Pro-poor Economic Growth and Environmentally Sustainable Development Poverty and Environment Initiative (PEI)

Mapping Study of P-E Related Innovative Local Best Practices and Local Private Funding Opportunities Sengerema District

2014
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Sengerema District

UNDP-UNEP Poverty-Environment Initiative
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1.0 INTRODUCTION AND BACKGROUND INFORMATION

1.1 Introduction

The economy of Tanzania is substantively dependent on natural resources such as land for agriculture and water, forestry and fisheries. It is estimated that over 74 percent of the population is engaged in agriculture as a source of their daily income (URT 2014). Consequently, the rural poor disproportionately depend on the availability of natural resources for their subsistence and livelihoods. Lately, huge deposits of natural gas have been discovered in Tanzania and the country continues to undertake exploration of oil.

Environment and poverty in Tanzania are inextricably interlinked to the extent that people who depend directly on natural resources for their livelihoods tend to be poorer in material terms (Mascarenhas 2000; Yanda et al, 2003). Whether working in agriculture, forestry or fisheries or relying on small scale extraction to make out a living, the returns from their labour are subject to environmental factors. Even relatively small weather variability can make a difference between a high crop yield and crop failure. Whether in rural or urban Tanzania, poverty tends to force people to degrade the natural resources they depend upon. Forests are cut down to provide fuel or building materials and cooking, thus exposing the land to the vagaries of nature.

Therefore, the sustainable management of these resources and the best use of revenues that is generated from these resources is paramount. Through initiatives of wanting to establish structures and programmes that successfully integrate poverty, environmental and gender concerns, the Government of Tanzania has taken a number of policy and programme initiatives to ensure the country’s improved management of the environment and natural resources (ENR) sector. This initiative includes UNDP/UNEP supported Pro-poor Growth and sustainable environmental - Tanzania Program. The programme aims at increasing the contribution of the environment and natural resources to national development goals, including poverty reduction, sustainable economic growth and the broader achievement of MDGs at both national and local levels.

1.2 Background to the Pro-Poor Growth and PEI Tanzania Programme

The Tanzanian population is about 45 million people according to the 2012 census, with about 29 percent living below the basic needs poverty line whereas the food poverty line amongst the population stood at nearly 10 percent (9.7) (NBS, 2013). However, discrepancies in terms of poverty at district level are alarming and raise
major concern on the development front. Much of the investments in natural resources are discussed and appraised at national level with marginal involvement and benefits to the communities. The Government has reconfirmed the critical importance of localization programme by way of scaling-up participation of the key players at local levels i.e. staff at the District Council Headquarters, Ward and Village levels (where majority of the poor, marginalized and vulnerable groups live), in planning, budgeting, implementation and monitoring of their development agenda.

At local level, from one area to another, based on specific realities, the level of development is variable. Key results are associated with the initiatives by the Local Government Authorities (LGAs), Non-State Actors (NSAs) including Private Sector, and other champions such as farmers, traders, fishermen, and livestock keepers. Despite limited results on the ground from the development initiatives, the country experiences successful best practices on the ground. However those best practices are area-specific, mostly not well known but are also not replicated because of lack of their integration into the District Development Plans (DDPs) and budgeting as well as non-availability of alternative funding such as private funding framework at the local level.

The mapping study is meant to establish the current status of Sengerema District council in terms of focusing more on enhancing national and district (LGAs) capabilities to mainstream (and implement) environmental sustainability, poverty reduction, gender and climate change issues (i.e. PEI components) into development plans and develop better architecture for financing the interventions and financial management in Tanzania.

1.3 Context and Objectives of the Study

The PEI Tanzania programme aims to strengthen existing planning, budgeting, monitoring at national, sector and local level with key partnership and stakeholders involved in areas of Poverty, Environment, Gender and Climate Change Initiatives. As noted earlier, the PEI Initiative is a three-year programme which is implemented from 2014 to 2017, with the coverage of six pilot districts namely, Bunda, Nyasa, Ikungi, Sengerema, Ileje, and Bukoba Rural. A number of surveys such as Mbelle 2013 and Lokina et al 2013 have already been conducted in the selected districts to analyze and compile baseline information (which will serve as a basis for measuring results and achievement of the project targets and goals). These surveys were also meant to identify benchmark and standards that can be used as indicators to monitor and evaluate the progress of the current projects.

The mapping of Sengerema District has mainly focused on three major components. These are (a) the mapping up of poverty-environment-gender related innovative local best practices to be mainstreamed into future local district agenda and budgeting; (b)
mapping up of the local private funding opportunities to support the implementation of future development agenda in Tanzania; and (c) generating the baseline data for the ongoing project sites in the sampled districts.

1.3.1 Objectives of the Study

The overall objective of this study is to map out the most relevant PEI based local innovative best practices and lessons learnt for possible replication elsewhere in future sustainable development endeavors, at local and national level in Sengerema District council through their mainstreaming into DDPs and budgets. The private funding opportunities for the District will also be explored.

1.3.2 Specific Objectives

(a) Map out all PEI best practice initiatives (innovations) in Sengerema District across different sectors. Focus should be on the PEI related innovations or the best practices on the implementation and execution modality of programmes;

(b) Identify constraints to scale-up those initiatives from localized areas to local and national wide level i.e. examine if and to what extent are the approaches, services and interventions replicable across Tanzania and in various contexts;

(c) Propose a list of the best practices that have proven impact on people to be scaled up and related indicators to measure impact when the replication is done, and recommend a strategy with a short medium and long term frame to scale-up those P-E best practices in line with national development agenda, sectors policies and local policies;

(d) Identify the appropriate local and national development agenda to conduct the mainstreaming process; and

(e) Identify most appropriate private funding framework to support the scale-up process both at local and national level consistently with national priorities and development goals, and propose a Monitoring and Evaluation (M&E) system to track changes overtime.

1.4 Layout of the Report

This Sengerema District mapping report is divided into 5 main sections. Section one offers an introduction and the overall background information of Tanzania’s poverty-environment nexus and the UNDP support programme, together with rationale and objectives of the study. Section two outlines the methodology of the Sengerema mapping study and its scope. The third section provides an overview of the socio-economic profile of Sengerema District. Section four offers an in-depth discussion of the study findings while the final section five presents the conclusions and recommendations.
2.0 METHODOLOGY

2.1 The Study Area and Scope

This study was conducted in Sengerema District which is located in Mwanza Region where the District Council and eight communities in Sengerema District were also visited. These are Sengerema Town where Sengerema community radio was visited; Chamabanda Village (Katunguru Ward); Nyalwambo Village (Nyamatongo Ward); and Kahumulo Village (Nyamatongo Ward). Other areas visited during the survey include Nyampande Village (Nyampande Ward); Nyakaliro Village (Nyakaliro Ward); Nyangalamila Village (Isenza Ward); and Mbugani Village (Bulyaheke Ward).

These communities were selected in order to pilot the project on Pro-Poor economic Growth and Sustainable Environmental Development (the Poverty and Environmental Initiatives (PEI Initiative)) because of the evident prevalence of poverty, gender disparities, the trends of the environmental degradation and climate change impacts, as well as opportunities to reduce poverty through sustainable management of domestic natural resources, climate change mitigation or adaption and gender mainstreaming.

It was found during the survey that human, social, physical capital, and the interventions by Sengerema District Council all play a significant role in improving community’s living standards, but that the relatively poor are harmed more by social as well as economic shocks such as weather variability, fall in cash crop prices, pest and disease infestation of food crops and livestock. In addition, it was found that people who had inadequate information, knowledge and those who are inadequately educated and unskilled face more constraints in diversifying their livelihood sources. Given the high levels of poverty in Sengerema, there is a view that it is important to develop and implement local policies and strategies that will get people out of absolute poverty. There is also a need to adopt participatory and joined-up approaches in the development of by-laws, regulations, strategies and projects.

The natural environment in Sengerema District also has not been without problems. For example, pressure on forests has progressively escalated, and ecological degradation is evident, including forest destruction, poor management, and environmental degradation. This has led to negative impacts on marginal communities that depend on forests and forest products. The underlying causes of deforestation are many and complex, but they include the following key drivers:

(a) Land clearance for small-scale subsistence farming leading to forest cover loss, largely due to increasing populations and low-intensity agricultural practices, such as shifting cultivation;
(b) Dependence by resource-poor households on cash income from the sale of forest products, such as charcoal, honey, wild fruits, and firewood;

(c) Commercial production of firewood and charcoal as an alternative source of income and subsequently meet urban energy demands. Note that the demand for firewood for brick making and crop processing is also high. With few exceptions, most of the fuel wood used in the District is collected freely from indigenous woodlands or farmlands which is more or less regarded by many actors as a common resource;

(d) The recent influx of people into areas near forest reserves and water catchment areas is having severe environmental consequences, such as rapid depletion of forests and wildlife, destruction of water resources, and damage; and

(e) Migrants from Mainland Sengerema to the small islands where unsustainable fishing practices take place is also an environmental calamity, as rapid deforestation takes place to meet fish processing needs as well as agriculture (particularly horticulture) to meet the growing food demand in the islands.

Disruption of the ecosystem not only impairs capacity of the natural environment to support life and livelihoods of the present generation, but also denies future generations of the opportunity to access and utilize productive resources.

Thus, eight communities were sampled and surveyed in anticipation that other villages will be rolled out during the coming phases of the programme. In addition to high levels of poverty, environmental degradation and gender issues, the selection of villages was also motivated by an active presence of complimentary interventions and local actors' readiness to engage in PEI initiatives as well as a real need to fill gaps in terms of strategic planning for development and budgeting. Based on the initial work and achievements in the selected project sites, PEI initiative is planning to support implementation of projects in the eight selected communities and Sengerema Town.

2.2 The Approach

2.2.1 Data Types and Data Sources

In Sengerema District, data were collected through literature review (desk review) of the relevant documentation (collected from the District Council and other sources), interviews with individual stakeholders and Focus Groups (FGs) method. As noted earlier, the mapping survey included identification of various successful initiatives in the district, the current status (situation analysis) of selected indicators namely,
income levels, major economic activities, number of beneficiaries (women, men), the natural environment, gender and ecosystem. Other indicators included climate change, local banks, microfinance services, housing, mobile phone, food security, farmers association, women, men, people living with disability and youth groups, Community Radio, Ward Agricultural Resource Centers, poverty, funding mechanism, social protection, and the information related to the District Development Processes such as the planning and budgeting processes, manpower, resource mobilization, allocation and utilization. In other words, information collected was mainly on the District institutional and legal frameworks, project sites (or locations), the community surrounding the project, project partners, project operations, and challenges facing the projects.

2.2.2 Sampling and Data Collection Methods

To accomplish the mapping study, information was collected from the official District reports, District Council Heads of Departments (Council Management Team) and Community leaders’ (where the project sites listed in Table 2.1 are located) FGDs. FGD members at community level (Community Leaders) and the District Council (Heads of Departments) were sampled using a purposive sampling method because the survey targeted these respondents. However, community members who participated in the community FGDs were randomly sampled. The information was collected using interview checklists for District Council’s Heads of Department FGD, Community Leadership FGDs and individual heads of department.

A comprehensive literature review was also undertaken. Review of literature was particularly intended to clearly understand the Pro-Poor Growth programme in terms of the project objectives, design, implementation, scope, coverage, project targets and goals, but also understand district institutional framework, legal framework, the planning and budgeting procedure (including funding and resource mobilization) used by various district projects in Sengerema.

2.2.3 Sample Size and Sampling

While at District Headquarter one FG was organized and a total of eight individual Heads of Departments were interviewed (out of 19 units), at community level 56 community members and leaders were consulted in Focus Group (FG) sessions (See also Table 2.1). For the district FG sessions the following Heads of Departments and their assistants participated in the FG sessions: Ag District Executive Director (DED), District Planning Officers (DPOs), District Agricultural, Irrigation and Cooperatives Officer (DAICO), District Livestock and Fisheries Officers (DLFOs), District Land and Natural Resources Officer (DLNRO), District Environmental and Sanitation Officers (DESO), District Community Development
Officer (DCDO), District Human Resources Officer (DHRO), and District Legal Officer (DLO). At community level FG sessions, the following were involved: Ward Executive Officers (WEOs), Village Executive Officers (VEOs), Villages Chairmen, Village Extension Officers, and some community members.

For individual eight Heads of Department interviews the following were consulted individually: District Planning Officers (DPLOs), District Agricultural, Irrigation and Cooperatives Officer (DAICO), District Livestock and Fisheries Officers (DLFOs), District Land and Natural Resources Officer (DLNRO), District Environmental and Sanitation Officers (DESO), District Community Development Officer (DCDO), District Human Resources Officer (DHRO), and District Legal Officer (DLO).

While participants of the district FGD and community leaders were selected purposively, community members attended community FDGs were randomly sampled. Note also that, where the group has women and men, women were sampled separately from men to ensure equal representation and gender balance.

Table 2.1: Number of Respondents

<table>
<thead>
<tr>
<th>Sn</th>
<th>Village and Ward</th>
<th>Project</th>
<th>Number of Respondents</th>
<th>Type of Consultation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sengerema District Council</td>
<td>PEI Initiative</td>
<td>15</td>
<td>FGD</td>
</tr>
<tr>
<td>2</td>
<td>Sengerema Town</td>
<td>Sengerema Community Radio</td>
<td>5</td>
<td>FGD</td>
</tr>
<tr>
<td>3</td>
<td>Nyampande and Nyakasungwa</td>
<td>Ward Agricultural Resource Centers (WARCs)</td>
<td>4</td>
<td>FGD</td>
</tr>
<tr>
<td>4</td>
<td>Sengerema District</td>
<td>Mobile Kilimo Platform</td>
<td>1</td>
<td>Individual (personal) Interview</td>
</tr>
<tr>
<td>5</td>
<td>Chamabanda Village (Katunguru Ward) and Nyalwambo Village (Nyamatongo Ward)</td>
<td>Irrigation agriculture for paddy and horticultural farming</td>
<td>13</td>
<td>FGD</td>
</tr>
<tr>
<td>6</td>
<td>Kahumulo Village (Nyamatongo Ward)</td>
<td>Fish Farming</td>
<td>6</td>
<td>FGD</td>
</tr>
<tr>
<td>7</td>
<td>Nyampande Village (Nyampande Ward)</td>
<td>Sunflower, maize and paddy processing</td>
<td>5</td>
<td>FGD</td>
</tr>
<tr>
<td>8</td>
<td>Nyakaliro Village (Nyakaliro Ward)</td>
<td>Beekeeping</td>
<td>5</td>
<td>FGD</td>
</tr>
<tr>
<td>9</td>
<td>Nyangalamila Village (Isenza Ward)</td>
<td>Tree Planting (Nursery) and Bio gas</td>
<td>6</td>
<td>FGD</td>
</tr>
<tr>
<td>10</td>
<td>Mbugani Village (Bulyaheke Ward)</td>
<td>Tree Planting (Nursery) and forest conservation</td>
<td>6</td>
<td>FGD</td>
</tr>
<tr>
<td>11</td>
<td>All Project Sites</td>
<td>Training Programmes</td>
<td>NA</td>
<td>FGDs</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>66</strong></td>
<td></td>
</tr>
</tbody>
</table>
3.0 OVERVIEW OF THE SOCIAL ECONOMIC PROFILE OF SENGEREEMA DISTRICT

3.1 Location and Topography

The District is found between 2° to 3° latitudes south of the equator and between 32° 45’ to 32° 45’ East of Greenwich meridian. From North to East, the District boarders Nyamagana and Ilemela Districts of Mwanza region and from the South to the East, the District shares boarders with Misungwi District of Mwanza region.

The newly created region of Geita boarders Sengerema District to the west. The headquarters of Sengerema District is located in Sengerema town, 35 km from Mwanza City. The total geographical surface area of Sengerema District is 8,817 km². Out of this, 3,335km² (37.8 percent) is covered by dry land while the remaining 5,482km² (62.8 percent) is covered by water of Lake Victoria. The area which is covered by vegetation is 677.41km² of which 638.21km² being man-made vegetation.

Although, land is a major economic resource and indicator for most poor communities, Sengerema District is only capable of exploiting 58.3 percent of the total arable land (see table 3.1). This signifies the under utilization of this resource for development. Meanwhile, the area currently used for irrigation is only 130 ha. (about 0.6 percent). The current area under cultivation is used for crop production such as maize, rice, sorghum, cassava, cotton, sweet potatoes, pulses, leguminous species and fruits.

On the West to North Western part of the District, there exist land slopes associated with a number of small hills and seasonal streams. In the Eastern part of the District, the land is flat but it is associated with few hills as well as seasonal streams. Physical features of the District includes a number of manmade water bodies mainly charcoal dams located at Sengerema, Buzilasoga, Sima, Nyamizeze, Nyakasungwa, Nyampande, and Sotta villages.
Table 3.1 Land and Water Area Distribution in Sengerema District

<table>
<thead>
<tr>
<th>Sn</th>
<th>Land Use</th>
<th>Area (Ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Available land</td>
<td>265,673</td>
</tr>
<tr>
<td>2</td>
<td>Land under cultivation</td>
<td>155,000</td>
</tr>
<tr>
<td>3</td>
<td>Land suitable for irrigation</td>
<td>8,130</td>
</tr>
<tr>
<td>4</td>
<td>Land for pasture and grazing</td>
<td>68,963</td>
</tr>
<tr>
<td>5</td>
<td>Forest land</td>
<td>41,710</td>
</tr>
<tr>
<td>6</td>
<td>Land for settlement</td>
<td>67,827</td>
</tr>
</tbody>
</table>

Source: Sengerema District Agricultural Development Plan (2012/13)

3.2 Climatic Conditions

Sengerema District has a bimodal rainfall pattern which consists of short and long rainfalls. The short rains starts in October and reaches its peak in December and ends in January. The long rains start in February and end in May. The annual rainfall of the District ranges from 800mm to 1200mm.

The District mean temperature is between 21°C – 23°C with August being the hottest month. There are two main agro economic zones, namely, the Northern and Southern zones. The Southern zone receives a reliable amount of rainfall between 900 -1200mm per annum. The Northern zone includes Kahunda and Buchosa divisions as well as Nyamatongo and Buzilasoga wards (within Katunguru and Sengerema divisions respectively) and is important for the production of maize paddy, cassava, sweet potatoes, pulses, cotton, fruits and coffee. The Southern zone includes Nyanchenche and Katunguru divisions. However, part of Sengerema division (Tabaruka and Busisi Wards) is also included in this zone. This zone receives unreliable rainfall normally less than 1000mm per annum. The zone is a major area for livestock keeping and growing of drought resistant crops, cotton and sweet potatoes.

3.3 Political Administration

Administratively, Sengerema District was created as a fully fledged district with effect from 1975. Before then, the District was part of Geita District which itself has now become a region. The area was then found to be too big to remain under the same political administration i.e. Geita District as it was hampering the delivery of quality administrative services. The district is run on a hierarchy of 766 hamlets; 126 villages, 34 wards, and five divisions. In terms of democratic representation, the district has two electoral constituencies, namely: Sengerema and Buchosa (and therefore two members of parliament), 34 elected councilors and 13 special seats councilors. Currently, out of all the 34 elected councilors, only one is from the opposition parties.
According to the 2012 Population and Housing Census, Sengerema District had a population of 663,034 of which 330,018 (49.8 percent) were males and 333,016 (50.2 percent) were females with an annual growth rate of 3.6 percent. To date, the District has an estimated population of 711,632 where 354,393 are males and 357,239 are females. The wards vary considerably in terms of size and population characteristics. Sengerema District is predominantly inhabited by the Sukuma and Zinza tribes as well as Kerewe tribes.

3.4 Socio-economic Conditions

The livelihood sources of majority of inhabitants of Sengerema District are fishery, agriculture, livestock keeping and small business enterprises, with agriculture being the mainpillar of the District economy. Currently, the contribution of agriculture to the District GDP is estimated at 70 percent while more than 75 percent of the labour force relies on agriculture for their livelihoods.

The District economy mainly depends on the agricultural sector because more than 90 percent of the people depend on crop cultivation and livestock keeping as their main economic venture. The average farm size per peasant household ranges from 1 to 3 acres. Unfortunately, the agricultural sector has been negatively affected by a number of factors such as climatic condition (rain fed agriculture) and poor physical infrastructure (roads). Due to these two main factors, among others, the performance of the agricultural sector has been constantly poor, and likewise negatively affecting the District’s economy.

Figure 3.2: Women Play the Major Role in Agriculture

As mentioned earlier, crops cultivated in Sengerema District reflect the two agro ecological zones that mainly give rise to the two electoral constituencies. The main food crops produced in Sengerema District are cassava, maize, beans and groundnuts. In terms of cash crops, the mainstay used to be cotton which is no longer, due to the nosedive fall of global prices. Banana was also popular but has also dropped due to persistent outbreak of Bacterial Wilt (Mnyauko) disease which has affected most of Kagera Region and part of Mwanza Regions where banana is grown.
As a result of these developments, the main cash crop has now become maize, rice, sunflower and coffee. Horticulture is also an important sub-sector for many of the inhabitants of Sengerema District. Horticulture products include tomatoes, onions and cabbage which are mainly sold in Mwanza city through Kamanga ferry. Another main economic activity in Sengerema District is fishery as about 62 percent of the surface area of the district is covered by water of Lake Victoria. Fishing is mainly done along the shores of Lake Victoria and its surrounding islands. The District is estimated to have 2,080 fishermen who use modern fishing gears. Catches of fish are used domestically for consumption but also sold in markets outside Sengerema District including fish processing industries based in Mwanza which export fish fillets and fish maws to Europe, Japan, Australia, Hong Kong, China, Israel and the U.A.E. Along the lake shore and island, a total of 83 reformed Beach Management Units (BMUs) take part in Lake Victoria Fisheries resource management. Formation of BMUs and BMU network from village to the district level has increased the capacity of BMUs. Like many other districts in Tanzania, Sengerema District continues to rely on livestock production and ownership to fulfill their social and economic needs.

As highlighted earlier, the District has a total area of 68,963 ha suitable for pasture development. The three main stocks being kept (and their numbers in brackets) are cattle (305,396), goat (196,042), and sheep (9,802). Other stocks include pig (670) and chicken (577,470). In terms of district gross domestic product (DGDP) figures from 2005, Sengerema District was estimated at TZS 198,710,595,628. With this figure, the per capital income was estimated at TZS 711,635 per annum.

With respect to social indicators, Sengerema District has a total of 187 primary schools of which four are privately owned. The below few lines show the current situation in primary school education. There are 56 secondary schools in the District of which 10 are privately owned. In terms of the health sector, the District has about
70 health service facilities which include 1 designated hospital, 9 health centres and 60 dispensaries.

### 3.5 Energy Sources and Homestead Conditions

Like many other districts in Tanzania, Sengerema District suffers from energy shortages of many sorts. The District has no sustainable energy sources. The population of Sengerema is predominantly dependent on biomass (firewood and charcoal) and kerosene as a source of energy. With the exception of town centres where electricity and the use of solar is evident, many villages are still not connected to the national grid. The recent rural electrifications under Rural Electrification Agency (REA) covered few areas of the district in Buyagu Division along the Kamanga – Sengerema road and this electrification has led to the reduction in the use of kerosene. At Chamabanda, the village has been selected to be connected under the REA project. The demand for this electricity is so high that it has outstripped the number of poles estimated. Communities are also using diesel-powered generators for generating electricity though this is an expensive alternative.

There is very limited use of biogas evident in the district: very few make use of this energy source in town centres. Plan International is currently undertaking a training programme at Bukokwa village to encourage the community to use this sound alternative energy. Bukokwa will then be a model which will be scaled up in other villages in the district.

![Figure 3.5: School Children Collecting Wood Fuel](image)

The houses are built from wooden poles/mud walls, earth floor matted with scalable special grass, and roofed with corrugated iron sheets. Upscale houses are built from biomass–fired bricks, with cement floors, and roofed with corrugated iron sheets. There are very few patches of houses built/roofed with grass. Generally, residents have good houses. The majority of residents in Sengerema District get two to three meals a day.

### 3.6 Transport, Communication and Poverty

The main modes of transport for residents of Sengerema District are road and marine. The road networks are passable throughout the year. Currently, the highway road from Busisi through Sengerema town to Chato is tarmac.
Water transport is another means of transport in Sengerema District. The district has access and direct connections to Mwanza city through the ferries at Busisi (which is a government owned ferry and at Kamanga (which is a privately owned ferry). Service providers in these two areas are mainly government and private investors. They include Tanzania Water Service and other private companies including individuals who provide passenger and cargo services using small boats. At Busisi, there are three government ferries, namely: MV Sengerema, MV Misungwi and a third small vessel. At Kamanga, there are two private investors running 3 ferries, namely: MV Orion, MV Samara and MV Kipepeo.

Figure 3.6: MV Victoria in Bukoba Tanzania  Figure 3.7: Dug Out Canoes also used for Water Transport

Given the strategic location of the district, water transport is, by design, another potential investment area in Sengerema District. Such connections could attract investors in water transport easily if the district can create conducive investment incentives. Such investments will not only improve transportation in the region, but also promote trade and tourism among them. Sengerema District is being served by most of the major telecommunication networks in the country although communities face challenges in recharging their phones due to shortage of electricity. It is estimated that 70 to 80 percent of people have mobile phones and are used mainly for communication but also for business facilitation.

The main cause of poverty in Sengerema District is lack of education. People are virtually lazy and not productive enough to meet their basic needs. People are generally reluctant to work especially the youth. For example, there was a man/husband at Nyakaliro village who took a recently purchased bed mattress from the house while his wife was away and sold it at the local pub! This mattress which was the only one in their house was bought by the wife and used by both. In other areas, the severe dry/arid landscape contributes to poverty but also low productivity
due to the use of old technology like hand hoe as a means of production, and shortage of agricultural inputs etc.

3.7 Gender Issues

Gender roles in Sengerema District communities are not significantly different from other District Councils under study. These roles are divided along traditional cultural values with women involved in all household issues, including looking after the family welfare and utility, upbringing of children, fetching water, collecting fuel wood, preparation of local brew (one of the livelihood sources) preparing food and are now also involved in the production sectors of the district.

Like in many other districts in the country, women in Sengerema District are faced with challenges caused by a number of factors. These factors include:

(a) Inadequate provision of efficient credit facilities for women;

(b) Lack of appropriate technologies to simplify their work and thus reduce the workload women face on a daily basis;

(c) Lack of appropriate skills and knowledge for undertaking specific economic activities;

(d) Traditional and cultural barriers that marginalize women within the communities; and

(e) Unused local resources available within communities.

One good example that can amplify the immense challenges being faced by women in Sengerema District is the fact that they are not allowed to inherit family properties, and especially, after the death of parents, husband or close relatives. In some of Sengerema village communities, women walk up to 15km from their home to collect firewood and food. Unfortunately, their culture does not give room for men to assist women in this laborious and backbreaking activity of collecting firewood.
The interviewed women groups were of the view that to accelerate the progress of women, there is a need to empower them through education and training in entrepreneurship, formulation of group and association, business orientation and training, enterprise development, and processing, packaging and marketing, and availing low cost start up capital.

In view of the above, gender awareness raising, education, and mainstreaming should be promoted in Sengerema District. These communities also need to be assisted further in terms of supporting energy saving and village transport and travel related projects such as biogas, energy saving stoves, and animal carts.
4.0 DISCUSSION OF THE STUDY FINDINGS

4.1 Identification of PEI Project Sites

4.1.1 Criteria Used for Project Identification I Serengeti District

A number of sites have been identified for interventions under the PEI initiatives by Sengerema District Council. A total of ten projects have been identified for implementation in Sengerema District (See Table 4.1). These are one Community Radio; two Ward Agricultural Resource Centers (at Nyampande village in Sengerema constituency and Nyakasungwa village at Buchosa constituency); Mobile Kilimo; A number of training programmes (to be organized at a later stage for champions in Sengerema and Buchosa constituencies); Irrigation agriculture for paddy farming; Irrigation agriculture for horticultural farming (at Chamabanda, Nyalwambo and Irunda villages on the shores of Lake Victoria and Nyampande village); Sunflower, maize and rice processing (at Nyampande village and Sengerema town); Fish farming; and lastly 1 beekeeping project (Nyakaliro village).

These sites were identified by the research team in collaboration and agreement with the Sengerema District Council. A set of criteria for project selection and identification of sites were proposed and discussed for each identified project. These criteria and the type of project are presented below:

(a) Sengerema Community Radio

The project site has been confirmed as to be housed at Radio Sengerema FM who will be the implementing partner (IP). The choice of Radio Sengerema FM has been agreed with Sengerema District Council simply because it is a suitable site in terms of frequencies and radio signals which allows clear broadcasting.

First established as a tele-centre back in 2001, Radio Sengerema FM is an established institution in Sengerema (See Figure 4.1). An IP must be a Non State Actor (NSA) with the required expertise which not only operates in the district, but also collaborates with the District Council. Radio Sengerema FM has been identified and recommended following the fact that it is heard by residents throughout Sengerema District and even as far as the neighbouring communities of Geita, Biharamulo, Bunda, Shinyanga, Tarime, Mwanza, Kigoma and Kagera.
Sengerema Community radio is expected to facilitate economic activities in the district for example in terms of dissemination, education, knowledge and information sharing. Extension officers for example will use this radio to disseminate new agricultural technology (and therefore promoting technological uptake) and action alert etc.

(b) Ward Agricultural Resource Centers (WARCs)

The site criteria for the establishment of these resource centres include the availability of a building that will be easily accessible by the majority of farmers. The centres should also be established where electricity is available, where possible, or other alternative energy sources can be installed. They should also be in areas where farmers can access markets for their agricultural and fishing products. With this in mind, Nyampande resource centre at Nyampande village has been identified as meeting these criteria. In fact, Nyampande has been chosen as the district’s resource centre. Nyakasungwa village has also been identified as meeting these requirements but, in addition, it has also been selected to represent the other electoral constituency of Buchosa.

Like Sengerema Community radio, the WARCs are expected to facilitate implementation of economic activities in the district such as information sharing, market information, education, knowledge. Extension officers for example will use the WARCs to disseminate agricultural related information, action alert etc. Foresters and Fisheries Officers can also make use of WARCs to disseminate information related to forest and fishing, respectively.

(c) Mobile Kilimo

This is an interactive mobile platform which will be used for multiple purposes such as financial services, networking, information sharing (communication), awareness creation, public and community sensitization, and early warning system etc. This will be availed throughout Sengerema District as it is estimated that 70 to 80 percent of people have mobile phones and are used mainly for communication, but also business facilitation. While E-Agriculture will mainly be used in sites suitable for production of crops, poultry, bee-keeping etc, E-Fishing will be used in sites located along the lake and river shores and E-Forestry in sites with community or village forests. This facility can also be used to curb illegal activities such as illegal fishing or harvesting of forest products in the community.
(d) Irrigation for paddy and horticultural farming

Sites for paddy have been identified due to their strategic and potential location for irrigation agriculture but also because of their potential to scale up because there are initial developed infrastructure like rubble lining parts of the main canals and division boxes. In these selected sites, PEI project will scale up or make a contribution by taking a project a step forward or completing it. The project aim will be to upgrade paddy farming from being too dependent on rain-fed cultivation to be able to harvest throughout the year.

(e) Sunflower, maize and paddy processing

Nyampannde sunflower processing site has been identified due to the success and best practice of UMIKU group who already manage their own processing machine and is serving the whole community of Sengerema District. Maize and paddy processing has also been identified as potential poverty reduction interventions in Sengerema District.

(f) Fish farming

This project has been identified in order to reduce the pressure being exerted on Lake Victoria due to over fishing but also illegal fishing. This project will also generate incomes to the communities as well as help to meet nutritional requirements. Projects sites are yet to be confirmed.

(g) Beekeeping

This project has been indentified and a site in Nyakaliro village has been confirmed. It has been acknowledged that there is an alarming rate of deforestation in Sengerema District where an estimated 80 to 90 percent of the population depends on biomass as the major and only source of energy.
Much of the surface surrounding village communities in the District is bare. All the trees (forests) have been depleted. Due to this environmental stress from deforestation, unsustainable farming, unsustainable harvesting of forest products etc., a number of beekeeping groups have been identified in the effort to support them to protect forests and plant trees.

4.1.2 Agricultural Farming

(a) Irrigation agriculture for paddy farming

Focus should be placed on assisting irrigation schemes to be fully operational as they have the biggest immediate impact on agricultural productivity and mitigation of climate change. The potential for irrigation is very high as there are numerous valleys and wetlands. Lake Victoria could also be used as a source of water for irrigation to some of the communities along the shores of the lake. Irrigation schemes should therefore be encouraged and supported. The government through DADPs has started with three irrigation projects and hopes to finalize at least one of them this year e.g. Sukuma Irrigation Scheme at Buchosa division.

(b) Irrigation agriculture for horticultural farming

The shores of Lake Victoria and other major perennial rivers have been identified as potential areas for horticultural farming as well as many other valleys present along the shores of Lake Victoria that are conducive. The Sengerema District Council is planning to create a horticulture centre that will have demonstration plots.
Farmers in the District are mainly situated along the shores of Lake Victoria starting from Chamabanda village (Katunguru ward) and Nyalwambo village (Nyamatongo ward) up to Irunda village. The main horticulture products are tomatoes, onions and cabbage which are sold in Mwanza city through Kamanga ferry. There is also Nyampande Green Horticulture farmers group who are heavily engaged in horticultural farming where their main market is also Mwanza city and Sengerema town.

(c) Sunflower, maize and paddy processing

As pointed out earlier, in years gone by, cotton used to be the main cash crop and mainstay of the economy of Sengerema District. Unfortunately, this is no longer the case due to the nosedive fall of global prices, where a kilogram is now selling at TZS 750 per kg, down from TZS 1,100 per kg in 2011. Many of the communities interviewed, for example at Kamumulo village, preferred prices to be at least TZS 1,500 per kg in order to meet their production costs. Banana was also popular but has dropped down due to the persistent outbreak of Bacterial Wilt (Mnyauko) in the district. As a result of these developments, the main cash crop has now become maize, rice, sunflower and coffee.

Sunflower, in particular, is a relatively new crop which was first introduced in the District through a women’s farmers group called UMIKU located at Nyampande village in the 2009/10 season. UMIKU started with 25 members. The group was then able to purchase a processing machine under the DADPs where farmers contributed 20 percent of the cost (TZS 848,000) that was used for buying a motor and construction of the building. Sengerema District Council assisted in installing electricity. The machine is now being managed by UMIKU and operates almost every day and now serves farmers living as far as 85km away at Kanada and Kome Island.

At Sengerema District, DADPs has placed emphasis on sunflower due to its high market value. A 5 liters gallon of sunflower oil is sold at TZS 15,000. It was further reported that, under DADPs two machines will be purchased this season and will be installed at Katwe and Irenza villages. The DDP is to buy a double refinery machine that can crush up to 5,000kg as in some seasons the district production outnumbers the capacity of available machines.
Due to the huge success of UMIKU, more farmers are now engaged in the cultivation of sunflower though it was still established that less farmers are engaged in cultivating the crop as compared to cotton although the former crop has higher income returns and is a quick-win crop. One of the main reasons for this discrepancy can be attributed to the fact that there is limited huge-scale sunflower cultivation as the majority of farms are not more than three acres.

4.1.3 Fish Farming and Beekeeping

Sengerema District Council is yet to identify appropriate sites to promote fish farming. Currently, Cage fishing is non-existent and a totally new fishing method to the majority of fishermen in the district. There exists limited knowledge on fish farming. The majority of fishermen in the District are still heavily dependent on fishing in the Lake Victoria, the second largest fresh water lake in the world and the largest in Africa. It is rich in biodiversity and fisheries are the major resource for the livelihoods of the riparian communities of Sengerema District and also for export. Unfortunately, the lake is now experiencing many problems associated with extensive resource exploitation, which is now threatening productivity and the ability of the lake to sustain a whole range of economic opportunities. Lake Victoria is under growing threat and the problems are profound and cannot be ignored.

Due to limited fishing equipments being deployed, many fishermen in Sengerema District conduct this activity in the evening/night and use *Kasia* famously known as *Bugabuga*. As a result, pressure lamp (*Karabai*) is being used to illuminate the night while fishing. Women are largely involved at the market place as middle people in selling the family’s catch. According to the Tanzania Fisheries Act, permitted fishing nets should be six inches but unfortunately there is rampant use of Beach Seine nets famously known as *kokoro* that are 10mm. Another fishing net related problem is the use of nylon nets commonly known as *uvuviwatimba* that do not decompose at all. Many of these fishermen do not own motor boats. To a large extend, fishing in Sengerema District is mainly done at Kome Island where over 60 percent of the population is involved.

However, there exists the prevalence of illegal fishing, especially at Nyamatongo and Nyakaliro wards, where poison mainly from coffee and tomatoes chemicals from horticulture is heavily used by fishermen from Mwanza city. BMU and local police (*Sungusungu*) exist but they are struggling to contain this problem as fishermen involved in this illegal fishing are heavily armed and have motor boats. A young fisherman was drowned this year Nyakaliro because of illegal fishing. In view of the above challenges in the fishing sector in Lake Victoria, the Sengerema District Council has placed great emphasis in supporting fish farming projects that will be
able to reduce and manage the pressure being exerted on the lake. With this in mind, fish pond farming is being encouraged and will be supported as an inland fishing alternative for the livelihoods of many communities in the District.

4.1.4 Livestock Keeping

Livestock keeping in Sengerema District is mainly cattle, especially Tanzania short horns or commonly known as Zebu and Ankole or Tanzania long horns. Then there are goats and sheep. These are the 3 main categories of livestock although to a lesser extent there is poultry and other livestock. Livestock keeping is mainly for milk production but also for commercial purposes and fattening (kunenepeisha) as well as ploughing. Cattles are mainly sold to cater for the market outside the district.

At the market place, an Ankole weighing between 200-300kg can be sold between TZS 600,000 to TZS 1,000,000. On the other hand, Zebu tends to be sold for much less and weigh between 150-200kg. Livestock keeping and the limited areas for grazing and water has led to conflicts between pastoralists and agriculturalists in Sengerema District.

For example, there exists a conflict at Chamabanda village where pastoralists from Nanchenche ward with huge cattle stock have invaded farmers’ land, causing environmental degradation and ruining agricultural crops. Nanchenche ward is an extremely arid area near Geita region and tends to force herders to look for pasture and water elsewhere.

Because of these challenges, the village government at Chamabanda through its Opportunities and Obstacles for Development (O&OD) decided to embark on the construction of a charcoal dam (rambo) and other water troughs to cater for these huge stocks of livestock. Another rambo is currently under construction at Kishinda village.

With regards to poultry, an incubator has recently been purchased so as to encourage poultry keeping and is currently being installed and will be managed by TAUSI farmers group at Nyakaliro village.
4.1.5 Environment Conservation and Beekeeping

The ecosystems challenges facing Sengerema District includes increasing pressures on resources as a result of rapid population growth, fishing and agriculture characterized by progressive reduction in farm sizes, and unsustainable land use and management practices. Land and freshwater resource base, associated biodiversity and population livelihoods and food security are threatened by land degradation, declining productivity capacity of croplands and rangelands, disruption of water sources, deforestation and encroachment of agriculture into wetlands. Climate change and variability aggravates even further this threat.

Sengerema District is experiencing a rise in deforestation as a direct result of the huge awareness and engagement of farmers into paddy farming as more tracks of land are cleared for this agricultural activity. Even reserve areas previously set aside for livestock keeping is disappearing fast. Water sources have now started to dry up. This has become a source of conflict among agriculturalists and pastoralists in Sengerema constituency. According to Mr. Simon Butera, the DALDO, “cattle eat grass but they do not cut down trees. Agricultural activities cut down trees in an alarming pace”. In years gone by, land use plan were present that stipulated arable land for cultivation, livestock grazing land, stock routes etc. but this is now non-existent.

Figure 4.6: Deforestation Motivated by Charcoal Business in Sengerema

However, at Buchosa constituency, the story is very different. In the two divisions of Kahunda and Buchosa, environmental conservation is very high. There is a lot of aorestation i.e. tree planting which has become a cash crop for timber harvesting and forests have grown and have started to encroach into arable land. Banana crop farming has disappeared. There is also a Mbawa Kavu project that aims at addressing the problem of Water weeds (Magugu Maji) along the shores of Lake Victoria and rivers in the District.

The many functions of the natural environment (both use and non-use value) therefore calls for prioritizing environmental conservations in terms of direct interventions such as tree planting and indirect through awareness raising and finding local solutions. As an integrated solution, it is envisaged that beekeeping should be encouraged and supported. Currently, there is a project at Nyakaliro being managed by the BMU as an income generation project. The project has been able to
purchase 180 beehives and 2.5 percent of generated income will go to supporting the government village office and another 2.5 percent will support BMU initiatives in the village to enhance its performance.

4.1.6 Farmers’ Associations and Microfinance Institutions (MFIs)

As noted earlier, Sengerema District is poorly served with financial services. For example, in terms of banks, there is only mobile CRDB bank at Sengerema town. NMB mobile bank used to be operational at Sengerema District and used to cover areas as far as Nyakaliro ward but is now no longer present. It is therefore paramount that emphasis is placed in supporting SACCOS and other MFIs that have a division and/or ward level coverage where possible so that they can be a platform for further training and capacity building.

In respect to farmers’ associations/groups, Sengerema District is blessed with many active groups. Various economic groups have been formed by the District Council in collaboration with other development partners. On the side of the District Council, economic groups are formed through Women Development Fund (WDF) and Youth Development Fund (YDF). Through the implementation of Support to Local Economy in Mwanza (SLEM), various economic groups in 13 clusters have been established. Established farmers groups in Sengerema District include BUJIBIRA farmers’ group at Chamabanda village which is engaged in tree planting. Others, and their areas of activity and focus, include BUBINZA (horticulture), NGOKORO (elders on finance etc), JIKWAMUE (women finance), and MAREKANI (youth as labourers).

However, it should be noted that there are less SACCOS/VICOBA in Sengerema District as the initial thinking among the communities was that they were mainly for women! As a result, we find more women organized in groups than men or youths. For example, NGUVU MPYA SACCOS at Kahumulo has 27 women and only three men. Selected groups and SACCOS will be offered entrepreneur training and how to manage a business start-up capital. This will be done under the capacity building programmes which are part of the PEI initiatives. The training programmes are partly intended to raise awareness on the importance of formulating mutually beneficial economic groups for farmers, fishermen, and other entrepreneurs. The programme will also focus on leadership and management skills as many of these groups are lead by people with limited education in running projects and/or groups and many of the groups struggle in securing loans.

4.2 Mapping of Relevant Local Initiatives

Part of the criteria and process to identify project sites has been described in section 4.1. In collaboration with Sengerema District Council this process commenced by
setting the criteria for selecting projects and project sites. Then prior to the field survey, ESRF organized a meeting with Sengerema District Commissioner (DC), District Executive Director (DED) and District Planning Officer (DPLO), where discussion and consensus on the types of projects and criteria for site selection was reached.

### 4.2.1 Criteria and Indicators for Evaluation of the PEI Projects

Monitoring and Evaluation (M&E) is important in determining the direction and impact of the project. In general, the PEI project aims at improving the livelihoods of the people through economic growth, sustainable environmental management and gender mainstreaming and empowerment. The focus of M&E tool therefore will be on how to track and assess implementation and impact of the identified projects which will be implemented in Sengerema District under Pro-Poor Economic Growth and Sustainable Environmental Development project. In other words, this M&E tool is meant to observe how the values of different performance indicators against stated goals and targets change overtime. Monitoring and Evaluation will help to identify the causal link between the project and resulting measurable outputs, impacts and outcomes. Thus, while monitoring will help track down whether the interventions are being implemented as planned and whether they achieve the desirable objectives; evaluation or impact evaluation will be used to identify the causal link between the interventions or project implementation and the impact or outcome. Note that, assessing impact indicators is more difficult than monitoring goals and targets. The monitoring questions are therefore related to monitoring goals and targets i.e. whether the project or interventions are implemented as planned and/or achieving the set objectives, while evaluation questions are pegged to impacts and outcomes.

As noted in Table 4.1, a total of 10 projects have been identified for implementation in Sengerema District. These are, one Community Radio namely Sengerema Community Radio; two Ward Agricultural Resource Centers (WARCs) at Nyampande and Nyakasungwa villages; Mobile Kilimo platform which will cater for the entire district; and a number of training programmes (for identified beneficiaries who are expected to prepare bankable projects and apply for loans from Twiga Bancorp, and champions in the project areas); two irrigation Schemes at Chamabanda Village (Katunguru Ward) and Nyalwambo Village (Nyamatongo Ward) for paddy and horticulture products; and fish farming at Kahumulo Village (Nyamatongo Ward).

Other projects include: beekeeping at Nyakaliro Village (Nyakaliro Ward); Tree Planting (Nursery) and forest conservation at Nyangalamila Village (Isenza Ward);
Bio Gas at Nyangalamila Village (Isenza Ward); Tree Planting (Nursery) and forest conservation at Mbugani Village (Bulyaheke Ward).

Implementation of a progressive monitoring and evaluation of the PEI projects identified in Sengerema District will therefore use the M&E framework in Table 4.2 (See also the appendices A1 up to A5).

**Table 4.1: Summary of the PEI Projects in Sengerema District**

<table>
<thead>
<tr>
<th>Sn</th>
<th>Project Name</th>
<th>Project Site</th>
<th>Status and Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sengerema Town</td>
<td>Sengerema Community Radio</td>
<td>Currently Sengerema Community Radio is operating. However, it faces a number of challenges such as shortage of studio equipments and some facilities for recording and shooting.</td>
</tr>
<tr>
<td>2</td>
<td>Nyampande and Nyakasungwa</td>
<td>Two Ward Agricultural Resource Centers (WARCs)</td>
<td>Two buildings have been identified for the WARCs. However, both of them require major repair and innovations before they can be used for agricultural resource center. In addition, all of them need to be equipped with facilities such as TV set (and the content), computers and secretarial services. All personnel at the WARCs require capacity building.</td>
</tr>
<tr>
<td>3</td>
<td>Sengerema District</td>
<td>Mobile Kilimo Platform</td>
<td>This is meant to strengthen production and marketing of agricultural products, forest products as well as fish products.</td>
</tr>
<tr>
<td>4</td>
<td>Chamabanda Village (Katunguru Ward) and Nyalwambo Village (Nyamatongo Ward)</td>
<td>Irrigation agriculture for paddy and horticultural farming</td>
<td>Horticulture is one of the key sectors (activities) in the economy of Chamabanda Village (Katunguru Ward) and Nyalwambo Village (Nyamatongo Ward). The yields and therefore incomes earned are also attractive, despite the fact that irrigation infrastructure is lacking</td>
</tr>
<tr>
<td>5</td>
<td>Kahumulo Village (Nyamatongo Ward)</td>
<td>Fish Farming</td>
<td>Capacity Building in Fish Pond Construction, fish fingers, Fish Feeds processing machine, and fish farming in general.</td>
</tr>
<tr>
<td>6</td>
<td>Nyampande Village (Nyampande Ward)</td>
<td>Sunflower, maize and paddy processing machines</td>
<td>These crops are produced in large quantities. Productivity and marketing can only be promoted further if the processing machines or plants are installed and used by farmers</td>
</tr>
<tr>
<td>7</td>
<td>Nyakaliro Village (Nyakaliro Ward)</td>
<td>Beekeeping</td>
<td>There are many potential areas which have not been explored. Most of the groups with beekeeping projects are using poor technology which affects productivity</td>
</tr>
<tr>
<td>8</td>
<td>Nyangalamila Village (Isenza Ward) and Mbugani Village (Bulyaheke Ward)</td>
<td>Tree Planting (Nursery) and forest conservation</td>
<td>There are many areas in Sengerema which have been affected by deforestation to the extent that women walk 15 km to collect fire wood. Bio Gass and tree planting and forest conservation programmes are therefore required</td>
</tr>
<tr>
<td>9</td>
<td>Nyangalamila Village (Isenza Ward)</td>
<td>Bio Gas</td>
<td>There are many areas in Sengerema which have been affected by deforestation to the extent that</td>
</tr>
</tbody>
</table>
As the integral part of the monitoring and evaluation process, the overall goal and specific objectives, outcome and performance indicators, and means of verification have been included in the M&E framework. In other words, the overall project goal; the objective; output; activities; outcome and performance indicators; means of verification, baseline data and targets will be specified in the project M&E Framework.

Note that, implementation of the activities is important for the project to realize the desired outputs. Likewise, the realized outputs are necessary for the project to attain the spelt out project objectives. It is only when all the activities are successfully implemented; expected outputs and respective project objectives are realized, the overall goal of the project can be achieved.

A number of indicators for evaluation of the PEI Projects in Sengerema District have been identified (See Tables 4.2 and the Appendices A1 to A5). They range from establishment of projects, number of beneficiaries, income generation, and creation of opportunities such as employment, skills development. Others include, access to loans, resource mobilization, improved communication, and project inception (See also Tables 4.2, section 4.3.2 and the Appendices A1 to A5). Section 4.3.2 has also presented qualitative indicators and qualitative baseline information.

### 4.2.2 Project Implementation

(a) ????

The projects listed in Table 4.1 were identified by the survey team in collaboration with officials of Sengerema District Council, and the President’s Office - Planning Commission with the inputs from United Nations Environmental Programme (UNEP) and the United Nations Development Programme (UNDP). The project must be executed within Sengerema District; it must be a priority in the respective community (in terms of benefiting as many people as possible, with notable impacts); and must address any of the four challenges namely the environment, gender, poverty or climate change. While UNEP and UNDP are expected to provide for initial funding, ESRF and Sengerema District Council will be responsible for coordination, monitoring and evaluation. Note also that in future various funding alternatives such
as Private Sector, alternative sources by Sengerema District Council etc will form the
major funding sources.

As noted, in addition, to UNEP, UNDP, Sengerema District Council and ESRF, a
number of other actors will be involved in the project implementation. These are the
Non State Actors (NSAs) operating in the district (Private Sector, NGOs, CSOs, etc),
champions in the respective wards and villages such as Women Groups, Youth
Groups, Farmers Groups, and individual champions. In Sengerema District ESRF’s
Implementing Partners include Sengerema Community Radio, Beach Management
Unit, SACCOS, UNESCO, TCRA, Twiga Bancorp Bank, TANESCO etc.

Expertise and/or skills are among the critical requirements for the success of the
projects. The government support, commitment and political will of the leadership in
Sengerema District, and commitment of the people are equally important if these
projects are to make notable impacts in the respective communities. Strategic
interventions or projects which are proposed in this report, can only make meaningful
impact when there is a robust implementation framework and/or timetable with a
clear roadmap as well as monitoring and evaluation. Thus, other important criteria for
success include the following:

(i) Project Timeframe

The timeframe provides timeline in terms of when to start and what to start
with, and when to finish. The given timeframe needs to be respected and the
interventions must be implemented within the agreed time period. One does
not have to make it too ambitious, but it is important that the timeframe is
realistic. All the proposed projects in this programme will be implemented
within the three years project lifetime i.e. 2014 – 2017. Each individual project
will have its own timeframe to be specified at a later stage. Implementation of
the projects in Sengerema District will commence the first quarter of 2015.

(ii) The Actors

As pointed out earlier, it is important to show clearly the roles and
responsibilities of different actors or players who will be engaged in the
execution of the projects. Note that, implementation plan will need responsible
and committed people to make it successful. Sengerema District Council,
Private Sector, ESRF, Sengerema Community Radio, Community Leaders,
Community members etc are such key players.

(iii) Resources
Any strategy and/or project must be financed. Resources must therefore be mobilized and therefore the resource envelop must be known. The resource envelop shows what it takes in terms of financial resources to implement the projects. This is an expensive plan which may not be successful if the resources are not forthcoming. The Funding options for these projects show that, in addition to UNEP and UNDP, Twiga Bancorp, the DPs; the District Council, Community members, and Private Sector have an important financing role. These are necessary pre-requisites to bear in mind.

(iv) Monitoring and Evaluation

Monitoring and evaluation must be one of the components of the implementation framework. The District Council must therefore ensure that these projects are successfully implemented i.e. the project results are realized, and the benefits are widely spread and number of beneficiaries are increased. There is also a need to reveal in advance the expected outputs. This will among others motivate actors as well as community members. It will also help to measure the extent to which the interventions have been successful.

Note also that, a successful project will be identified as the Best Practice for other villages, Wards and District Councils to learn. Efforts will be made to ensure that villages, wards and Local Government Authorities draw lessons from successful projects (Best Practices).

(v) Government Commitment and Political Will

Implementation of some of the strategic plans in Sengerema District are negatively affected by persistent conflict of interests, whereby political interests (individual and short terms) undermines economic interests and therefore economic gains which are long term in nature. This claim is evidenced by the fact that unlike economic decisions, in many cases political decisions are primarily for personal interest and stature rather than the interests of the people. These decisions have always been in conflict with technical decisions. Such conflict of interest presents a serious draw back to the successful implementation of DDPs in Sengerema District. Unless there is government commitment and political will, the proposed projects will never make a meaningful progress.

(b) Implementing Partners
Considering the nature and scope of the programme, it is necessary that after identifying the development problems and potential projects in the area, to identify possible collaborators and from them choose implementing partners whom can collaborate in implementing the identified projects. Sengerema District Council and ESRF are among the key players. However, in addition to the District Council and ESRF, it is strongly recommended that Sengerema Community Radio (Sengerema Tele Center), be part of the collaborators (IPs) given their involvement and experience in Sengerema District where they work.

4.3 Monitoring and Evaluation (M&E) System For Tracking Changes of the PEI Projects

4.3.1 Monitoring and Evaluation Framework

As pointed out earlier, a total of 10 projects have been identified in Sengerema District (See Table 4.1). A successful project implementation will require an overall project goal; the objective; output; activities; outcome and performance indicators; means of verification, baseline data and targets are spelt out, among others. While Table 4.2 presents the Monitoring and Evaluation (M&E) Frameworks for the Ward Agricultural Resource Centers (WARCs) project in Sengerema, the appendices A1 up to A5 have presented the M&E Frameworks for the remaining 9 projects identified in the District (See Table 4.1, section 4.3.2 and the Appendices A1 up to A5). All the M&E Frameworks have defined the overall project goal; the objective; output; activities; outcome and performance indicators; means of verification, baseline data and targets.

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1 One M&E table for the Ward Agricultural Resource Centers (WARCs) Projects is presented in section 4.3 as an example, to enable readers follow and understand the analysis and discussion. The rest of the M&E Frameworks are presented in Appendices A1 up to A5
### Table 4.2: Logical Monitoring and Evaluation (M&E) Framework

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Ward Agricultural Resource Centers (WARCs) – Nyampande and Nyakasungwa</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Goal</strong></td>
<td>To establish a fully equipped Ward Agricultural Resource Centers (WARCs) which will facilitate information generation and accessibility for development in Sengerema District</td>
</tr>
<tr>
<td>(a) Established two fully equipped WARCs in Sengerema District</td>
<td>(a) Establishment of the two fully equipped WARCs</td>
</tr>
<tr>
<td>(b) Number of people using the two fully equipped WARCs in Sengerema District</td>
<td>(b) Operating WARCs which are fully equipped</td>
</tr>
<tr>
<td>(c) Number of men Vs women using the 2 fully equipped WARCs in Sengerema District</td>
<td>(c) People of Sengerema District using the 2 fully equipped WARCs</td>
</tr>
<tr>
<td>(d) Number of people created the opportunities such as trade and businesses through these WARCs</td>
<td>(d) Trade and Business creation</td>
</tr>
<tr>
<td><strong>Objective 1:</strong></td>
<td>Communication, research, education, business development opportunities, promoting sustainable agriculture, forestry, fishing and a strong local food systems</td>
</tr>
<tr>
<td>(a) Communication, research, education, business development opportunities, promoting sustainable agriculture, forestry, fishing and a strong local food systems are facilitated by the two WARCs</td>
<td>(a) Two WARCs facilitating and improving communication, research, education, business development opportunities, promoting sustainable agriculture, forestry, fishing and a strong local food systems</td>
</tr>
<tr>
<td><strong>Output:</strong> Ward Agricultural Resource Centers (WARCs) with the necessary infrastructure and its facilities installed and functioning</td>
<td>(a) Two WARCs with full set of infrastructure and facilities</td>
</tr>
<tr>
<td>(a) Two Sites for WARCs obtained;</td>
<td>(a) Two functioning WARCs</td>
</tr>
<tr>
<td>(b) Constructed or Rehabilitated two WARCs;</td>
<td></td>
</tr>
<tr>
<td>(c) Two WARCs set of infrastructure and equipments;</td>
<td></td>
</tr>
<tr>
<td>(d) 10 WARCs’ personnel;</td>
<td></td>
</tr>
<tr>
<td>(e) Two Operating WARCs</td>
<td></td>
</tr>
</tbody>
</table>
Data for the monitoring and evaluation will be collected once a year during the three years project period. The uses of the Monitoring and Evaluation Tool are summarized below:

(a) Describing the Monitoring and Evaluation Tables

M&E Tables present the necessary components of the Monitoring and Evaluation systems for the 10 projects which will be implemented in Sengerema District. The first column defines four important variables namely, the overall goal, objectives, outputs and activities. As pointed out earlier, overall goal spells out the ultimate destination the projects intend to reach. This is a broad objective set by the project implementing consortium. The objectives define small goals which the projects have to achieve to be able to meet the overall goal. Below each objective the matrix shows a number of expected outputs. These are requisite outputs which the project has to produce to be able to meet the spelt out objectives and therefore the overall project goal. Note that for the outputs to be produced, some activities must be implemented. Thus, a set of activities have been presented under each output.

The second and third columns of the matrix present performance indicators and means of verification respectively. Indicators are specific empirical measures required to monitor progress towards achieving the overall project goal such as number of beneficiaries; completion of the radio station; access to information and knowledge; trade and business creation etc.

The project objectives can therefore be monitored by assessing performance indicators. Means of verification are used to confirm the monitoring findings, while the baseline data shows the current situation (the situation before project implementation), and the targets show the destination (where the community around the project wants to go). Fulfillment of these preconditions is inevitable if the project has to achieve intended objectives and goals.

(b) Other Components of the Monitoring and Evaluation System

To ensure adequacy and effectiveness of a monitoring system, a number of minimum requirements must be fulfilled. First is the availability of relevant data. Data for all the specified indicators must be collected and analysed to be able to make a meaningful monitoring of the projects. There are important actors who must be available, and a number of activities which must be performed for a monitoring system to work effectively. The actors and activities needed include data producers (data collectors);
data analysts (data analysis); Data and analysis users (dissemination and feedback); decision makers (make relevant decisions and changes); and stakeholders (beneficiaries of services, NSAs and community members etc). Whenever data is collected, the key questions used during the baseline study must be repeated. After data collection and analysis, the findings must be compared to the findings and/or status of the project during baseline, to be able to make conclusions on performance and direction of the project.

(c) **Major Objectives of Monitoring and Evaluation**

As pointed out earlier, monitoring is a crucial tool for 4 major reasons or purposes:

(i) *Effective Management*: If actual implementation diverges from planned implementation, monitoring provides evidence and can gauge the magnitude of the problem that need to be identified and solved.

(ii) *Policy Transparency*: NSAs, community members and LGAs are entitled to information related to policy formulation, financing, and implementation of various projects in the district, which can adequately be generated through an efficient monitoring system.

(iii) *Democratic Accountability*: NSAs, community members and LGAs are entitled to know whether project expenditure matches budget allocated for the project. If there is a mismatch, they are entitled to know the reasons.

(iv) *Feasible and realistic Target Setting*: It is very difficult to know what is possible to achieve in the future without knowing what has been possible to achieve in the past. It is only possible to know what has been achieved in the past and set new targets through monitoring.

(d) **Possible Challenges during Implementation**

There are many actors in the information system, performing many activities. The following are typical challenges likely to come across:

- Roles badly defined
- Lack of coordination between the different actors thus, the problem of duplication, competition, gaps etc
- Difficulty in accuracy and reliability of some information
- Difficulty in accessing/availing information
- Lack of relevance of some information
- Long delays in production of information (lead times)
- Lack of use of data by users (doesn't know about them, receive them too late, receive a format which is not adapted, lack of confidence, etc.)

### 4.3.2 The Baseline Conditions

Table 4.2 and the appendices have mainly presented quantitative baseline data for the specified indicators. This section presents qualitative indicators and the associated baseline information. Broadly, the qualitative indicators include gender, the natural environment, climate change, poverty profile and livelihood. Other indicators defined broadly are communication (and information), District Council Collaboration with Non State Actors (NSAs) as well as irrigation.

(a) Gender Status

Gender roles in most communities of Sengerema District are divided along traditional cultural lines with women involved in all household cores, including looking after family warfare and utility, upbringing of children, fetching firewood for energy, fetching water, petty businesses, preparing food and farming of annual crops or horticultural crops.

Figure 4.7: A Building by Women SACCOS in Sengerema District

Men are involved in activities such as farming, cultivation of perennial crops and trees, livestock keeping, hunting, fishing, house construction and maintenance, sale and trade of produce and allocation of resources, and other activities. The role of women at household level and community well being and economy is fundamental. Recently, communities in Sengerema District have been witnessing a slow transformation of gender authority and productivity to women.

This includes women engaging in off farm income generating activities and new economic opportunities such as various agricultural and natural resources activities, processing of oil seeds to produce vegetable oil, trading in different merchandise, and formation of women groups aimed at helping each other in terms of advice, developing right ideas and planning, organizational development, cooperation in execution of the jointly planned activities, enhancing perseverance in hard times, and raising capital.
The interviewed women groups were of the view that to accelerate the progress of women, there is need to empower women through education and training in entrepreneurship, group and association development, business orientation and training, enterprise development, and processing, packaging and marketing, and availing low cost start and operations capital.

Gender gaps and oppression reportedly still exist in Sengerema District. For instance, the percentage of women aged 15-49 years who have experienced physical violence is 42 percent.

Figure 4.8: Women Domestic Core

About 54 percent of women and 38 percent of men aged 15 to 49 years believe that a husband is justified in beating his wife for certain reasons, e.g. wife neglecting children; wife argues with husband; wife goes out without telling husband; and wife refuses to have sex with husband. Acceptability of wife beating is higher among women 2010. In view of the above, gender empowerment, education and mainstreaming in DPPs is critical if Sengerema District is to make change and transform the communities.

(b) The Natural Environment and Climate Change

The total area of the District is 8,817 sq km. Out of these 3,335 sq km is covered by dry land while the remaining 5,482 sq km are covered by water of the Lake Victoria. The area which is covered by vegetation is 677.41 sq km (which is 8 percent of total area and 21 percent of total land area) of which 638.21 sq km being manmade vegetations. About 62 percent of Sengerema District area is covered by Lake Victoria water.

The district has forest reserves and tree planted forests. The main indigenous trees are the Mitundu and the main planted trees are the Pinus Cariberia. There are two types of natural forest reserves those under Central Government, and those under Local Government, i.e. District Council, Village Councils, and Community Forests (Ngitiri). Those under central Government are the biggest, e.g. the Maisome, Sima, and Kome Forest Reserves. The Ngitiri are traditional Sukuma land forests. Every family or clan has an Ngitiri; they plant trees and later harvest them for firewood, construction, and

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2 Gender-Based Violence and Female Genital Cutting in the 2010 TDHS
The forestry sector plays an indirect role as a productive sector through planting and on delivering trees. These trees function also as a cover against all forms of soil erosion. Apart from preventing soil erosion (a land degradation agent) but also forests are the good sources of humus that adds soil fertility constantly, the condition which makes the soil fertile in crops farming.

The contribution of forests and its allied products to local livelihoods, ecosystem services and the district economy as a whole is significant. The forests and forest resources play an important role in supplementing and diversifying farm incomes.

The main issue facing forestry sector and forest management and protection in Sengerema include, forest destruction, poor management, and environmental degradation with negative impacts on marginal communities that depend on forests and forest products. The underlying causes of deforestation include land clearance for small-scale subsistence farming; dependence by resource-poor households on cash income from the sale of forest products, such as charcoal; and commercial production of firewood and charcoal as a source of energy.

(c) Poverty Profile and Livelihoods

Livelihoods of the people in Sengerema District is not better given the levels and gravity of poverty in the district. The houses in Sengerema District are built from wooden poles with mud walls, earth floor matted with scalable special grass, and roofed with corrugated iron sheets. Upscale houses are built from biomass–fired bricks or cement blocks, with cement floors, and roofed with corrugated iron sheets. An average...
household owns basic furniture (wooden tables, chairs, and beds), aluminum, clay or plastic kitchenware, kerosene lantern, a radio, a bicycle, and a cell phone. Upscale households also have 14-21 inch TV, and own solar panels for lighting. But these ones are few. In areas with grid electricity, electricity is used mainly for lighting.

Figure 4.11: Upscale Houses
More than 95 percent of households use biomass-generated fire for cooking. Recently, with the solar power being increasingly accessible, people are installing Solar PV equipment and systems in household which resulted in improved access to electricity and lighting.

Figure 4.12: Poor Houses

The determinants of household welfare and poverty in Sengerema are numerous and complex, ranging from individual and household to community and the social characteristics. The relative importance of these factors varies across the district. From the survey (interviews) it came out clearly that declining households’ living standards and poverty in Sengerema District is linked with declining quality of education; poor initial conditions; inability to generate or take advantage of income generating opportunities because of low awareness and access to information in Kiswahili; increasing population density; declining culture and trust; increasing degradation of the natural environment; overexploitation of natural resources assets; inadequate innovation; and never ending shocks (including those from climate change effects) for a person to move out of poverty.

Specifically, poverty in the district is linked with:

(i) Insufficient education and knowledge prohibiting people from Sengerema from practicing environmentally sustainable agriculture, livestock keeping, fisheries development and protection of natural resources against degradation including of water, forest, animals, minerals, air and land;

(ii) Cultural and mentality barriers: people being stuck solely to the traditional organizational and agricultural system of cash crops whose farm gate prices
have been declining but input prices have been rising exponentially over years, e.g. cotton production;

(iii) Unpredictable and unstable rainfall is having detrimental effects on household welfare and has much stronger effects on Sengerema District livelihoods, consistent with a higher engagement in agriculture, livestock, and natural resources sectors by households and very little diversification outside of agriculture;

(iv) Inability to devise and adopt innovative livelihood strategies and limited livelihood diversification (outside subsistence farming and low wage for agricultural labour) are increasing vulnerability. Persisting low income among most people in Sengerema is caused by among other things falling crop prices and food crop pests and diseases which has resulted into prolonged reliance on natural resources (forest resources) for their livelihoods or to meet their basic needs.

Figure 4.13: Marketing of Agricultural Products

(v) Growing stress on the natural resource base and unstable and unpredictable weather patterns, and inadequate adaptive and mitigation capacity and resilience is causing suffering and constraining social economic development efforts;

(vi) Small scale family farming - which makes it difficult to secure adequate quantities for markets and reduced transport costs.

Some stakeholder advised that people should grow certain types of crops as a group, that are harvested at the same time; then it will be easy to attract big buyers and some economies of scale.

(vii) Little focus on value adding activities to existing products. People are using the same technologies, design and marketing techniques, and quality management practices with little improvements although the market preferences, needs and demands are changing. By adding value and improving design, fabrication, and marketing techniques, they would have made a big difference in returns and profitability; and
(viii) Limited involvement of women in decision making and participation in enterprise development which is constraining family financial growth and wellbeing.

In summary, it was found that human, social, physical capital, and the interventions from the Sengerema District Council (or lack of them) all play a significant role in improving community’ living standards, but that the relatively poor are harmed more by shocks such as weather variability, fall in cash crop prices, and pest and disease infestation of food crops and livestock. In addition, it was found that people who had inadequate information, knowledge and those who were inadequately uneducated and unskilled face more constraints in diversifying out of unprofitable activities. The results also revealed subtle insights into the relationships between gender and poverty.

Given the high levels of poverty in Sengerema District, the respondents were of the view that it is important to develop and implement local policies and strategies that will get people out of absolute poverty. They also emphasized the importance of participatory and joined-up approaches in the development of by-laws, regulations, strategies and projects.

(d) Information and Communication

Information and communication is one of the obstacles facing Sengerema District despite the fact that mobile phones have made significant improvement in information sharing and communication. There is inadequate information at all levels especially to farmers, e.g., for improving farm productivity, profitability and diversification; post harvest management of crops and animal products; markets; available training opportunities; inputs; basic financial management, available grants, subsides, soft loans, unleashing investments, nutrition, etc.
Sengerema has one tele-center which includes Sengerema community radio. Sengerema community radio serves the entire district and a few neighbouring districts. However, this radio operates with a series of challenges in the areas of expertise, production, poorly developed road network to access the remote rural areas, transport, equipments etc. The poor communication and access to information have affected connectedness in Sengerema.

Remoteness and decreased market access by communities living in areas without a reliable road to the main road, was found to significantly stifle agricultural growth, e.g. lack of feeder roads to the main road make the farmers to sell their produce at throw away prices.

**Irrigation Farming**

The key productive sectors in Sengerema include agriculture, livestock, Forestry, Fisheries, Beekeeping, and to small extent small industries. Mining are still at the initial stage at Sota in Igalula Ward. The District’s economy mainly depends on the agriculture sector because more than 90 percent of the population depends on crop cultivation and livestock keeping. Recently, the agricultural sector has been negatively affected by a number of factors such as climatic conditions (rainfall variability) and poor physical infrastructures, roads in particular.

This to large extent has negatively affected the income of the people and the District as a whole. The agricultural sector contributes 80 percent of the District’s income. Table 3.1 shows the land use in the District with 163,130 Ha (61.4 percent of Total available land) suitable for Agriculture (i.e., cultivation and irrigation). Approximately 5 percent of the land suitable for agriculture is suitable for irrigation. Irrigation is mainly practiced in paddy and horticulture products fields. Chamabanda Village in Katunguru Ward and Nyalwambo Village in Nyamatongo Ward for example are among the potential areas for irrigation.
(f) **Marine Environment**

To a large extent, the fishing sector in Sengerema District needs to be modernized so that it adopts new and environmentally friendly fishing technologies. Promotion in the use of modern fishing facilities such as engine-powered modern fishing boats (trawlers, seine) is paramount given the fact that shallow water do not have enough stock of fish anymore following destruction of fish hatcheries. Nile Perch harvest is also dwindling due to over and illegal fishing while sardines are on the rise. The fishery sector is facing a huge environmental challenge from the use of poison, beach seine and other illegal small fishing nets.

Big numbers of people from Mainland Sengerema migrate to the small islands where unsustainable fishing practices take place thus leading to environmental calamity, as rapid deforestation takes place to meet fish processing needs as well as agriculture (particularly horticulture) to meet the growing food demand in the islands. The environment is depleted faster through destruction of breeding areas but also the health of consumers of fish is threatened by diseases such as cancer.

Establishing and strengthening security through Beach Management Units, fisheries farmers groups as well as capacity building especially in production, processing and packaging are crucial steps to address this problem. Establishing and construction of fish collecting centers/markets and cold storage facilities (rooms, vans) at main collection points (preferably at Kemondo, Lakes Ikimba and Kajunge) are equally fundamental. Construction of fish ponds where rivers flow into lakes should be supported and encouraged. And in the promotion of fish ponds and cage fishing, there should be the construction of demonstration plots for knowledge development as well as developing fish fingers for the fish farming sector. Farmers groups are yet to be involved in this specific area of production of fish fingers although there is a willingness to participate. The above entry points should be channeled through identified champions like Mr. Ahmed Mbae in collaboration with fisheries farmers' groups/associations.

(g) **District Council Collaboration with Non State Actors (NSAs)**

Unlike in the past, collaboration between the government and Non State Actors in Tanzania has improved significantly during the past 20 years in the spirit of participatory approach. The government is now working very closely with the NSAs in formulating the national policies, planning, budgeting, strategies, programmes and projects. This is true at all government administrative levels namely the Central Government, Regional Secretariat, District Council, Ward, Village and Street Government. In Sengerema
District Council the NSAs are encouraged and involved in all the district development processes such as, formulation of the district strategic plans, district social economic profiles, district investment profiles and plans, DDPs and budgeting. For example, during the district planning and budgeting process, NSAs are involved fully through the District Stakeholders’ Assembly (or meeting) to discuss and give their views on the DDPs and budgeting. All NSAs operating in Sengerema District are required to not only register with the District Council, but also submit their Annual Work Plans and Progress reports to the Council etc.

The main challenge related to this collaboration is that the level of NSAs participation and involvement is still very low because very few NSAs abide to these regulations. According to the DPLO in Sengerema district, some of the NSAs do not have trust to the Council. The interviewed NSAs for example claim that although they interact with the District Council, they have the feeling that district Council is not supportive enough to make NSAs confident with the council. Most NSAs are still not confident with the District Council authorities i.e. they are still not very sure and would not therefore dare to fully trust the District Council.

4.4 Mainstreaming Upcoming Local and National Development Planning Agenda

4.4.1 Enhancing Agricultural Productivity

Agriculture and in particular irrigation agriculture has been earmarked as a major entry point that will produce big results in terms of enhancing productivity and income of people in Sengerema District. Agriculture is generally a low capital or input intensity activity, using relatively low farm inputs such as fertilizers and improved seeds. Subsequently, agriculture has persistently registered lower productivity and a lower growth rate than other activities such as services, thus affecting negatively the pace towards poverty reduction. Poorly developed marketing arrangements are exacerbating the problem even further.

The major productivity enhancing factors which require scaling up are therefore productivity improvement through the promotion of the use of fertilizers and mechanization, processing, marketing, storage and irrigation projects (in order to reduce dependence on rain and be able carry on with farming activities throughout the year). Other entry points include the use of non-chemical fertilizers, enforcement of bylaws on encroachment of river sources and banks and the shores of Lake Victoria so as to protect water sources.
4.4.2 Fishery

To a large extent, the fishing sector in Sengerema District needs to be modernized so that it adopts new fishing technologies. Promotion in the use of modern fishing facilities such as engine-powered modern fishing boats (trawlers, seine) is needed; as well as capacity building in production, processing and packaging. Establishing and strengthening fisheries farmers groups is therefore paramount. Additional measures include, establishing and construction of fish collecting centers/markets and cold storage facilities (rooms, vans) at main collection points at e.g. Kome Island, Kamanga and Sengerema town; construction of fish ponds where rivers flow into the Lake; promotion of fish ponds and, where possible, cage fishing, and construction of demonstration plots for knowledge development. Capacity building for BMUs should also be a priority.

4.4.3 Livestock Keeping

One of the common activities in the district is commercial indigenous poultry keeping. Various breeds that are resistant to diseases have been developed. This activity is common to households and groups as well and is mainly the domain of the majority of women. Pig keeping is also a major stock kept by many households in the district and overseen by women. Farmers’ groups should be supported and trained in modern ways of keeping these animals. Demonstration plots should be encouraged and supported to improve poultry keeping especially through group formation.

Formulation of land use plans to various villages is critical to curb the inflow of livestock from various places and determine the land capacity for livestock keeping in all villages of Sengerema District Council.
4.4.4 Environment Conservation and Beekeeping

Establishing tree nurseries and planting of trees is paramount to environmental conservation in Sengerema District. Environmental awareness among inhabitants in Sengerema District is extremely low, especially at Nyalwambo village where it is estimated to be below 35 percent. It is therefore crucial to promote programmes geared towards creating awareness to the village communities on environmental issues and establish or strengthen villages environmental committees.

Agro forestry business can be another promising PEI intervention in Sengerema District. Buhindi forest which covers 600 acres should be exploited for conservation. The land here has not been overexploited and therefore still has its natural soil fertility that can boost agricultural production with minimal inputs. Forestation should go hand in hand with supporting and improving beekeeping activities especially for groups that are currently engaged in beekeeping. Beekeeping was seen as both a source of income and playing an important role in conservation of forests. In this regard, beekeeping groups should be given a priority.

4.4.5 Farmers’ Associations and Microfinance Institutions (MFIs)

Land use plan i.e. uses, ownership and title deeds (land titling) for farmers should be a priority in Sengerema District. This is extremely important so as to allow farmers be able to have collateral for financial loans from accredited banks and other microfinance institutions. Many farmers have huge pieces of land which do not have title deeds. For instance, a farmer and his family at Chamabanda village owns 75 acres of land and has 19 children but to date has no credit loans whatsoever.

4.5 Mapping of the alternative funding sources

4.5.1 Introduction

Like many other District Councils, one of the challenges which Sengerema District Council has been facing is underfunding of the district plans. There has always been a huge gap between the budget requested and budget allocated to the District Council and the amount of funds released. In addition, many times the process of disbursement has been unreliable and not timely according to the Heads of Department FGDs responses.
(a) Internally Generated Revenue

Most of the Sengerema District Council income comes from the Central government allocations. This amounts to more than 90 percent of the total district approved budget. The Council also raises revenue locally. The main sources of local income come from: Fees including taxi registration, bus stands, forestry products, valuation, inoculation and ambulance; Licences including road, liquor; property taxes and rents; charges including for refuse collection, cess, hire of vehicles, markets; fines; and others include sale of assets and recovery of public fund. Other internal revenue sources are fishing (ada za miało), coffee (through the buying companies), other crops and Contractors.

Generally speaking, Sengerema District has a poor and weak local revenue base. This source contributes less than 10 percent of the total approved budget. This source is getting weaker and weaker with time partly due to the changes or interferences from central government. Some of the revenue is remitted to the Central Government through Tanzania Revenue Authority. Recently, the Parliamentary Committee instructed all District Councils to allocate 60 percent of the local revenue collection for development projects which constrain even further the effective implementation of other council operations and service delivery functions. The challenge here is how to fill the gap as far as internal expenditure is concerned.

(b) The District Budget (Resources from the Central Government)

There has always been a huge gap between the budgets approved by Full Council and the ceiling received from the Central Government. To accommodate the ceiling a number of identified priorities have to be dropped. In many cases this has raised questions at lower levels on the relevance of the planning and budgeting processes (which takes most of their precious time to prepare); since only few (if not any) of their priorities are considered. Note that even those considered in the ceiling, not all are fully implemented. These inconsistencies have tended to demoralize the people at the grassroots especially when they have laboured much to make their contribution ready (mostly in terms of materials and own labour). Disbursement of the allocated and approved budgets is also a daunting, as some of the disbursements are made the last two weeks of the quarter.

(c) The Budget Cycle

The planning and budgeting process in Tanzania is bottom-up. The process starts from the kitongoji or street to the village level, then to the Ward Development Council (WDC) and thereafter to the Full District Council where all ward plans are consolidated into a
district plan then submitted to the Ministry of Finance through Regional Secretariat and PMO RALG.

The Ministry of Finance then submits the Ceilings (maximum budget levels per District) to Districts and the Districts review and scale down the budget levels so that they are in line with the Ceilings (some priorities and projects are normally abandoned at this stage). One of the major challenges in the budget preparation cycle is therefore that, the budget ceiling usually come very late, which makes repackaging of the budget estimates already prepared extremely difficult and therefore not carefully done because of time constrain i.e. it is always done in a rush to try and beat the deadlines, etc.

4.5.2 Need for Alternatives Funding Sources

The Council’s budget is therefore limited given the priorities spelt out in the District Development Plans (DPP). Sengerema District Council must therefore look for additional or alternative options (alternative funding sources) to complement the existing ones, if the DDP is to be implemented successfully. Like many other District Councils, Sengerema District is not traditionally used to take its own initiatives to mobilize resources from alternative sources for the district. The council relies mainly on one funding source i.e. the Central Government which is disquieting and risky. The current Institutional and Legal Frameworks governing the operations of District Councils in Tanzania do not provide space for the district executives become pro-active and mobilize resources for their districts. Throughout, the excuse for underperformance of the District Councils has mainly been budget deficits and late disbursement. Existing opportunities for additional resources have virtually not been utilized.

There is therefore an urgent need for the council to change its approach and become a real player rather than an observer. Sengerema District Council must become pro-active in terms of resource mobilization for the district by exploiting alternative funding sources which are available. This will help the council to bridge a huge budget gap and be able to finance its annual plans for the development of the district. For this to succeed the current Institutional and Legal Frameworks governing the operations of District Councils in Tanzania must be supportive, and the district executives must be motivated to work on alternative funding.

The alternative funding sources which could also benefit the PEI initiatives in Sengerema include direct engagement with Development Partners (DPs); International Organizations; local institutions such as Parastatal Pension Fund (PPF), National Social Security Fund (NSSF), and the National Housing Corporation (NHC), and use of
diasporas. Others are bankable or fundable projects; attracting investors in the district; attracting private sector investment capital; effective use of small scale players (entrepreneurs) at community level such as farmers, livestock keepers and fishermen; improve financial management and resource management; and promote tourism in Sengerema District. These are opportunities and potential complementary funding sources which the district has not been able to utilize fully.

(a) Local institutions such as PPF, NSSF, and NHC

A number of local institutions such as Parastatal Pension Fund (PPF), National Social Security Fund (NSSF), and the National Housing Corporation (NHC) have made massive investments in Tanzania. There are cases where these organizations have been looking for areas to invest. Investment requires different strategies, campaigns and diplomacy. The district government executives (with the support of key regional executives) therefore need to be strategic and aggressive. The district government must make it a habit to target potential investors and go out for negotiations with them. The National Housing Corporation (NHC) for example are mandated to provide and facilitate the provision of high quality housing in Tanzania for use by members of the public as residential or commercial buildings. They also undertake massive construction of both residential and commercial estates. Apart from NHC, there are National Social Security Fund (NSSF) and Parastatal Pension Fund (PPF) which are meant to promote investment in real estates, among others. The district government needs to take deliberate initiatives towards utilization of such opportunities by attracting investments in the district. This could successfully be implemented by appointing a powerful negotiation team which will be representing the district in such negotiations.

(b) Diasporas

Studies have testified that a number of investors hailing from different District Councils such as SEngerema District (and Mwanza Region) are investing outside their district. Most of the investors under this category are attracted by the friendly investment climate elsewhere. A part from the cultural and economic factors and/or obstacles, majority of the potential investors hailing from this district have lost confidence and trust over the investment climate in Sengerema District. The institutional and legal framework governing investment activities in the district (e.g. Red tapes, bureaucracy, infrastructure) are among the factors mentioned frequently by respondents. Diasporas do not feel that they are part of development process in Sengerema District, Mwanza Region. Thus, the intimacy and partisanship between the two sides is compromised. The question is – What the district and regional governments should do to better make
use of this opportunity. The district and regional government needs to be proactive and attract diasporas as partners in district development. This can be done through mobilization via e.g. a forum of indigenous investors to campaign and lobby and attract them to invest at home. This should be organized by the district in collaboration with regional authority.

(c) **Develop bankable or fundable projects**

A Bankable Project is also known as a Fundable Project. This is a project or proposal that has sufficient collateral, future cash-flows, and high probability of success, thus it is acceptable by institutional lenders for financing. Sengerema District Council has not utilized such funding alternatives in the past. Fortunately, there are financial markets all over the world where capital is sold to would be investors with a condition of producing bankable projects. Examples of suppliers of loanable funds in the capital markets are various banks (like CRDB Bank, SELF, Twiga Bancorp, etc), stock exchange, different calls for grant proposals etc. There are many calls for grant proposals which suit a variety of demanders of loanable funds including African governments (Central and Local Governments), NGOs, research and regional institutions.

These are also funding opportunities which are suitable for Sengerema District Council and which could have been exploited by the councils and address the chronic problem of resource gap. There are two important pre-requisites here. First, Sengerema District Council must build the capacity of developing loanable or bankable projects, and secondly, the district staff must cultivate a culture of frequent search for grant opportunities or announcements. To do so, district staff must be motivated and have freedom to pursue these alternative funding sources.

(d) **Attracting investors and Private Sector Investment Capital in the district**

Sengerema District is blessed with a number of investment opportunities (potential) which have not been utilized. They include marine transport, forestry, and fishing. As noted earlier, there is a need for the Council to change its mindset and attitudes by taking its own measures to mobilize resources and attract investors in the district. This process must begin with preparation of the District Investment Profile and Plan; and District Social Economic Profile. These are useful tools which can be used aggressively to market the existing investment opportunities in the district through a well organized Investment Forum.
Also important to emphasize is the fact that, Sengerema District Council needs to fully tap the resources from private sector by encouraging the private investors to participate in the implementation of the District Development Plans (DDPs). The Council needs to regard Private Sector as Development Partners and acknowledge their contribution towards the District Development. To make them respond positively, the council needs to create a friendly environment through e.g. an incentive package for them.

(e) Involve and empower players at community level

It is reported that poor involvement and therefore absence of active participation of the key players at community level (particularly the LGAs, Ward level and Village level) in both formulation and implementation of national and district plans is the main reason for the dismal performance of Sengerema District Council. Involvement and active participation of the lower level is therefore critical if the impact of DDPs is to be felt.

Apart from their involvement and participation, building of their capacity is another factor the district needs to consider. Thus Sengerema District Council must use champions effectively. These are such as small scale farmers, women, livestock keepers, associations (groups) and fishermen.

(f) Improve the District financial management and resource management

Capacity of most District Councils in Tanzania is low. Among the capacity gaps in Sengerema District include skills and competencies of the district staff. For optimal resource mobilization and utilization of the resources, the district must have competent staff for financial management, resource allocation and utilization.

(g) Development Partners and International Organizations

There are a number of projects which are implemented by various District Councils in Tanzania, funded by the DPs directly. However, in most cases this is a result of the initiatives by respective District Councils in terms of negotiating with the DPs directly requesting them to finance bankable projects in the respective districts. Sengerema District should also pursue this funding alternative in order to bridge the resource gap which the district has been facing.

These are among the potential complementary funding sources which have not been utilized by Sengerema District Council.
During the survey, significant efforts or contributions by community members were evident especially in fishing, agriculture, housing, irrigation, beekeeping and WARCs where beneficiaries have constructed descent houses, and other buildings to cater for offices and other official activities. The team visited a few NSAs such as Sengerema Tele Center, and Sengerema Community Radio who are active players in Sengerema District. Like many other District Councils, this district is not oriented towards its own resource mobilization system.

As noted earlier, in terms of resources the council relies mainly on the Central Government. Other sources make an insignificant share of the total district budget. There is a need for the council to make use of other potential local revenue sources outlined above which have not been utilized in the past. Also important to point out is sourcing from financial institutions. The council has not fully utilized existing financial institutions mainly due to low LGA capacity and skills to prepare Bankable Projects and submit them for funding. There is therefore a need to support Sengerema District Council in terms of preparing Bankable Projects for the council and present them to the respective banks.

4.6 Scaling Up and Replicating P-E Best Practices

As already noted, Sengerema District was created as a fully fledged district with effect from 1975 from then Geita District, which is now an administrative region. A total of 10 projects have been identified for implementation in the District. The ultimate goal is to identify areas that need improvement and scaling-up for better results and that can be emulated by other communities. In this context scaling up means expanding, replicating, adapting and sustaining successful policies, programs or projects in geographic space and over time to reach a greater number of rural poor communities in Sengerema District. The following proposed measures are expected to improve performance of the projects and resource utilization thus leading to improved livelihoods of people in Sengerema District:

(a) Strengthen the microfinance system through support of SACCOS.
(b) Support for the development of agro business and multiple value chains, for microfinance through multiple channels, and for women and young entrepreneurs. Training should focus on helping rural entrepreneurs in Sengerema District to identify business opportunities and to help prepare business plans that then can be submitted to TWIGA Bankcorp for financing.

(c) Support the development of the small holder irrigation value chain development through training, technical assistance and credit support.

(d) Diversification of Smallholder Farming Systems in Sengerema District through cultivation of indigenous trees and support beekeeping initiatives

(e) Scaling up value chains, and especially in terms of access to markets.

The WARs will be equipped with the necessary computer hardware and software, and their staff will be capacitated to undertake the requirements of the project. The centre will be able to access and analyze information, for which its staff will be trained in the use of ICT to search for information relevant to communities.

Note also that, the PEI initiative will support study visits where beneficiaries from Sengerema District will be supported to visit and learn from best practices in other districts (Nyasa, Bukoba Rural, Bunda, Ileje and Ikungi). Where possible beneficiaries from the five districts will be supported to visit Sengerema District and learn from any best practice. Within Sengerema Districts, arrangements will be made to support study visits between wards and between villages.
5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusions

This mapping study was undertaken as part of the Pro-Poor economic Growth and Environmentally Sustainable Development project. The project is intended to enhance the national and district capacities to mainstream and implement environmental sustainability, poverty reduction, gender and climate change linkages into district and sector development plans (Agriculture, Forestry and Fishery) and develop related financial mechanisms in Tanzania. This survey is one of other initiatives of the project which is specifically meant to carry out a baseline study in terms of collecting and presenting information and standards that can be used as performance indicators to monitor and evaluate the progress of the selected projects.

Evidence shows that Sengerema District is facing the challenges of poverty, gender disparities, the trends of the environmental degradation and climate change impacts. There are therefore opportunities to reduce poverty through gender mainstreaming, sustainable management of domestic natural resources, and climate change adaptation. In addition, the district has complimentary interventions and local actors’ readiness to engage in PEI initiatives as well as a real need to fill gaps in terms of strategic planning for development results.

A total of 10 projects have been proposed in the area of agriculture, environment, gender and climate change. These are Sengerema Community Radios; Ward Agricultural Resource Centers (WARCs); M-Kilimo Platform; Irrigation Scheme (Horticultural and paddy); Bio Gas; Tree Nurseries and Tree Planting (forest conservation); Fish Farming; Beekeeping; Training Programmes; and Agro-Processing. The project identification was based on project viability in terms of the number of people it serves (beneficiaries); project impacts and the project capacity to address environmental challenges, gender inequality, poverty and the impacts of climate change.

Monitoring and Evaluation (M&E) frameworks for each project have also been proposed where the following variables have been specified, overall goal of the project, objective(s), expected outputs, and activities. Other variables are performance indicators, means of verification, baseline data and the targets.
5.2 **Recommendations**

One of the criteria for identification and selection of the projects is the evidence that the projects have the capacity to facilitate poverty reduction, improve the quantity and quality of the natural environment, minimize the impact of climate change, and promote gender equality. These are priority challenges which Sengerema District is grappling with. The proposed projects are therefore pertinent and critical for the district's transformation. Successful implementation of the proposed projects will require support of the Central Government because a number of policies as well as some regulations will need to be amended. In addition, success of these projects will also depend on the requisite support services and commitment by different players. A number of measures are therefore necessary if the PEI projects are to make meaningful impacts in Sengerema District. These interventions or have been presented in three categories. These are recommended projects; specific recommendations which can be managed by Sengerema District Council and be implemented without delay; and another set of recommendations which are generic and relevant to all the District Councils in Tanzania but require some policy regulatory amendment before they can be implemented and make impacts.

### 5.2.1 Recommended Projects

The following projects have been recommended based on the preceding analysis and discussions. These are the activities which need to be implemented in Sengerema District during this phase or the following phases.

<table>
<thead>
<tr>
<th>Sn</th>
<th>Project Name</th>
<th>Project Site</th>
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<tbody>
<tr>
<td>1</td>
<td>Sengerema Community Radio</td>
<td>Sengerema Town</td>
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<tr>
<td>2</td>
<td>Two Ward Agricultural Resource Centers (WARCs)</td>
<td>Nyampande and Nyakasungwa</td>
</tr>
<tr>
<td>3</td>
<td>Mobile Kilimo:</td>
<td>Sengerema District</td>
</tr>
<tr>
<td></td>
<td>- Agriculture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Forestry</td>
<td></td>
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<tr>
<td></td>
<td>- Fishing</td>
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<tr>
<td>4</td>
<td>Training or Capacity Building Programmes and Awareness Creation.</td>
<td>All Project Sites</td>
</tr>
<tr>
<td></td>
<td>These will include:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Training on development of Bankable Projects</td>
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<tr>
<td></td>
<td>- Training on Group formation and group dynamics</td>
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<td></td>
<td>- Training of the Communities on PEI</td>
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3 Most of the recommendations for Sengerema District Council are also relevant to other 5 district councils because the District Council Institutional and Legal Framework and therefore most of the challenges facing District Councils in Tanzania are the same.
<table>
<thead>
<tr>
<th>Sn</th>
<th>Project Name</th>
<th>Project Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Irrigation agriculture for paddy and horticultural farming</td>
<td>Chamabanda Village (Katunguru Ward) and Nyalwambo Village (Nyamatongo Ward)</td>
</tr>
<tr>
<td>6</td>
<td>Fish Farming</td>
<td>Kahumulo Village (Nyamatongo Ward)</td>
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<tr>
<td>7</td>
<td>Sunflower, maize and paddy processing machines</td>
<td>Nyampande Village (Nyamatongo Ward)</td>
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<tr>
<td>8</td>
<td>Beekeeping Group</td>
<td>Nyakaliro Village (Nyakaliro Ward)</td>
</tr>
<tr>
<td>9</td>
<td>Forest Conservation (Tree Nurseries, and Tree Planting):</td>
<td>Nyangalamila Village (Isenza Ward) and Mbugani Village (Bulyaheke Ward)</td>
</tr>
<tr>
<td>10</td>
<td>Bio Gas</td>
<td>Nyangalamila Village (Isenza Ward)</td>
</tr>
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Additional project areas include preparation of the District Investment Profile and Plan; District Social Economic Profile; and District Strategic Plan. There is also a need to finance the initiatives to develop the fishing and forest related by laws and the approval process given the environmental challenges the district is facing in agriculture, fishing and forestry sectors.

### 5.2.2 Specific Recommendations for Sengerema District Council

#### (a) Integration of PEI components into district planning and budgeting

The study findings show that in the past PEI components have not been considered as priorities due to limited knowledge of members of these communities on the respective components. This is a calamity which threatens efforts to attain PEI related goals in Tanzania. This intervention can easily be handled by Sengerema District Council on its own through the planning and budgeting process which is bottom-up and it is to a larger extent managed by the council. PEI priorities are relatively new to ordinary people in the villages. Thus, during the Opportunities and Obstacles for Development (O&OD) process, the lower level communities where planning and budgeting process begin (Ward and Village levels) therefore need to be guided by technical experts from the District Council to enable them understand and consider PEI related priorities. In addition, members of the communities must be educated through training and awareness creation programmes.
(b) Resource Mobilization

Like other District Councils in Tanzania, Sengerema District Council has not been a Resource Mobilizer because traditionally the council has been allocated budgets by the Central Government. The current Institutional and Legal Frameworks governing the operations of District Councils in Tanzania do not provide space for the district executives become independent and pro-active to mobilize resources for their districts. Existing opportunities for alternative funding have virtually not been utilized. There is therefore a need for the council to change this attitude so that from now onwards the council considers itself as a Resource Mobilizer. It must be mobilizing resources to complement and bridge the resource gap. Sengerema District Council has a multiple avenues for resource mobilization as follows:

(i) Mobilize Resources from Local institutions such as PPF, NSSF, and NHC

A number of local institutions such as Parastatal Pension Fund (PPF), National Social Security Fund (NSSF), and the National Housing Corporation (NHC) have made massive investments in Tanzania. There are cases where these organizations have been looking for areas to invest. The district government must make it a habit to target potential investors and go out for negotiations with them. These organizations are meant to promote investment in real estates, among others. The district government needs to take deliberate initiatives towards utilization of such opportunities by attracting investments in the district. This could successfully be implemented by appointing a powerful team with negotiation skills which will be representing the district in such negotiations.

(ii) Mobilize Resources from Diasporas

Studies have testified that a number of investors hailing from different District Councils such as Sengerema District (and Mwanza Region) are investing outside their district. Most of the investors under this category are frustrated due to unfriendly investment climate in their district. The institutional and legal framework governing investment activities in the district (e.g. Red tapes, bureaucracy, infrastructure, incentives) are among the factors mentioned frequently by respondents. The district and regional government need to be proactive and attract diasporas as partners in district development. This can be done through mobilization via e.g. a forum of indigenous investors to campaign and lobby and attract them to invest at home. This should be organized by the district in collaboration with regional authority.
(iii) **Develop bankable or fundable projects**

A Bankable Project is also known as a Fundable Project. This is a project or proposal that has sufficient collateral, future cash-flows, and high probability of success, thus it is acceptable by institutional lenders for financing. Sengerema District Council has not utilized such funding alternatives in the past. Fortunately, there are financial markets all over the world where capital is sold to would be investors with a condition of producing bankable projects. There are many calls for grant proposals which suit a variety of demanders of loanable funds including African governments (Central and Local Governments), NGOs, research and regional institutions.

These are also funding opportunities which are suitable for Sengerema District Council and which the District Council needs to utilize and address the chronic problem of resource gap. There are two important pre-requisites here. First, Sengerema District Council must build the capacity of developing bankable projects, and secondly, the district staff must cultivate a culture of frequent search for grant opportunities or announcements. In addition, some degree of independence or freedom is inevitable for the staff to feel responsible.

(iv) **Attracting investors and Private Sector Investment Capital in the district**

Sengerema District is blessed with a number of investment opportunities (potential) which have not been utilized. They include marine transport, forestry, and fishing. There is therefore a need for the top executives of Sengerema District Council to change their mindset and attitudes by taking its own measures to mobilize resources and attract investors in the district. This process must begin with preparation of the District Investment Profile and Plan; and District Social Economic Profile. These are useful tools which can be used aggressively to market the existing investment opportunities in the district through a well organized Investment Forum.

The Council needs to fully tape the resources from private sector by encouraging private players to participate in the implementation of the District Development Plans (DDPs). The council needs to consider Private Sector investors as development partners and create a friendly environment e.g. through an incentive package for them.
(v) *Involve and empower players at community level*

The District Council needs to ensure that key players at grassroot level (i.e. Wards and Villages) are fully involved and actively participate in both formulation and implementation of national and especially district plans. This is the main reason for the dismal performance of Serengeti District Council. Involvement and active participation of the lower level is therefore critical if the impact of DDPs is to be felt. Apart from their involvement and participation, building their capacity is another factor the district needs to consider. Thus Sengerema District Council must use champions effectively. These are such as small scale farmers, women, livestock keepers and fishermen.

(vi) *Improve the District Council’s financial management and natural resource management*

Capacity of most District Councils in Tanzania is low. Among the capacity gaps in Sengerema District include skills and competencies of the district staff. For optimal utilization of the resources the district must have competent staff for financial management, resource allocation and utilization.

(vii) *Development Partners and International Organizations*

There are a number of projects which are implemented by various District Councils in Tanzania, funded by the DPs directly. However, in most cases this is a result of the initiatives by respective District Councils in terms of negotiating with the DPs directly requesting them to finance bankable projects by District Councils. Sengerema District should also pursue this funding alternative in order to bridge the resource gap which the district has been facing.

(c) *By Laws*

Sengerema District Council is also mandated to formulate bylaws and pass them through PO-RALG for approval before its use. This is an opportunity which the District Council has not tapped. More bylaws should therefore be formulated and pass them through for approval process. Specifically these bylaws should target illegal fishing including a ban to use poison and dynamites. These bylaws should also target illegal harvesting of forest products.
(d) **Capacity Building and Skills Development**

Skills Gap has appeared as one of the major challenges facing District Councils including Sengerema. The District Council must find ways to fill in the gaps of various positions i.e. skills and competencies in the district by scaling up recruitment of personnel and encourage others to apply for training. Likewise, since most community members at grassroot where selected projects will be implemented are not skilled enough, training and sensitization programmes must be designed to build capacity on project management and entrepreneurs.

(e) **Promote Private Forest Associations or Groups**

District Council should encourage and promote associations or groups of forest and charcoal dealers, license them, give them titles or property rights to operate sustainable forest estates for production of trees (and forest products such as timber, charcoal and wood fuel). It is high time now investors are attracted in the area of forest management in a sustainable way. The government need to develop a mechanism where investors will be allowed to own land and invest in reforestation (tree planting) aimed at production of forest products for both local as well as external market. Allow the investors to plant the right tree species, using rotational age to ensure continuity and a stable market supply. The demand for energy is readily available.

Njombe, Iringa and Morogoro regions have been practicing this model (Private Forest Programme (PFP), which can be replicated. PFP is a joint programme between the Government of Tanzania and the Finish Government which was launched in January 2014. This programme is initially implemented in the 6 districts of the Southern Highlands. These are Njombe, Makete, Ludewa (in Njombe Region); Kilolo and Mufindi Districts in Iringa Region; and Kilombero District in Morogoro Region. The programme is intended to promote commercial tree planting and sustainable forest management through registered farmers groups.

Formalization of forest products (such as charcoal, fire wood, timber and poles) business or trade through associations or groups will enable the government and other stakeholders to build capacity of these groups through training. These groups can also be used as marketing centers where the Government can easily collect revenues thus enable the National Accounts reflect and raise forest contribution to GDP from the current 3.3% which is very much under-estimated.
In addition, the aforementioned proposed interventions are necessary to enable forests play its critical role in the maintenance of the hydrological balance and soil protection. Forest maintain rainfall pattern and prevent water runoff thus, ensuring appropriate hydrology which is necessary for sustainable water sheds. This is important not only for agricultural development in Tanzania, but also for fishing and marine transport. The forests are also important for recycling and fixing of carbon dioxide which is currently a topical agenda around the world. The direct benefits and spillover benefits are far much higher than what is currently gauged by the National Accounts.

(f) Involvement of Non-State Actors (NSAs)

Sengerema District Council needs to acknowledge the important role which the Non State Actors especially Private Sector and the Civil Society Organizations (CSOs) can play in e.g. resource mobilization and investment, capacity building of the key players in the district, planning and budgeting, as well as implementation of the DDPs. However, NSAs participation and involvement level is still very low because majority of the NSAs are not collaborating and working together with the District Council. There is therefore an urgent need for the Council to put more efforts to mobilize NSAs and involve them in the district development process. To facilitate this initiative the council needs to create a conducive and friendly environment and consider them as partners in development rather than rivals.

5.2.3 General Recommendations for Sengerema District Council and Central Government

(a) Political Will and Government’s commitment

As noted earlier, any investments or project implementation requires sustainable funding. Resources must therefore be mobilized (from all possible sources), adequately and timely allocated. In addition, the project must have competent and skilled personnel working under a well-organized and competent management team. Furthermore, the project needs to operate in a conducive environment with not only support of a surrounding community, but also the government’s commitment and political will.

(b) Monitoring and Evaluation

Monitoring and evaluation must be one of the components of the implementation framework. This tool should be used regularly to follow up and evaluate the project implementation. The necessary steps should subsequently be taken whenever the M&E
findings make such suggests. The District Council must therefore ensure that these projects are successfully implemented and reported i.e. the project results are realized and are inclusive.

(c) The District Autonomy

District Councils in Tanzania are not autonomous thus making it difficult for them to prudently plan and efficiently allocate and utilize their resources for development of the respective districts. District technical teams are not free to make key decisions on resource allocation and utilization. Sengerema is not exception to this problem. District plans which are bottom-up are designed and coordinated by technical personnel who are not only the architectures, but also skilled people to undertake the district planning and budgeting processes. However, key decisions and approval of these critical DDP documents are made by councilors (politicians) who are not in many cases acquainted to such technical processes. As if this is not enough, there is no evidence that any of the technical personnel is mandated to vote or influence the final decisions made by councilors. This is a disquieting institutional system which needs to be reformed now. While it is important to ensure that LGAs have the requisite capacity to manage the DDP processes, there is also a need to give them more autonomy and freedom to administer and manage their system.

(d) Political Interferences and Conflict of Interests

Implementation of some of the strategic plans in many District Councils are negatively affected by persistent conflict of interests, whereby political interests (individual and short terms) undermines economic interests and therefore economic gains which are long term in nature. This claim is evidenced by the fact that unlike economic decisions, in many cases political decisions are primarily for personal interest and individual stature rather than the interests of the people. These decisions have always been in conflict with technical decisions. Such conflict of interest presents a serious draw back to the successful implementation of DDPs in the respective districts. Political disagreements affect some of the districts more than others because of the opposition leadership (especially where opposition parties are dominant).

There is therefore a need for Sengerema District to escape from this catastrophe by ensuring that politics observe the set boundaries. Also important to look at is for the government to review and elevate the minimum qualifications of both councillors and Members of Parliaments (MPs) in Tanzania. We need to ensure that political interests don't override economic and social interests.
(e) **Late Disbursement of finances**

To squarely address the persistent problem of late disbursement of budgets (which is reportedly exacerbated by delayed revenue collection by the government), the government needs to use any viable and effective means and create a fund enough to finance a one year LGAs plans in Tanzania. During a one year period the government should guarantee revenue collection sufficient to finance LGAs plans of the succeeding year, thus breaking the current vicious budget circle caused by delays in revenue collection (Cash Budget).

(f) **Release of Budget Ceiling**

One of the major challenges in the budget preparation cycle is that the budget ceiling usually come very late (when District Councils have already completed their budgets) which makes repackaging of the budget extremely laborious and therefore not carefully done because of rushing to beat the deadlines, etc. The Central Government needs to ensure that, budget ceiling are released well in time to avoid repackaging and rushed budget preparations. Otherwise, it is not only unnecessarily double work to the LGAs but also too much work and demoralizing.

(g) **Delayed Budget Approval Feedback**

Immediately after the Full District Council, community members (Ward and Village levels) are informed by their councilors and Ward Executive Officers (WEO) on the approved projects. Thus, preparations commence immediately especially in relation to resources contributed by respective communities (Wards and Villages) such as building materials (timber, bricks) and construction, just to learn later that some of the proposed projects have been rejected by the Central Government. This does not only demoralize community members and Local Governments, but also encourages wastage.

(h) **Land Use Plan**

None of the surveyed district councils have the District Land Use Plan. There is therefore an urgent need to mobilize resources to

- Finance land use survey
- Specify relevant land uses and issue title deeds
- Take concerted efforts of motivating local investors or Land Users including farmers to apply for title deeds (Titling) and make use of land related opportunities afterwards
Land use planning and titling should be made a special project. This will not only reduce the number of land disputes, and increased land under crop, but also facilitate investments and assured collateral to access loan.
REFERENCES

ESRF (Economic and Social Research Foundation) (2005) Regional Investment Profile for Mara Region: Main and Final Draft Submitted to the Mara Regional Secretariat, ESRF, Dar-es-Salaam

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Razack L et. Al (2012) Sustainable Local Ecosystem-Based Solution to Poverty-Environment Problems; Environment for Development in Tanzania (EfDT), Department of Economics, University of Dar-es-Salaam, Tanzania

### Appendix A1: Logical Monitoring and Evaluation (M&E) Framework

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Goal</strong></td>
<td>(a) A working Mobile-Kilimo platform&lt;br&gt;(b) Number of registered people&lt;br&gt;(c) Number of men (women) registered&lt;br&gt;(d) Average Household Income</td>
<td>(a) Established and working M-Kilimo platform serving:&lt;br&gt;• Agriculture&lt;br&gt;• Fishing&lt;br&gt;• Forest Management</td>
<td>0 (None) 0 (None) 0 (None) (0 (None)) TZS 800,000</td>
<td>1 164,180 80,448 (83,732) TZS 2,400,000</td>
</tr>
<tr>
<td><strong>Objective 1:</strong> To have the Mobile Platform (M-Kilimo) that will facilitate agriculture i.e. production and marketing, fishing, and forest management</td>
<td>(a) A working Mobile-Kilimo platform facilitating agriculture, fishing and forest management</td>
<td>(a) Established and working Mobile - Kilimo serving:&lt;br&gt;• Agriculture&lt;br&gt;• Fishing&lt;br&gt;• Forest Management</td>
<td>0 (None) 0 (none) 0 (None)</td>
<td>1 1 1</td>
</tr>
<tr>
<td><strong>Output:</strong> A functioning Mobile-Kilimo platform established</td>
<td>(a) A working Mobile-Kilimo platform</td>
<td>(a) Established and working M-Kilimo platform serving:&lt;br&gt;• Agriculture&lt;br&gt;• Fishing&lt;br&gt;• Forest Management</td>
<td>0 (None) 0 (none) 0 (None)</td>
<td>1 1 1</td>
</tr>
<tr>
<td><strong>The Activities:</strong> Designing the M-Kilimo; Testing or piloting the M-Kilimo; Launching the M-Kilimo in Sengerema District</td>
<td>(a) Designed M-Kilimo;&lt;br&gt;(b) Tested or piloted M-Kilimo;&lt;br&gt;(c) Registration;&lt;br&gt;(d) Launched M-Kilimo in SengeremaDistrict</td>
<td>Availability and implementation of the following:&lt;br&gt;(a) Designed M-Kilimo;&lt;br&gt;(b) Tested or piloted M-Kilimo;&lt;br&gt;(c) Registration;&lt;br&gt;(d) (d) Launched M-Kilimo</td>
<td>(a) 0 (b) 0 (c) 0 (d) 0</td>
<td>(a) 1 (b) 1 (c) 1 (d) 1</td>
</tr>
</tbody>
</table>

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4 For Tree Nurseries and Tree Planting (Forest Conservation), fishing as well as Energy saving technologies (Biogas) see section 4.3.2
# Appendix A2: Logical Monitoring and Evaluation (M&E) Framework

## Project Name

### Training Programme: Capacity Building, Bankable Projects and Loan Application and management

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Training Programme: Capacity Building, Bankable Projects and Loan Application and management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Goal</td>
<td>Is to train all project beneficiaries on how to prepare Bankable Projects; apply for and administer or manage loans and projects</td>
</tr>
<tr>
<td>Training Programme: Capacity Building, Bankable Projects and Loan Application and management</td>
<td>(a) Number of training programme organized (Resource Person; and Training Materials) (b) Training Programme Delivered</td>
</tr>
<tr>
<td>Indicators</td>
<td>Means of Verification</td>
</tr>
<tr>
<td>(a) Number of beneficiaries identified (Men Vs Women)</td>
<td>(a) Training organization (b) List of beneficiaries or participants</td>
</tr>
<tr>
<td>(c) Training Delivery</td>
<td>0 (None)</td>
</tr>
<tr>
<td>0 (None)</td>
<td>0 (None)</td>
</tr>
<tr>
<td>0 (None)</td>
<td>0 (None)</td>
</tr>
<tr>
<td>Objective 1: To ensure champions in Sengerema District prepare bankable projects; apply for loans from Twiga Bancorp (and other Banks); use the loans for better or improved project management</td>
<td>(a) Number of beneficiaries in Sengerema District (Men Vs Women) able to prepare bankable projects; apply for loans from Twiga Bancorp (and other Banks); use the loans for better or improved project management</td>
</tr>
<tr>
<td>Output: Sengerema District with champions who are able to take up these opportunities (i.e. prepare bankable projects; apply for loans from Twiga Bancorp (and other Banks); use the loans for better, improved and productive project management)</td>
<td>(a) Number of champions in the district preparing bankable projects (Men Vs Women); (b) Number of champions in the district making applications for loans from Twiga Bancorp (and other Banks) - Men Vs Women; (c) Number of champions in the district utilizing loans for better and productive project management (Men Vs Women)</td>
</tr>
<tr>
<td>Availability and implementation of the following: (a) Resource person; (b) Training modules; (c) Participants identified for the training; (d) Training organized and delivered; (e) Number of loans applications (Men Vs Women); (f) Number of loans utilized (Men Vs Women); (g) Number of projects with improved results</td>
<td>0 (None)</td>
</tr>
<tr>
<td>(b) 8</td>
<td>(c) 15 (15)</td>
</tr>
<tr>
<td>(d) 1</td>
<td>(e) 15 (15)</td>
</tr>
<tr>
<td>(f) 15 (15)</td>
<td>(g) 12</td>
</tr>
<tr>
<td>The Activities: Identify a resource person; prepare training modules; identify 60 beneficiaries in Sengerema District for the training; organize and deliver the training; champions’ preparation of bankable projects; loans applications; loans utilization; and improved project results.</td>
<td>(a) Identified resource person; (b) Prepared training modules; (c) Number of participants identified for the training (Men Vs Women); (d) Training organized and delivered; (e) Number of loans applications (Men Vs Women); (f) Number of loans utilized (Men Vs Women); (g) Number of projects with improved results</td>
</tr>
<tr>
<td>0</td>
<td>(b) 0</td>
</tr>
<tr>
<td>0</td>
<td>(c) 0</td>
</tr>
<tr>
<td>0</td>
<td>(d) 0</td>
</tr>
<tr>
<td>0</td>
<td>(e) 0</td>
</tr>
<tr>
<td>0</td>
<td>(f) 0</td>
</tr>
<tr>
<td>0</td>
<td>(g) 0</td>
</tr>
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</table>
## Appendix A3: Logical Monitoring and Evaluation (M&E) Framework

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Irrigation Scheme: Chamabanda Village (Katunguru Ward) and Nyalwambo Village (Nyamatongo Ward)</th>
<th>Indicators</th>
<th>Means of Verification</th>
<th>Baseline Data (2014)</th>
<th>Targets (2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Goal</strong></td>
<td>To facilitate a total of 400 farmers in Chamabanda and Nyalwambo Villages adopt irrigation farming</td>
<td>(a) Number of the farmers (Men Vs Women) adopting irrigation farming in Chamabanda and Nyalwambo Villages</td>
<td>(a) Farmers’ adoption of irrigation farming in Chamabanda and Nyalwambo Villages</td>
<td>110 TZS 800,000</td>
<td>400 TZS 2,400,000</td>
</tr>
<tr>
<td></td>
<td>(b) Average Household Income</td>
<td>(b) Average income generation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Objective 1:</strong></td>
<td>To construct irrigation schemes which can accommodate a total of 400 farmers Chamabanda and Nyalwambo Villages</td>
<td>(a) Completed irrigation scheme in Chamabanda and Nyalwambo Villages</td>
<td>Construction of the modern irrigation scheme in Chamabanda and Nyalwambo Villages</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Output: A modern irrigation scheme with a potential of covering 400 farmers in Chamabanda and Nyalwambo Villages and other communities in the neighborhood in Sengerema District</td>
<td>(a) Completed modern irrigation scheme with the capacity of serving 400 farmersing Chamabanda and Nyalwambo Villages</td>
<td>(a) Completed modern irrigation scheme and irrigation farming</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>The Activities:</strong></td>
<td>Carry out a Baseline study; Prepare a baseline report (and recommendations); Identify Implementing Partner; Fund the project; complete construction</td>
<td>(a) nBaseline report (and recommendation); (b) Availability of the Implementing Partner; (c) Funding and construction of the scheme; (d) A complete and operating modern irrigation scheme</td>
<td>Implementation of the baseline survey; Preparation of the baseline report (and recommendation); Availability of the Implementing Partner; Funding and construction of a modern irrigation scheme; A working modern irrigation scheme</td>
<td>(a) 0 (b) 0 (c) 0 (d) 0</td>
<td>(a) 2 (b) 1 (c) 2 (d) 2 (e)</td>
</tr>
</tbody>
</table>

## Appendix A4: Logical Monitoring and Evaluation (M&E) Framework

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Beekeeping Group: Nyakaliro Village (Nyakaliro Ward)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Goal</strong></td>
<td>To diversify income generating sources and protect the natural environment (forestry) through beekeeping projects Nyakaliro Village (Nyakaliro Ward)</td>
</tr>
<tr>
<td><strong>Objectives</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Objective 1:</strong></td>
<td>To facilitate a total of 30 Beekeeping groups in Nyakaliro Village (Nyakaliro Ward) to establish and operate Beekeeping projects</td>
</tr>
<tr>
<td><strong>Output:</strong></td>
<td>A total of 30 Beekeeping Projects Nyakaliro Village (Nyakaliro Ward) established</td>
</tr>
<tr>
<td><strong>The Activities:</strong></td>
<td>Carry out a Baseline study; Prepare a baseline report (and recommendations); Identify Implementing Partner; Fund the project; Complete and operate the projects</td>
</tr>
</tbody>
</table>

### Indicators | Means of Verification | Baseline Data (2014) | Targets (2017) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Number of beekeepers (Men Vs Women) at Nyakaliro Village (Nyakaliro Ward)</td>
<td>(a) More income generating and a-forestation</td>
<td>(a) 0 (0)</td>
<td>15 (5)</td>
</tr>
<tr>
<td>(b) Acres of re-forestation</td>
<td>(b) 0 acres</td>
<td>(b) 0</td>
<td>10 acres</td>
</tr>
<tr>
<td>(c) Average Household Income</td>
<td>(c) TZS 800,000</td>
<td>(c) TZS 2,400,000</td>
<td></td>
</tr>
<tr>
<td>(a) Number of facilitated beekeeping groups in Nyakaliro Village (Nyakaliro Ward)</td>
<td>(a) Facilitated Beekeeping Groups Nyakaliro Village (Nyakaliro Ward)</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>(a) Number of Beekeeping Groups Nyakaliro Village (Nyakaliro Ward)</td>
<td>(a) Beekeeping Groups Nyakaliro Village (Nyakaliro Ward)</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>(a) Baseline study conducted</td>
<td>(a) Implementation of the baseline survey;</td>
<td></td>
<td>(a)</td>
</tr>
<tr>
<td>(b) Baseline report (and recommendations;</td>
<td>(b) Preparation of the baseline report (and recommendation;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Availability of the Implementing Partner;</td>
<td>(c) Availability of the Implementing Partner;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Funding and construction of the scheme;</td>
<td>(d) Funding Beekeeping Groups;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) Number of complete and operating Beekeeping Groups</td>
<td>(e) Operating Beekeeping Groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f) Baseline study conducted</td>
<td>(f) Implementation of the baseline survey;</td>
<td></td>
<td>(a) 1</td>
</tr>
<tr>
<td>(g) Baseline report (and recommendations;</td>
<td>(g) Preparation of the baseline report (and recommendation;</td>
<td></td>
<td>(b) 1</td>
</tr>
<tr>
<td>(h) Availability of the Implementing Partner;</td>
<td>(h) Availability of the Implementing Partner;</td>
<td></td>
<td>(c) 1</td>
</tr>
<tr>
<td>(i) Funding and construction of the scheme;</td>
<td>(i) Funding Beekeeping Groups;</td>
<td></td>
<td>(d) 5</td>
</tr>
<tr>
<td>(j) Number of complete and operating Beekeeping Groups</td>
<td>(j) Operating Beekeeping Groups</td>
<td></td>
<td>(e) 5</td>
</tr>
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</table>
### Appendix A5: Logical Monitoring and Evaluation (M&E) Framework

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Fish Farming at Kahumulo Village (Nyamatongo Ward)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Goal</strong></td>
<td><strong>To diversify income generating sources and protect the natural environment (forestry) through beekeeping projects Nyakaliro Village (Nyakaliro Ward)</strong></td>
</tr>
<tr>
<td><strong>Indicators</strong></td>
<td><strong>Means of Verification</strong></td>
</tr>
<tr>
<td>(d) Number of beekeepers (Men Vs Women) at Nyakaliro Village (Nyakaliro Ward)</td>
<td>(c) More income generating and a-forestation Income generation</td>
</tr>
<tr>
<td>(e) Acres of re-forestation</td>
<td></td>
</tr>
<tr>
<td>(f) Average Household Income</td>
<td></td>
</tr>
<tr>
<td><strong>Objective 1:</strong></td>
<td><strong>To facilitate a total of 30 Beekeeping groups in Nyakaliro Village (Nyakaliro Ward) to establish and operate Beekeeping projects</strong></td>
</tr>
<tr>
<td>(a) Number of facilitated beekeeping groups in Nyakaliro Village (Nyakaliro Ward)</td>
<td>(b) Facilitated Beekeeping Groups Nyakaliro Village (Nyakaliro Ward)</td>
</tr>
<tr>
<td><strong>Output:</strong></td>
<td><strong>A total of 30 Beekeeping Projects Nyakaliro Village (Nyakaliro Ward) established</strong></td>
</tr>
<tr>
<td>(a) Number of Beekeeping Groups Nyakaliro Village (Nyakaliro Ward)</td>
<td>(b) Beekeeping Groups Nyakaliro Village (Nyakaliro Ward)</td>
</tr>
<tr>
<td><strong>The Activities:</strong></td>
<td><strong>Carry out a Baseline study; Prepare a baseline report (and recommendations); Identify Implementing Partner; Fund the project; Complete and operate the projects</strong></td>
</tr>
<tr>
<td>(k) Baseline study conducted</td>
<td>(k) Implementation of the baseline survey;</td>
</tr>
<tr>
<td>(l) Baseline report (and recommendations)</td>
<td>(l) Preparation of the baseline report (and recommendation;</td>
</tr>
<tr>
<td>(m) Availability of the Implementing Partner;</td>
<td>(m) Availability of the Implementing Partner;</td>
</tr>
<tr>
<td>(n) Funding and construction of the scheme;</td>
<td>(n) Funding Beekeeping Groups;</td>
</tr>
<tr>
<td>(o) Number of complete and operating Beekeeping Groups</td>
<td>(o) Operating Beekeeping Groups</td>
</tr>
<tr>
<td><strong>The Activities:</strong></td>
<td><strong>Carry out a Baseline study; Prepare a baseline report (and recommendations); Identify Implementing Partner; Fund the project; Complete and operate the projects</strong></td>
</tr>
<tr>
<td>(p) Baseline study conducted</td>
<td>(p) Implementation of the baseline survey;</td>
</tr>
<tr>
<td>(q) Baseline report (and recommendations)</td>
<td>(q) Preparation of the baseline report (and recommendation;</td>
</tr>
<tr>
<td>(r) Availability of the Implementing Partner;</td>
<td>(r) Availability of the Implementing Partner;</td>
</tr>
<tr>
<td>(s) Funding and construction of the scheme;</td>
<td>(s) Funding Beekeeping Groups;</td>
</tr>
<tr>
<td>(t) Number of complete and operating Beekeeping Groups</td>
<td>(t) Operating Beekeeping Groups</td>
</tr>
</tbody>
</table>