PROPOSED PEI INTERVENTIONS FROM ASSESSMENT STUDIES

1.0 INTRODUCTION
In 2014, studies were conducted on “THE ASSESSMENT STUDY TO IDENTIFY INSTITUTIONAL, LEGAL AND FINANCIAL BOTTLENECKS ON POVERTY-ENVIRONMENT IMPLEMENTATION AT DIFFERENT LEVELS OF DISTRICT, WARD AND VILLAGE IN BUKOBA RURAL, BUNDA, IKUNGI, ILEJE, NYASA, AND SENEREMA DISTRICTS”

Objectives
The main objective of this study was to identify institutional, legal, financial bottlenecks on Poverty-Environment (including related climate change and gender equality issues) implementation at different administrative levels of Bunda, Bukoba Rural, Nyasa, Ileje, Ikungi and Sengerema Districts, wards and villages. The specific objectives were: i) To assess institutional, organizational and legal capacities as well as coordination mechanisms to help implement P-E objectives that are mainstreamed into District Development Plans, DDPs; ii) To assess main budgetary process bottlenecks and challenges that hinder translation of P-E related objectives into impacts at district level; iii) To propose the interventions or recommendations (institutional, legal and budgetary) to remove bottlenecks and challenges.

2.0 RESULTS
Several important findings, recommendations, and key actions were elucidated.

Brief summary of what emerged from the study:

(i) In all Districts, the inadequate access to information, knowhow, and requisite business, production, processing, and value addition skills is the main priority issue/challenge.
(ii) The ecosystem (natural resources) is and will continue being the source of livelihood and the prime provider of raw materials that will serve as an engine for socio-economic development, in the next three to five decades, even beyond in some remote areas and periphery Districts.
(iii) The loss of biodiversity, is causing some people to experience declining well-being, and exacerbating poverty in some social groups, especially the among the not-so-well educated (Primary school’s standard VII to Secondary school Form IV graduates), women and youth. The main reasons are: a) loss of forestry and vegetation for firewood, charcoal, for making construction materials (brick making) and timber for
construction and sale; b) land degradation due to soil erosion, wild fires, cultivation in marginal land, inappropriate agricultural practices and poor agricultural practices such as shifting cultivation, overgrazing, and encroaching desertification in Ikungi, and Bunda Districts; c) declining subsurface and surface water levels in wells, rivers and lakes due to change rainfall intensity, and shift in season variability, and related climate change effects, and destruction of water catchments and wetlands. Other includes: declining fisheries resources due to overfishing, destruction of spawning grounds, raising water temperatures; development pressures on the lakes (especially Victoria and Lake Nyasa) ecosystems are increasing because population growth and the multi-purpose role of the lakes and the subsequent pollution; and inadequate financial resources, insufficient human and technical resources, and low awareness on technologies and techniques to address the above issues.

(iv) Institutional issues included: Low administrative and organizational capacity from District Council to the Village Councils; Inadequate expertise among Councilors overseeing several sectors (e.g. Committee on Economic, Infrastructure, and Environment, or the Committee on Education, Health, and Water); lack of working tools and facilities affecting good governance and sometimes compromising accountability in service delivery Inadequate qualified professional staff in some subject areas, such Livestock, Crop Production, Fisheries, Environmental Management, Natural Resources Management, Research and Statistics Management, Risk Management, and Monitoring and Evaluation; and most Districts do not have an overarching strategy or strategic plan.

(i) Legal issues: most legislation were old and need a review (LGA Act of 1982- dated- 32 years old, Government (Urban Authorities) Act 1982, Local Government Finance Act 1982, Urban Authorities (Rating) Act 1983, Regional Administration Act 1997; Local Government Laws (Miscellaneous Amendments) Act 1999) and other such as the Mortgage Financing Act and the Unit Titles Act of 2008 to align it to the Public Private Partnership Policy of 2010; People at the local level do not have capacity/skills to prepare their own by-laws and to implement them due to financial constraints; and some sectoral laws e.g. Environmental Act 2004 are conflicting with by-laws (e.g. agricultural by laws); and oversight challenges due inadequate skilled manpower and financial and technical resource constraints are leading to increased illegal harvesting of

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1. Tanzania loses about 1.1% of its forest cover every year, with a deforestation rate of 412,000 Ha per annum, MNRT, 2014. About 300,000 rural families (over 1 million rural people) depend on charcoal production and sales for their primary source of income, Camco Advisory Services Tanzania Limited. 2012. "Biomass Energy Strategy (BEST) Tanzania." Dar es Salaam.
forest products illegal fishing practices leading to degrading the water catchments, wetlands, rivers’ and Lakes’ ecosystems.

(i) Budgetary issues: Large proportion of the District Council funds comes from the Central government allocations, which amount for more than 90% of the District Council’s approved budget, resulting in perpetual dependence and limited autonomy; much potential cess revenue goes uncollected - District authorities collect not more than one-quarter of the revenue that is potentially available to them from produce cess charges due to limited human and infrastructural capacity; and some of the revenues that are remitted to the Central Government, e.g. from the Wildlife Management Areas (WMA) are supposed to be remitted back to the District Council (in the case of WMAs it is 25%), but they are remitted late. As a result, the dwindling fiscal space of the District internal revenues and the resultant under-funding is affecting the coordination and adequacy of implementation of P-E, climate change, and gender mainstreaming interventions and environmental management at all levels.

3.0 WAY FORWARD

The prospects and way forward for the outputs from the six reports would include:

(i) There is need to have a long-term vision and develop District strategic plans (SP) that will guide/give direction to the Districts’ development pathway and drive P-E and other interventions that will foster sustainable social economic development and growth of the people. Such a functional strategy or strategic plan would enable robust joined-up or holistic approaches to overall development and achievement of P-E objectives whereby the focus is multi-sectoral and encompasses all livelihood and development issues and generating long term outcomes with higher impacts that can withstand the test of time, and with minimum undesired effects. Otherwise, focusing on single or just few disconnected issues may yield detached results chains (which normally in Tanzania they generate limited or short to medium term intermediate states and impacts with limited behavior/cultural changes or paradigm shift).

(ii) P-E interventions may help impact on the GDP of the people in the 6 Districts (currently is between TShs 600,000 and 900,000 (about US$ 330-500) per year by: Contributing to productivity enhancements, including input factors, management of pests and diseases, climate proofing, and profitability improvements of crop farming, animal husbandry, informal forestry, and fisheries. These areas are integral to the local economies; underpin large parts of GDP, and if significantly improved may foster revenue and export earnings (to EAC countries, Malawi, Zambia, Congo, and South
Sudan), sustain a large proportion of the population; and may retard to migration of youth to town centers.

(iii) Investments in the conservation and preservation of forests may sustain a wide range of P-E related sectors and livelihoods and at the same time preserve biodiversity, terrestrial species, contribute to employment, income generation, and reduce/retard environmental degradation and potential climate-induced destructions caused by e.g. drought, floods, etc.

(iv) The natural resources dependency may be reduced by P-E interventions by opening access to primary and secondary processing, storage, packaging, and marketing of valuable products, e.g. oil seed’s products, grains, horticultural products, herbs and traditional medicine, spices, eco-friendly construction materials e.g. bricks and roofing materials, etc.

(v) The population of Tanzania is increasing fast and shifting towards the urban centers (from 17.5m in 1978 to 45m in 2014, and is expected to rise to 63 m in 2050). The proportion of women in the population is rising and is currently at about 62.2%. There is a need to empower women to be financially independent to safeguard their rights and improve their lives to enable them to fulfill their potential by: i) Increasing business, organization, and management skills levels, and other opportunities for entrepreneurship training to build agro-entrepreneurial ability and self-employment and diverse market participation to supply local and distant markets; ii) giving women access to finance, know-how, techniques, technologies and processes for increasing crop, livestock and forestry products’ production, processing, distribution, and marketing to distant places like municipalities in Mwanza, Arusha, Mbeya, Musoma, Dar es Salaam, regionally, and overseas. The above interventions would enable women businesses to obtain a fair share of the benefits.

(vi) P-E interventions may help review, updating, or formulation of Districts and Central Government’s policies, development strategies and plans favorable for acceleration of implementation of P-E objectives. In addition, P-E actions may support the improvement of the regulatory environment, enactment of favorable business and investment laws, establishment of incentives for businesses in strategic areas, and in encouraging South-South and other investments (including attracting FDI) in above mentioned core areas or others such as the construction of feeder roads, and offices and affordable quality housing for public servants and the poor through the Public Private Partnership (PPP).

(vii) Other potential P-E related interventions include: support to establish climate insurance (to hedge against climate change effects in the agricultural sector) and a stabilization fund for crops (e.g. for coffee and cotton) in order to compensate farmers
should world market prices fluctuate to drop too sharply and thus seriously affect the prices paid to the farmers; and inspiring and promoting awareness to the people in the District and also among the Diaspora on the various economic opportunities available in within own and other Districts and encourage them to exploit them accordingly, e.g. through developing and promoting a District Investment Profile or using an ICT based platform to promote needed technology, investments, or needed specific financial inflows (e.g. infrastructure bonds, credit lines, etc)

(viii) Most of the recommendations and interventions from the Institutional, Legal, and Budgetary areas are in the domain and mandate of the District authorities and Central Government. The will need further discussions among policy makers and implementers and decision making/approval from higher Government level circles. Some will need changes in the Constitution that is currently being reviewed, review or abandoning certain policies and plans (for instance the evaluation of the viability and performance to date of the instruments and Opportunities and Obstacles for Development- O & OD approach for planning from village, through District and Regional levels, to National level; need to significantly improve credibility, efficiency and accountability in managing District resources/finances; establishing new investment laws and a new novel financial infrastructure; offering tax incentives (breaks) and/or credit enhancements like limited loss guarantee to emerging innovative enterprises; ensuring accurate and reliable data e.g. through fostering documented monitoring, data gathering, and research by the National Bureau of Statistics and standard bodies; intermediation of District funding through resources from the natural gas proceeds/sovereign wealth fund; using liquidity from the pension funds, insurance companies, and even banks to finance projects, e.g. construction of Business Districts and Real Estate development in new Bukoba Rural, Nyasa and Ikungi Districts; diversifying sources of District’s funds, in order to plug the gap, i.e. meeting enormous demand for funds to meet a huge challenge in financing the District’s activities, through e.g. District Development bonds (including sensitization of the general public on the essence of bonds, their benefits to the District and to those who purchase them), Social Venture Funds, Community Development Funds, Social Investment Funds (e.g. Calvert Funds that invest in companies that address social problems) and mobilizing Diaspora savings for development purposes, including organizing Diaspora bonds and collective investment

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2 A Diaspora bond is a retail savings device marketed and sold to the Diaspora members, aimed at tapping their wealth or incomes in their country of residence. It can be denominated in small denominations like $100, but may go beyond this level, depending on the market being targeted. It needs to be organized by reputable home government institution or even by Private Corporation in Tanzania, provided it abides to securities regulations. Tanzania can learn from countries like Bangladesh, India, Pakistan and Sri Lanka
schemes licensed by the Dar es Salaam Stock Exchange (schemes like community infrastructures, e.g. water, housing, schools and hospitals).

Another example include setting up the technical position of Deputy District Executive Director who will perform the following functions- i) establishing and strengthening of beneficial strategic alliances between the District Council-Business Community/Private Sector-Academia, Research and Extension Institutions-Training Institutions, ii) coordination of cross- and inter-sectoral programs and projects, including P-E), iii) in collaboration with the proposed District Business Council to oversee creation, strengthening, and management of linkages between emerging and existing enterprises-local, national, regional, and international buyers or international niche markets for specialty products, e.g. organics, where the producers/enterprises may fetch premium prices.

(ix) Table 1 below presents proposed selected high value and impact interventions that may be included in the Annual Work Plan for 2015/16. After further deliberations some of the interventions may be taken up for funding and implementation.
A) PROPOSED PEI INTERVENTIONS FROM ASSESSMENT STUDIES AND IMPORTANCE TO STAKEHOLDERS AND FOR ACHIEVEMENT OF P-E OBJECTIVES (1: Very low; 5: Very high)

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<tr>
<th>ISSUE/ITEM</th>
<th>RECOMMENDATION</th>
<th>SELECTED KEY INTERVENTIONS FOR INCLUSION IN THE 2015/16 ANNUAL WORK PLAN</th>
<th>IMPORTANCE TO STAKEHOLDERS AND FOR ACHIEVEMENT OF P-E OBJECTIVES</th>
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| Institutional | The Central Government, LGA, business community, and development partners should further strengthen and enhance capabilities of enterprises, community and business associations, and the public sector to effectively and efficiently mainstream PEG-CC issues in the local development agenda/framework and implement them in line with community wants and needs to enhance ownership and long term sustainability. | 1. The District Council in collaboration with other stakeholders should commission a consultant to formulate a long-term vision and develop a strategic plan (SP) that will guide/give direction to the District’s development pathway and drive P-E and other interventions that will foster sustainable social economic development and growth of the District and PEI stakeholders to communicate, network and exchange ideas.  
2. Enhance the capacity among the Bunda, Ikungi, Illeje, Nyasa, Sengerema, Nyasa and Bukoba Rural District Councils to keep talking among themselves and PEI stakeholders to communicate, network and exchange ideas. | 5  
3 |
| Budgetary | The Council should undertake an assessment of the full range of natural resources available in their jurisdiction | 1. Facilitate entrepreneurs’ and women groups’ access to savings and | 3 |
and carefully leverage revenue from its sustainable exploitation, extraction or value addition (including negotiating and getting appropriate allocation/taxes from the natural resources under the Central Government domain) to equitably implement P-E related interventions for broad based local socio-economic development and growth (including youth and gender equity and equality).

credit facilities (Savings and Credit Cooperatives Societies- SACCOS, Rotating Savings and Credit Associations-ROSCAS, and VICOBA).

2. The DED in collaboration with P-E partners should recruit a trainer or a consultant to help them to develop a sustainable financing strategy and expose the District authorities to other funding mechanisms such as from local banks for P-E investments by business enterprises, or private sector-LGA/Community partnership using funding instruments from e.g. TIB, Twiga Bank, NMB, CRDB, Agricultural Bank; grants from TASAF, Agriculture Sector Development Program 2016/17-2019/20, AfDB; multilateral bodies and bilateral donors, private foundations and philanthropic organizations, e.g. BMGF, etc.);

| Environment and Climate Change | Therefore, the District Council, Central Government, and environmental stakeholders should identify potential vulnerabilities and risks; identify cost effective | 1. Undertake a comprehensive vulnerability assessment on climate change impacts in the |
and appropriate response options for different areas in the District; and develop, introduce, and support uptake of District additional specific adaptation, mitigation, and resilience measures suited to address climate change induced effects in line with local realities. The aim of the above is to enhance resilience of ecosystems, minimize suffering, and reduce adverse effects on agriculture and food security; livestock; water; energy; forestry; health, and infrastructure.

2. Enhance Councilors’ and technical cadres’ awareness and understanding on climate change vulnerabilities and potential impacts in the District;

3. Motivate communal and individual afforestation by establishing nurseries through individual growers and by groups, e.g. schools and other institutions, as a source of income and tree planting as an income generating and asset accumulation venture

4. Conduct applied research aiming at Lake Nyasa’s biodiversity protection, at reducing the impact of human activity on the Lake’s biodiversity, involve the stakeholders, and ensure that their results contribute to solving specific practical problems.

5. Establish a program of environmental education and training on sustainable exploitation of resources in Lake Nyasa and its basin
Gender

The District council and gender stakeholders (including URT Parliament; Ministry of Women, Children, and Gender; Women Development, Children and Gender Associations/Groups/NGOs; Tanzania Women’s Lawyers’ Association, Political Parties Women’s Wings; Tanzania Rural Women and Children Development Foundation (TARWOC); Faith Based Organizations, EAC; UN Inter-agency Gender Group; International Covenant on Economic, Social and Cultural Rights-Tanzania; etc), should use joined-up approaches to empower women and girls to escape or reduce gender related challenges and to develop and encourage other approaches to reverse the GBV and FGM trends.

1. Sustainable changes in knowledge, attitude and practice may directly impact FGM and GBV being abandoned: The District Council to develop action plans and allocate resources to support women’s rights and self-sustainability, including further empowering women and girls by improving education opportunities for girls and sensitizing communities on the effects of harmful traditional practices such as FGM.

2. Empower women to be financially independent to safeguard their rights and improve their lives to enable them to fulfill their potential by: i) Increasing opportunities for entrepreneurship training to build agro-entrepreneurial ability and self-employment and diverse market participation to supply local and distant markets; ii) giving women access to know-how, techniques and technologies for
increasing crop production.

3. Conduct a study/business health check to assess the results chain of poverty-environment-gender activities on the performance and development of women and youth entrepreneurial groups/enterprises in the District.

4. The District Council and other stakeholders should support individual and women groups to enhance their business culture and financial management skills; to enhance the quality of their goods and services; to be techno-savvy; to increase efficiency and productivity; to raise customer value optimization.

5. Empower women to invest in the production and marketing of forests’ products to generate wood and non-wood forest products such as bee products⁴.
gums, natural dyes, fruit and nuts, fiber, spices, and medicinal plants
6. Deliver information to women groups on P-E opportunities and implementation in Kiswahili or their local language.
7. The District council should conduct a study to assess vulnerability, impacts and risks of climate change on women, children, youth and elderly.

| Other recommendations related to Poverty Alleviation at village and Ward levels, i.e. Fisheries, Agriculture (crops), Livestock, and Forestry. | Enhance the vibrancy of the agricultural, livestock, fisheries, and forestry sectors by: supporting access to productivity and profitability enhancements; creating and strengthening business linkages between small and medium individual producers, groups, enterprises producers and local, national, and regional buyers (EAC, SADC); availing processing and value addition knowhow and affordable facilities; developing respective functional supply and value chains and encouraging the stakeholders to participate. In addition, the Central and local government should strengthen the regulatory framework to reduce illegal practices and control overexploitation of forest resources, water catchments, and wetlands. | Fisheries: Promote and support integrated fish farming as an alternative source of income generation and livelihood by enabling (to individuals, groups, business enterprises) access to appropriate technologies, purchasing and installing equipment and facilities, and appropriately train the aspirants in the related best practices for feeding, disease control, breeding, and marketing. | Forestry:
1. Address all drivers of deforestation and forest degradation taking into account specific local circumstances, and support appropriate mechanisms to reward or provide incentives for forest conservation and avoidance of deforestation, as per Participatory Forest |
The bacterial wilt in Banana is caused by Xanthomonas campestris pv. musacearum (Xcm) with symptoms that include progressive yellowing and wilting of leaves, shrivelling of male buds, premature ripening and internal discoloration of fruits.

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<th>Management, Community Based Forest Management, and Joint Forest Management guidelines</th>
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| 2. Stimulate investments in beekeeping, honey, wax and other products to provide high return and profitable opportunities. In addition, raise awareness among residents to adopt modern production, processing and packaging technologies and practices e.g. production of modern beehives; equipment and facilities for honey collection, processing and wax production. Furthermore, provide training on modern beekeeping, extension services, research services, and marketing support to expand cost-effective production and marketing of safe and high quality bee products.

**Livestock:**
Train women and youth in environmental friendly storage and tanning of leather using vegetable and eco-friendly dyes and production of leather goods.

**Crop farming:**
1. Create awareness, promote, and facilitate the acquisition bacterial wilt

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4 The bacterial wilt in Banana is caused by Xanthomonas campestris pv. musacearum (Xcm) with symptoms that include progressive yellowing and wilting of leaves, shrivelling of male buds, premature ripening and internal discoloration of fruits.
resistant banana plantlets in Bukoba Rural District, produced through tissue culture biotechnological solutions in Crop Bioscience Solutions, Arusha. The acquired plantlets would be used for replanting and rehabilitating the destroyed farms. To begin with, about five hundred thousand plantlets are required for BRD for food security purposes.

2. Promote oil seeds production – Sunflower and Sesame) milling and oil refining technologies to improve quality and shelf life and increased income for individuals and communities.

3. Conduct an assessment of the crop value chains and influence of trade policies on the produced volumes and internal and external market access.

Land resources:
Enhance the capacity of the District for development and implementation of village land use plans which will allocate areas for crop production, water storage facilities/dams, (e.g. from seasonal rivers and rain water harvesting), individual and village forests, grazing livestock, production/manufacturing, markets, business area, and for other purposes (recreation, education, health, to avoid conflicts.

Energy:
1. **Promote sustainable energy sources:** Support the development and rollout of alternative sources of energy and equipment; including energy efficient stoves, biogas, and solar lighting that will reduce pressure on existing forests;

2. **Promote the use of residual biomass,** e.g. rice husks, in firing bricks instead of firewood.
B) PRO-POOR INTERVENTIONS FROM STUDIES:

- The District Council should design, install, and effectively use an Information Management System (IMS) and facilitate its use by other stakeholders to facilitate the linkage, access, and smooth flow of information between PEI actors.

- Develop and promote a District investment profile and allocate land for the development of crop and livestock products value chains, and establishment of an industrial park and human settlements

- Motivate communal and individual afforestation by establishing nurseries through individual growers and by groups, e.g. schools and other institutions, as a source of income and tree planting as an income generating and asset accumulation venture

- Improve the gross margins from cultivation of cassava, maize, paddy, sorghum, millet and cotton, through a comprehensive approach, i.e. encouraging farmers to use both improved variety seeds such as disease resistant cassava varieties, and hybrid and climate resilient sunflower and simsim, upland rice, high yielding sorghum, and fertilizer as a package

- Empower women to be financially independent to safeguard their rights and improve their lives to enable them to fulfill their potential by: i) Increasing opportunities for entrepreneurship training to build agro-entrepreneurial ability and self-employment and diverse market participation to supply local and distant markets; ii) since women potentially hold the greatest leverage for agricultural development, train them in enterprise and group/association development

- Promote and support integrated fish farming as an alternative source of income generation and livelihood by enabling (to individuals, groups, business enterprises) access to appropriate technologies, purchasing and installing equipment and facilities, and appropriately train the aspirants in the related best practices-e.g. design and construction of quality ponds, fishing gear, access to fish fingers (vifaranga, production of nutritious and quality fish feed, protection from bird pests, prevention and treatment of diseases, cold storage facilities, water and environmental management, waste water treatment, and orientation in efficient and cost-effective fish farming operations (starting with the hands-on demonstration/learning by doing).

- Support horticultural farmers near Lake Victoria shores with efficient pumping, water holding and distribution systems and training in Good Agricultural Practices (GAP, Pesticides Management, Agro-commodities Quality and Safety Standards, Ecological Farming, HACCP, Basics in Sanitary and Phytosanitary Measures)

- Support generation of solar based electricity for facilitating economic progress in Serengeti Ward by installing PV generators that can generate 30-100 kilowatt for water pumping in horticulture production and handling schemes; maize, cassava and millet milling; small scale welding; and for other social services such as school, health center, and households
• Develop and upscale the use of appropriate alternative energy sources, including mini hydro systems, solar for lighting, biogas for cooking and equipment such as ecological biomass cook stoves to reduce pressure on forest resources;

• Support development of livestock feeds through pasture establishment and preservation of pastures and crop residues for dry season feeding

• Promote and strengthen traditional and modern early warning rainfall systems and indigenous climate resilient agricultural systems; - experience of Chololo

• Create awareness on afforestation (for wood fuel, construction, stabilizing soil, aesthetics, and trade) and deliver the knowledge on nurseries development, and forest management by establishing three demonstration village forests of about 10 Ha with 30,000 early trees each (with the assumption that in the early years of survival rate will be 50-60%). Then facilitate entrepreneurs who may be trainer of trainees to take and experiment, test, evaluate and disseminate to others the gained knowledge

• The District Council to promote processing of crops, livestock and natural resources products to produce quality and safe consumer ready products and packaging

• Train women groups to establish and run algae farms along Lake Victoria shores and other lakes, processing into valuable products, and develop local and export markets for the produce

• Support women groups to cultivate 5-10 Ha farms of herbals, traditional medicine products, and fruits that help in disease preventing or stemming fruits and nuts, such as pomegranate, black raspberries, and almonds. In addition, assist them in acquiring technology and facilities for primary and secondary value addition, packaging, and marketing

• Support small scale Irrigation Schemes for horticulture products and paddy.