



BRIEF ON UNDP GEF LAKE TANGANYIKA INTEGRATED MANAGEMENT PROJECT BY SIMBOTWE MWIYA,
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1.0 BACKGROUND AND GENERAL INFORMATION

1.1 BACKGROUND

The Zambian component of the UNDP/GEF –supported Lake Tanganyika Integrated Management Programme (LTIMP) focuses on sedimentation control, which is within the framework of priorities of the sub-regional Strategic Action Programme (SAP). In the SAP, the control of sediment inflows from the steep mountainous terrain bordering Lake Tanganyika in both Mpulungu and Kaputa Districts is seen as one of the most important areas for support. Over-fishing has also been identified as a key issue, and this is being addressed through co-finance and technical cooperation from the African Development Bank, FAO and other partners of the Lake Tanganyika Integrated Management Programme.

Sediment inflows are being reduced through an increase in the area of land brought under sustainable land use, particularly for agriculture and forestry. Emphasis is on institutional strengthening with support to community participation in agriculture, forestry, and soil-erosion prevention.

Best practice and innovation, as well as regional coordination and dissemination of lessons is assured by linking the project to the World Agro-forestry Centre (ICRAF)’s training and demonstration programmes as a regional activity.

1.2 PROJECT OBJECTIVES

Project Purpose: To reduce sedimentation in the inflowing rivers of the Lake Tanganyika basin through cross-sectoral measures that help limit soil erosion and seek to halt and reverse deforestation.

Project outcome: Stakeholders in the lake catchment manage and sustainably use agricultural and forest resources to reduce sedimentation and conserve biodiversity

Lake Tanganyika’s biological and other natural resources protected and sustainably utilized; thereby contributing to the “Global environmental concerns and commitments integrated in national development planning and policies”, which is the higher-level outcome stipulated in UNDP’s Strategic Results Framework (SRF).

1.3 PROJECT COMPONENTS

Output 1: Sustainable natural resource use practices established

Output 2: Alternative income generating activities (AIGAs) developed

Output 3: Awareness of stakeholders on the importance of sustainable natural resource management raised

Output 4: Capacity of local governance structures for sustainable natural resource management enhanced

Output 5: Project efficiently and effectively managed, monitored and evaluated

1.4 INSTITUTIONAL ARRANGEMENTS

The LTIMP is implemented by staff recruited by UNDP on behalf of the Ministry of Lands, Natural Resources and Environmental Protection (MLNREP) which is the implementing partner through the Department of Environment and Natural Resources. The Global Environmental Facility (GEF) provides funding and the United Nations Development Program is the implementing agency. It is worth noting that UNDP Zambia Country office also provided funding amounting to 400,000 USD in addition to the 2,440,000 USD from Global Environmental Facility.

At district level, MTENR has delegated government oversight of the project to the District Development Coordinating Committee (DDCC) chaired by the District Commissioner's office in Mpulungu. To ensure that the project is entrenched and sustained, the project team staff is working with counterparts on the government side in the relevant government institutions in Mpulungu and Kaputa Districts. This will facilitate effective exchange of information and put in place operational phase out modalities that will ensure the continuation of project activities beyond the life of this Project. The Institutions that the project works with at district level are Ministry of Agriculture; Forestry Department; Zambia Wildlife Authority; Water Affairs Department; Ministry of Community Development and Social Welfare; Department of Fisheries; the Local Authorities (Mpulungu and Kaputa District Councils) and District Commissioners offices in Mpulungu and Kaputa.

2.0 The steps employed to achieve the project objectives were:

1. Verification And Validation Of Sites
 - a. Visit Sites
 - b. Confirm Locations
 - c. Validate Available Data/Information on the Sites
2. Create Awareness about the Project
 - a. Meet influential people in communities (councillors, village headmen)
 - b. Meet the Chief
 - c. Meet the community

- d. Facilitation of formation of Village Development Conservation Committees (VDCC) and Catchment Conservation Committees (CCC)
3. Conduct Baseline Surveys
 - a. Participatory through a questionnaire
 - b. Technical through consultants/PRA
4. Formulate Natural Resource Management (NRM) plans
 - a. Take stock of resources
 - b. Establish status of resources
 - c. Establish root causes of observed conditions
 - d. Propose remedial measures through formulation of an action plan
 - e. Formulate by-laws
 - f. Identify Alternative income generating activities
 - g. Consolidate commodity groups
5. Capacity Building
 - a. Conducting training needs assessment
 - b. Conducting trainings
6. Implementation of Natural Resources management (NRM) plans and funding identified alternative income generating activities
7. Monitoring and evaluation (M&E): Although it appears as a last step; there will be M&E throughout the implementation steps from step 1.

3.0 Other noted achievements per output:

Output 1: Sustainable natural resource management practices

- Natural resources management plans and by-laws have been developed by communities in the project sites
- By-law enforcement seen and some cases handled by the communities (26 cases reported most of them on illegal charcoal production and a few on illegal timber harvesting by trained community forest rangers)
- Agriculture demonstration sites where low input agriculture is shown benefiting 13,400 Farmers(5360 women and 8040 males)
- Establishment of tree nurseries in 10 schools
- Demonstration plots for fruits(11 plots for bananas and 3 plots for Oranges) were set up
- Community sensitizations on enforcement of natural resources by-laws resulting in a number of arrests. Chipote Community confiscated 286 pieces of illegal timber while Kabyolwe confiscated 27 and the VDCCs are working hand in hand with the DFO.
- Protection of 200 hectares of natural forests; Trees planted in 50 hectares in Commercial woodlots and 100 hectares on individual farmer plots.
- Water quality monitoring

- Mainstreamed HIV/AIDs, Gender and Climate change in all the trainings as cross-cutting issues during the woodlot nursery establishment training held in 2011

OUTPUT 2: Alternative income generating activities researched, piloted, and disseminated :

- The revolving fund has been established
- Applications are processed by Village conservation development committee (VCDC) level to DDCC level for desk and field appraisal
- In terms of number of beneficiaries **847** people have benefited, **471** of which are males and **366** are females from the disbursed 308,000 USD.
- The project has adopted the policy of helps vulnerable but viable farms and it trains the beneficiaries in Business skills etc
- As of 31st December 2011, the fund has grown from **308,000USD(1.54 Billion ZMK)** originally provided by GEF and UNDP Country office from December 2009 to **323,000 USD(1.615 Billion ZMK)**
- 24 individuals closely monitored by the project have grown their income from an average of 157 USD dollars per year to 5000 USD by investing in vegetable growing; bee-keeping; fish farming and growing seasonal crops

Output 3: Awareness of stakeholders on the importance of sustainable natural resources management raised

- Awareness meetings held for communities in all the 11 VCDCs
- Awareness meetings on tree nursery establishment and management were held at 10 of the 10 schools in the project area
- Awareness meetings for leaders(Chiefs, Councilors and Headmen)
- Capacity of Village Conservation Development Committees, headmen, and chiefs has been enhanced.
- Areas for natural resources regeneration have been identified and demarcated in Mpulungu and Chambanenge local forests

Output 4: Capacity of local governance structure for sustainable natural resource management enhanced

- 11 VCDC have been established and capacity enhanced
- All 11 VCDC have enacted by-laws and are enforcing them

Output 5: Project efficiently and effectively managed, monitored and evaluated

- Mid-term Evaluation was undertaken in July 2011 and it highlighted that the Zambian component was doing very well ahead of the other countries.

4.0 CHALLENGES:

- Limited parcel of land for woodlot establishment. To resolve this challenge, the project works closely with the traditional leaders to get more land for commercial woodlots.
- Rigidity among some local community members to give up natural destruction tendencies such as charcoal burning, illegal fishing and timber harvesting.
- The non disbursement of revolving fund loans to community members due to delays in signing the MOU with Zambia National Farmers Union discouraged the farmers and dampened their morale as they had not anticipated the situation: Need to conclude MOU ASAP
- Political Interference and wrong promises to farmers not to repay back loans affected the recovery rate in 2011. To resolve this challenge the project has been engaging the Politicians and District level Leaders to urge communities to pay back.

5.0 Lessons learnt

- Sedimentation can be controlled through effective community mobilization. The success of the pilot project in Zambia justifies the need for replication of the results in an up-scaled project intervention
- Positive input and backstopping from the funding agency and the implementing agency is crucial in the success of an intervention. UNDP Zambia and The Zambian Government have been very supportive to the Project Management Unit.
- Team building through motivating team members and clear planning play a key role in successful project implementation.
- Positive altitude change is one of the most important steps towards livelihood improvement
- Organizing Communities through groups raises their ability to borrow and pay back
- Women are more likely to pay back loans than men
- Government Officers are very supportive and if properly motivated can deliver meaningful results comparable to short term Consultants.
- Communities have the ability to learn if facilitators are patient despite the literacy barrier
- Political Interference can negatively affect a successful intervention

6.0 Examples of Individuals whose lives have changed because of the UNDP GEF Project interventions are:

1. Mr.Sichilima: Patrick Sichilima of Munjela in Kaputa District used to have an annual income of about K2, 500,000 per year before the project. He got an initial loan of K1, 800,000 that he paid back and got a second loan of K6, 000,000. He is working very hard to become a real household name in vegetable growing in the Nsumbu community and the nearby tourist lodges. His annual income so far has increased ZMK to K 25,000,000 ZMK per year after investing in vegetable production. Mr.Sichilima pays attention to measures against sedimentation.



Figure 3: Mr. and Mrs. Sichilima of Munjela village in their rain fed tomato field. The crop was grown using a loan from the revolving fund (January 2011). This farmer is doing well both on the production side and putting sedimentation measures in place (ridges ploughed across the slope and storm drains).

2. David Silunjili of Mbete Village has developed from a mere fisherman with little income of just under 160 USD per to an onion exporter to the neighbouring Democratic Republic of Congo.



The picture shows David Silunjili (in blue T shirt and gumboots) with a friend in his onion field. The picture was taken in August 2011. He is expecting to harvest 20 x 90kg bags of onion. In 2010 he harvested 14 x 90kg bags which he sold in Kasumbalesa and realized K 10,000,000(2000 USD)

3. Mr Simwinga: Mr.Simwinga has been farming in Mwanamboko area nearly the Lunzua power station. Before the Project started; Mr.Simwinga used to grow just enough Maize for home consumption. He got a loan of K1, 500,000 from the Project and grew a crop of Maize in 2009/2010 farming season. Armed with knowledge on good farming techniques from a number of lessons he had received from the UNDP/Lake Tanganyika Project, he ploughed his field meticulously and paid attention to the required spacing between plants. Mindful of mitigation measures against sedimentation, Mr Simwinga put in place contour ridges around his field. He produced enough Maize for home consumption for the whole of 2010 and sold the surplus and generated K8, 000,000

from his crop of Maize. He used the money he generated to meet household bills such as schools, hospital bills and recapitalization of his farming enterprise through buying agricultural inputs.



Figure 2: Mr. Simwinga in his maize field (February 2011)

Mrs. Simwinga is a hard working house wife. Before the start of the project, she had already set her eyes on starting fish farming but did not have the required capital and therefore was entirely dependent on her husband for all her financial requirements. At the start of the UNDP/Lake Tanganyika Project, Mrs Simwinga joined the Fish farming commodity group, went through a lot of learning sessions and practical demonstration organized by the project. In April 2010, Mrs Simwinga applied for a loan of **K10,000,000(2000 USD)** to set up her dream business. She expanded her fish ponds, bought fingerlings from Misamfu Research station and local materials for making feed. Apart from planning to sell table size fish, Mrs Simwinga's intention is also to be a source of fingerlings for other fish farmers in her community. Mrs Simwinga stocked 4 large fish ponds with 15,000 fingerlings.

The expected production under the current management ,made by fisheries Department in Mpulungu is 763 Kgs of table size @K20,000 per kg implies having an income of **K15,260,000** per six months for a long time to come since the cycle will be repeated over and over using fingerlings kept in a holding pond in each life cycle. The estimate from sell of fingerlings per six months wills K3, 000,000. This implies that Mrs Simwinga has been empowered and will have a total income of **K18, 260,000** every six months for a long time. With this money, she can meet the school and medical bills and her many other personal requirements independent of her husband.



Figure 1: Mrs. Simwinga and her grandson at the fish ponds (January 2011)

5. The Farmers in Mbete Village of Mpulungu have been taught to plant their garden crops on raised ridges. These ridges stop soil erosion and make it easy to carry out furrow irrigation as they help the water to soak in the planted area. As result, production of onion, tomato and Okra has increased in the area. The annual average income in households involved in Vegetable production has increased from about ZMK 3,000,000(600 USD) mainly from fishing at the start of the project in 2009 to ZMK 30,000,000 (5000 USD) in 2011. The farmers sell their produce to Mpulungu and Mbala towns and even the Copperbelt towns of Ndola and Kitwe in the case of Onion. This intervention has helped reduce sedimentation into Lake Tanganyika; relieved the Fish resources of further pressure of being further decimated and has improved the farmers 's disposable income for hospital bills; school fees and household feeding.

