, insolvency or bankruptcy of any of the parties hereto;

12. CONFIDENTIALITY

The parties shall for all purposes and at all-time maintain the details of this agreement as confidential. Further the parties hereto undertake to maintain as confidential all information, sensitive material or any other matter, not intended for dissemination that may come in their possession in connection with the Project or the co-operation.

13. FORCE MAJEURE

The term "Force Majeure" shall be defined as to include by way of example, but not limited to, war, insurrection, riot or other violence, typhoons, flood, other severe weather conditions, earthquake, flood, strike and similar occurrences beyond the control of the parties.

SIGNATURES

On behalf of our organisations, we hereby fully agree upon and approve the above terms, constituting an agreement of cooperation between OSIENALA and MROSPENALA (Friends of Lake Victoria

Lake Victoria Center for Research On behalf of OSIENALA sevel apment On behalf of the MRSLD: 30th December 2019 Date and place Date and place O. Box -8 Ms MAO Yuting] Dr. Obiero ong siancla.org [Deputy Secretary [Exec Signature Signature

Agreement of Cooperation/Contract between the OSIENALA and MRSLD