THE UNITED REPUBLIC OF TANZANIA
PRESIDENTS OFFICE, REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT (PO-RALG)

Tanzania Strategic Cities Project (TSCP)

Environmental and Social Management Framework (ESMF) for the Proposed TSCP Additional Financing II Project

FINAL REPORT

November, 2016
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<th>Description</th>
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<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immuno Deficiency Syndrome</td>
</tr>
<tr>
<td>BOD</td>
<td>Biochemical Oxygen Demand</td>
</tr>
<tr>
<td>BOQ</td>
<td>Bill of Quantities</td>
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<tr>
<td>CDA</td>
<td>Capital Development Authority</td>
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<tr>
<td>CDO</td>
<td>Community Development Officer</td>
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<tr>
<td>CGV</td>
<td>Chief Government Valuer</td>
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<td>CMT</td>
<td>Council Management Team</td>
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<tr>
<td>CO₂</td>
<td>Carbon dioxide</td>
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<tr>
<td>COD</td>
<td>Chemical Oxygen Demand</td>
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<tr>
<td>COI</td>
<td>Corridor of Impact</td>
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<tr>
<td>DC</td>
<td>District Commissioner</td>
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<td>DMT</td>
<td>District Management Team</td>
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<td>DOE</td>
<td>Division of Environment</td>
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<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<td>EIC</td>
<td>Education Information and Communication</td>
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<td>EIS</td>
<td>Environmental Impact Assessment</td>
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<td>EMA</td>
<td>Environmental Management Act</td>
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<td>Environmental Management Officer</td>
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<td>EMoP</td>
<td>Environmental Monitoring Plan</td>
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<td>EMP</td>
<td>Environmental Management Plan</td>
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<td>Environmental Management Tools</td>
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<td>Eng.</td>
<td>Engineer</td>
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<td>ER</td>
<td>Emergency Response</td>
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<td>Environmental and Social Impact Assessment</td>
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<td>Environmental and Social Management Framework</td>
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<td>ESMoP</td>
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<td>ESSF</td>
<td>Environmental and Social Screening Form</td>
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<td>EWURA</td>
<td>Energy and Water Utilities Regulatory Authority</td>
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<tr>
<td>GHGs</td>
<td>Green House Gases</td>
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<tr>
<td>GoT</td>
<td>Government of Tanzania</td>
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<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<td>HWMP</td>
<td>Hazardous Waste Management Plan</td>
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<tr>
<td>IDA</td>
<td>International Development Association</td>
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<td>IEC</td>
<td>Information Education and Communication</td>
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<td>IPM</td>
<td>Integrated Pest Management</td>
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<td>LGAs</td>
<td>Local Government Authorities</td>
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<tr>
<td>LGRP</td>
<td>Local Governments Reform Program</td>
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<td>LGSP</td>
<td>Local Governments Support Program</td>
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<td>LGSP – CBG</td>
<td>Local Governments Support Program – Capacity Building Grant</td>
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<tr>
<td>MC</td>
<td>Municipal Council</td>
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<tr>
<td>MEO</td>
<td>Mtaa Executive Officer</td>
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<tr>
<td>MLHHSD</td>
<td>Ministry of Lands, Housing and Human Settlement Development</td>
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<td>MPs</td>
<td>Members of Parliament</td>
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<tr>
<td>MWMP</td>
<td>Medical Waste Management Plan</td>
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<tr>
<td>NEMC</td>
<td>National Environment Management Council</td>
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<tr>
<td>NGO</td>
<td>Non Governmental Organisation</td>
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NO₃  Nitrogen Oxides
O₃   Ozone
OSHA Occupational Health And Safety Authority
PAP  Project Affected People
PEA  Preliminary Environmental (and Social) Assessment
PHA  Public Health Act
PMO-RALG Prime Minister’s Office, Regional Administration and Local Government
PO – RALG President’s Office-Regional Administration and Local Government
PPE  Personal Protective Equipment
RAPs Resettlement Action Plans
RAS  Regional Administrative Secretary
RC   Regional Commissioner
RPF  Resettlement Policy Framework
SOX  Sulphur Dioxide
STDs Sexually Transmitted Diseases
SWMP Solid Waste Management Plan
SWOT Strength Weaknesses Opportunities Threats
TAA  Tanzania Airports Authority
TACAIDS Tanzania Commission for Aids
Tanga-UWASA Tanga Urban Water Supply and Sanitation
TANESCO Tanzania Electric Supply Company
TANROADS Tanzania National Roads Agency
TMSP  Traffic Management and Safety Procedure
TNA  Training Needs Assessment
ToR  Terms of Reference
TOT  Training of Trainers
TSCP Tanzania Strategic Cities Project
TSCP – AFP TSCP Additional Financing Project
URT  United Republic of Tanzania
VPO  Vice President’s Office
WB   World Bank
WB/OP World Bank/Operational Policy
WBWG World Bank Working Group
WDC  Ward Development Committee
WEO  Ward Executive Officer
WWMP Waste Water Management Plan
Executive Summary

The Government of Tanzania (GOT) through the Prime Minister’s Office, Regional Administration and Local Government (PMO-RALG) now known as the President’s Office-Regional Administrative and Local Government (PO-RALG), has been implementing the Tanzania Strategic Cities Project (TSCP) in selected urban Local Government Authorities (LGAs) financed by a World Bank (IDA) credit and a grant from the Government of the Kingdom of Denmark since 2010. The TSCP is an investment operation that provides finance for critical infrastructure in 4 cities of Mwanza, Tanga, Mbeya and Arusha; 4 Municipalities of Ilemela, Dodoma, Kigoma-Ujiji, Mtwara-Mikindani and the Capital Development Authority (CDA).

Works have involved upgrading/rehabilitation of a number of artery urban roads and drainage and associated structures such as drainage ditches, culverts/bridges, footpaths and street lighting and local infrastructure such as bus and lorry stands aimed to improve movement of people, goods and services in the urban areas. TSCP also fund development of infrastructure to improve solid waste management including solid waste collection centers, equipment for transportation and disposal, and the development or improvement of disposal sites. To date, most of the prioritized infrastructure are complete and in use or in final stages of completion.

Some areas of the completed infrastructure have been identified where improvements need to be made. In addition a number of infrastructures were not financed under the first phase TSCP due to limitation of available funds under the credit. Due to overall satisfactory implementation of the parent project and based on these identified gaps, GOT received an additional credit – Tanzania Strategic Cities Project- Additional Financing of US$50 million from IDA and US$6 million from DANIDA. This first AF is financing additional infrastructure investments and also improvements to the management capability of the 8 urban LGAs and CDA in Dodoma (following the recent split of Mwanza City Authority, Ilemela Municipality has been included as part of the project sites under TSCP AF). The TSCP AF has been under implementation since 2014.

While the first AF helped to address some of the infrastructure gaps, still, not all proposed infrastructure works identified under the parent TSCP were covered. Further, participating LGAs have identified new sub-projects which are important to the functionality of existing sub-projects as well as overall urban development in each LGA. Hence, GoT is now preparing a Second Additional Financing (AFII) to the TSCP. The AFII will scale up positive impact by financing complementary activities including: (i) the rehabilitation/upgrading/construction of urban roads, sidewalks, bus/lorry stands, street lights and drains, public parks, markets and other community facilities and providing the two remaining cities with sanitary landfills; and (ii) strategic institutional strengthening and capacity building activities for project LGAs, particularly to build foundations for future local economic development, enhance implementation and enforcement of urban plans, and continue to enhance solid waste management and own source revenue generation.
To ensure that these future infrastructure development interventions are implemented in an environmentally and socially sustainable manner, TSCP AF has an Environmental and Social Management Framework (ESMF) that will guide implementers – Participating Urban LGAs to identify and mitigate potential negative environmental and social impacts during the planning stage for the construction of the sub-projects. This ESMF presents definitive, conclusive and clear procedures consistent with the laws in Tanzania and the World Bank’s safeguard policies.

The ESMF outlines an environmental and social screening process which will enable the LGA Project Teams with support of consulting service providers to identify potential environmental and social impacts of construction and operation of the infrastructure and support structures and to address them by incorporating the relevant mitigation measures into the designs of the subprojects before they are implemented.

Environmental and Social Impact Assessments (ESIAs) and Resettlement Action Plans (RAPs) for the first phase of the Core Urban Infrastructure and Services component of TSCP (constituting rehabilitation/upgrading of urban roads and drainage and solid waste collection and disposal infrastructure) were conducted and approved by National Environment Management Council (NEMC) in 2010 and each Participating LGA was issued an EIA Certificate enveloping all sub-projects that were tabled for funding. The environmental and social assessment and management process specific for TSCP additional works promulgated in this ESMF responds to requirements specified in the Tanzania EIA and Audit Regulations, 2005 (Part IX, Regulation 42, Sub-regulation (1); (2)(b); and (4)) dealing with approval of changes to a project with a valid EIA Certificate.

The environmental and social assessment and management in this ESMF requires the Municipal sector specialists (Civil Engineers, Environmental Engineers) assisted by the Project Team at each participating urban authority who after training (and with assistance from Municipal Environmental Management Officers and PO-RALG Project Team) will screen the infrastructure projects at the preparation stage using the environmental and social screening form in Annex 3 and the environmental and social checklist in Annex 4 to identify and mitigate potential adverse effects/impacts. The subsequent environmental and social assessment work will be carried out based on the screening results and related recommendations.

It is envisaged that the anticipated impacts from development of the infrastructure sub-projects to be funded by the TSCP Second Additional Financing will be short-term, site specific, confined, reversible and can be managed through the application of the mitigation and monitoring measures. Thus, a process of environmental and social screening and assessment using simple methods (checklists) and procedures (existing structures at local authorities) are recommended for this ESMF.

The salient aspects of this process to be established at each of the 8 Participating LGAs and CDA will involve:

Municipal sector specialists assisted by the construction consulting firm qualified in environmental and social planning and management will incorporate the identified mitigation plans/measure into the infrastructure designs and project proposals.
(i) The qualified Municipal sector specialists assisted by Municipal Environmental Management Officers and LGA Project Teams will screen the subprojects using the ESMF Checklists (Annex 3 & 4) to determine the changes to the TSCP where extra work needs to be done to supplement the existing Environmental Impact Statements. The screening results will be issued as part of the Terms of Reference to registered firm of experts (certified by NEMC) commissioned by PO-RALG to undertake the additional assessment work.

(ii) Firm of experts will prepare application documents including a special application form issued by NEMC – Form No.5 for Variation of EIA Certificate (sample attached as Appendix 5) and a project brief availing information on the nature of - and reasons for proposed variation(s); the environmental and social changes including effects to the community arising from the proposed variation(s); effects to environmental and social performance requirements set out in the EIA report previously approved; and any addition measures proposed to eliminate, reduce or control any adverse environmental impact arising from the proposed variations and to meet the requirements in the EIA process.

(iii) The preparatory work shall entail update of the Environmental and Social Management Plans (ESMPs) including field investigations to determine status of ecological and social receptors and engage with LGA Project Team, project recipient communities and their leaders and relevant stakeholders.

(iv) The respective Municipal Environmental Management Officers assisted by LGA Project Team will review the updated ESMPs for compliance with the results and recommendations from the environmental and social screening process and would recommend approval to the PO-RALG.

(v) PO-RALG / LGAs will submit the Applications for Variation of EIA Certificate to NEMC to provide/approve the nature of additional information required to supplement the EISs.

(vi) If no more assessment work is required – NEMC will recommend approval of variations and each Participating LGA is issued with Variation of EIA Certificate approval in accordance with Part VII, Regulation 35, Sub-regulations (1) – (3) of the EIA and Audit Regulations, 2005.

(vii) If more work is required, the EIS supplement reports are prepared by the firm of experts with support from certified staff at each Participating LGA and CDA (coordinated by the Environmental Management Officer (EMO), and consultations with stakeholders. The supplement reports are submitted for review and approval by NEMC and if satisfactory each participating LGA and CDA will be issued with approval of Variation of EIA Certificate.

(viii) Based on the updated and approved generic ESMP, the EIA Consultant will develop specific ESMPs for individual or groups of similar sub-projects (as relevant) proposed by Participating LGA for additional financing.

(ix) Design Consultants in collaboration with LGA Project Team will incorporate the recommended mitigation measures into the proposals and designs of the sub-project development activities.

(x) The Environmental Management Officer (assisted by LGA Project Teams and including community representatives) will undertake review (aided by ESMF checklists) and issue recommendations on the proposals and designs of the sub-project development activities.

(xi) Design Consultants will finalize subproject designs and ESMP for implementation and monitoring by LGA Project Teams (coordinated by the Environmental Management Officer (EMO)).
Thus, in terms of institutional arrangements, the project implementers are

(i) LGA Project Teams will be responsible for

- the initial screening,
- overseeing update of the generic LGA – wide ESMP
- preparation of specific subproject ESMP
- implementation of individual subproject mitigation measures according to the plans; and
- where applicable preparation of Resettlement Action Plans

(ii) The Council Environmental Management Officer (EMO)

- will monitor and supervise compliance with requirements of this ESMF
- report progress back to the PO-RALG Project Team and to the National Environment Management Council (NEMC) as relevant.

NEMC supported by the PO-RALG Project Team will perform an enforcement monitoring role for the overall TSCP based on submissions and recommendations from the Municipal Environmental Management Officers and by the Municipal sector specialists (who would perform a self-monitoring role).

The ESMF assesses the capacity of the implementation participants at different levels to implement the proposed screening process and mitigation measures. These entities have previous experience with management of environmental and social issues related to construction/civil works. Furthermore, the national legal framework for environmental management in Tanzania that spells out the roles and responsibilities of different government actors and other stakeholders has taken root. The National Environmental Management Act enacted in 2004, came into force July 2005 and is supported by a number of regulations to operationalize it (albeit only recently promulgated) such as EIA and Audit regulations, regulations for registration of environmental experts who are certified to undertake EIA, and a number of regulations for management of air emissions, solid wastes, hazardous waste, waste water discharges and for control of noise and vibration pollution.

The PO-RALG has the capacity and experience to do backstopping to the LGAs; with various initiatives by the office to support the LGAs capacity both to support and supervise construction work of the proposed infrastructure and to implement the required environmental and social screening process described above. Prevalent weaknesses are in the integration into the design before project commences and monitoring of the mitigation measures. The ESMF makes recommendations as appropriate, including training needs and cost estimates. It recommends building capacity at all levels through the provision of training to staff and decision makers who will be designated the role of planning, reviewing and implementing, and monitoring the construction of the different infrastructure and their auxiliary structures. The role of the NEMC in the context of TSCP has been clarified to be one of providing technical assistance and as facilitator for the training program and review of the ESIA documents.
In parallel to this ESMF, a Resettlement Policy Framework (RPF) has been prepared also under the TSCP AF. This RPF document outlines the principles and procedures to be followed in the event that the construction of completely new infrastructure or the expansions and extensions leads to land acquisition and/or the loss of livelihoods, and therefore will be used in conjunction with the ESMF as required. This document and the associated RPF are updates to the original ESMFs and will be disclosed to the public prior to the appraisal of the TSCP AF II.

The ESMF includes a summary of the Environmental Management Plan (EMP) under Annex 6 in order to facilitate the implementation of the additional TSCP infrastructure development programme. This summary EMP, is based on information pertaining to the environmental and social management of infrastructure projects provided in this ESMF, particularly capacity building for environmental management of the relevant staff within the Participating LGAs. It clearly indicates the institutional responsibilities with regard to implementing mitigation measures, monitoring of the implementation of these mitigation measures and related cost estimates and time horizons.
B1. INTRODUCTION

B1.1 BACKGROUND OF THE OVERALL TANZANIA STRATEGIC CITIES PROJECT (TSCP)

The Government of Tanzania (GOT) through the Prime Minister’s Office, Regional Administration and Local Government (PMO-RALG) now known as the President’s Office- Regional Administration and Local Government has received funds from the World Bank (IDA Credit) and a grant from the Government of the Kingdom of Denmark to implement the Tanzania Strategic Cities Project (TSCP). PO-RALG has been implementing the TSCP (since 2010) with 7 participating urban Local Government Authorities (LGAs): 4 cities of Mwanza, Tanga, Mbeya and Arusha; and 3 Municipalities of Dodoma, Kigoma-Ujiji and Mtwara-Mikindani. In Dodoma, the project is supporting both the Dodoma Municipal Council and the Capital Development Authority (CDA). Currently, the TSCP is supporting 8 urban Local Government Authorities after Ilemela Municipal Council was split from the Mwanza City Council.

The participating eight LGAs are Arusha, Tanga, Mwanza, Ilemela, Mbeya, Dodoma, Kigoma, Mtwara, and a ninth Capital Development Authority (CDA) of Dodoma. It is to be noted that as a result of the change in the administrative boundaries of one of the LGAs in the original project (Mwanza City Council split into Mwanza City Council and Ilemela Municipal Council), Ilemela MC officially became an additional Project LGA during AFI and for AFII, Ilemela will implement its own projects.

These activities will increase access and quality of urban services; improve quality of life and local economic development; strengthen municipal finances and urban management; and ultimately, support participating LGAs’ urbanization and economic development agenda. The AFII will scale-up project activities and bring direct positive outcomes in the areas of Accessibility and Connectivity, Urban resilience, Environmental Sanitation, Urban Management and Urban Planning and Municipal Finance.

The President’s Office, Regional Administration and Local Government (PO-RALG) is implementing the Tanzania Strategic Cities Project (TSCP). Its main objective is to improve the quality of and access to basic urban services in the seven selected Local Government Authorities (LGAs). During the design and preparation of TSCP, the participating LGAs/CDA prioritized infrastructure sub-projects that would substantially enable the project objectives to be achieved. At the project appraisal, it was determined that due to cost estimates being far above the available funds under the credit, only a limited number of the prioritized projects in the list were to be financed under the project and the remaining sub-projects would be considered in future in case additional financing becomes available. Notably, there was no Resettlement Policy Framework (RPF) prepared for the original project.

The Government of Tanzania (GoT) through the President’s Office Regional Administration and Local Government (PO-RALG) is currently implementing TSCP-AF
and at the same time preparing a new credit for the TSCP Second Additional Financing (TSCP-AF II) under the World Bank (through the International Development Association (IDA)) to fund the sub-projects that were either not financed and thus not implemented during initial TSCP financing or are newly identified priority sub-projects which complement the objectives of TSCP. The project structure for TSCP AF2 will not change, and the same three components will remain.

Rationale for TSCP
The TSCP was prepared in a response to a request from the GOT to assist with the financing of an investment operation that would provide finance for critical infrastructure in key urban LGAs and support for improved fiscal and management capacity for urban development and management. TSCP recognize the strategic importance of Tanzania urban centers as the engines for the country’s structural transformation, economic growth and nationwide improvements in welfare. The Participating seven urban LGAs have strategic importance to mainland Tanzania in terms of their physical locations, importance for regional trade, demographic weight and contribution to the national economy.

The proposed AFII is envisaged to support similar investments or upscale activities financed under the parent and AFI. Proposed activities under AFII are envisaged to be similar to the original and AFI in terms of types and scale of sub-projects. Hence, AFII activities will trigger the same World Bank environmental safeguard policies namely, Environmental Assessment (OP/BP 4.01) and Physical Cultural Resources (OP/BP 4.11). AFII activities are not envisaged to pose additional safeguards risks or impacts, or require a change in Environmental Assessment Risk Category (currently Category B), or trigger new policies. The AFII will support the same set of Local Government Authorities (LGAs) as in the parent and AFI project. Most activities proposed for scale-up under the AFII were appraised when the parent project or AFI were prepared. These activities will be re-appraised to ensure that they are still priority investments and that their costs can be covered under AFII.

TSCP Objectives and Outcomes

The Development Objective: is to improve the quality of and access to basic urban services in seven elected Participating Local Government Authorities (LGAs).

The Purpose: rehabilitation and expansion of urban infrastructure and institutional strengthening activities aimed at improving the fiscal and management capacities of the Participating LGAs.

Project Outcomes: the TSCP will improve the welfare and capacities of the LGAs to identify their key problems, determine the appropriate solutions in the form of sub-projects, plan their implementation and assume full responsibility for their maintenance and management.

TSCP Components
**Component 1-Core Urban Infrastructure and Services:** supports investments in urban roads and drainage, including associated structures such as drainage ditches, culverts/bridges, footpaths and street lighting; solid waste management including solid waste collection centres, equipment for transportation and disposal, and the development or improvement of disposal sites; and local infrastructure such as bus and lorry stands. The component also finance construction supervision of the works for the investment sub-projects and technical assistance specifically for the implementation and monitoring of ESMPs and RAPs linked to sub-projects, including the payment of compensation costs.

**Component 2- Institutional strengthening:** to ensure the sustainability of the investments and lay the foundation for continued improvement of services, this component supports institutional strengthening and capacity building activities with the objective of increasing the financial resources at the disposal of Participating LGAs and their technical capacity to plan and implement their own infrastructure projects. This includes provision of support for management of environmental and social safeguards. Grant from Government of the Kingdom of Denmark is financing activities under this component.

**Component 3-Implementation Support and Preparation of Future Urban Projects:** supports project implementation and preparation of future urban projects.

**Current Status: completed works**
Activities under Core Urban Infrastructure and Services component have involved improvement or development of selected infrastructure sub-projects at various locations within the Participating urban LGAs. Works has involved upgrading /rehabilitation of a number of artery roads and drainage and associated structures aimed to improve movement of people, goods and services in the urban areas. Priority is given to roads to enhance connectivity (linking principal residential areas, commercial centers and service centers i.e. markets, airports, bus terminal) to the main road networks, enhancement of traffic flow /alleviation of traffic congestion. Completed subprojects also include a range of local infrastructure such as bus and lorry stands, and rehabilitation of solid waste collection centres, provision of equipment for transportation and disposal, and the development or improvement of disposal sites i.e. additional cells to existing landfills. Most of the infrastructure on the list of the first batch of prioritized subprojects are complete and in use or in final stages (90% complete). TSCP contains a set of other interventions designed to meet the management and institutional needs of the participating urban local governments and communities within as well.

**Rationale for TSCP Second Additional Financing**
Some areas of the completed infrastructure have been identified where further improvements need to be made. In addition, a number of infrastructures were prioritized during the TSCP design and preparation but not financed under the first rounds of implementation due to cost estimates being far above the available funds under the credit. Participating LGAs have also identified new sub-projects important for functionality of existing sub-projects of overall urban development of the LGAs. Thus, the GOT through
PO-RALG has decided to apply for a second additional credit that will specifically finance these additional infrastructure investments and coupled improvements of management capability of the participating urban LGAs.

B1.2 ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF) PURPOSE AND OBJECTIVES

B1.2.1 Purpose of ESMF

Tanzania Strategic Cities Project (TSCP) has been assigned Environmental Assessment Risk Category Band triggers the following World Bank Safeguard Polices: (i) Environmental Assessment (OP/BP 4.01); (ii) Involuntary Resettlement Policy (OP/BP 4.12); (iii) Physical Cultural Resources (OP/BP 4.11). The project is likely to generate some negative and site specific environmental and social impacts that mitigation during implementation. At the commencement of the TSCP in 2010 Environmental and Social Management Framework (ESMF) and Resettlement Policy Framework (RPF) were not prepared, rather site specific environmental and social safeguard instruments were developed. Thus, each participating LGAs and the CDA had in place site specific Environmental and Social Impact Assessments (ESIAs) and Resettlement Action Plans (RAPs) to manage environmental and social impacts emanating from implementation of project activities under the original TSCP for, Project Teams at LGAs and CDA (coordinated by Council Engineer) have used these reports in supervising construction works and implementation of ESMPs and RAPs linked to sub-projects, including the payment of compensation costs where applicable. TSCP included implementation of interventions designed to build environmental and social management and institutional capacity of the urban LGAs. LGA Staff (Municipal Engineers) work alongside Construction Supervision Consultants which has enabled transfer of skills and mentoring.

Subsequently, an ESMF and RPF were prepared during TSCP AF to provide guidance for environmental and social screening process, and preparation of appropriate site or investment specific safeguard instruments such as Environmental and Social Impact Assessments (ESIAs) or Environmental and Social Management Plans (ESMPs). These existing ESMF and RPF, with these updates, remain relevant and applicable to AFII.

The proposed TSCPAFI1I will support subprojects likely to generate some detrimental and site specific environmental and social impacts. The extent, magnitude and duration of these impacts have not yet been determined. Some of the proposed additions to the existing sub-projects do not have complete technical designs ready nor do they have ESIA reports or RAPs. The laws of Tanzania and World Bank’s Environmental and Social Safeguard Policies require the PO-RALG to use the Environmental and Social Management Framework (ESMF) to guide target urban LGAs in assessing, managing, and monitoring environmental and social impacts of these additional subprojects. The framework is envisaged as a road map to ensure the subprojects are implemented in an environmentally and socially sustainable manner.
B1.2.2 Objectives of ESMF

The aim of this ESMF is to enable early screening for potential impacts and select an appropriate instrument to prevent, minimize, mitigate or compensate adverse environmental and social impacts and to enhance beneficial impacts. Specific ESMF objectives are to:

- Establish clear procedures and methodologies for the environmental and social planning, review, approval and implementation of subprojects to be financed under the TSCP Additional Financing 2
- Specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to subprojects;
- Determine the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF;
- Establish the Project funding required to implement the ESMF requirements; and
- Provide practical information resources for implementing the ESMF.

B1.2.3 Scope of ESMF

ESMF is specifically designed for the TSCP-AF2 thus will further guide the on-going implementation of the TSCP. The ESMF is to assist in ensuring that the assessment of possible impacts on environment in the project sites is thoroughly carried out to provide a guide for compliance with the project monitoring indicators during the implementation. The ESMF will also cover all other subprojects that may be identified in future for financing under the project.

B1.2.4 Application Arrangements (Institutional Set-Up)

PO-RALG will be responsible for ensuring that the requirements of this ESMF and corresponding ESIAs and management plans (ESMF and RAPs) are implemented. Notably, the necessary approvals as highlighted above and which are required by the law, will be involved. The responsible Authorities in the approval process at different levels include: the Vice President’s Office (Division of Environment and the National Environment Management Council (NEMC); the Chief Government Valuer in the Ministry of Lands, Housing and Human Settlement Development (MLHHSD) and; respective Regional and District Commissioners, authorized Environmental Management Officers and Land Officers in the LGAs and Executive Officers in Project Wards and Sub-Wards (“Mitaa”).

B1.2.5 Users of the ESMF

The ESMF shall aid the objectives of the TSCP by facilitating LGA project teams and other project participants aware of environmental and social requirements for assessing TSCP financed activities, thus enhancing their capacity to effectively manage
environmental and social issues during the preparation (designing, planning) and implementation of the individual sub-projects:

- Eight urban LGAs and CDA: Project Team and staff in target sectors (roads, sanitation, environmental management etc.) who are responsible for application/planning, review, approval, and supervision of the sub-projects;
- Statutory LGA Committees and Local Management Committees overseeing environmental and social aspects;
- Leaders and representatives from sub-project host communities;
- Consulting engineers, Contractors and service providers involved in subproject planning / design, construction and installation works.
- Environmental and social assessment consultants and development services providers who provide services to LGAs in non-core functions such as management training or technical support;
- Regional Secretariat and / PO-RALG Project Team responsible for developing support programmes of implementation.

B1.3 ESMF PRINCIPLES

The following general principles and practices of sound environmental and social management shall be widely applied in the implementation of this ESMF:

Sustainable Development Principles
Environmental and social impacts and mitigation checklist of this ESMF focus on sustainable development principles including protection of biodiversity; duty not to transfer, directly or indirectly, damage or hazards from one area to another; promotion of best available techniques and best environmental practices; promotion of cleaner production; maximising sustainable benefits of neighboring communities; duty to cooperate on a district and regional level for the protection and preservation of the environment.

Precautionary Approach
The key tenet of Precautionary Approach is: “Where there are potential threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation”. Prior assessment adopted in this ESMF ensures assessment of environmental impacts before starting a new activity or project and before decommissioning a facility or leaving a site.

Polluter Pays Principle / User Pays Principle
Polluters should in principle bear the cost of pollution, with due regard to public interest and without distorting the practical value of the investment to an unreasonable extent. Similarly, users of resources e.g. water, land, and natural resources etc. should pay costs for use. In this ESMF, environmental costs of developments are internalised into the financial planning of any sub-project, especially through mitigation measures, monitoring and evaluation.
Stakeholder Participation and Transparency
The ESMF recognize that stakeholder participation is an essential component in the planning and implementation of environmental protection. This extends to stakeholders representation on decision making bodies, timely disclosure of relevant information to stakeholders in accessible format and regular ad hoc consultation with them as and when issues arise.

Continuous Monitoring and Evaluation
In order to preserve the integrity of the environment, the ESMF emphasize the responsible stakeholders to maintain regular monitoring and evaluation. This calls for commitment to continuous improvement of environmental performance.

Employee Education
The ESMF makes provisions for LGAs and responsible stakeholders to have programmes to educate, train and motivate employees to conduct their activities in an environmentally responsible manner.

Facilities and Operations
The ESMF makes provisions for LGAs and responsible stakeholders to select technologies/facilities and operate facilities and conduct activities taking into consideration the efficient use of energy and materials, the sustainable use of renewable resources, the minimization of waste generation, and the safe and responsible disposal of residual wastes.

Compliance and Reporting
The ESMF guides LGAs and responsible stakeholders to achieve compliance with national policies, legislation, and World Bank policies relevant to environmental and social risk management.

B1.4 APPROACH AND METHODOLOGY FOR DEVELOPMENT OF THE ESMF

Detailed description of approach and methodology involving public consultations for preparing the ESMF and comments raised are found as Annex I.

B1.4.1 Overall Approach

The Consultant's approach to the development of the ESMF was as follows:
- Identification of key issues for ESMF development at the inception phase (Inception Report)¹,
- Collection of data and information from literature, consultations with key informants and observations at representative LGAs to determine:

Baseline conditions of important biophysical and socio-economic receptors emphasizing prevalent trends and indicators;

Components of the TSCP sub-projects and activities in general likely to interact with this baseline;

Potential resulting environmental and social impacts;

Best alternative approaches for designing and implementing TSCP sub-projects;

Individual and institutional capacity building needs for implementation of the ESMF

- Emphasis on gap analysis and consolidating key findings into an ESMF report
- Developing the ESMF based on content specifically specified in the TOR.
- ESMF disclosure was made progressively throughout stakeholder consultations to gather feedback and recommendations for inclusion in the final outputs. Final distribution will be through key local and national institutions and outlets.

B1.4.2 Methodology

Desk Reviews
Review of relevant literature was undertaken during initial preparations and continued throughout the assessment phase and preparation of the framework document. Information sources include documents from PO-RALG, LGAs, web-search, national and local data and information centers/sources including:

- Project documents for TSCP: project appraisal document, ESIA reports and RAPs from previous TSCP Project areas;
- Recent studies, appraisal/ performance assessments documents for TSCP
- Background literature of the environmental and social conditions at target LGAs
- Current environmental and social management frameworks in use within TSCP area
- Tanzania legislation and the World Bank safeguard policies.

Documents reviewed are listed under the Bibliography section.

Fieldwork and consultations
Field work was conducted by paying visits to two representative sample LGAs: The selection of the LGAs was done based on the following criteria: geographical location (ecological representation, accessibility / distances) and maximization of all types of sub-projects, specifically those likely to depict appreciable number and variety of potential environmental and social impacts. The sample included 2 out of the 8 LGAs targeted namely Tanga City and Arusha City.

At each LGA the Consultant gathered available documents (i.e. environmental / economic / social data, land use plans and materials from previous planning sessions) and conducted interviews/discussions with relevant project implementers and persons in-charge of sub-projects, such as: Project Team; Council Engineers; TSCP Focal Person; TSCP RAP Team; Relevant LGA sectors identified were: Physical (land and land-use) planning; environmental management; economic planning; health and sanitation and community development; and relevant Council Management Committees.
The fieldwork was carried out during January - February 2014. Details of field work and stakeholders met are under Annex 1. Additional consultation was carried out in all the Eight LGAs and the CDA in August- September 2016 as part of preparation of various safeguard documents.

**B1.5 LAYOUT OF THE ESMF**

The ESMF has 7 main parts (B1 to B7) as follows:

**Part B1:** The introduction presents a synopsis of TSCP background description: its objectives and components; presents rationale and objectives of developing the ESMF, scope; application arrangements and users; guiding principles; and approach and methodology used to develop the ESMF.

**Part B2:** Details of the infrastructure works / subprojects under the TSCP additional funding 2 and describes the target areas including the general state of environment and social conditions at participating LGAs as well as institutional and management arrangements. A matrix showing all the subprojects and their respective geographical locations and nature of proposed works is found in Annex 2.

**Part B3:** Is an overview of Environmental and Social Management Requirements describing United Republic of Tanzania policy, legislative and institutional framework and applicable World Bank safeguard policies.

**Part B4:** Describes a step-by-step procedure for subproject preparation, approval and implementation.

**Part B5:** Details of Environmental Management describing the potential environmental and social impacts and risks on key receptors at subproject location and programmes for managing impacts and risks related to the sub-projects.

**Part B6:** This part includes an assessment of institutional capacity and recommendations on capacity building and technical assistance required for ESMF implementation.

**Part B7:** Is the ESMF implementation budget.
B2. PROJECT DESCRIPTION

B2.1 Anticipated Sub-project Types under TSCP Second Additional Financing

Second additional financing under TSCP will cater for three categories of sub-projects (Table 1). Details are presented under Appendix 2.

B2.1.1 Type 1: Additional works to improve completed infrastructure

Proposals from participating LGAs includes some areas of the completed infrastructure that have been identified where improvements need to be made: additional structures to a number of completed roads and drainage infrastructure including storm water discharge drains; access/cuts across drains to houses/property; pedestrian walkways; street lighting; non-motorized transport facilities and other roads/facilities for connectivity; enhancement of traffic flow /alleviation of traffic congestion. Other additional works will entail improvements of solid waste management. The completed infrastructures were implemented based on approved technical designs and environmental and social impacts assessment reports. The current preparations for additional subprojects will only involve update/preparation of new designs, cost estimates, and ESIA reports, as relevant, based on experience so far gained.

B2.1.2 Type 2: Sub-projects prepared under TSCP but not implemented

Some of the sub-projects were prioritized during the TSCP core project design and prepared but not financed under either the first round of TSCP implementation or during the TSCP-AF1, due to cost estimates being far above the available funds under the credits. Renewed proposals from participating LGAs include urban roads and drainage, including associated structures; solid waste management infrastructure, and transport and local infrastructure. These sub-projects have detailed engineering designs and cost estimates, and environmental and social impacts assessment reports (ESIA, EMPs and where required, RAPs) that were developed during preparation of the main TSCP project.

B2.1.3 Type 3: New sub-projects important for functionality of existing sub-projects or overall urban development of the cities

These are new proposed sub-projects not yet prepared under TSCP including urban roads and drainage and associated structures; and solid waste management infrastructure. The proposed sub-projects therefore have no complete technical designs or environmental and social impacts assessment reports, which will need to be prepared as relevant.
### Table 1: Summary: Anticipated Sub-projects Types

<table>
<thead>
<tr>
<th>Road and Drainage Infrastructure</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>o Roads (rehabilitation by grading, graveling, brick paving or tarmac/asphalt concrete surfacing)</td>
<td></td>
</tr>
<tr>
<td>o Side drains (de-silting, sand traps, stone pitching, gabions, concrete pipes)</td>
<td></td>
</tr>
<tr>
<td>o Drainage channels (new construction to facilitate functioning of completed / existing facilities)</td>
<td></td>
</tr>
<tr>
<td>o Pedestrian crossing slabs, pedestrian walkways, speed humps, rumble strips, road shoulders, etc.</td>
<td></td>
</tr>
<tr>
<td>o Culverts</td>
<td></td>
</tr>
<tr>
<td>o Bridges</td>
<td></td>
</tr>
<tr>
<td>o Road furniture: street lights, signage.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Urban transport</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>o Bus stands / bus stops (entrance / exit lanes, fencing wall, security guard shelter, passenger waiting sheds, toilet)</td>
<td></td>
</tr>
<tr>
<td>o Taxi stands</td>
<td></td>
</tr>
<tr>
<td>o Truck stands / parking area</td>
<td></td>
</tr>
<tr>
<td>o Public car parking</td>
<td></td>
</tr>
<tr>
<td>o Loading / off-loading bays</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other works</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>o Workshop (store)</td>
<td></td>
</tr>
<tr>
<td>o Playgrounds/public parks: tennis court, basket/netball courts complete with: electricity &amp; water supply systems and water storage</td>
<td></td>
</tr>
<tr>
<td>o Markets and other community facilities</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solid / Liquid Waste Management</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>o Sanitary landfills (rehabilitation/new)</td>
<td></td>
</tr>
<tr>
<td>o Community waste collection points (skip pads)</td>
<td></td>
</tr>
<tr>
<td>o Evaporation ponds (new construction, improving lining)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equipment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>o Solid waste management e.g. front loader</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preparation of infrastructure projects expenditures</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>o Design, supervision, etc.</td>
<td></td>
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</table>

### B2.1.4 Component 1 Preliminary Sub-Projects & Cost Estimates

<table>
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<tr>
<th>S/N O</th>
<th>LGAs</th>
<th>Sub Project Description</th>
<th>Qty (Km/No)</th>
<th>Cost Estimates (US$ millions)</th>
<th>Status</th>
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<tbody>
<tr>
<td>1</td>
<td>TANGA CC</td>
<td>Construction of Sanitary Landfill at Neema</td>
<td>1 No</td>
<td>2.87</td>
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<tr>
<td></td>
<td></td>
<td>Msambweni road</td>
<td>4.0km</td>
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<tr>
<td></td>
<td></td>
<td>Bus Stand/Lorry parking service road</td>
<td>1.8km</td>
<td>1.86</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Study and design of storm water drainage system; preparation of drainage &amp; sanitation plan</td>
<td>LS</td>
<td>0.80</td>
<td>New</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sub Total</td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>ARUSHA CC</td>
<td>Oljoro-Murriet Road</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Extension of Njro Road</td>
<td>2.5km</td>
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<tr>
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<td></td>
<td>Ngarenaro Roads</td>
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<td>Location</td>
<td>Distance</td>
<td>KM/Lot</td>
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<td>Krokon Road</td>
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<td>Sombetini-FFU Road</td>
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<td><strong>Sub Total</strong></td>
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<td><strong>11.34</strong></td>
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<tr>
<td>2</td>
<td>Construction of Sanitary Landfill at Buhongwa</td>
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<td></td>
<td>Mtakuja Road</td>
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<td>3</td>
<td>Makongoro Junction -Mwaloni Road</td>
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<td><strong>Sub Total</strong></td>
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<td>Kaya - Simu Road:</td>
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<td>Mwanga - Kitambwe - Mwembe Togwa Road</td>
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<td>Wafipa - Kagera Road</td>
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<td>Kagashe Road</td>
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<td></td>
<td>Mlole storm water drain</td>
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<td></td>
<td>Entrance to Regional hospital Road and Storm Water Drainage</td>
<td>0.2km</td>
<td>0.22</td>
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<tr>
<td></td>
<td>Katonyaga Storm water drain</td>
<td>1.5km</td>
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<td></td>
<td>Nazareth-Ujenzi Road</td>
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<tr>
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<td>Maweni-Burega Road</td>
<td>1.5km</td>
<td>1.20</td>
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<td>LS</td>
<td>0.80</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sub Total</strong></td>
<td></td>
<td><strong>10.05</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Ndovu Road</td>
<td>1.24km</td>
<td>0.90</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Swala Road</td>
<td>1.49km</td>
<td>0.98</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zuzu Road</td>
<td>0.93km</td>
<td>0.55</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boma Road</td>
<td>0.38km</td>
<td>0.37</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Project Description</td>
<td>Distance (km)</td>
<td>Factor</td>
<td>Status</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>--------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Biringi Avenue/Farahani Road</td>
<td>3.86</td>
<td>1.87</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Central Business Park Roads</td>
<td>1.69</td>
<td>0.67</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Study and design of storm water drainage system; preparation of drainage &amp; Sanitation plan</td>
<td>LS</td>
<td>0.90</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Construction of Regional Bus Terminal at Nzughuni Area</td>
<td>1 No.</td>
<td>4.60</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Ilazo - Ipagala road</td>
<td>4.2</td>
<td>3.56</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Construction of Main Central Market</td>
<td>1No</td>
<td>2.70</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sub Total</strong></td>
<td><strong>17.10</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Ring Road from Kisasa to Mapinduzi/ UDOM &amp; Njedengwa</td>
<td>1.05</td>
<td>0.66</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Chinangali Public Park</td>
<td>1No</td>
<td>0.37</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Six (6) Footbridges</td>
<td>6 No</td>
<td>0.36</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transit Lorry Parking</td>
<td>1No</td>
<td>7.17</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Access Road to Lorry Parking</td>
<td>0.74</td>
<td>0.28</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Road linking Chang'ombe/ DMC Road and Great North Road</td>
<td>0.88</td>
<td>0.55</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Service Roads from Kikuyu Junction (Great North road) linking Kinyambwa, Kikuyu, Chidachi and Itega Communities Road</td>
<td>6.00</td>
<td>4.39</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Storm water Drain From Ipagala Community through Ilazo Communities to Hombolo reservoir</td>
<td>6.5</td>
<td>2.35</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sub Total</strong></td>
<td><strong>16.13</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>MIST Roads</td>
<td>2.76</td>
<td>1.38</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Sae-Tanesco-Kisanji Road</td>
<td>0.86</td>
<td>0.54</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Construction of Stand Alone Drain (Airpot-Mahakama Road-Sinde-Isyesye River)</td>
<td>2.88</td>
<td>2.87</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Extension of Dausen Legico Road</td>
<td>0.37</td>
<td>0.23</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Extension of Ilomba - Ivumwe Road</td>
<td>1.87</td>
<td>1.32</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Extension of New Forest Road</td>
<td>0.81</td>
<td>0.55</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Construction of Waiting Shades at Nanenane Bus Stand</td>
<td>LS</td>
<td>0.22</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Study and design of storm water drainage system; preparation of drainage &amp; sanitation plan</td>
<td>LS</td>
<td>0.80</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sub Total</strong></td>
<td><strong>7.91</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>COTC Road</td>
<td>0.88</td>
<td>0.80</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Senegal Road</td>
<td>0.82</td>
<td>0.68</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Construction of concrete paved Commuter (daladala) bus stand at Mikindani including loading/ off-loading bus bays</td>
<td>1Nos</td>
<td>0.26</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Construction of 37,154m² of Mashujaa Public Park children playgrounds, tennis courts, basket/netball courts garbage collection centres, grassed areas, paved walkways and provision of electricity and water</td>
<td>1No</td>
<td>0.57</td>
<td>Original</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Length</td>
<td>Cost</td>
<td>Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>--------</td>
<td>------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction of Vigaeni-Mtepwezi stand alone drain</td>
<td>4.84km</td>
<td>1.73</td>
<td>Original</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction of 7,270m2 Tilla Park and Maduka Makubwa children playgrounds, tennis courts, basket/netball courts garbage collection centres, grassed areas, paved walkways and provision of electricity and water</td>
<td>1No</td>
<td>0.29</td>
<td>Original</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extension of Chuno road to join Port road</td>
<td>2.4km</td>
<td>2.55</td>
<td>Original</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction of Chuno market</td>
<td>1No</td>
<td>1.80</td>
<td>New</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td></td>
<td><strong>8.68</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total for LGAs</strong></td>
<td></td>
<td><strong>96.38</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Physical and Price Contigencies @ 10%</strong></td>
<td></td>
<td><strong>9.64</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Contract Supervision Consultants</strong></td>
<td></td>
<td><strong>7.50</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total for Infrastructure / Activities for LGAs/CDA (excluding VAT)</strong></td>
<td></td>
<td><strong>113.51</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Sub-projects which were originally prepared under parent/AFI or newly-identified sub-projects.*

The following types of subprojects cannot be financed under World Bank regulations:

- Subprojects that involve the significant conversion or degradation of critical natural habitats;
- Activities already covered by other sources of financing or are already included in other national or regional public development programs and where financing has been secured;
- Growing or purchase of tobacco or drugs; and
- Investment in bars or establishments serving alcohol.

Also, during the first year of the TSCP and until experience demonstrates that the local capacity exists to adequately manage their environmental and social impacts, the types of subprojects listed below will not be financed by the TSCP. This list will be reviewed annually to determine if subproject types should be removed from, or added to, the list.

- Subprojects involving the use of pesticides or agrochemicals, including tick dips
- Animal vaccination yards and slaughterhouses
- Dams and weirs
- Subprojects in locations that are ecologically sensitive such as forests, wetlands, and other unique habitats.

**B2.2 TSCP Coordination and Implementation Arrangement**

The current arrangement is such that the PO-RALG through the World Bank Working Group (WBWG) in the Division of the Urban Development is the executor of the TSCP, and is overall responsible for implementation of the project. PO-RALG’s primary role is
the coordination of all participants responsible for the preparation, review, approval and implementation of the sub-projects including ensuring that the requirements of the ESIAs and ESMPs/RAPs are implemented. Eight LGAs and CDA in Dodoma are responsible for prioritizing projects which are implemented; participate fully in the execution and management of the infrastructure/sub-projects including safeguards management. Project implementation is mainstreamed at PO-RALG and within existing LGA/ CDA departments (utilizing existing staffing structures and government system) to promote ownership and sustainability. TSCP is also working with a number of public and private institutions and Civil Society Organizations.

The arrangement is designed to guarantee execution of works and development of sustainable urban infrastructure development and management and will be adopted for the TSCP – AF2.

**Project implementation structure:**

- **Steering Committee and Technical Committee** – guide the work of the PO-RALG Project Team with the Project Manager at PO-RALG report directly to the Permanent Secretary.
- **Central MDAs role** will continue to be steering the TSCP with respect to policy and institutional issues with the Vice President’s Office and Ministry of Lands, Housing and Human Settlement Development (MLHHS) representatives to the Inter-Ministerial Steering Committee and while the National Environment Management Council (NEMC) as a member of the Technical Committee.
- **LGA and CDA Project Team** will be composed of LGA staff supported by consultants supervising major works. LGA Councils / CDA Board and Council Directors / CDA Director General will endorse LGA Annual Work Programmes of detailed activities for funding by PO-RALG.
- **Under the current institutional arrangement**, each of the participating LGAs has an Environmental Management Officers responsible for supervision of environmental management activities and a Community Development Officer responsible for social development activities. At project level, each LGA has a dedicated core project implementation unit, including focal points for environment and social specialists. A Construction Supervision Consultant (CSC) is engaged for each LGA and is responsible for day-to-day monitoring of construction activities, including environmental and social performance, and reporting to the LGAs and PO-RALG on a monthly basis.

**Subproject Environmental and Social Management Structure**

**Identification and prioritization of sub-projects / selection of sites:**
This is the function of recipient urban LGAs/ CDA who have developed their own funding proposals on a demand –driven basis. Priority urban infrastructures were drawn
from consultations along with residents and other urban stakeholders. In some cases the selection was influenced by technical considerations provided by LGA sector specialists and consultant / design engineers.

**Provision of land:**
Subprojects will be mostly sited on existing infrastructure. Where land is required, i.e. expansion or extension, the subproject will utilize land designated by LGA or land acquired from individuals. Compensation procedures and payment of compensation costs by LGAs / CDA will be in accordance with RAPs prepared for respective subprojects.

**Designs**
Detailed designs are contracted to consulting firms. Procurement / contract awarding procedures include capability/experience in environmental and social impacts mitigation / integration into designs. Municipal Engineers and sector responsible for the sub-project (e.g. waste management) will work with the design consulting team to enable transfer of skills and knowledge.

Preparation and approval of environmental and social management instruments:
The qualified consulting firms will be tasked with preparation of the safeguards reports (updating or developing ESIA reports and associated ESMPs and RAPs and integration into designs for prioritized sub-projects in each LGA.

The completed subprojects under the parent project were subjected to environmental and social impact assessment following national EIA procedure. Under the second additional financing, each participating TSCP LGA will submit consolidated ESIS for new selected subprojects to the National Environment Management Council (NEMC) to be approved through the Division of Environment and each LGA issued ESIA Certificate by Minister Responsible for Environment at VPO. Chief Government Valuer (in the Ministry of Lands, Housing and Human Settlement Development (MLHHS) will endorse compensation schedules included in the subproject RAPs before implementation.

Preparation and approval of environmental and social management reports and subsequent implementation of the Plans will include participation of the following highlighted in this ESMF section B4. Municipal Engineers and staff from sector responsible for the sub-project; Authorized Land Officers in the Local Authorities; LGA Environmental Management Officers; Respective Regional and District Commissioners; LGA Environment and Social Committees; Executive Officers in Project Wards; and Local management committees for environment/social/relevant sectors.

PO-RALG will continue to organize technical assistance and training to participants as relevant.

**Execution of works:**
Urban infrastructure works will be undertaken by LGAs through Contractors. LGAs and CDA will continue to make in kind contributions in the form of staff time. Community contribution (as condition of construction commencement) – is not a requirement under
TSCP because, in urban settings, it could lead to delays. The Contractor is required to provide a Construction ESMP before commencement of works and to have qualified environmental personnel to ensure implementation of said plan, compliance with law, and the contract requirements. The contractor will provide regular reports (at a minimum, monthly) on implementation of the above requirements.

Construction supervision of the works
The LGA’s are responsible for oversight and monitoring of physical works. Construction supervision consultancies will be procured to assist LGAs and CDA to supervise investment subprojects and to transfer skills to technical staff. Where necessary, support from PO-RALG will be provided to assist LGAs in the implementation of the RAPs prior to commencement of construction contracts including facilitating payment of compensation costs; however it should be noted that each LGA and CDA is responsible to mobilize financial resources for paying compensation. PO-RALG will also provide support to assist LGAs in the implementation and monitoring of construction aspects of the ESMPs linked to sub-projects. Supervising consultancy will have adequate environmental and social safeguard expertise. The Supervising Engineer will monitor the construction and review reports provided by the Contractor as a condition of payment.

Management / maintenance
Infrastructure, once complete, will be maintained by respective LGAs. These tasks are long-term and will be done by LGA sector specialists, i.e. roads and drainage by City/Municipal Engineers and waste management sites by Health Department etc.

Operation supervision to assist LGAs in the implementation and monitoring of operations aspects of the ESMPs linked to sub-projects will continue to been provided by PO-RALG.

Monitoring of operations aspects of the ESMP: the role will be played by LGA Environmental Management Officers, LGA sector responsible for the sub-project and local management committees for relevant sectors.

Reviews and Audits
After a period of implementation the ESMPs of subproject should be subject to annual reviews / audits. PO-RALG will undertake Environmental Audit of completed sub-projects using external / independent reviewers /auditors.

Capacity assessment of the participants and recommendation for improvements see section B6.

B2.3 Target Areas for TSCP Second Additional Financing

Enhancing the capacity of urban Local Government Authorities (LGAs) participating in TSCP is the primary focus for the TSCP. Therefore, the target areas are all 8 urban LGAs
and CDA in Dodoma currently receiving funds from TSCP and hence eligible to receive funds for financing priority sub-projects under their areas of jurisdiction.

**B2.3.1 Environmental and Social Conditions and trends of (each) participating LGA**

**Mtwaranikindani Municipality**

(i) **Environmental condition**

The municipality lies at Mikindani bay on the Indian Ocean coast covering an area of approximately 163km². According to the Strategic Land Use Plan, the borders of the municipality are expected to be expanded. Elevation is low ranging from sea level up to 50 meters, which contributes to frequent flooding during rainy seasons. The soils in the coastal sedimentary zone are well drained sandy soils of low fertility and low moisture holding capacity.

The council has a stretch of coastal strip of 25km from Chihiko in the south to Mirumba in the north. The shoreline is covered by mangrove trees. The outskirt is dominated by grassland or bush grassland. The municipality is sub-divided into two major agro-ecological zones: coastal areas favourable for sea weed (mwani) farming and the western outskirt suitable for urban agriculture.

(ii) **Social condition**

The estimated population is 156,436 persons (2012 Census). The major occupation along the coastal strip is fishing with an average annual fish production of 385 metric tons. Industry, trade and commerce are the major economic activities in the CBD. A number of other trading activities are also carried out along various streets. About 33% of the population are involved in urban agriculture. The council possess a total of 9,000 hectors of arable land but only 6,757 hectors has been utilised.

The main catchment areas are Mtawanya, Mbae and Mchuchu. Daily water demand is 12,500m³ while production capacity is 8,769m³ per day, hence creating a shortage of 3,231m³ per day. In addition, the municipality does not have a central sewerage system. The generated solid waste is dumped at site in Mangamba landfill site. In general, the municipality suffers from inadequate equipment and facilities for managing solid waste properly.

Besides formal settlements in planned areas, the housing pattern also includes informal settlements located in unplanned areas with poor service environment.

**Kigoma-Ujiji Municipality**

(i) **Environmental Conditions**

Located on the Northern shores of Lake Tanganyika in the Western part of Tanzania, the Municipality has close proximity to the second deepest Lake in the world. A large part of
the Council lies on terrain consisting of hills over 100 m above sea level. Kigoma Region lies within the Great Rift Valley. It is mainly endowed with rich and fertile volcanic soil. Vegetation cover is mainly miombo woodland, grassland and a wetland area in Kibirizi Ward which drains into Lake Tanganyika. It is reported that much of the natural vegetation has been degraded below its most productive condition, partly due to population expansion in suburbs. Natural vegetation is found on protected hill areas such as Katonga, Kibirizi, Buronge, Masanga, and Kitwe Sanctuary Forest Reserve.

Within the Kigoma urban area the main forest reserves are Kitwe Forest Reserve and Buronge Forest Reserve in Kibirizi Ward.

It has a high water demand that is yet to be met by the existing water sources. The main sources of water for domestic use include Lake Tanganyika, Nyakageni and Rutale water springs (Kipampa Ward).

(ii) Socio-economic Conditions
Having started from the Arabic era as one of the major slave trade collection centres, the Municipality has a strong established Islamic faith among the inhabitants. It is also the Western terminal of the Central Railway line from Dar es Salaam. It has a total population of 215,458 (2012 Census). The average annual population growth rate between 2002 and 2012 was 2.4% for the entire Kigoma Region, a decline of 50% compared to the average growth rate from 1998 to 2002 of 4.8%.

The main economic activities in the Central Business District (CBD) are trade, small scale industries and fishing. Farming is done in the outskirts. About 75% of residents earn their living from trading, especially from the informal sector trading activities. There Municipality has six main markets, namely (Kigoma Central, Mwanga, Bubebazeba, Nazareth, Isanga and Ujiji.)

About 75% of the population is accommodated in unplanned settlements which occupy only 28% of the residential areas mainly located in the urban peripheries which include Kamala, Businde, Buhanda, Gungu, Kibirizi and Kichwele. Such settlements are poorly serviced with basic infrastructure.

The urban development is spatially shaped by two main roads namely Kigoma Railway Station-Ujiji Road and the Mwanga-Mwandiga Road. Urban development is characterized by both densely populated developed settlements largely in the inner locations, such as Mwanga, Bangwe, Gungu, Kitongoni and Lumumba. Bubebazeba, Kipampa and Kasimbe are sparsely populated developed settlements.

3.0 Mwanza City Council
3.1 Environmental Settings
Located on the Southern shores of Lake Victoria, the city lies at an altitude of 1,140 metres above the sea level. It has two main districts, Nyagamana and Ilemela. An
estimated 68% of the area occupied by the city is surrounded by water. The lake also influences the climate in Mwanza.

The city is characterised by gently undulating granites and granodiorite physiography with isolated hill masses and rock inselbergs (between 1100-1600 metres in height). It is characterised by well-drained sandy, loamy soil generated from course grained cretaceous rock.

Areas near the lake are evergreen whereas other areas in the outskirts are dry over some period of the year, especially between July and September.
Lake Victoria is the main source of water for the city, serving about 90% of city dwellers and the Kisesa township population. The rest of the city is served by non-piped schemes such as shallow, medium/deep wells, rivers and traditional water sources such as rainwater and boreholes.

3.2 Socio-economic Conditions
The population size of Ilemela and Nyamagana is 343,001 and 363,452, respectively. Fishing on Lake Victoria is one of the most important economic activities. A total of 29,630 tons is sold to within the country and about 28,875 tons is consumed locally within the region and another 40,000 tons is exported to the European Union.

Main trade activities and industries include: Mining of minerals, steel industries, food processing and confectionery, brewery industries, beverages, construction industries, transport industries, ginneries for cotton, hotel industries, fish gear industries, oil industries, printing and publishing industries, fish processing industries and fishnet industries.

Agriculture and livestock keeping are other activities that people engage in. Cotton trade used to be the biggest earner of foreign exchange for before fishing took over. The region is not unique in the sense that it has both rural and urban settings. However, at the heart of Mwanza, buildings and the Lake Victoria borders the railway. Of the current 50,000 housing units in the city, 60% are built in unplanned areas. Approximately 70% of the population reside in unplanned settlements characterised by high congestion of buildings and poor accessibility to services.

4.0 Arusha City
4.1 Environmental condition
Arusha city lies at the southern slopes of Mount Meru which form isolated peaks breaking up the gently sloping plains at an altitude ranging from 1,160 m to 1,450 m above sea level. The city covers an area of 208 km². The rivers flowing across the city are Burka, Engarenaro, Naura, Themi and Kijenge, all of which converge to join Themi River south of the city. Major hills located within the city area are Themi, Suye and Nemas.

The southern slopes of Mt. Meru are characterised by volcanic soil and the south-western part of the city is covered by extensive black cotton soil (mbuga soil), which shrinks during dry season, developing cracks up to 50 mm wide and 1.5 m deep. Climate is
characterised by bi-modal rainfall pattern, and the following dominant vegetation zones in the sub-urban wooded bush lands, wooded grasslands, bushed grassland and thickets.

4.2 Social condition
The population is approximately 416,442 persons (2012 Census). The allocation of land to different activities is as follows: Urban agriculture (13,265 Ha), forests and hills (500 ha), residential (4,487 Ha), water bodies (150 Ha), open spaces (270 Ha), industrial areas (504 Ha), institutions (1,022 Ha) and mining (quarrels and murram) (30 Ha). The economy is mainly dependent on commerce, industries, tourism and small scale urban agriculture.

The total length of the road network is 335 km, of which 196 km are earth roads, 54 km are gravel roads and 85 are paved roads. Solid waste generation is approximated to be 410 tons per day but only 40 % is collected and dumped at Muriet landfill. In planned settlements, 78 % of total households use septic tanks, 8 % use pit latrines, and 14 % use conventional central sewerage system. Water demand is 42,000 m$^3$ per day and the supply capacity is 35,000 m$^3$ per day.

5.0 Tanga City
5.1 Environmental condition
Tanga city extends 20 km inland from the coast of the Indian Ocean. It lies between 0 and 17 meters above sea level. The landscape features rolling hills, valleys and streams. The city is located along the coast; hence it experiences humid tropical climate and three rainy seasons. In terms of vegetation cover, shrubs and scattered natural trees dominate the council. Natural forests cover approximately 1,500 ha and mangrove forest covers 3,031 ha of the coastal strip.

5.2 Social condition
Population is approximately 273,332 persons (2012 Census) whereas 81 % of people live in urban areas. The available fishing, tourism attractions, bank services, natural resources and other opportunities, have not been fully exploited by the local community. It is estimated that the annual per capita income of a person living in Tanga (2011) is approximately Tshs. 886,343=. Low level of income is attributed to the decline in industrial activities (sisal and manufacturing industries) and hence shortage of employment. The decline in industrial activities has had a negative impact on the performance of the railway and port.

Tanga city has abundant water sources from the Zigi River. The maximum water processing capacity is 42,000 m$^3$/ day while daily demand is 26,000 m$^3$/day.

6.0 Mbeya City Council
6.1 Environmental Settings
The city is located in the southern highlands of Tanzania. It is accessible by road and TAZARA railways from Dar es Salaam. Climate is generally tropic with marked seasonal and altitudinal temperature variations and sharply defined dry and rainy seasons. In the arable areas soils are most commonly of moderate fertility, coarse or medium in texture.
and varying from sandy loam and alluvial soils to cracking clays. Large part is dominated by crystalline and mainly fersic gneiss and granite rocks covered with thick layers of volcanic and alkali basalt.

Miombo (*Brachystegia julbernadia*) woodland is predominant in Mbeya. Those areas with higher rainfall support forest, often evergreen and bamboo thickets, except at the highest elevation, where afro-alpine grasslands exist.

There are three basic drainage systems:
- The Ruaha – Rufiji basin extending from the south highlands on the southern plateau of Tanzania forms a watershed area of the main rivers draining the Region towards the east. Main rivers include the Great Ruaha which is considered as one of the great inlets of the Indian Ocean.
- Lake Rukwa basin in the northwest of which the rivers Zira and Songwe form the inland drainage into Lake Rukwa.
- Lake Nyasa basin in the south forms another inland drainage, of which the rivers Kiwira, Lufilyo, Mmbaka and Songwe are considered to be major sources of water to Lake Nyasa. Water from Lake Nyasa drains to the Indian Ocean through Shire and Zambezi River in Malawi.

6.2 Socio-economic conditions
The population is approximately 305,319 persons (2012 census). Economy depends on trade, business and tourism in the CBD supplemented by urban agriculture and mining in the outskirt.

7.0 Dodoma Municipal Council (including the Capital Development Authority)

7.1 Environmental Condition
Characterized by broad upland plains the municipality lies very close to the centre of mainland Tanzania. It is the official capital of Tanzania. The Municipality of Dodoma is on the vital Central Railway Line on a major crossroad of the National East West trunk road and the famous north to south Cape to Cairo Great North Road, which passes in Tanzania through Mbeya, Iringa, Dodoma, Babati and Arusha.

The Capital Development Area (CDA) covers an area of 276,910 ha and has a designated area for urbanization, designed to a population of 1,000,000. The rest of CDA area is earmarked for an underground water catchment area, agriculture and livestock grazing area, afforestation and conservation areas and a future international airport.

Climate is mostly semi-arid due to low and erratic rainfall. Rainfall is the most important climatic factor in with only one rainy season of heavy storms and flash floods are a common occurrence. Soil is considered to be of low fertility, deficient in organic matter, moderate to poor in permeability and of shallow depth. Salt content is generally high and in some areas, salt pans form under the top soil and surface soil crusting is common.

Vegetation in the sub-urban area is characterised by bush or thicket type. Depressions, which are seasonally inundated mbugas (areas with impeded drainage) support grasses to
form grasslands and sometimes a mixture of grasses and woody plants. These are the wooded grasslands. Woodlands are observed as patches on many hills in Dodoma.

7.2 Socio-economic conditions
The population is 410,956 (2012 Census). Trade, industry and commerce dominates the CBD area. In the outskirt urban agriculture and livestock keeping are practiced.
B3. LEGAL REQUIREMENTS AND INSTITUTIONAL FRAMEWORK

B3.1 WORLD BANK SAFEGUARD POLICIES

The World Bank Safeguard Policies are Operational Policies (OP) and Bank Procedures (BP) approved by the Board for addressing environmental and social issues within the Banks supported development projects. A summary of the ten safeguard policies is provided under annex 2. TSCP has been assigned Environmental Risk Assessment Category B and triggers the following World Bank Safeguard Policies: (i) Environmental Assessment (OP/BP 4.01); (ii) Involuntary Resettlement Policy (OP/BP 4.12); (iii) Physical Cultural Resources (OP/BP 4.11). Subsequently, the same policies will apply to the Sub-Project activities under the proposed second Additional Financing.

The safeguard policies triggered by TSCP in general and Additional Financing 2 specifically are:

**OP 4.01 (Environmental Assessment)**

The Project intends to finance a variety of types of small-scale infrastructure (e.g. artery urban roads and associated storm water drains, drainage channels from urban facilities, waste disposal infrastructure etc.) that can have adverse environmental impacts. The ESMF checklist is designed to identify these potential impacts, and direct LGA project teams and local leaders and management committees to practical ways of avoiding or mitigating them. The LGAs will prepare appropriate environmental and social instruments (ESIAs or ESMPs) according to the type and scope of identified impacts.

**OP 4.12 (Involuntary Resettlement)**

The Project will support urban LGAs investments in various types of subprojects that may require land for the construction of small-scale infrastructure. To ensure that current landowners or users are properly compensated, a Resettlement Policy Framework (RPF) has been prepared to be used by LGA project teams and local leaders and management committees concurrently with this ESMF. The RPF provides the framework for determining the need for and content of a Resettlement Action Plan (RAP) for subprojects.

**OP/BP4.11 (Physical Cultural Resources)**

Culturally, Tanzania is a rich and diverse country and is home to ancient civilizations: 300-year-old Arab settlements; 100–year-old European buildings; graveyards; sacred areas; mosques; churches; etc. To mitigate against the potential adverse impacts on physical cultural resources, training of LGA project teams and local leaders and management committees and the subproject planning checklist as well as other tools, will include potential “chance finds” of cultural property resources. This will ensure that
physical cultural resources encountered by chance during implementation will be properly reported to Antiquities Department, and appropriate measures are taken to avoid damaging them. Chance find procedures will be incorporated into civil works contracts and buffer zones will be created to avoid damage to cultural resources, such as “sacred” forests and graveyards.

The World Bank Environmental Health and Safety Guidelines containing quantitative limits and good international management practices for different types of industry and sectors, are also applicable to the various sub-projects. The applicable sectoral guidelines include, but are not limited to:

- WBG EHS Guideline on Waste Management Facilities
- WBG EHS Guideline on Construction Material Extraction
- WBG General EHS Guideline

The relevant requirements from these guidelines will apply to the sub-projects. Where there is also coverage by national regulations, the more stringent of the two apply. It should however be noted the TSCP project implementation has been observing national guidelines/regulations, which are quite similar to WBG EHS, see section B 3.2.

**B3.2 RELEVANT NATIONAL ENVIRONMENTAL AND SOCIAL MANAGEMENT REQUIREMENTS**

TSCP is set within the context of a range of local and national environmental and social management policies, and legal support. These are the important factors that will provide an enabling environment so that the safeguards that will be put in place by the Participating urban LGAs to offset the environmental and social impacts of the infrastructure subprojects can really work. Tanzania has a good policy, legal and institutional framework for management of environment and social issues enshrined in the National Constitution, National Environment Management Policy and National Environmental Management Act, the Land Policy and Land Acts as well as supporting local laws and by-laws. A few policies and laws that are relevant to the environmental and social management of the TSCP infrastructure development component are presented below.

**B3.2.1 The Constitution**

*The Constitution of the United Republic of Tanzania Cap 2 (1977)*

This is the supreme law. No specific Article that address the right to clean and safe environment directly. The main tenet of the Constitution are the various rights bestowed to individuals which encompass all social matters and issues related to the environment which will be realized by the project through this ESMF. Article 24 has irrevocable provisions for the rights for a person to own property, for its protection and to fair and adequate compensation when deprived of the property.
B3.2.2 General Environmental Management

*National Environmental Policy (1997)* was established in order to engage the contradictions and minimize sectorial conflicts and overlap of activities. Infrastructure investments under the TSCP may be established in more than one sector of the economy i.e. roads, waste management, transport etc. This ESMF environmental process and procedures (described under B4 below) shall be applicable to all subprojects and implemented by related Departments / Sections at each LGA. Through this ESMF, Sectors at LGAs responsible for sub-projects will develop lists of priority environmental concerns in their sectors/areas and draw plans for dealing with them.

*Environmental Management Act (EMA), Cap 191 (2004)*
The ESMF section B 1.2 outlines principles and best practices for management of environment which are in accord with EMA principles. Procedure and institutional arrangements for preparation and approval of environmental and social management instruments: ESIA reports, EMPs for subprojects (described above B2.1.3 and B4 below) are in line with rights, duties, and powers to individuals and institutions bestowed by EMA at all administrative levels (including the National Environmental Management Council, officers and committees at LGAs). The sub-project EMP for managing wastes will ensure the rights of every person residing in Participating LGAs to a clean, safe and healthy environment which are the basic tenets of the EMA.

*Environmental Impact Assessment and Audit Regulations (2005)*
It is an offence for LGAs to commence, finance, permit or license a project without EIA authorization.
The LGA – specific EIA process described in this ESMF (section B4 below) including application, screening, assessment, review and approval are in line with EIA Regulations. The EIA and Audit Regulations Part IX, Regulation 42, Sub-regulation (1); (2)(b); and (4), require that in such situations where an EIA Certificate is still valid, and a Proponent wishes to make changes to the development, extra work should be done to supplement the existing Environmental Impact Statement. The nature of additional information required to supplement the EIS should be provided by the National Environment Management Council (NEMC). The EIS supplement is undertaken by the Proponent. At the completion of the assessment, the supplement report is reviewed and approved by NEMC. The Proponent is issued with a Variation Certificate in accordance with Part VII, Regulation 35, Sub-regulations (1) – (3)) of the EIA and Audit Regulations, 2005. This ESMF environmental and social assessment and management process specific for TSCP additional works aims to fulfil this requirement.

*Environmental (Registration of Environmental Experts) Regulations (2005)*
Sub-project EIAs, where required, will be conducted by person or firm of experts registered and certified by the Registrar at NEMC. PO-RALG will commission Consulting firms certified to undertake EIAs. LGA will strive to assign qualified LGA staff to prepare sub-project ESMP; or support and supervise external experts where
screening determines a need to follow national procedures and obtaining EIA certificate issued by Minister responsible for environment. LGAs will ensure through capacity building outlined under this ESMF (B6) that its relevant Staff attain qualifications required under this regulations to conduct Environmental Impact Assessment and Audit or related studies and are registered / certified by Registrar (NEMC).

**B3.2.3 Management of Air emissions and Ambient Air Quality**

**Environmental Management Act (EMA), Cap 191 (Sections 74, 75, 130-132)**
EMA has provisions for three main areas: General Atmosphere; Climate Change and Management of Gaseous Wastes from Various Sources. The Act directs LGA to adopt national standards on air emissions.

**Environmental Management (Air Quality Standards) Regulations, (2007)**
The regulation prohibits emissions/release of hazardous substance into the environment. The sub-project EMP for managing wastes will adhere to permissible emission limits and quantities of emissions of SOX, CO, black smoke and suspended particulate matters, NOx, O3, hydrocarbon, dust, lead, and substances in exhaust of motor vehicles prescribed by the regulations. If need be, LGA seek air pollutant emission permit issued by NEMC.

**Public Health Act, Cap 336 (2009)**
Sets requirements for management of gaseous wastes from various sources including vehicles. The sub-project EMP will ensure that habitable buildings under TSCP are designed to have adequate openings or ventilation, means of smoke escape, and maintenance of equipments and devices.

**Occupational Health and Safety Act, No.5 (2003)**
Sub-project EMP will incorporate requirements and standards for personnel working in areas where dangerous fumes are likely to be present; and precautions in respect to explosive or inflammable dust, gas, vapour or substance.

**B3.2.4 Management of Solid Wastes**

**Environmental Management Act (EMA), Cap 191 (Sections 114 – 118).**
By developing waste management infrastructure, the LGA have fulfilled their responsibility required by EMA which empower them to devise means for minimization of solid wastes and method of collection, transportation, treatment and disposal; as well as availing appropriate equipment and routes for collection; and designate transfer station / collection centers. The subproject ESMP will ensure proper functioning of the infrastructure and facilities.

**Public Health Act, Cap 336 (2009)**
By developing waste management infrastructure, the LGA also have fulfilled PHA requirement that vest duty to LGA to set aside and manage areas in respect of solid (and
(liquid) wastes; collect, transport and dispose wastes from all sources; cleanse all receptacles; clean, maintain, and keep streets and public places, dumping sites and control scavengers at all waste sites. The subproject ESMP and specific Waste Management Plans will ensure that the LGA infrastructure and facilities operate as per these requirements.

**Environmental Management (Hazardous Waste Control and Management) Regulations (2009)**
The subproject ESMP and specific Waste Management Plans will ensure that the LGA infrastructure and facilities have specific procedures and practices for storage, transportation, treatment and disposal of all categories of hazardous and toxic wastes including health care wastes, electrical and electronic wastes, pesticides, radioactive, industrial and consumer and chemical wastes. The monitoring procedures set in this ESMF process will ensure periodic records and annual reports of the performance of the licensed waste management landfills.

**B3.2.5 Management of Wastewater and Ambient Water quality**

**Environnemental Management Act (EMA), Cap 191 (Sections 61, 62, 123 – 129)**
By developing storm water management infrastructure, the LGA also have fulfilled EMA requirement that vest duty to LGA to prepare for placement of storm water drains. The sub-project EMP will adhere to provisions on discharge of sewage and management of liquid wastes and storm water.

**Environmental Management (Water Quality Standards) Regulations (2007)**
The sub-project EMP will ensure safe distances of water supply systems from pollution sources for any infrastructure activity near water sources. The inclusion of Environmental Management Officers in project teams and approval of subproject ESMP will ensure no discharge of water polluting substances will go uncontrolled.

**B3.2.6 Management of Soil Quality**

**Environmental Management (Soil Quality Standards) Regulations (2007)**
The sub-project EMP will ensure main polluting activity and discharge effluent are prevented from contaminating soils or subsoil.

**B3.2.7 Management of Noise**

**Environmental Management Act (EMA), Cap 191 (Sections 147).**
The sub-project screening procedures set in this ESMF will delineate all sorts of activities with potential to emitting noise and vibrations in order to control noise and vibration pollution into the environment.

**Environmental Management (Quality Standards for Control of Noise and Vibration Pollution) Regulations (2011)**
The sub-project ESMP will incorporate measures for control of noise and vibration pollution emanating from construction site, vehicles, workshop, and quarries that annoys,
disturbs, injures or endangers the comfort, repose, health or safety of others and of the environment.

**B3.2.8 Management of Land and Land Use**

The Constitution of the United Republic of Tanzania Cap 2 (1977); National Land Policy (1997); Land Act, Cap 113 (R.E 2002); Land Acquisition Act, Cap. 118 (R.E 2002); Urban Planning Act No.8 (2007); Land Use Planning Act No. 6 (2007); Land (Assessment of the Value of Land for Compensation) Regulations (2001); Land (Compensation Claims) regulations (2001); Courts (Land Disputes Settlements) Act, Cap. 216 (2002).

These laws and regulations govern the use of land and other assets in urban areas including property and land rights, acquisition of land and other assets, rights and compensation, and dispute resolution and grievance mechanisms. Sub-project ESMP will include component on Land acquisition and compensation procedures (Resettlement Action Plan) for each site that include comprehensive census of people whose land will be taken (even temporarily) and inventory of their assets and properties. Valuation and prompt compensation shall follow procedures laid down in land laws and regulations.

**B3.2.9 Management of Public / Occupation Health and Safety**


**B3.2.10 Others Relevant to Infrastructure Development**


The Acts provides for prevention and control of water pollution and degradation of water resources and penalties to be taken against one who pollutes the water resources.

**Road Act No. 13 (2007)**

Land acquisition and compensation procedures (Resettlement Action Plan) within Sub-project ESMP for each site will be guided and follow guidelines provided under this act i.e. give notice to affected people of plans for construction of a road (new road or to widen, deviate or re-align an existing road or road of access) and ensure compensation of owner of a land acquired. The ESMF recommend LGAs to liaise early in planning with the Road Authority mandated to permit use of the road reserve.
B3.3 INSTITUTIONAL FRAMEWORK FOR ENVIRONMENTAL AND SOCIAL MANAGEMENT

B3.3.1 Environmental and Social Management Authorities

Environmental Management Authorities as per Environmental Management Act, Cap 191 (2004) and EIA Regulations:

a) National Environmental Advisory Committee
Advice the Minister Responsible for Environment

b) Minister Responsible for Environment
Issue guidelines and designate duties to various entities; approval by issuing of decision letter / EIA Certificate for development projects; delegate responsibility for EIA authorization to Director of Environment, LGAs and Sector Ministries.

c) Director of Environment
Coordinate, advise, assess, monitor and report environmental related aspects and activities; responsible for environmental policy and legal formulation and implementation; integration of environmental considerations into development policies, plans, programmes, strategies and projects; undertake strategic environmental assessment. The Director provides advice to Minister for approval of Environmental Impact Assessment report (EIS) and issuance of EIA Certificate.

d) National Environment Management Council (A Body Corporate)
Undertake enforcement, compliance, review and monitoring of environmental impact assessment. NEMC role is to initiate /develop procedures and safeguards for the prevention of activities which may cause environmental degradation; provide advice and technical support to different stakeholders; enforce and ensure compliance of the national environmental quality standards. NEMC has specific roles and responsibilities to NEMC in the undertaking EIA / PEA for new development projects (Part III – XI); Environmental Audit for existing development projects (Part X); and Environmental Monitoring and Reporting (Part XI). Under the EMA, NEMC is empowered to establish specific offices or to appoint or designate officers to effectively perform its functions.

- Registrar of EIA Expert /Firm of Experts /Environmental Auditor/Environmental Inspectors
Register and keep registry of qualified firms/individuals authorized to offer services in undertaking EIA, Initial and Control Environmental Audit Environmental Inspection, EIA training and other technical support.

- Environmental Inspector (Appointed or Designated)
Empowered to enter on any land, premise or facility of the project for the purpose of inspection, to examine records and to make enquiries on the project or for the purpose of monitoring the effects of activity carried out on that land, premise or facility upon the environment.

- **NEMC Zonal Offices**

Headed by Environmental Management Coordinators replicate all functions and departments of NEMC including overseeing Compliance and Enforcement; EIA; Research and Planning etc. NEMC target 7 such offices namely: Lake Zone (Mwanza (center), Geita, Kagera, Mara and Shinyanga); North Zone (Arusha (center), Tanga, Kilimanjaro, Manyara,); Southern Zone (Mbeya (center), Iringa, Rukwa, Nkasi, Ruvuma); South-Coast Zone (Mtwara, Lindi); Central Zone (Tabora, Dodoma, Singida); and Coast Zone (Dar es Salaam, Pwani, Morogoro).

e) **Sector (Ministries) Environmental Sections**

Responsible for all sector–specific environmental matters within the Ministry including participation in Cross-Sectorial Advisory Committee for review of EIA Reports; review and verification of Environmental Audit Reports, monitoring on-going projects, and submit Monitoring reports to NEMC.

f) **Regional Secretariat**

Assist the Regional Commissioner; over see/advise implementation of national policies, enforcement of laws and regulations at regional level. EMA, Cap. 191 Section 34 confers additional roles to the Regional Secretariat to coordinate all environmental matters within respective region.

g) **Local Government Authorities**

Perform basic functions including promoting social and economic wellbeing and development of areas and people within jurisdictions including relevant to environmental and social management. EMA, Cap. 191 Section 37 confer additional functions for the environment committees; give general powers to the LGAs including to undertake inquiries and investigations, summon any person, resolve conflicts among various parties, inspect and examine any premise, order to remove substance or article harmful to the environment and prosecute or sue any violator.

- **LGA Environment Management Officer (designated / appointed)**

Enforce, advise the Environment Management Committee, gather/ manage information, and report on state of local environment. EMO are tasked to monitor the preparation, review and approval of environmental impact assessment for local investments.

- **LGA Standing Committee on Urban Planning and Environment**
The Committee is established under Section 42 (1) of the Local Government (Urban Authorities) Act, 1982 as a standing committee responsible for urban planning. EMA cover additional functions for the environment committee, include overseeing proper management of environment within an urban area.

- **Standing Committees of Economic Affairs, Works and Environment of a Township**

  Established under Section 96(1) of the Local Government (District Authorities) Act, 1982 while EMA, Cap. Additional functions for the environment committee include overseeing proper management of environment within a township.

  **h) Registered EIA Expert /Firm of Experts /Environmental Auditor/Environmental Inspectors**

  Are qualified firms/individuals authorized to offer services in undertaking EIA, Initial and Control Environmental Audit Environmental Inspection, EIA training and other technical support.

    **i) Other Actors as per EIA and Audit Regulations, 2005**

    - **Investor/ Developer / Project Proponent:** oversee and meet costs of Environmental assessment and implementation of ESMP/EMoP; undertake Initial Environmental Audits and Environmental Control Audit, Self-auditing during implementation of ESMP; undertake Baseline Survey before project implementation as basis for undertaking effective monitoring

    - **General Public** empowered by EMA and EIA Regulations to participate in all environmental management matters concerning them and at all stages of the EIA process specifically to raise issues and concerns and to appeal when dissatisfied.

**B3.3.2 Land Management Authorities**

**a) Minister Responsible for Lands / Land Use Planning**

Sole authority over all land matters: duty of formulation and implementation of Land Policy and Act; issuing permit for using land (other than village or reserved land); urban planning and use and development of land; designate any Body or Organ as a planning authority and to declare any area of land to be a planning area

**b) Commissioner for Lands**

Sole authority responsible for land administration: principal administrative officer and professional officer and advisor to the government in land matters at all levels; has power to delegate the powers to officers at Local Authority to work and comply with his/her directives.

**c) Qualified Valuers**
Land (Assessment of the Value of Land for Compensation) Regulations, 2001 (Regulation 5) directs that every assessment of the value of land and unexhausted improvement (properties / assets) is done by a qualified Valuer.

d) Chief Valuer
Land (Assessment of the Value of Land for Compensation) Regulations, 2001 (Regulation 6) directs that every assessment of the value of land and unexhausted improvement (properties / assets) is done by a qualified Valuer is verified by the Chief Valuer of the Government or Representative.

B3.3.3 Other Authorities relevant to Infrastructure Development

Tanzania Electric Supply Company Limited (TANESCO)
Under the Ministry of Energy and Minerals, its core functions are generation, transmission, distribution, supply and use of electric energy. At so many location TANESCO use road reserves for transmission infrastructure.

Energy and Water Utilities Regulatory Authority (EWURA)
In the electricity sector to regulate transmission and distribution of petroleum and natural gas; in the water sector responsible for (i) licensing and regulating water supply and sanitation services (ii) establishing standards, guidelines and tariffs chargeable in relation to water supply and sanitation services (ii) Monitoring water quality.

Water Basin Authority
Established to manage water resources in nine (9) water basins: Pangani River Basin, Rufiji River Basin, Lake Victoria, Wami-Ruvu, Lake Nyasa, Lake Rukwa, Internal Drainage Basin to Lake Eyasi, Manyara and Bubu depression, Lake Tanganyika, Ruvuma and Southern Coast.

Water and Sewerage Authorities
These are urban based, established to offer water supply and sanitation services in respective urban centers. The authorities issue permits for discharging liquid wastes.

Tanzania National Roads Agency (TANROADS)
Issue approvals or permit for undertaking physical works on roads or road reserves, issue permit for extraction of construction minerals, issue permit for using roads above set limits (tonnage, width etc.).

Occupational Health And Safety Authority (OSHA)
Oversee safety, health and welfare of persons at work, carries out all workplace inspections; hygiene surveys and measurements, occupational health examinations of workers, offer advice on ergonomics and scrutinize workplace drawings.

Ministry of Home Affairs, Fire and Rescue Services Force
Protection against fire hazards, to issue permit for use of fire-fighting equipment’s, Inspection of fire equipment commissioning of fire protection and detection system installed, to perform research on fire hazards and fire incidences.

**Tanzania Commission for Aids (TACAIDS)**
Prevention and control spread of HIV/AIDS, to promote advocacy and education on HIV/AIDS, to protect human and communal rights of people infected with and affected by HIV/AIDS
B4. SUB-PROJECTS PREPARATION, APPROVAL AND IMPLEMENTATION

B4.1 PREPARATION AND APPLICATION

The chapter describes an environmental and social assessment and management process specific for TSCP Additional Financing 2 for sub-projects preparation, approval and implementation. The process is based on a simple screening and approval procedure including linkages with national procedure/institutions and various LGA-level entities and consulting service providers. The purpose of this process is:

- To determine whether future sub-project investments are likely to have potential negative environmental and social impacts;
- To determine appropriate mitigation measures for activities with adverse impacts;
- To incorporate mitigation measures into sub-project design;
- To review and approve proposed activities or sub-project; and
- To monitor environmental parameters during sub-project implementation.

The extent of environmental and social work that might be required for sub-project prior to implementation will depend on the outcome of the screening process. Main steps of the environmental and social assessment process to be established at PO-RALG and under each LGA leading towards review and approval of sub-projects under the TSCP Additional Financing 2 are described below.

ESIA for the first phase of the Core Urban Infrastructure and Services component of TSCP was conducted for each Participating LGA and approved in 2010. Each LGA was issued an EIA Certificate enveloping all sub-projects that were tabled for funding. The environmental and social assessment and management process specific for TSCP additional works will be guided by requirements specified in the Tanzania EIA and Audit Regulations, 2005 (specifically (Part IX, Regulation 42, Sub-regulation (1); (2)(b); and (4)) dealing with approval of changes to a project with a valid EIA Certificate. The salient aspects of the process to be established at each of the 8 Participating LGAs and CDA shall include:

Step 1: Preparation

For the process to be effective, each Council Executive Director of participating LGAs will delegate coordinating responsibilities and day-to-day activities in the environmental and social assessment and management process to the Council Environmental Management Officer (EMO). The EMO shall remain as the main contact person for the national environmental management authorities (i.e. NEMC, Director of Environment) and PO-RALG in all matters related to environmental and social management.

The Council Executive Director shall ensure that key staffs are included in the Project Team. Minimally, the team will include a sector specialist (i.e. Civil Engineer,

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2 The number and type of team members will depend on the nature and scope of the sub-project under consideration.
Environmental Engineer), LGA staff trained and with experience in environmental assessment, environmental and sanitation management, sociology/community development, economic planning, Land and urban planning\(^3\). The environmental and social management aspects will be coordinated by the EMO\(^4\).

Step 2: Screening

Screening is the classification stage to determine the level at which an impact assessment will be carried out. Project Teams at each Participating LGA and CDA shall undertake initial screening to define the changes to the TSCP where extra work needs to be done to supplement the existing Environmental Impact Statements.

The qualified Municipal sector specialists responsible for the design and/or implementation of the proposed infrastructure subprojects (assisted by Municipal Environmental Management Officers and LGA Project Teams) shall make brief description of the infrastructure / sub-projects defining activities likely to cause adverse environmental and social impacts. The screening takes consideration of key factors specifically magnitude/scale of emerging impacts and concerns of the public realized during sub-project implementation. The Teams shall carry out screening of the sub-project by using this ESMF environmental and social Checklist (Annex 3 & 4) as well as screening criteria provided in the EIA Regulations.

After reviewing the results of the environmental and social screening process, Team will then write a brief screening report defining the subproject activities likely to cause additional impacts and extent of environmental and social assessment and management work required and submit to the PO-RALG Project Team for approval.

Time frame: Screening at LGAs within 10 working days; approval by PO-RALG within 5 working days.

The screening report will be issued as part of the Terms of Reference to registered firm of experts (certified at NEMC to undertake ESIA) commissioned by PO-RALG to undertake the additional assessment work.

Step 3: Application for EIA Variation Certificate

EIA Consultant will prepare application documents for each EIA Certificate Holder (Participating LGA and CDA) including a project brief as background information for application of Variation of EIA Certificate. Box 1 is the type of information required for the application. The preparatory work shall entail update of the ESMPs including field investigations to determine status of ecological and social receptors and consultation with LGA Project Team, project recipient communities and their leaders and relevant stakeholders.

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\(^3\) Other opted specialists appointed by the Council Executive Director on need basis depending on nature of project

\(^4\) 10% of project funds are to be allocated to the EMO for environmental and social management activities and to cover monitoring, allowances, review costs, fuel and stationary (See capacity building chapter 7)
**Box 1: Content of Project Brief for application of Variation of EIA Certificate**

*Project Description*: a description of the additional or changes to project pointing variation(s) from the EIA report previously approved including clear definition of the affected sub-projects and areas.

*Changes in Baseline Condition*: an update of the status of the project’s operating conditions that will be affected by the proposed additional sub-projects / activities (including a synopsis of prevailing environmental, social and compliance issues).

*Emerging Environmental and Social Impacts and concerns*: identification of sources, nature and extent of key impacts, compliance and issues of concern covering but not limited to: pollution (changes to air quality, water and soil quality including accidental spills and disturbances); effects to local biodiversity and natural habitats; land use changes; use of resources and management of wastes (energy and material efficiency); Occupation Health and Safety; and community wellbeing, health, safety, and security.

*Mitigation Measures*
Recommendations to avoid, reduce, mitigate or compensate the impacts including estimates of costs and responsibility for implementation of the mitigation measures. Show commitment of funds to implement the proposed mitigation measures.

*Update ESMaP and ESMoP*
Update Environmental and Social Management Plan (ESMaP) and Environmental and Social Monitoring Plan (ESMoP)

EIA Consultant will fill in a special application form issued by NEMC – Form No.5 for Variation of EIA Certificate (sample attached as Appendix 5) for each Participating LGA and CDA availing information on:
- the nature of proposed variation(s);
- reasons for variation(s);
- description of the environmental and social changes arising from the proposed variation(s);
- description of how the environment and the community might be affected by the proposed variation(s);
- description of how and to what extent the environmental and social performance requirements set out in the EIA report previously approved for this project may be affected; and
- description of any addition measures proposed to eliminate, reduce or control any adverse environmental impact arising from the proposed variations and to meet the requirements in the EIA process.

The respective Municipal Environmental Management Officers assisted by LGA Project Team will review the updated ESMPs for compliance with the results and recommendations from the environmental and social screening process and would recommend approval to the PO-RALG.

EIA Consultant will submit application documents including project briefs with updated ESMPs to the Project Team at PO-RALG for approval and necessary signatures.
PO-RALG/ LGAs (or the EIA Consultant on behalf) will submit duly filled in Forms No.5 and approved project briefs together with a prescribed fee for NEMC to approve / determine the scope of supplementary work required.

Step 4: NEMC Determine Scope of Supplementary Work

Upon submission to NEMC of the intended TSCP additional development activities in each participating LGA and CDA, the Council shall advised on the nature of information required to supplement the 2010 EISs (see Appendix 1).

No Additional Assessment Work Required: If the environmental and social screening results by NEMC indicate the potential impacts and application of mitigation measures in project design are sufficient; the TSCP Additional Financing will not require additional environmental work - NEMC will recommend approval of variations and each Participating LGA (EIA Certificates holder) will be issued with Variation of EIA Certificate approval(step 6).

Additional Assessment Work Required: In some cases the results of the environmental and social screening process by NEMC may indicate extra work needs to be done to supplement the existing Environmental Impact Statements. The Council will provide the nature of additional information required. PO-RALG (EIA Consultant on behalf) shall proceed to step 5: carry out the EIS supplement work.

B4.2 APPRAISAL AND APPROVAL

Step 5: Carrying Out Supplementary Assessment Work

The ESIA Consultant will initiate environmental work according to the nature of additional information required to supplement the EISs. Impacts identification and mitigation shall be based on this ESMF environmental and social Checklist. The Consultant will undertake assessment with involvement of certified staff at each LGA and CDA (coordinated by the Environmental Management Officer (EMO). The study may include field investigations - a site visit conducted to determine status of ecological and social receptors and engage with project recipient communities and stakeholders. The work shall culminate in production of EIS Supplement Report.

OR

NEMC could recommend a more detailed assessment for a specific sub-project i.e. a Preliminary Environmental (and Social) Assessment (PEA) or Full-scale ESIA. The EIA Consultant shall follow the steps (Boxes 2a & 2b) as per provisions in the national EIA & Audit Regulations with LGA input and participation.

Box 2a: Preliminary Environmental (and Social) Assessment (PEA)
Scope of PEA work:
 a) Description of the project characteristics and the affected environment;
b) Identification of impacts on the local environment;

c) Assessment or evaluation of the significance of the impacts; and

d) Identification of mitigation measures.

Box 2b Full-scale Environmental and Social Impact Assessment (ESIA) General Steps:

a) Scoping and preparation of Terms of Reference;

b) Preparation of Environmental Impact Statement;

c) Review by Technical Advisory Committee;

d) Approval and Issuing of an EIA Certificate.

The EIA Consultant shall complete the assessment work and submit the supplement reports for review and approval by NEMC (step 6).

Step 6: Approval of Variation to the EIA Certificate

If the review of the project brief or EIS Supplement Report by NEMC indicate the potential impacts and application of mitigation measures in projects design are sufficient; NEMC will recommend to the Minister to issue approval of Variation to the EIA Certificate. Upon receipt of the approval, PO-RALG (EIA Consultant on behalf) shall proceed to step 7 - incorporate the mitigation measures into the proposals or designs of the sub-project development activities.

Step 7: Incorporating Mitigation Measures into Sub-Project Proposals / Designs

The EIA Consultant shall develop sub-project specific ESMPs based on the updated and approved generic ESMP for individual or groups of similar sub-projects (as relevant) proposed by Participating LGA for additional financing. The design consultants in collaboration with LGA Project Team will incorporate the mitigation measures recommended in the sub-project specific ESMP, into the proposals and designs of the sub-project development activities and submit the revised designs to the Project Management Team as appropriate for review and approval (step 8).

Step 8: Approval of Revised Designs by LGAs

The Environmental Management Officer (assisted by LGA Project Teams and including community representatives) shall review and make recommendation on the revised designs. The review assesses to ensure considerations of landtake / land acquisition and resettlement impacts, discharge of pollutants (i.e. sediments and oils in storm water / wash-down waters) into sensitive habitats, additional modifications, alternatives routes etc. The ESMF checklist lists mitigation measures and management controls besides each identified impact that the Team will use to check if the ESMPs proposed by EIA Consultants address the negative impacts or enhance positive ones.

Participating LGA Recommendations

If the sub-project environmental assessment and project documentation have satisfactorily addressed all key issues and satisfied that the sub-project designs are environmentally and socially compliant, the EMO will clear the sub-project through to the PO-RALG Project Team.
PO-RALG will provide review results to design consultant for final incorporation into design and/or subproject ESMP and proceed through standard project authorization by GoT.

Any proposed infrastructure project that does not comply with the requirements of Tanzania environmental policies and legislation and World Bank Core Principles will not be cleared for approval. This process is designed to ensure that the environmental and social assessment process is part of and conducted during the design process thereby ensuring that the infrastructure development activities are environmentally and socially sound and sustainable.

**B4.4 IMPLEMENTATION, MONITORING, REPORTING AND REVIEW**

The Project Teams will ensure that all relevant project approvals including resources (human and financial) for proposed mitigations are complete before initiating subproject implementation. During implementation the LGA Project Team will be responsible for:

- Ensuring that compensations for lost land rights and properties (if applicable to the sub-project) are implemented and completed before the commencement of any construction works.
- Ensuring that the implementation of the sub-project ESMP is part of the Contractor's contractual obligations. The LGA procurement section will supervise the tendering process for all service providers.
- Ensuring that the ESMP is implemented and approval conditions are observed during the mobilization, construction and operation of the sub-project.

If the project reaches a stage of decommissioning, the LGA Project Team shall prepare a decommissioning plan which will include environmental and social issues highlighted in the ESMP.

**Step 10: Monitoring and Reporting**

Environmental monitoring needs to be carried out during the mobilisation, construction as well as operation and maintenance phases of the infrastructure sub-project in order to measure the success of the mitigation measures implemented earlier. Under TSCP, the responsibilities for monitoring and evaluation of the mitigation measures adopted would be assigned as follows:

**The Municipal sector specialists (Municipal Engineer)** is responsible for the day-to-day monitoring of the sub-project ESMP including supervising aspects implemented by the Contractors and resolving grievances specifically the monitoring of (i) the environmental and social assessment work to be carried out by service providers; (ii) overseeing the implementation of the Resettlement Action Plans; (iii) monitoring of environmental issues and the supervision of the civil works contractor during the construction process; (iv) monitoring of environmental issues during operations and during maintenance of the infrastructure facility; (iv) submission of monitoring reports to District Environmental
Offices/NEMC. The monitoring and reporting will be done by the Municipal sector specialists who will bear the overall responsibility of supervision of the infrastructure projects and shall report to the Project Team at PO-RALG.

**Members of the Community:** Will undertake - after awareness raising - effects monitoring (which records the consequences of activities on the biophysical and social environment). This will be done throughout the infrastructure project cycle: (i) During planning phase - participate in the identification of indicators for monitoring the mitigating measures; (ii) During implementation (construction) phase, monitoring the execution of works with respect to environmental aspects, e.g. verify the compliances of the Contractors with their obligations; (iii) During operation and maintenance phase, the overall environmental monitoring and alerting on any emerging environmental hazards in conjunction with the ongoing infrastructure project activities. The communities will be enabled to pass on their observations and concerns through the existing administrative structure of the local governments i.e. mtaa/Ward councils and environment committees to Municipal Environmental Management Officers who will have direct link with NEMC/PO-RALG.

**The National Environment Management Council (NEMC)** will perform an enforcement monitoring role supported by PO-RALG based on submissions and recommendations from the EIS/EMO. The NEMC will ensure that the monitoring plan for the overall monitoring of the entire TSCP – Additional Financing 2 requirements is implemented with particular focus on monitoring cumulative impacts of the infrastructure projects on a municipal level and to ensure that individual infrastructure project mitigation measures are effective at the cumulative and municipal level. NEMC would primarily achieve this objective through periodic field visits, coordinating and implementing the Training Program and through technical assistance and backup services to the PO-RALG.  

**PO-RALG** will perform monitoring functions for the entire TSCP – Additional Financing 2. Monitoring and Evaluation guidelines developed to monitor the entire project will include parameters for compliance of proposed measures to safeguard the environmental and social impacts. Monitoring activities by the Implementers, Environmental Officers/NEMC will be performed periodically through performance surveys/audits.

**Monitoring indicators**  
The objectives for monitoring are: (i) to alert project implementing institutions and to provide timely information about the success or otherwise of the EIA process as outlined in this ESMF in such a manner that changes to the system can be made, if required; (ii) to make a final evaluation in order to determine whether the mitigation measures designed into the infrastructure projects have been successful in such a way that the pre-infrastructure project environmental and social condition has been restored, improved upon or worse than before.

A number of indicators would be used in order to determine the status of infrastructure of beneficiary LGAs and CDA, affected people and their environment (general standards of the roads and drainage compared to before, management of waste – solid, waste water,
storm water compared to before, general sanitation of the urban area compared to before, and capacity and knowledge of environment and social management issues compared to before, level of participation of other stakeholders in project activities compared to before etc.) Therefore, the infrastructure project EIA’s will set three major socio-economic goals by which to evaluate its success:

- Project beneficiary institutions are able to maintain their pre-project capacity to plan, construct, and maintain their infrastructure and even improve on it;
- The pre-infrastructure development environmental state of physical and biological natural resources e.g. land, water, bio-diversity has been maintained or improved upon;
- The pre-infrastructure development social and economic state (livelihoods, health status etc) of project affected people (PAP) has been maintained or improved upon.

In order to assess whether these goals are met, the infrastructure projects will indicate parameters to be monitored, institute monitoring milestones and provide resources necessary to carry out the monitoring activities. The following parameters and verifiable indicators will be used to measure the ESIA process, mitigation plans and performance.

- Adoption of ESIA process by the Participating LGAs and CDA; evaluate the rate of adoption;
- Number of environmental resource persons within the LGAs who have successfully received EIA training in screening methods etc.; evaluate the training content, methodology and trainee response to training through feedback;

Monitoring indicators which should be included in the Project Monitoring Manual include:

**Environmental indicators**

- Efficiency of infrastructure projects maintenance and operating performance;
- Water quality and soil quality at site and outlet (e.g. final exit of storm water drains) of infrastructure sub-project meets local standards and/or WB EHS Guidelines (whichever is more stringent).
- Compliance with the Construction ESMP, Sub-project ESMP and/or ESIA.
- Safe disposal of hazardous wastes

**Social indicators**

- Number of people provided with environmental training to implement the ESMF
- The number of local workers used during implementation of the works
- Savings in costs for resources and services required to maintain the infrastructure (water, energy, management of liquid and solid waste etc.)
- Community grievances received and resolved

**Step 11: Annual Reviews**

Annual Reviews of the TSCP sub-projects will be carried out as commissioned by LGA / PO-RALG. These are to be Third Party audits (by independent Local Consultant, NGO or Service provider) which will review the implementation of environmental and social management in the LGAs.
B5. ENVIRONMENTAL MANAGEMENT

In this section the ESMF describes how sub-projects will respond to the needs for environmental management i.e. the conservation of natural habitats and the protection of cultural property.

B5.1 DETERMINATION OF POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS AND PROPOSED MITIGATIONS

In this ESMF, environment is broadly defined to include natural environment (air, water and land) and human wellbeing, health and safety. When, during the screening process (using ESMF checklist: Annex 4), it is determined that a sub-project is likely to cause, and subsequently manage, potential adverse environmental and social effects, the LGA Project Team will use ESMF checklist and resources and participation sheets to support environmental planning. Emphasis is on plans and designs that avoid creating adverse environmental and social impacts that have to be explicitly managed.

B 5.1.1 Screening Activities Likely to Cause Environmental and Social Effects

Table 2 presents subproject activities likely to cause environmental and social impacts albeit of varying degrees at different locations.

Table 2: Summary of activities associated with proposed subprojects

<table>
<thead>
<tr>
<th>Subproject infrastructure type</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads</td>
<td>Rehabilitation by grading, gravelling, brick paving or tarmac/asphalt concrete finished surface</td>
</tr>
<tr>
<td>Road side drains</td>
<td>De-silting, construction of sand traps, stone pitching, gabions, concrete pipes</td>
</tr>
<tr>
<td>Drainage channels</td>
<td>New construction, rehabilitation by paving? of existing drains</td>
</tr>
<tr>
<td>Culverts and bridges</td>
<td>New construction, rehabilitation by of existing structures</td>
</tr>
<tr>
<td>Pedestrian crossing slabs, walkways, speed humps, rumble strips, road shoulders</td>
<td>New construction</td>
</tr>
<tr>
<td>Road furniture (street lights, signing etc.)</td>
<td>New installations</td>
</tr>
<tr>
<td>Bus stands / bus stops</td>
<td>New construction of entrance / exit lanes, buildings (security guard shelter, passenger waiting sheds, toilets etc.) and fencing wall.</td>
</tr>
<tr>
<td>Public car parking area, taxi stands, truck stands, loading / off-loading bays</td>
<td>New / upgrading by grading, gravelling, brick paving</td>
</tr>
<tr>
<td>Other works</td>
<td>New construction: buildings (workshop, store); water</td>
</tr>
</tbody>
</table>
### B 5.1.2 Potential Direct Environmental and Social Impacts and Mitigation

Potential direct environmental and social impacts are a result of interactions between subprojects’ activities with the relevant baseline aspects (valued receptors). Impacts may emanate from any of the three categories of subprojects LGA Project Team will undertake impact identification guided by the following important considerations:

- **Impacts identification link to causes of impacts (cause-effect interactions)** and identification shall extend through entire subproject cycle
All valued receptors – physical, chemical, biological, built or human on subproject site, immediate vicinity or off site locations needs to be considered as required during the planning, designing and implementing stages of sub-projects.

The ESMF checklist lists mitigation measures and management controls connected to each identified impact that the project teams will use to check if the subproject ESMP addresses the negative impacts or enhance positive ones.

(i) Impacts on remnants of natural areas and vegetation

Screening may determine that a subproject is likely to affect natural areas particularly in peri-urban parts of the LGAs including land and water areas. Such natural areas within or in near vicinity of urban areas occur albeit as small groves of natural forests, wetlands and rivers but whose ecological functions have already been essentially modified by human activities. Two broad direct impacts on natural habitats are possible: clearance of a natural vegetation and disturbance of contained fauna and direct pollution. During road construction, storm water drainage loaded with wastes, oils, sediments etc. may lead directly or indirectly into or cut across such areas.

Although, none of TSCP activities are likely to involve significant conversion or degradation of natural habitats as they mostly involve improvements of existing structures and may constitute small land take, it is however, important that any likely impacts to natural habitats (caused by runoff) are addressed in the subprojects ESMP. Any subprojects involving the significant conversion or degradation of natural habitats would not be eligible under this Project.

Mitigation measures: Subprojects ESMPs are to determine mitigation measures for possible impacts to natural habitats during construction and use with regard to runoff (especially when there is illegal dumping or/and oil leakage) which might cause significant adverse impacts. The ESMPs are to prohibit the use of drainage systems as dumping areas, indicate contractors to use equipment which are in good condition and that during use oil tankers to be limited to highways/main roads only (to avoid any possible oil leakage).

(ii) Impacts on water resources and management

Water resources in urban areas constitute surface water found in natural water bodies (lakes, rivers, wetlands, ponds) man-made water retention structures (dams, reservoirs, troughs) and underground aquifers. During screening it may be determined that a subproject (located close to or leading into natural water sources) is likely to cause impacts on local water resources including (i) eroded soils from construction activities obstruct natural drainage systems and cause effects on the integrity of watercourses, drainage, and sedimentation regime; (ii) paving of surfaces (vehicle parking areas, bus stand etc.) increase rain water catchment exacerbating storm water management of an area; (iii) potential to deplete water resources due to construction activities requirement for water inputs e.g. for mixing, cleaning, dust dousing etc. and water for drinking and ablution purposes for construction crew.
TSCP infrastructure development is designed in many respects to improve water management of a subproject site and reduction of associated risks i.e. flooding due to poor drainage systems.

**Mitigation measures** in the ESMF checklist (subproject ESMP) include determination of water needs before extraction to determine available quantities (especially if involve underground water resources); adoption of alternative strategies to avoid/minimize extraction from natural water bodies, sourcing from authorized Municipal/community water supply systems; channeling surface water from paved areas to storage troughs and measures to manage deposition of eroded soils into water bodies.

**(iii) Impacts on land, soil and construction mineral resources**
Depending on type of subproject and nature of locality, screening could determine that construction works will involve some degree of land disturbance and/or movement of soils and thus expose the soils to erosion by the elements (wind, rain) and lead to land degradation at construction sites and offsite quarry sites. Main potential impacts are degradation of land and soils – substantially reducing their quality (nutrients, water retention, physical properties etc.) below acceptable levels; and depletion of land, soil and mineral resources. Soils on hilly and undulating areas such as Kigoma-Ujiji Municipality, Mwanza City, Mbeya City when exposed are more susceptible to erosion. Construction of new drainage systems, new bridges, waste disposal facilities, and recreational facilities may require more works and for longer periods. However, many of the additional infrastructure e.g. extensions of roads are very short length (less than 1km), road furniture and local structures require small to medium sized sheds or concrete buildings envisaged not to require extensive construction works and limited land disturbances.

Secondary impacts at points of extraction of the construction materials may include depletion of local construction materials e.g. stones/aggregates, sand, gravel, cobblestones, and fill materials.

**Mitigation measures focus in this ESMF checklist** is on the phase prior to planning by authorities and Contractor. Instructions to the Contractors shall include soil erosion control and land rehabilitation measures; supervision and monitoring during and after sub-project implementation. Contractor shall identify erosion prone areas, identify permanent erosion control measures (applicable for a particular site) and plan construction works and sites to limit quantity of material likely to be eroded and transported into watercourses.

**Proposed management actions** for participating LGAs are to: procure and use Contractors with requisite experience of land management and soil erosion control; develop management plans for existing quarry sites, and new sources of construction materials
(iv) Materials Efficiency and Wastes

Subprojects under TSCP for improvement of waste collection and disposal infrastructure in urban LGAs aim to increase wastes collection efforts in urban areas and load destined to municipal disposal sites and management of disposal sites in an environmentally suitable and socially acceptable manner.

Planned or accidental discharging of various types and quantities of solid and liquid wastes, spillage / leakages of materials emanating from sub-project directly into natural habitats may impair qualities of receiving medium: surface water bodies (BOD, COD) and underground water sources; contaminate and reduce quality of land areas or soils. Main causes are inadequacies in the waste management practices during construction and operation of infrastructure: discharge of oil and lubricants from vehicle repairs and filling at car parking areas, discharges of eroded soils, seepages from landfills, littering during waste collection, transportation and disposal, soils and wastes clogging drainage systems etc. The effects will tend to be severe if discharged wastes are hazardous and/or will contaminate water sources used for domestic purposes or arable land. Discharges in a water habitat tend to reach further due to dispersion, but severity of contamination is reduced by dilution. The effects on land will tend to be concentrated and localized, not dispersed or diluted (unless by rain).

Mitigation measures in this ESMF checklist hinge on development and implementation of subproject – specific Waste Management Procedure / Plan that (i) identify what type of solid or liquid wastes and categories of wastes the subproject will generate or handle (biodegradable / organic wastes; packaging materials; non-biodegradable (metallic, plastic), construction wastes, and hazardous wastes i.e. medical wastes, fuels, oils, lubricants, vehicle / machinery fluids etc); (ii) identify ways to reduce the volume of waste by reusing or recycling initiatives; (iii) use best available mechanisms, practices and technologies for waste collection and transportation water treatment facilities and solid waste disposal sites.

(v) Impacts on Air Quality and Climate Change

Emissions emanate from fuel powered equipment i.e. vehicles engines and construction equipment etc. Exhaust contain pollutants notably carbon-dioxide (CO₂) plus small quantities of noxious gases such as nitrogen oxides (NOₓ), sulphur dioxides (SOₓ), hydrocarbons and particulate matters (PM). These Green House Gases (GHGs) are known to interfere with temperature regime and cause climate change effects. Clearance of vegetation reduces vegetation cover thus reducing sink for carbon-dioxide and consequent climate change effects. However, the impact on air quality will be minor and localized due to sizes and numbers of equipment used per site. Increase of air pollution from dust, odours, and noise etc. cause modifications to air quality.

Mitigation measures in this ESMF and later adopted in subproject ESMP for managing air and noise pollution hinge on avoidance strategies; equipment operations and maintenance measures that minimize emissions of substances into the atmosphere.
Proposed management actions for participating LGAs requirement and instructions to the Contractors and facility operators to institute procedures for preventive maintenance of equipment.

(vi) Impacts on Landscape and Visual Amenity
Project aspects likely to affect landscape and visual quality are activities that cause modifications in the quality of the landscape features or erection of structures that do not blend with the natural setting of an area. These include land clearance that leaves bare areas or eroded areas in otherwise green surroundings. Haphazardly disposed wastes are an eye sore and result in loss of visual amenity of affected area. The effects will be more felt at areas designated as tourist destination.

Mitigation measures in this ESMF and later adopted in subproject ESMP for managing landscape and visual amenity include avoidance and minimizing strategies.

Proposed management actions for participating LGAs establish: standards on shapes, height, color etc. of buildings and structures erected at scenic areas especially of touristic values.

(vii) Impacts on Built Environment
Infrastructure development, upgrade or rehabilitation aim at improving access and services during operation. However, construction works or subproject physical presence could cause physical damage or restrict access or delay access to existing infrastructure (albeit temporarily) e.g. roads, electrical installations (below ground and overhead lines), water intake and supply systems, homes, business and service institutions and other natural sites causing disturbances to local residents and users.

Infrastructure being located in already developed areas invariably will operate using existing support facilities and associated services i.e. water supply system. Connection to existing utility facilities without considerations of available resource would increase pressure on the system depending on their carrying capacity.

Mitigation measures in this ESMF and later adopted in subproject ESMP hinge on prior information /notices to and consent by other operators and users of affected infrastructure.

Proposed management actions for participating LGAs establish: procedure for early notification and coordination among relevant utility and infrastructure authorities responsible for e.g. water supply, electricity supply, roads, communication installation etc.

(viii) Impacts on Land Rights and Land Use
Taking land for linear developments (roads and drainage) will create new or extend Corridor of Impact (CoI). The involuntary taking of land and other assets (permanent or temporary acquisition) owned and/or used by both individuals and by communities may
result in a number of direct social and economic impacts of varying severity. Change or modification of existing or potential land uses of the urban LGA:

- Modification on residential areas, modifications in the access to buildings, fragmentation of property, and expropriate of buildings; damage of homes leading to relocation or loss of shelter and consequent displacement or relocation of people, assets and property.
- Disruption of social sensitive areas (burial sites etc.) and institutional areas
- Direct encroachment causing loss, partial replacement or damage of indigenous vegetation and contained biodiversity.

The subprojects development is unlikely to have effects on the population and its quality of life [e.g. relocation of the population, of their activities, modification of their habits (severance) as are mostly small to medium scale activities in terms of land or size of total building floor area required for their establishment.

Mitigation actions in the ESMF and later adopted in subproject ESMP shall kick off by undertaking comprehensive census of people whose land will be taken (even temporarily) and inventory of their assets and properties. Valuation and prompt compensation shall follow procedures laid down in land laws and regulations. Sub-project ESMP will include component on Land Acquisition and Compensation Procedures (Resettlement Action Plan) for each site.

Proposed management action for participating LGAs are to:
- Review and address any gaps in the current land acquisition practices for location of public infrastructure and facilities.

(ix) Impacts on Community Livelihoods

Positive economic impacts of the project include reduction in expenditure on infrastructure investment and contribution to local government incomes. Other direct and indirect positive effects include increased employment opportunities at all levels; development of new services; improvements that accrue from improved access.

Indirect negative impacts relate to improvements in infrastructure i.e. roads and associated social and economic services are induced settlements (that habitually sprout along new or improved infrastructure) and increased illegal developments due to new or improved access. Improved urban conditions inevitably attract new comers and/or new economic migrants (seeking employment, services provision, traders etc.) which may lead to impacts such as additional pressure and demands to local on local social services and resources (increase water users); and social / health hazards due to interactions among new comers and with locals.

Proposed management actions for participating LGAs to minimize indirect or cumulative impacts are to establish and enforce landuse plans for all categories of land within the urban LGA boundaries. The potential for indirect and/or cumulative social impacts will be assessed as part of the sub-project ESIAs and/or ESMPs.
(x) Impacts on Public Health and Safety

Infrastructure located at public places or used by general or specific segment of population i.e. bus stands are associated with congregates of people. Several causes of hazards to public relate to design of infrastructure such as toilets without / inadequate water supply are predisposed to poor sanitation and hygiene; buildings without provisions for fire prevention or enough ventilation are risks to users. Lack of periodic maintenance of drains creates breeding grounds for water-borne vectors of diseases such as malaria mosquitoes and bilharzias snails and water-borne infections.

Mitigation measures: the design and implementation process take into consideration health risks that are prevalent in the project area (e.g. guinea worm, malaria, meningitis, cholera etc.). The design of subprojects will be completed in accordance with good international practice and the WB EHS Guidelines. Participating LGA’s are required to have sufficient budgets and plans for maintenance of completed works.

(xi) Occupational Health and Safety Risks

Table 3: Summary of potential risks to workers

<table>
<thead>
<tr>
<th>Sub-project aspect / activity</th>
<th>Potential Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure to dust, noise</td>
<td>Disturbances / nuisance and discomfort</td>
</tr>
<tr>
<td>Injuries from sharp / falling objects, falling from heights</td>
<td>Serious injuries</td>
</tr>
<tr>
<td>Exposure to water-borne infections from food, drinking water</td>
<td>Poisoning, loss of life</td>
</tr>
<tr>
<td>Exposure to sun/heat</td>
<td>Sickness and ill-health (reduced manpower)</td>
</tr>
<tr>
<td>Negligence due to fatigue / loss of morale</td>
<td>Loss of production time</td>
</tr>
<tr>
<td></td>
<td>Loss of property</td>
</tr>
</tbody>
</table>

Mitigation actions in the ESMF and later adopted in subproject ESMP include measures for managing air and noise pollution; and safety measures and procedures are adequate and correctly implemented, particularly with regards to work procedures, equipment, and materials. The Contractor is required to provide a safe and healthy work environment as a condition of contract and to provide a Construction ESMP to outline how this will be achieved.

(xii) Risks to Sub-project from Natural Factors and Processes

Natural factors and processes on site, in near vicinity or catchment areas could be external factors that pose risks on the developed infrastructure or sub-projects.

Table 4: Summary of potential risks to project due to natural factors

<table>
<thead>
<tr>
<th>Natural process aspect</th>
<th>Potential risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremes of climatic elements: winds, rains, storms, hurricanes, lightening</td>
<td>- Damage of project structures</td>
</tr>
<tr>
<td></td>
<td>- Disruption of project operations and schedules</td>
</tr>
<tr>
<td>Extreme aquatic conditions: waves, tides, currents</td>
<td>- Injuries and fatalities to project personnel working on the site or visitors.</td>
</tr>
<tr>
<td>Topography of the area: steep terrain cause</td>
<td></td>
</tr>
</tbody>
</table>
### Natural process / aspect

- Erosion, stone dislodging, landslides; low terrain cause flooding.
- Surface drainage (streams, rivers) close to or cutting across subproject
- Storm water drainage – causing flooding and overflows.
- Height of hydro-geological conditions: high water table causing floods
- Soil movements (soil erosion)
- Geology: seismic activities (earthquakes etc.)
- Nearby wildlife areas

### Potential risk

- Damage of project structures
- Discharges into project site
- Water stagnation / flooding of project site
- Damage to project structures
- Injuries and fatalities to project personnel working on the site or visitors.

Mitigation actions in the ESMF and later adopted in subproject ESMP include risk assessment to determine conformity of sub-project in terms of: compatibility / co-existence of project with nearby natural features; safe distance from neighboring features; and buffer zone.

#### (xiii) Risks from Neighboring Anthropogenic Activities

These are anthropogenic activities and other external socio-economic factors on project site, in near vicinity that might affect the subproject.

**Table 5: Summary of potential risks to project due to socio-economic factors**

<table>
<thead>
<tr>
<th>Socio-economic aspect / activity</th>
<th>Potential Risk to Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land disturbances activities:</td>
<td>Destruction of infrastructure or subproject area</td>
</tr>
<tr>
<td>cultivation (slash and burn,</td>
<td>Conflicts related to trespassing / illegal practices on the project site</td>
</tr>
<tr>
<td>bulldozing, livestock grazing,</td>
<td></td>
</tr>
<tr>
<td>Occupation, economic and social</td>
<td>Theft of materials and portable items with ready-made market or for home use.</td>
</tr>
<tr>
<td>status of nearby residences</td>
<td></td>
</tr>
<tr>
<td>Security condition in neighbourhood to the project site</td>
<td>Vandalism of structures / equipments</td>
</tr>
<tr>
<td></td>
<td>Theft of materials and portable items with ready-made market or for home use.</td>
</tr>
<tr>
<td>Bush fires practices</td>
<td>Injuries and fatalities to project personnel working on the site or visitors.</td>
</tr>
<tr>
<td></td>
<td>Destruction of subproject area (wooded groves, planted trees / grass)</td>
</tr>
<tr>
<td>Boundary fence and buffer zone</td>
<td>Conflicts related to blocked access to local resources present on the site</td>
</tr>
<tr>
<td>separating project from</td>
<td></td>
</tr>
<tr>
<td>neighbouring features</td>
<td></td>
</tr>
</tbody>
</table>

Mitigation actions in the ESMF and later adopted in subproject ESMP include risk assessment to determine conformity of sub-project in terms of: compatibility / co-existence of project with nearby social features; safe distance from neighbouring features; and buffer zone.

### B5.3 PREPARATION OF SUBPROJECT ESMP

An ESMP is required for all sub-projects involving physical works. Where explicit impacts mitigation measures are required for a sub-project an ESMP is required. ESIA
Consultant will prepare ESMP for each subproject as basis for development of overall ESMP for each Participating LGA and CDA. The basic elements of an ESMP (consolidated in an ESMP matrix as the sample below) are:

- A description of the possible adverse effects that the ESMP is intended to deal with;
- A description of planned mitigation measures, and how and when they will be implemented;
- A program for monitoring the environmental effects of the project both positive and negative;
- A description of who will be responsible for implementing the ESMP; and
- A cost estimate and source of funds.

**Table 6: Sample Sub-project Environmental Management Plan**

<table>
<thead>
<tr>
<th>Program activity / aspect</th>
<th>Anticipated Effect</th>
<th>Mitigation Measure(s)</th>
<th>Monitoring Parameter</th>
<th>Responsibility</th>
<th>Schedule</th>
<th>Cost and Source of Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oily discharges in runoffs / wash down waters from vehicle parking area</td>
<td>Possible contamination of natural water bodies (lake, sea, river, wetland etc.)</td>
<td>Construct drainage channels to divert cleaning / runoff water</td>
<td>Inspect channel construction</td>
<td>LGA Engineering Department; EMO</td>
<td>Construction period</td>
<td>Included in project BOQ</td>
</tr>
</tbody>
</table>

Check condition of drainage channel | EMO; LGA Environment Committee | Ongoing | Nil |

Oily water collected in oil traps | Inspect oil traps construction | EMO; LGA Engineering Department | Construction period | Included in project BOQ |

Check efficiency of oil traps | EMO; LGA Engineering Department | Ongoing | Nil |

Proper collection and use of waste oils | Cement manufactures, wood treatment etc. | Ongoing | Nil |

Early warning of reduced water quality | Check water quality at potential points of discharge into water body | EMO; LGA Engineering Department | Every 6 months until effectiveness of mitigation measures is proven | $100 a year - - EMO |

**B5.4 PUBLIC / COMMUNITY PARTICIPATION AND DISCLOSURE**

Public consultations are a requirement in the national EIA regulations during the scoping and review stages. This requirement also supports the existing participatory planning process at LGAs that is exercised during sub projects identification. Furthermore different stakeholders are already directly involved in the whole TSCP project cycle right from the design, to implementation and monitoring and the summary of the consultations on the frameworks is shown in Annex 1. The first step is to conduct consultations with the local communities and all other interested/affected parties during the screening process for identification of subproject components/ activities likely to cause impacts. These consultations should identify key issues and determine how the concerns of all parties...
will be addressed in the terms of reference for the environmental assessment works / ESIA.

To facilitate meaningful consultations, the ESIA Consultants supported by LGA Project Team (EMO and CDO) will provide all relevant materials and information concerning the infrastructure projects in a timely manner prior to the consultation, in a form and language that are understandable and accessible to the groups being consulted. Depending on the public interest in the potential impacts of the sub projects, a public hearing may be requested to better convey concerns.

<table>
<thead>
<tr>
<th>Box 3 ESIA Regulation requirements on public disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publicizing the proposed project and its anticipated effects and benefits by-</td>
</tr>
<tr>
<td>1. Posting posters in strategic public places in the vicinity of the project site;</td>
</tr>
<tr>
<td>2. Publishing a notice on the project in mass media newspaper, radio</td>
</tr>
<tr>
<td>3. Making an announcement of the notice in both Kiswahili and English languages</td>
</tr>
<tr>
<td>Hold (where appropriate), public meetings with affected parties and communities to</td>
</tr>
<tr>
<td>1. Explain the project and its effects, and to receive their oral or written comments;</td>
</tr>
<tr>
<td>2. Ensure appropriate notices are sent out at least one week prior to the meetings</td>
</tr>
<tr>
<td>3. Venue and times of the meetings are convenient for the affected communities and the other concerned parties</td>
</tr>
</tbody>
</table>

Once the infrastructure project has been reviewed and cleared by NEMC and the respective Council Environmental Management Officer, the LGA Project Team will inform the public about the results of the review. The Project Team in collaboration with the “Mtaa” Governments will be responsible for disclosing the findings and recommendations of the environmental and social screening and review process to the Ward Development Committee (WDC). The Project Team will be responsible for taking the minutes of the public disclosure meeting and will produce and distribute copies of the minutes to offices at the Municipal Councils, Ward and Mtaa Governments and other interested/affected parties (community representatives, NGOs, political/religious, and other civil societies in the community. A summary of the outcome of this public disclosure meeting will be posted at appropriate places.

Any affected or interested individual or group has the right of appeal, if dissatisfied with the decision reached at any stage in the ESIA process. The appeals process will be according to the National Environment Management Act, 2004.

To ensure that an appropriate public consultation mechanism is developed:

i. the environmental and social screening process outlined in the ESMF includes such a requirement;
ii. development of individual infrastructure project ESMP (if required) and RAP include such a requirement;
iii. once the infrastructure project activities have been reviewed and cleared by NEMC/respective councils, the infrastructure Project Team will inform the public about the results of the review.
iv. PO-RALG Project Team will undertake both compliance monitoring and effects
monitoring throughout the infrastructure project cycle.

v. The ESMF and RPF copies would be available at the following locations:
   - Information center of the National Environmental Management Council;
   - Offices of PO-RALG
   - Offices of the Municipal Director in respective Municipality / City
   - Infoshop of the World Bank.
B6.CAPACITY BUILDING, TRAINING AND TECHNICAL ASSISTANCE

B6.1 INSTITUTIONAL CAPACITY ASSESSMENT

A rapid assessment of the existing institutional arrangement and capacity for the Participating urban LGAs to implement the ESMF focused on the adequacy of institutions at local, municipal, regional, national levels to undertake sub-project design, planning, approval and implementation work and specifically to carry out their ESMF responsibilities. Assessment focused on the adequacy of and recommendations on: institutional structure; existing laws, policies and regulations; and resources for environmental and social management.

B6.1.1 Institutional Structure for Environmental and Social Management

Project implementation is mainstreamed at all levels utilizing existing staffing structure and government systems. The LGA Project Teams are responsible for subproject implementation including safeguards requirements. PO-RALG provides overall coordination and technical support to local Project Management Team including necessary link with national safeguard authorities (i.e. NEMC, Ministry of Lands). Subproject ESIA reports and RAPs once cleared by the national authorities are fed back to Municipal Council and the subproject ESMPs to guide implementation and monitoring by Council Teams, EMOs, Construction supervision Consultants and Contractors.

However contrary to the linkages in the national institutional structure propagated by EMA, decision making powers for environmental and social oriented authorization of planned projects have not been properly devolved to the LGA. The link and support from national zonal and regional authorities vested with responsibility to support LGAs to address environmental and social management issues have not been effective. This results in the implementation of projects and/or their ESMPs (where incorporated) not being systematically monitored and LGAs not having a clear role nor resources to monitor and manage environmental and social aspects of projects in their jurisdictions.

At the Municipal council level, environmental and social management is not yet a priority sector, the roles are delegated to different functional departments. EMO not being part of the Council Management Team (CMT) has little powers for decision making or inter-sector coordination. Similarly Ward and Sub-ward Environment Management Committees are not linked to EMOs or LGA Project Teams. Resettlement structure seems to be robust with RAP Teams and Grievance Committees in place and functioning although representation of Project Affected Persons (PAPs) in both entities is unfortunately missing.

Institutional overlap of sector responsibilities is a contentious issue as there is no clear interagency coordination to resolve environmental and resettlement issues that arise e.g. in situations where several authorities have legal rights of use of one location i.e. road
way leave used by different road authorities (national, regional, municipal), sewerage, communications, electricity, gas and water supply authorities.

**B6.1.2 Existing Policies, Laws and Regulations for Environmental and Social Management**

A range of national environmental assessment and management policies, acts and regulations i.e. for administering permits and licenses such as permit for using land, natural resources in general and protected areas, for undertaking physical works, withdrawing water, extraction of construction minerals, discharging wastes etc. are known and in use at LGA level. With this framework LGAs are able to (a limited extent) ensure correct environmental and social management during planning and implementation of infrastructure sub-projects and in LGA’s operations and maintenance at large. At subproject level LGA use several concurrent management practices for environmental and social management mostly in the form of frameworks and checklists (especially those promulgated by the World Bank). This practice has not attributed to the legacy, but, rather a good practice, in the authorization of environmental and social activities of various projects incoherent with the devolvement of powers to LGAs.

However, Municipal by – laws (meant to translate nation laws and regulations) are outdated; communities complain about some of the environmental and social management practices such as long delays in compensation payments (way beyond period prescribed by law) once valuations of land and properties have been done; and lack of maintenance of completed infrastructure e.g. clogged storm water drains etc.

**B6.1.3. Human Resource Capacity**

The experience and capacity for environmental and social management supervision exist at PO-RALG augmented by the links the ministry has established with national environmental and land management authorities i.e. inclusion of Vice President's Office (NEMC and Division of Environment) and Ministry of Lands in TSCP steering and technical committees.

Similarly, among some of the key technical staff at LGA level (Environmental Management Officers, Land Officers) to enforce many of the policy and legal requirements. However, there are only few such qualified staff per LGA. Civil works are supervised by engineers with little / no backstopping by environmental, land or community development officers/coordinators. Most staff, members of municipal, ward and local management committees and contractors operating locally are not well conversant with the principles and practices of sound and responsible social and environmental management and are lacking the necessary capacity for compliance with requirements of the policies and acts. Particularly, most have little sound experience and knowhow in carrying out ESIA's and, handling of environmental compliance, monitoring and auditing of infrastructure projects i.e. good site practices, health, safety and security measures. The infrastructure sub-projects that the LGA staffs has so far supervised were found to lack some of the key environmental services e.g. storm water management.
(harvesting & drainage systems), proper solid waste collection and disposal, and enforcement of use of Personal Protective Equipment etc.

**B6.1.4. Budgetary Resources to Support the Staff in Their Work**

Lack of or little budgetary resources to support the staff in their work is the main cause of lack of or low knowledge and experience relevant to carry out environmental analyses and designing mitigation measures for TSCP infrastructure. A special window by TSCP (through Component 1 and Component 2) to support environmental and social management capacities and Contractor costing and including (in BoQs) of safeguard measures are good practices that will ensure project sustainability.

**B6.1.5. Recommendation: Institutional Development Plan**

It is thus highly recommended to Urban LGAs to develop and implement costed Institutional Development Plan designed to facilitate implementation of the ESMF:

- Coordination and linkages – between and across sectors, with other infrastructure development initiatives; and up and down management levels;
- Undertake revisions for compliance with requirements of policies, regulations, administrative procedures and inculcate in local By-laws;
- Increase number and qualifications of staff (Heads of Department, Councilors’ Committees, Local Management Committees and external Contractors) to carry out environmental / ESMP responsibilities and create a dedicated section (not one person) managing environmental and social issues.

**B6.2 TRAINING**

This refers to training needs and plan for the various participants involved in implementing the ESMF / subproject ESMP based, in part, on the institutional assessment described above.

**B6.2.1 Training Objectives**

The objective of the training under the ESMF is to:

- support staff of the various LGA sector departments and sections relevant to infrastructure and subproject areas supported under TSCP to prioritise their needs, and to identify, prepare, implement and manage the environmental and social aspects of their subprojects;
- ensure that LGA Environment Management Officers and Community Development Officers have the capacity to assist sector departments in preparing their subproject proposals, and to appraise, approve and supervise the implementation of subprojects; and
- strengthen local service providers to provide technical support (including basic ESMPs) to LGA Management Teams in preparing their subprojects.
• Ensure local leaders and influential responsible for coordination and linking various levels have the tools for conflict resolution and good governance for environmental and social management.

**B6.2.2 Training Needs Assessment (TNA)**

As part of TSCP Additional Financing implementation a training needs assessment (TNA) and training effectiveness be carried out in the urban LGAs covered by TSCP. The TNA will consider all participants (TSCP Regional Coordinators, LGA staff, representatives and community leaders, management committees and groups and service providers who will have responsibilities for implementing the ESMP. The needs assessment will distinguish among their different skills development / training needs in terms of:

• **Awareness-raising** for influential, representatives and community leaders who need to appreciate the significance or relevance of environmental and social issues.

• **Sensitization** to the issues for participants who need to be familiar enough with the issues that they can make informed and specific requests for technical assistance; and

• **Detailed technical training** for LGA Management Teams who will need to analyze potentially adverse environmental and social impacts, to prescribe mitigation approaches and measures, and to prepare and supervise the implementation of management plans. (including community participation methods; environmental analysis; using the ESMP checklist; preparing ESMPs etc.; ESMP reporting; and subproject supervision and monitoring.

It is proposed that NEMC or experienced national private or public environmental and social practitioners carry out environmental management/ESIA needs assessments.

**B6.2.3 Training Plan**

The cost for training plan is integrated into planned TSCP institutional capacity building components. The plan:

• Distinguish among the various participants (e.g. government officials, community leaders and representatives), and between their needs for general awareness building and more specific training.

• Address initial training needs, follow-on analyses of training effectiveness and further or “refresher” training. Include mechanisms for periodically bringing trainees together to examine the need for and design of additional training.

• An outline of the schedule for such a training plan.

• Detailed agenda and specification of resource needs including venue, trainers, materials, etc. for each type of training activity.

• Consideration of a training-of-trainers (TOT) component in the training plan as appropriate.

*Technical training of designated staff in environmental management/ESIA*
The current staff in respective LGA departments i.e. sector specialists who will be responsible for preparation of subprojects proposals, staff designated as EMO, and Community Development Officers and Land Officers who coordinate resettlement planning will receive environmental and social training in the form of Training of Trainers (TOT) that will enable them appraise and approve subprojects and advice on issues related to environmental management, including supervision and monitoring. Later on, these staff could train other staff within the implementing LGAs as necessary. Other ESIA training topics would include an overview of environmental and social issues within the urban LGAs / sectors; introduction to ESIA processes, methods for impact identification, analysis and mitigation (management and action plans: ESMP and RAP); ESIA review and the role of the public and stakeholders; practical ESIA experience in Tanzania; and case studies.

The training would take the form of one weeks (5/6 working days) long training workshop, based on the proposed training below. This level of training could be provided by more experienced private or public environmental practitioners operating at national / international levels.

**Proposed Training Program for Designated LGA Staff**

<table>
<thead>
<tr>
<th>Topic/Subject</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory brief</td>
<td>(Opening session)</td>
</tr>
<tr>
<td>• Definitions (environment, components of the environment, environmental management)</td>
<td></td>
</tr>
<tr>
<td>• What Environment Management Tools (EMT) are available in use in Tanzania &amp; universal</td>
<td></td>
</tr>
<tr>
<td>• Setting Environmental and Social Assessment Management system, procedures, process specific for LGA</td>
<td></td>
</tr>
<tr>
<td>Environmental and social assessment process</td>
<td>3 days</td>
</tr>
<tr>
<td>• Screening process: how to identify projects/ components and activities likely to cause impacts (screening list, and the kind of criteria for use in this regard).</td>
<td></td>
</tr>
<tr>
<td>• Preparation of scope (terms of reference) for carrying out ESIA</td>
<td></td>
</tr>
<tr>
<td>• Defining valued environmental and social receptors (indicators) in the existing environmental and social conditions</td>
<td></td>
</tr>
<tr>
<td>• Identification and evaluation of impacts: direct, indirect/secondary, cumulative and methods to use and significance criteria etc.</td>
<td></td>
</tr>
<tr>
<td>• Design of appropriate mitigation and monitoring measures [ESMP/RAP]</td>
<td></td>
</tr>
<tr>
<td>• How to review/approve an ESIA report and associated ESMPs / RAP: conformity list, and the kind of criteria for use in this regard</td>
<td></td>
</tr>
<tr>
<td>• How to incorporate ESMP in project designs and in construction contract documents</td>
<td></td>
</tr>
<tr>
<td>• How to review and approve overall project proposals</td>
<td></td>
</tr>
<tr>
<td>• The importance of public consultations in the ESIA process</td>
<td></td>
</tr>
<tr>
<td>• How to monitor and report project implementation</td>
<td></td>
</tr>
<tr>
<td>• Case studies</td>
<td></td>
</tr>
<tr>
<td>Environmental and social requirements (policies, legislation, procedures and sectoral guidelines) &amp; institutional frameworks</td>
<td>2 days</td>
</tr>
<tr>
<td>• Review and discussion of Tanzania’s environmental and social requirements</td>
<td></td>
</tr>
<tr>
<td>• Review and discussion of the World Bank safeguards policies requirements</td>
<td></td>
</tr>
<tr>
<td>• Review and discussion of specific sectoral guidelines relevant for infrastructure development</td>
<td></td>
</tr>
<tr>
<td>• How to collaboration with institutions at the local, regional and national levels. e.g. NEMC, Ministry of Lands</td>
<td></td>
</tr>
<tr>
<td>Selected topics on environmental components and conservation and social issues relevant to</td>
<td>1 day</td>
</tr>
</tbody>
</table>

71
<table>
<thead>
<tr>
<th>urban LGAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• How to make environmental and social profiles of a specific urban area</td>
</tr>
<tr>
<td>• Environmental degradation e.g. land degradation (soil erosion), depletion of natural resources</td>
</tr>
<tr>
<td>• Environmental pollution e.g. air quality, water quality, soil quality</td>
</tr>
<tr>
<td>• Management of waste including handling of hazardous materials.</td>
</tr>
<tr>
<td>• Flood protection/control</td>
</tr>
<tr>
<td>• Ground and surface water management</td>
</tr>
<tr>
<td>• Land and property valuation and compensation</td>
</tr>
</tbody>
</table>

Awareness /Sensitization for entities relevant/responsible for review/approve of sub-projects

Training/awareness creation workshops for participants vested with the responsibility of endorsing/approving infrastructure development projects under the TSCP. The workshops disaggregated for:

Higher level participants: Regional Coordinators / Influentials (RC/RAS/MPs), Council Executive Directors, Council Coordinators / Influentials (DC / Councilors of respective wards), Council Committees (on environment, health, resettlement) and affected public roads and utility authorities;

Lower level participants (Ward and Sub-Ward Executive Officers, WDC, and Local Management Committees. Objective is participants appreciate significance or relevance of environmental and social issues.

Subjects covered could include but not limited to the following:

- Main environmental and social problems /challenges and issues within the sectors (infrastructure construction and operation)
- Environmental and social assessment and management context: relevant policies, regulations and procedures
- Review of environmental and social screening and assessment process
- How to screening projects; appraise and approve ESIAs, ESMP and overall project proposals; and supervise the implementation of subprojects.

**B6.3 RETOOLING AND TECHNICAL ASSISTANCE**

Technical assistance from more experienced environmental practitioners (from the National Environment Management Council for example) be obtained to “mentor” the designated staff and other relevant/responsible people to support them in building experience. Local government authorities do not have the requisite capacity and knowledge for implementing the ESIA process and supporting the project implementing institutions. Similarly, the capacity in the Contractors and design firms and other service providers and is nonexistent or very minimal. NEMC in collaboration with the project implementers, LGAs will identify and train individuals who will be involved in the implementation of civil works be to enhance their ability to mainstream environmental and social aspects in infrastructure project planning/designing and implementation.
B7. ESMF IMPLEMENTATION PLAN AND BUDGET

A summary Environmental Management Plan (EMP) has been prepared as Annex 6. This summary EMP captures activities on capacity building for environmental and social management within the project implementing entities described earlier in this ESMF. Key items in the ESMP and costs related to ESMF implementation include: institutional development activities, training program, technical assistance, allowances for the review and approval of subproject management plans and annual reviews. In this regard, the PORALG Project Team will play a guiding role. Summary of cost estimates for capacity building are in the Table7.

B7.1 TRAINING

B7.1.1 Training Needs Assessment (TNA)
Cost estimates are for payment in the form of consultancy services to private or public environmental and social practitioners. The estimated costs for these needs assessments are to cover all 8 LGAs and CDA.

B7.1.2 Technical Training of Designated Staff in Environmental Management/ESIA
About 100 designated staff from the implementing LGAs will be trained (7 – 10) from each of 9 LGA / CDA. This could include sub-project sector specialists (i.e. Municipal Engineer), EMO and staff from departments responsible Social planning/Community Development, Economic Planning, Urban Planning, Land and Health. This training would be provided in the form of two 5-day courses, with about 45 / 50 participants each. Cost for each course would include: per diem, food, transport, accommodation, conference hall, incidentals for participants, trainers and support persons.

B7.1.3 Workshop for Decision Makers
About 40 people from each LGA will participate in the workshop. This will be a one/two days workshop costing include: per diem, food, transport, accommodation, conference hall, incidentals for participants, resource persons and support person).

B7.2 PREPARATION OF ESIAs / ESMPs / RAP
At the moment, 7 Participating LGAs and the CDA with exceptional of Ilemela, are ESIA Certificate holders for previous ESIAs of completed TSCP subprojects. At least 9 environmental assessment work to supplement approved EISs and update ESMPs will be carried out. However, it is not known at this time where (exact location) and how many of the subprojects proposed for additional financing will be screened by NEMC and determined to require specific Preliminary Environmental Assessment of a more detailed full-scale ESIA. The supplement assessment work and update of ESMP will be undertaken by private certified environmental and social practitioners (individuals or firms).
### Table 7: ESMF Implementation Budget (‘000s)

<table>
<thead>
<tr>
<th>Activity</th>
<th>year</th>
<th>Total (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional Development</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training Needs Assessment</td>
<td>50</td>
<td>-</td>
</tr>
<tr>
<td>Training and Sensitization</td>
<td>80</td>
<td>40</td>
</tr>
<tr>
<td>ESMF Review and Workshop</td>
<td>80</td>
<td>-</td>
</tr>
<tr>
<td>Refresher workshops</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Community leaders awareness raising and Sensitization</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td><strong>Technical Assistance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General TA</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>Specific TA</td>
<td>-</td>
<td>50</td>
</tr>
<tr>
<td><strong>Sub project ESMPs, RAPs etc.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental and Social management Plans</td>
<td>100</td>
<td>30</td>
</tr>
<tr>
<td>Resettlement Action Plans</td>
<td>100</td>
<td>30</td>
</tr>
<tr>
<td>Annual reviews</td>
<td>-</td>
<td>30</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>450</td>
<td>240</td>
</tr>
</tbody>
</table>

### B.8 Grievance Management

World Bank funded projects are required to implement a Grievance Redress Mechanism (GRM) to receive and facilitate resolution of affected peoples’ concerns, complaints, and grievances about the project’s performance, including concerning environmental and social impacts and issues.

A GRM already exists under all TSCP implementing LGAs and CDA to manage any project-related complaints. The GRM is for people seeking satisfactory resolution of their complaints on any aspect of the project, including the environmental and social performance of the project. The mechanism ensures that: (i) the basic rights and interests of every affected person by poor performance, including environmental performance or social management of the project, are protected; and (ii) their concerns arising from the poor performance of the project during the phases of design, construction and operation activities are effectively and timely addressed.

In the early stages of engagement, project stakeholders and affected communities must be made aware of:

(i) how they can access the GRM;
(ii) who to lodge a formal complaint too;
(iii) timeframes for response;
(iv) that the process must be confidential, responsive and transparent; and
(v) Alternative avenues where conflicts of interest occur.

The grievance process is based upon the premise that it imposes no cost to those raising the grievances (i.e., Complainants); that concerns arising from project implementation are adequately addressed in a timely manner; and that participation in the grievance process does not preclude pursuit of legal remedies under national law.
BIBLIOGRAPHY

1. URT, (1956), The Town and County Planning Ordinance, Cap.378 of 1956,
2. URT, (1967), The Land Acquisition Act No 47 of 1967
3. URT, (1977), The Constitution of the United Republic of Tanzania
4. URT, (1982), The Local Government Act (District and Urban Authorities of 1982)
5. URT, (1996), The National Land Policy
6. URT, (1997), The National Environmental Policy
7. URT, (1999), The National Land Act, Cap 113
8. URT, (1999), The Tanzania Development Vision 2025
10. URT, (2001), The Land Act No. 4 Regulations 2001 subsidiary Legislation
11. URT, (2003), The Environmental and Social Management Framework and Resettlement Policy
15. URT, (2004), The Public Procurement Act 2004
16. URT, (2005), The National Strategy for Growth and Reduction of Poverty (NSGRP),
22. World Bank (2010), Project Appraisal Document For a Tanzania Strategic Cities Project, April 30, 2010
## ANNEX1: Stakeholders views

<table>
<thead>
<tr>
<th>No</th>
<th>Name/stakeholders</th>
<th>Issues/Concerns</th>
</tr>
</thead>
</table>
| 1  | Municipal Director and Heads of Departments            | • MUST students frequently complained about poor access road to the university, the project will improve this situation  
• Payment of compensation is a big challenge  
• For Mbeya the project will improve storm water drainage to reduce floods, road furniture’s that will enhance safety and security as well as upgrade roads and solid waste. |
| 2  | Mr January – Environment Officer                      | • These projects will have economic benefits to the community  
• We urge people to form the GRC and to use this committee as a mechanism to file complains  
• Complains should also include land acquisition, and contraction activities |
| 3  | Local at Sae – TANESCO Junction - Mjimpya Road community, Muungano road, Ikuti community, New Forest Road Community | • Within the proposed project area there are some utilities such as those of water and electricity, what will happen if they are damaged?  
• During construction, the contractor is likely to close the roads and this might limit access and affect businesses in the area  
• In case any of the locals is affected by the construction activities, the City Council should ensure that the PAP is compensated on time and fairly  
• Regarding valuation, it should be transparent, the affected person should be notified of their compensation amount prior to receiving payments  
• Who will be responsible to carry valuation if once property is damaged during construction phase?  
• What if the project affects only annex structures will they be compensated? |
| 4  | Nanenane Bus stand Bus Drivers and Business man/women(vendors) | • Waiting sheds should be increased  
• Solid waste should be not left for long time in the bins/skip pads  
• Stand light should be used all the time for extension of business time and for security purpose.  
• Construction activities should not interfere with bus stand activities |
### 3. Dodoma Municipal Council

<table>
<thead>
<tr>
<th>SN</th>
<th>Name/stakeholders</th>
<th>Views/Concerns</th>
</tr>
</thead>
</table>
| 1  | Eng Nchila TSCP-AF Coordinator |  - We urge locals to accept the project as the purpose is to improve infrastructures  
- The Challenge is with the Municipal council to be responsible for the payment of compensation if there is any impact.  
- Lack of Education about compensation or eligibility and therefore have very high expectations |
| 2  | Mr. Mfungo Manyama- Community Development Officer |  - In terms of business the project will create clean environment especially reduce dust  
- The project will increase the quality of settlement  
- We shall also facilitate to establish a Grievances committee |
| 3  | Meeting with Fruits vendors, around bus stand, CBE and VETA road. |  - Construction activities should not cause dust pollution  
- Construction activities should not block access to shops and kiosks |
| 4  | TANROADs |  - It is important to share design to avoid disputes  
- The LGA should relocate utilities on timely manner  
- In areas where the project will cross or link to TANROADs roads we should be involved |
| 5  | DUWASA |  - Currently there is a dispute exists between road builders and DUWASA – lack of design sharing.  
- Water Pipes not reallocated as expected. |
| 6  | Locals along Ndovu and Swala Road |  - Construction activities should avoid damage to houses by vibration  
- Construction activities should not disrupt small business  
- This project will not affect individual properties but if any impact they should compensate on time |
| 7  | Daladala and Bus drivers at Swala road and lorry drivers |  - Fear to compete with other daladala if dislocated. Loose of market customers.  
- Loose of customers if the stand has to be shifted very far from the market area/business Centre. |
| 10 | Passengers for Daladala and rural buses at Mshikamano bus stand |  - There will be increase of dust pollution during construction.  
- The project should not block access to services |
Community Meeting - Mlezi and Hazina streets residents and Northern Kikuyu and hazina ward leaders

- Timed notification and education to affected people. Prior marking of affected properties.
- The project will not have compensation issues but if any the Municipal should compensate.

4. Arusha City Council

<table>
<thead>
<tr>
<th>SN</th>
<th>Name/stakeholders</th>
<th>Views/Concerns</th>
</tr>
</thead>
</table>
| 1  | Anna Mwambene Ag. City Director | • The economy of the city will increase since the roads will be in supportive of the economic activities including transportation issues  
• Incooperation of service ducts in the design for further expansion of the services such as Electricity, Water and Sewerage system. |
| 2  | Ever Mlingi Ass. Head teacher-Ngarenaro Secondary | • Bumps should be incorporated properly into the roads for safety of the students since the road passes just outside their school gate.  
• They are pleased with the project since it has considered making their play ground |
| 3  | Ward executive officer-Levolosi | • Culverts should be placed to improve access  
• The bumps should be put appropriately in the road for safety purposes |
| 4  | Business people- Majengo street | • The improvement of the road will reduce the extent of dust to their area since it has been a big problem to the status of their health.  
• Bumps and other road signs should be considered for safety purposes |
| 5  | Residents- Ngarenaro ward | • They proposed that the playground should be fenced.  
• There should be toilets and other infrastructure |
| 6  | Residents- Muriet ward | • If there is any relocation the ACC should compensate on timely manner  
• They suggested that the road design should include the bus bays. |
| 7  | Residents Ngusero street | • The design team should work closely with the water supply authority so as to make sure that the water infrastructures are not damaged during construction  
• The design should include the bumps, pedestrian roads as well as bus bays  
• The diversions should as well be improved to be tarmac |
### 5. Mwanza City Council

<table>
<thead>
<tr>
<th>SN</th>
<th>Name/stakeholders</th>
<th>Views/Concerns</th>
</tr>
</thead>
</table>
| 1  | Eng Mahenge T.N- Acting City Engineer | • For Mwanza among others the project will improve storm water drainage to reduce floods, road furniture’s to enhance safety and security as well as upgrade roads.  
• The design of the roads will as much as possible base on the corridor of the road to avoid compensation |
| 2  | Community Development Officer | • In terms of business the project will create clean environment especially reduce dust around their business  
• Create temporary employment during the construction period  
• The project will increase the quality of settlement  
• We argue locals to establish a GRC that will collaborate with the existing GRC at City Council |
| 4  | Local Community Igogo area | • Who will be responsible with relocation of utilities such as water and electricity  
• What if the contactor damages someone’s property will this be compensated and how |
|    | Lake Victoria Environmental Management Program (LVEMP) | • Once the drains are built, they are supposed to be covered in order to avoid solid wastes to enter and pollute water in the Lake Victoria  
• They will discuss with the city council so that they can know how to reallocate their infrastructures (Uzinza and Sukuma) |
|    | Tanzania Telecommunication Co. Limited (TTCL) | • The design of the roads should provide ducts for the TTCL pipes. This will allow laying of the lines without destroying the road |

### Mtwara Mikindani Municipal Council

<table>
<thead>
<tr>
<th>SN</th>
<th>Name/stakeholders</th>
<th>Views/Concerns</th>
</tr>
</thead>
</table>
| 1  | Eng Mpaki TSCP-AF Coordinator | • For Mtwara among others the project will improve storm water drainage to reduce floods, road furniture’s to enhance safety and security as well as upgrade roads.  
• We urge locals to accept the project as the purpose is to improve the infrastructures within the Municipal. |
| 3  | Ms Manyama-MMMC Community Development | • These projects will have economic benefits to the community  
• We urge people to form the GRC and to use this committee as a mechanism to file complains |
Complains should also include those associated with misconduct of the contractor.

<table>
<thead>
<tr>
<th>SN</th>
<th>Position/stakeholders</th>
<th>Views/Concerns</th>
</tr>
</thead>
</table>
| 5  | Majengo, Magomeni and Vigaeni local communities | • We accept the project as the major challenge in the area is floods during rainy season;  
• The project should ensure that the design considers safety and security of locals e.g. pedestrian cross bridges and covering parts of the drainage  
• Any complaints raised during project implementation should be handled on a timely manner  
• Compensation should be paid prior to project implementation stage  
• Locals should be given priority on employment during construction phase  
• Who will compensate utilities likely to be damaged during construction? |

**CDA-Dodoma**

<table>
<thead>
<tr>
<th>SN</th>
<th>Position/stakeholders</th>
<th>Views/Concerns</th>
</tr>
</thead>
</table>
| 1  | TSCP-AF Coordinator | • For the CDA area, the project will improve storm water drainage to reduce floods; road furniture’s to enhance safety and security.  
• We urge locals to accept the project it will improve the infrastructures within the CDA. |
| 2  | Public Relation Officer | • The purpose of these meetings is to inform people about the project and that the implementation will take place soon.  
• Create temporary employment during the construction period  
• The project will increase the quality of settlement  
• There is a GRM within the CDA to handle any complains arising from this project implementation therefore we argue you to choose your GRC members to facilitate the process |
| 3  | Concerns expressed by communities of Msangalale/Kisasa Mashariki, Chamwino | • We are aware of the proposed project and acknowledge that we have been consulted regarding the proposed project  
• Any complaints raised during project implementation should be handled on a timely manner  
• Locals should be given priority on employment during construction phase  
• Storm water is a major problem in the area because of poor topography  
• The project should not block access to houses during construction  
• The contractor should avoid Closure of street roads during construction  
• The project should note that there are individual water pipes crossing the road proposed for upgrade |
• Contractor should minimize dust pollution

| Nala Local communities | • Land in the project proposed area is owned by CDA.  
• Project preparation process should observe the existing laws.  
• Land is a sensitive issue in CDA area.  
• Future expansion of the lorry park beyond the current boundary might lead to loss of individual lands |

7. **Kigoma Ujiji Municipal Council**

<table>
<thead>
<tr>
<th>SN</th>
<th><strong>Position/stakeholders</strong></th>
<th><strong>Views/Concerns</strong></th>
</tr>
</thead>
</table>
| 1  | Eng Nshimba TSCP-AF Coordinator | • The Municipal has issued letters to all utility suppliers, informing about the project, and inviting them for site visits and discussions on the fate of affected infrastructure (if any).  
• The municipal, through ward and sub ward leaders has disseminated relevant project information to the local community. |
| 2  | Ms Agnes Sanga-Community Development Officer | • We intend to continue with stakeholders meetings to inform people about the project  
• Also to inform them of the GRM within the Municipal Council to handle any complains arising from this project implementation and to urge communities to establish such committees in their localities |
| 3  | Local community and leaders of proposed project areas of Kaaya, Mwanga MwembeTogwa and Kakolwa area | • Any complains raised during project implementation should be handled on a timely manner  
• What if the contactor damages someone’s property will this be compensated and how  
• This project will not have compensation issues because these are existing roads and drains  
• If any asset is affected, the compensation should be paid on time and should involve the affected person and the local leaders. |
| 4  | KUWASA MD-Mr. Simon Lupanga | • The storm water drainage are very important in order to avoid mosquito breeding sites and breeding sites for other disease causing organisms  
• The Municipal council should contact the KUWASA during initial stages of project design |
| 5  | Acting Municipal Planner and Environmental officer (Mr. L. Nzilayikunde) | • Rehabilitation of sources of raw materials should be done after material extraction phase is over.  
• Trucks hauling materials must be covered to avoid environmental pollution and accidents.  
• During the operation phase, maintenance of storm water drainage is very important.  
• The contractor must be well guided on issues of waste management. |
Lake Tanganyika Water Basin Mr. Dodomah V and Ms. Bonna M

- Storm water drains should be part of road project.
- Mitigation measures that should be in place as far as water resources are concerned

### 8. Tanga City Council

<table>
<thead>
<tr>
<th>SN</th>
<th>Position/stakeholders</th>
<th>Views/Concerns</th>
</tr>
</thead>
</table>
| 1  | Eng. Ramson TSCP-AF Coordinator | - The economy of the City will increase since the roads will be in supportive of the economic activities including transportation issues.  
- The communities where the roads are passing have accepted the project |
| 2  | Moses Kisibo- Focal person TSCP-HIV | - During the construction of the roads, the contractor should observe all the proposed measured that will be incorporated into the ESMP including the training on HIV issues  
- The issues of health and safety of the workers should also be observed |
| 3  | Local Communities in the Project areas | - Any complains raised during project implementation should be handled on a timely manner  
- There are still some areas which are prone to floods but have not been considered in TSCP projects; they should be considered.  
- The contractor should ensure prior to blocking a road under construction, there is an alternative |
| 4  | Julius Rwabutomize Ag-Regional manager-TTCL TANGA | - The design should be able to take on board their infrastructures and avoid reallocation if possible since it is too expensive to reallocate  
- If reallocation has to take place, then the compensation to them should be done immediately so that their services are not delayed |
| 5  | Ag. PDE-TANESCO/TANGA | - It is very costly to do the reallocation of their infrastructure due to the fact that they won’t be selling during that time as well there will be too much complains from their customers |
| 6  | Eng. Dickson Semkuyu Ag.TM –Tanga UWASA | - They have their water supply infrastructure crossing to most of the project areas  
- They need cooperation with the designing team so that they don’t destruct the roads later when they want to put the water infrastructure  
- The designing team should include the water infrastructure into their designs |
| 7  | Residents -Makorora ward | - Employment opportunities should be given to the youths during the construction phase  
- There should be road signs such as Entry and Exit signs |
• If possible the street lights should be solar energy oriented since its cheap and sustainable
• The culverts should be placed in the entrance of each house where the road passes
• The Mabawa area has a big pit which should as well be considered in the design

8 Residents Msambweni ward
• There should be road signs such as Entry and Exit signs as well as Zebra crossing
• During the rainy season Msambweni Primary school is always closed due to floods. The design team should as well consider effective measures to this area

<table>
<thead>
<tr>
<th>S/N</th>
<th>NAME</th>
<th>CONCERNS</th>
</tr>
</thead>
</table>
| 1   | Mkelewe Tungaraza Road engineer-MCC | • The economy of the city will be enhanced by the new roads since the roads connect the municipal with the City.  
• The residents of the project areas are eagerly waiting for the implementation of the project |
| 2   | Jafari Shango Regional manager-TTCL MWANZA | • Road ducts should be well allocated with marks on them for easy identification  
• The design team and the District Engineer are welcome to plan with TTCL on where to install such ducts, and the types and sizes of ducts |
| 3   | Eng. Mramba RM Technical Manager-MWAUWASA | • They would like to see the design prior to the implementation so that they can identify where their infrastructures are since they have a GIS system for easy mapping.  
• If there will be reallocation of their infrastructures, the costs should be included in the BOQ and let their installation be handled by MWAUWASA. |
|     | Leon Matata TANESCO MCC | • The planning of the roads should be done to occupy enough space at the beginning and so when these roads are upgraded there will be no interference with the utility providers.  
• There should be boundaries along the roads identifying locations for positioning of the infrastructures for each utility provider. |
| 6   | Residents Kirumba ward | • Azania road should be improved and be used as an alternative road during the construction of Makongoro junction-Mwaloni road.  
• The activities in the market should go on as usual so, the Municipal Council should prepare a traffic management plan to be used during the road construction. |
| 7   | Residents Buswelu and Ilemela ward | • They need the Municipal Council to ensure all affected persons are compensated on time.  
• The road should include safety signs to avoid unnecessary accidents. |
|   | Residents Kiseke ward | • The mtaa leaders should be informed of all these projects before they start in order to notify the public  
• Employment opportunities should be given to the residents where the road passes  
|   | Residents Nyamanoro and Nyasaka ward | • There are drains that were constructed in Msuka River by the residents. This project should consider improving them  
• Meetings should be conducted regularly for updates of the progress of the project |
### Annex 2: SUMMARY OF WORLD BANK SAFEGUARD POLICIES

<table>
<thead>
<tr>
<th>Policy Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OP 4.01 Environmental Assessment</strong></td>
<td>The objective of this policy is to ensure that Bank-financed projects are environmentally sound and sustainable, and that decision-making is improved through appropriate analysis of actions and of their likely environmental impacts. This policy is triggered if a project is likely to have potential (adverse) environmental risks and impacts in its area of influence. Depending on the project, and nature of impacts a range of instruments can be used: ESIA, environmental audit, hazard or risk assessment and environmental management plan (ESMP). When a project is likely to have sectoral or regional impacts, sectoral or regional EA is required. The Borrower is responsible for carrying out the EA. <strong>Under TSCP - Additional Financing</strong>, the Borrower (Government of URT) has prepared an Environmental and Social Management Framework (ESMF) which outlines the environmental and social screening process to be applied to infrastructure projects. The purpose of the screening process is to assess the impacts of future construction activities where the exact scope of investment activities and locations are not known at this time.</td>
</tr>
<tr>
<td><strong>OP 4.04 Natural Habitats</strong></td>
<td>This policy recognizes that the conservation of natural habitats is essential for long-term sustainable development. The Bank, therefore, supports the protection, maintenance, and rehabilitation of natural habitats in its project financing, as well as policy dialogue and analytical work. The Bank supports, and expects the Borrowers to apply a precautionary approach to natural resource management to ensure opportunities for environmentally sustainable development. This policy is triggered by any project (including any infrastructure project under a sector investment or financial intermediary loan) with the potential to cause significant conversion (loss) or degradation of natural habitats whether directly (through construction) or indirectly (through human activities induced by the project). <strong>This policy is not triggered by TSCP</strong></td>
</tr>
<tr>
<td><strong>OP 4.36 Forests</strong></td>
<td>This policy focuses on the management, conservation, and sustainable development of forest ecosystems and their associated resources. It applies to projects that may/may not have impacts on (a) health and quality of forests; (b) affect the rights and welfare of people and their level of dependence upon or interaction with forests and projects that aim to bring about changes in the management, protection, or utilization of natural forests or plantations, whether they are publicly, privately or communally owned. The Bank does not support the significant conversion or degradation of critical forest areas or related critical natural habitats. <strong>This policy is not triggered by TSCP</strong></td>
</tr>
<tr>
<td><strong>OP 4.09 Pest Management</strong></td>
<td>The objective of this policy is to promote the use of biological or environmental control methods and to reduce reliance on synthetic chemical pesticides. In Bank-financed agricultural operations, pest populations are normally controlled through Integrated Pest Management (IPM) approaches. In Bank-financed public health projects, the Bank supports controlling pests primarily through environmental methods. The policy further ensures that health and environmental hazards associated with pesticides are minimized. The procurement of pesticides in a Bank-financed project is contingent on an assessment of the nature and degree of associated risk, taking into account the proposed use and the intended user, for the construction or rehabilitation of any dams. <strong>This policy is not triggered by TSCP</strong></td>
</tr>
</tbody>
</table>
**OP 4.11 Physical Cultural Resources**

This policy aims at assisting in the preservation of cultural property (sites that have archaeological (prehistoric), paleontological, historical, religious, and unique natural values – this includes remains left by previous human inhabitants (such as middens, shrines, and battlefields) and unique environmental features such as canyons and waterfalls), as well as in the protection and enhancement of cultural properties encountered in Bank-financed projects.

This policy is triggered by projects which, prima facie, entail the risk of damaging cultural property (i.e. any project that includes large scale excavations, movement of earth, surficial environmental changes or demolition).

Under TSCP - Additional Financing 2, the Borrower (government of URT) has prepared an Environmental and Social Management Framework (ESMF) which instructs a site specific ESIA process / Environmental and Social Management Plan to accommodate “chance finds” procedure for Physical Cultural Resources be applied to infrastructure projects development activities that might have negative impacts on cultural property, as necessary.

**OD 4.10 Indigenous Populations**

This policy aims at ensuring that the development process fosters full respect for the dignity, human rights and cultural uniqueness of indigenous peoples; that they do not suffer adverse effects during the development process; and that indigenous peoples receive culturally compatible social and economic benefits.

*This policy is not triggered by TSCP.*

**OP 4.12 Involuntary Resettlement**

The objective of this policy is avoid or minimize involuntary resettlement where feasible, exploring all viable alternative project designs. Furthermore, it intends to assist displaced persons in improving their former living standards; it encourages community participation in planning and implementing resettlement; and to provide assistance to affected people, regardless of the legality of title of land.

This policy is triggered not only if physical relocation occurs, but also by any loss of land resulting in: relocation or loss of shelter; loss of assets or access to assets; loss of income sources or means of livelihood, whether or not the affected people must move to another location.

Under TSCP - Additional Financing 2, a Resettlement Policy Framework (RPF) has been prepared which will serve as guidance for infrastructure projects that involve land acquisition.

**OP 4.37 Dams Security**

This policy focuses on new and existing dams. In the case of new dams, the policy aims at ensuring that experienced and competent professionals design and supervise construction; the Borrower adopts and implements dam safety measures for the dam and associated works. In the case of existing dams, the policy ensures that any dam upon which the performance of the project relies is identified, a dam safety assessment is carried out, and necessary additional dam safety measures and remedial work are implemented. The policy also recommends the preparation of a generic dam safety analysis for small dams.

*This policy is not triggered by TSCP.*

**OP 7.50 Projects Implemented on International Waterways**

The objective of this policy is to ensure that Bank-financed projects affecting international waterways would not affect: (i) relations between the Bank and its Borrowers and between states (whether members of the Bank or not); and (ii) the efficient utilization and protection of international waterways.

*This policy is not triggered by TSCP.*

**OP 7.60 Projects in Disputed Areas.**

This policy ensures that projects in disputed areas are dealt with at the earliest possible stage: (a) so as not to affect relations between the Bank and its member countries; (b) so as not to affect relations between the Borrower and neighboring countries or other
claimants; and (c) so as not to prejudice the position of either the Bank or the countries concerned. This policy is not triggered by TSCP.

<table>
<thead>
<tr>
<th>EHS Guidelines</th>
<th>The World Bank Environmental Health and Safety Guidelines containing quantitative limits and good international management practices for different types of industry and sectors, are also applicable to the various sub-projects. The applicable sectoral guidelines include, but are not limited to:</th>
</tr>
</thead>
</table>
|                | - WBG EHS Guideline on Waste Management Facilities  
|                | - WBG EHS Guideline on Construction Material Extraction  
|                | - WBG General EHS Guideline  
|                | The relevant requirements from these guidelines will apply to the sub-projects. Where there is also coverage by national regulations, the more stringent of the two apply. |
Annex 3: Sample Checklist for Environmental and Social Screening

ENVIRONMENTAL AND SOCIAL SCREENING FORM [Sample]

The Environmental and Social Screening Form (ESSF) has been designed to assist in the evaluation of infrastructure projects under the TSCP Additional Financing. The form is designed to place information in the hands of implementers so that impacts and their mitigation measures, if any, can be identified and/or that requirements for further environmental analysis be determined.

The ESSF contains information that will allow project planners to determine the characterization of the prevailing local bio-physical and social environment with the aim to assess the potential infrastructure project impacts on it. The ESSF will also identify potential socio-economic impacts that will require mitigation measures and/or resettlement and compensation.

Name of infrastructure project…………………………………………………………

Implementing Institution (Participating Urban LGA) …………………………………

Name of the Mtaa/Ward/Town/ /Municipality/City in which the infrastructure project is to be implemented…………………………………………………………

Name of Executing Agent/Contractor………………………………………………

Name of the Supervising Agent……………………………………………………

Name, job title, and contact details of the person responsible for filling out this ESSF:

Name: ........................................................................................................

Job title: .................................................................................................

Telephone numbers: ..............................................................;

Fax Number:

E-mail address
PART A: BRIEF DESCRIPTION OF SUB-PROJECT

Please provide information on the type and scale of the infrastructure project (area, required land, approximate size of total building floor area).

Provide information about actions needed during the construction of structures including support/ancillary structures and activities required to build it, e.g. need to quarry or excavate borrow materials, laying pipes/lines to connect to energy or water source, access road etc.

Describe how the infrastructure project will operate including support/activities and resources required to operate it e.g. roads, disposal site, water supply, energy requirement, human resource etc.

PART B: BRIEF DESCRIPTION OF THE ENVIRONMENTAL SITUATION AND IDENTIFICATION OF ENVIRONMENTAL AND SOCIAL IMPACTS

Describe the infrastructure location, siting, surroundings (include a map, even a sketch map)

Describe the land formation, topography, vegetation in/adjacent to the project area

Environmentally sensitive areas or threatened species

Are there any environmentally sensitive areas or threatened species (specify below) that could be adversely affected by the project?

Intact natural forests: Yes ____ No ____
Riverine forest: Yes ____ No ____
Surface water courses, natural springs Yes ____ No ____
Wetlands (lakes, rivers, swamp, seasonally inundated areas) Yes ____ No ____
How far is the nearest wetland (lakes, rivers, seasonally inundated areas, sea)?
__km.
Area of high biodiversity: Yes __________ No __________
Habitats of endangered/threatened, or rare species for which protection is required under Tanzania national law/local law and/or international agreements. Yes __________ No ___________
Others (describe). . . . . . . . . . . . Yes __________ No __________

**Rivers, Lakes and Marine Ecology**

Is there a possibility that, due to construction and operation of the project, the river and lake ecology will be adversely affected? Attention should be paid to water quality and quantity; the nature, productivity and use of aquatic habitats, and variations of these over time.

Yes __________ No __________

**Protected areas**

Does the project area (or components of the project) occur within/adjacent to any protected areas designated by government (national park, national reserve, world heritage site etc.)

Yes ________ No __________

If “YES”, Natural Habitats (OP 4.04) is triggered. Carry out EIA for appropriate mitigation measure to be taken.

If the project is outside of, but close to, any protected area, is it likely to adversely affect the ecology within the protected area areas (e.g. interference with the migration routes of mammals or birds).

Yes ________ No __________

**Geology and Soils**

Based upon visual inspection or available literature, are there areas of possible geologic or soil instability (prone to: soil erosion, landslide, subsidence, earthquake etc)?:

Yes __________ No __________

Based upon visual inspection or available literature, are there areas that have risks of large scale increase in soil salinity?

Yes __________ No __________
Based upon visual inspection or available literature, are there areas prone to floods, poorly drained, low-lying, or in a depression or block run-off water

Yes ___________ No ___________

Contamination and Pollution Hazards

Is there a possibility that the project will be at risks of contamination and pollution hazards (from latrines, dumpsite, industrial discharges etc)

Yes ___________ No ___________

Landscape/aesthetics

Is there a possibility that the project will adversely affect the aesthetic attractiveness of the local landscape?

Yes __________ No __________

Historical, archaeological or cultural heritage site

Based on available sources, consultation with local authorities, local knowledge and/or observations, could the project alter any historical, archaeological, cultural heritage traditional (sacred, ritual area) site or require excavation near same?

Yes ___________ No __________

If “YES”, Cultural Property (OP 4.11) is triggered. Carry out EIA for appropriate mitigation measure to be taken.

Resettlement and/or land Acquisition

Will involuntary resettlement, land acquisition, relocation of property, or loss, denial or restriction of access to land and other economic resources be caused by project implementation?

Yes __________ No ______________

If “Yes” Involuntary Resettlement OP 4.12 is triggered. Please refer to the Resettlement Policy Framework (RPF) for appropriate mitigation measures to be taken.

Loss of Crops, Fruit Trees and Household Infrastructure
Will the project result in the permanent or temporary loss of crops, fruit trees and household infra-structure (such as granaries, outside toilets and kitchens, livestock shed etc)?

Yes ___________ No ______________

**Block of access and routes or disrupt normal operations in the general area**
Will the project interfere or block access, routes etc (for people, livestock) or traffic routing and flows?

Yes ___________ No ______________

**Noise and Dust Pollution during Construction and Operations**

Will the operating noise level exceed the allowable noise limits?

Yes ___________ No ______________

Will the operation result in emission of copious amounts of dust, hazardous fumes?

Yes ___________ No ______________

**Degradation and/or depletion of resources during construction and operation**

Will the operation involve use of considerable amounts of natural resources (construction materials, water spillage, land, energy from biomass etc.) or may lead to their depletion or degradation at points of source?

Yes ___________ No ______________

**Solid or Liquid Wastes**

Will the project generate solid or liquid wastes? (including human excreta/sewage, asbestos)

Yes ___________ No ______________

If “Yes”, does the project include a plan for their adequate collection and disposal?

Yes ___________ No ______________
Occupational health hazards
Will the project require large number of staff and laborers; large/long-term construction camp?
Yes ________________ No ______________

Are the project activities prone to hazards, risks and could result in accidents and injuries to workers during construction or operation?
Yes ________________ No ______________

Will the project require frequent maintenance and or repair
Yes ________________ No ______________

Public Consultation
Has public consultation and participation been sought?
Yes ________________ No ______________

PART C: MITIGATION MEASURES
For all “Yes” responses, describe briefly the measures taken to this effect.
Annex 4: Sample Checklist for Identifications of Environmental and Social Impacts and Mitigation

The Environmental and Social Checklist below is a sample checklist which will be adapted to the particular type and circumstance of the infrastructure project. The checklist will be completed by the designated LGA Project Team who has received environmental and social assessment and management training.

<table>
<thead>
<tr>
<th>Activity / aspect</th>
<th>Anticipated Effect</th>
<th>Likelihood</th>
<th>Avoidance &amp; Mitigation Measures (for “Yes” Responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NATURAL HABITATS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical placement of new infrastructure</td>
<td>Replacement of / direct encroachment of natural vegetation / habitats</td>
<td></td>
<td>Avoidance strategies: Siting of subproject circumvent a critical habitat or species</td>
</tr>
<tr>
<td>Land clearing</td>
<td>Loss or damage of vegetation, fauna and biodiversity in a natural habitat</td>
<td></td>
<td>Subproject ESMP Compensation measures (i.e. establish and maintain an ecologically similar area).</td>
</tr>
<tr>
<td>Drainage, dredging, filling or channelization of wetlands</td>
<td>Conversion of wetlands</td>
<td></td>
<td>Subproject ESMP Minimize loss of vegetation</td>
</tr>
<tr>
<td>Sediments and other liquid waste such as oil in runoffs from construction works.</td>
<td>Prevent aeration and Increased turbidity of natural water areas</td>
<td></td>
<td>Subproject ESMP Use contractors with good equipments Soil erosion control measures (see section 3 below)</td>
</tr>
<tr>
<td><strong>WATER RESOURCES AND MANAGEMENT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved drainage system</td>
<td>Reduce risk of flooding and stagnant pools of water</td>
<td></td>
<td>Enhancement measures</td>
</tr>
<tr>
<td>Physical placement of infrastructure on/close to water courses / bodies</td>
<td>Obstruct drainage systems / change of water courses</td>
<td></td>
<td>Avoidance strategies: Observe and enforce setback lines: 30m from river banks; 60 m from high water mark of Lake or sea LGA Management Plans for affected areas</td>
</tr>
<tr>
<td>Soil disturbance (digging / excavation) increasing erosion and sediments load in runoffs into water body</td>
<td>Change of water courses Increased water turbidity</td>
<td></td>
<td>Subproject ESMP Soil erosion control measures (see section 3 below)</td>
</tr>
<tr>
<td>Uncontrolled water extraction or tapping from existing sources</td>
<td>Water sources depletion Increase pressure on the existing water supply systems</td>
<td></td>
<td>Subproject ESMP Comprehensive water resource assessment to determine available quantities in rivers, underground water resources Extract un- or under- exploited water resources (e.g. underground aquifers) Authorization for connection from existing Municipal / community water supply systems Use of water saving devises (e.g. hand pumps and press/release taps etc.) Rain water harvesting at all buildings or channeling to storage troughs.</td>
</tr>
<tr>
<td><strong>LAND, SOIL AND CONSTRUCTION MINERAL RESOURCES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site preparation</td>
<td>Soils erosion at subproject site and points of source of materials</td>
<td>LGA procurement of Contractor</td>
<td></td>
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<td>------------------</td>
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</tr>
<tr>
<td>Clearing of vegetation Civil works (trenching, digging)</td>
<td></td>
<td>Use Contractors with requisite experience of land management and soil erosion control</td>
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<td></td>
<td></td>
<td>Subproject ESMP</td>
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<td></td>
<td></td>
<td>Avoidance / minimization of soil erosion</td>
<td></td>
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<td></td>
<td></td>
<td>Minimize surface area to be cleared during works</td>
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<td></td>
<td></td>
<td>Avoid and minimize the removal of stumps, trees and natural vegetation</td>
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<td></td>
<td></td>
<td>Minimize the extent and exposure time of bare/cleared areas</td>
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<td></td>
<td></td>
<td>Machinery operations</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Avoid use of heavy machinery during rainy season to avoid ground compaction, creation of ruts and loss of organic matter</td>
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<td></td>
<td></td>
<td>Soil erosion control using vegetation</td>
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<td></td>
<td></td>
<td>Use mulch of vegetation e.g. agricultural plants or any other type of mulch;</td>
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<td></td>
<td></td>
<td>Use of permanent vegetation such as trees</td>
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<td></td>
<td>Leaving buffer zones of natural vegetation cover between a cleared area e.g. access roads and water bodies</td>
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<td></td>
<td>Soil erosion control mechanical measures</td>
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<td></td>
<td></td>
<td>Use of mechanical process e.g. on roads: stone ripraps, spreading gravel or crushed stone, use nets and matting etc.</td>
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<td></td>
<td>Design slopes and ditches to prevent erosion</td>
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<td></td>
<td></td>
<td>Topsoil from stripped areas put aside for later use in areas to be re-vegetated</td>
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<td></td>
<td></td>
<td>Divert surface runoff from exposed surfaces</td>
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<td></td>
<td></td>
<td>Grading of materials: piling and levelling of top-soils, fill and excavated materials</td>
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<tr>
<td></td>
<td></td>
<td>Materials deposition or transportation into water courses.</td>
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<td></td>
<td></td>
<td>Subproject ESMP</td>
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<tr>
<td></td>
<td></td>
<td>Avoidance / minimization measures</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Avoid levelling near lake or rivers (i.e. a 30-m limit from the top of the bank’s slope), unless this is the location of the planned work</td>
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<tr>
<td></td>
<td></td>
<td>Mechanical measures</td>
<td></td>
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<td></td>
<td></td>
<td>Materials deposited on the surface of inclined ground must adhere well to the existing ground to avoid sliding</td>
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<tr>
<td></td>
<td></td>
<td>Preserve topsoil stockpiled to a maximum height of 1.5 m to be used to landscape the road slopes and other disturbed surfaces</td>
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<tr>
<td></td>
<td></td>
<td>Excavated material - immediately piled/temporarily stored either inside the road reserve or an area which is already cleared located more than 60 m from water bodies.</td>
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<tr>
<td></td>
<td></td>
<td>Excavated material not re-used - deposited, levelled and landscaped to give it a natural and stable form either within the right of way, 35m from the road reserve or 60m from water bodies.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Uncontrolled excavation / extraction of construction materials (stones/aggregates, sand, gravel, cobblestones, fill materials)</td>
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<td></td>
<td></td>
<td>Depletion of construction materials at points of source</td>
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<td></td>
<td></td>
<td>Contractor procurement</td>
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<td></td>
<td></td>
<td>Obtain construction materials only from authorized sites or suppliers</td>
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<tr>
<td></td>
<td></td>
<td>LGA Management Plans</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>For existing quarry sites, and new sources of construction materials</td>
<td></td>
</tr>
</tbody>
</table>

**MATERIAL EFFICIENCY AND WASTES**
<table>
<thead>
<tr>
<th><strong>Uncontrolled water use (for construction, cleaning purposes)</strong></th>
<th><strong>Reduced volume of water available for various uses</strong></th>
<th><strong>Subproject ESMP</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Institute measures for reduction of water consumption, waste water, and pollution by:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reducing water consumption in construction, cleaning and other areas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Avoiding spillage and leakage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reusing and/or recycling suitable water sources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reducing waste water pollution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Treating waste water in an environmentally-sound way (see WMP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education awareness on measures to minimize water loss (waste water reuse)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Uncontrolled use of materials e.g. construction materials</strong></th>
<th><strong>Reduced volume of material available for various uses</strong></th>
<th><strong>Subproject ESMP</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Institute measures for controlling use of materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Avoiding losses due to spillage and leakage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Establishing preventive maintenance programmes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Substituting and/or reducing the use of materials harmful to the environment (e.g. cleaning agents, disinfectants, leaded fuel)</td>
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<tr>
<td></td>
<td></td>
<td>Use materials formulated with internationally acceptable benign (non toxic) / low toxicity / ingredients</td>
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<tr>
<td></td>
<td></td>
<td>Adopt system to recycle the use of the materials</td>
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<td></td>
<td></td>
<td>Minimize residue through processing by solids control equipment</td>
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<tr>
<td></td>
<td></td>
<td>Use of high standard personnel and equipment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Discharge of biodegradable / organic wastes: food, cleared vegetation etc.</strong></th>
<th><strong>Increase nutrients in soils and aquatic bodies</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proliferation of disease germs and vectors</td>
</tr>
<tr>
<td></td>
<td>Attract human and animal scavengers</td>
</tr>
</tbody>
</table>

| **Sub-Project ESMP / Solid Waste Management Plans (SWMP)** |
| | Composting |
| | Animal feeds |
| | Recycling and re-use |

<table>
<thead>
<tr>
<th><strong>Disposal of paper, cardboards, wood &amp; packaging materials</strong></th>
<th><strong>Loss of visual quality</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Sub-Project ESMP / Waste Water Management Plans (WWMP)</strong></td>
</tr>
<tr>
<td></td>
<td>Waste water use for irrigation / watering</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Disposal of non-biodegradable (metallic, plastic)</strong></th>
<th><strong>Soil degradation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Accidental injuries</td>
</tr>
</tbody>
</table>

| **Sub-Project ESMP / Medical Waste Management Plan (MWMP)** |
| | Waste water use for irrigation / watering |

<table>
<thead>
<tr>
<th><strong>Discharge of waste water</strong></th>
<th><strong>Same as solid wastes</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Sub-Project ESMP / Hazardous Waste Management Plan (HWMP)</strong></td>
</tr>
<tr>
<td></td>
<td>Proper handling, transportation and storage of materials and products:</td>
</tr>
<tr>
<td></td>
<td>Applying the first-in-first-out principle</td>
</tr>
<tr>
<td></td>
<td>Establishing adequate, secure, and controlled storage for hazardous materials</td>
</tr>
<tr>
<td></td>
<td>Handling dangerous substances with care</td>
</tr>
<tr>
<td></td>
<td>Properly cleaning and disposing of packaging materials</td>
</tr>
<tr>
<td></td>
<td>Transport in leak-proof containers that are clearly labelled</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Disposal of medical wastes</strong></th>
<th><strong>Health hazards (poisonous materials, accidental injuries); Soil degradation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Sub-Project ESMP / Medical Waste Management Plan (MWMP)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Disposal of hazardous wastes: used batteries, chemicals, paints etc</strong></th>
<th><strong>Soil degradation, health hazards (poisonous materials)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Leaks and accidental discharge / spills of fuels, oils, lubricants, vehicle / machinery fluids</td>
<td>Soil and water degradation, Loss of visual quality</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Secure storage area: (outside easily flooded zones and more than 60m from watercourses or wetlands) with an impervious surface that can contain fuel, oil, and other fluid spills.</td>
<td>Machinery maintenance site: Dedicated central disposal point approved by the Engineer for disposal of used fuels, oils, paint, vehicle fluids, and old tires and tubes, household, office, workshop, and other solid wastes; burning cleaned spills and contaminated soils</td>
</tr>
<tr>
<td>Workers handling and using hazardous materials: specifically trained in how to handle and use hazardous materials; how to avoid any risk of accidental discharge; how to respond in the event of a natural disaster or environmental emergency, including events leading to chain reactions, so as to avoid any accidental discharges</td>
<td>Spills clean-up: by burning in place or collecting the contaminated soil and burning at central disposal point; Residue deposited on the ground from washing trucks or from any operation be buried or cleaned up to the satisfaction of the Engineer</td>
</tr>
<tr>
<td>Machinery operations: avoid use of heavy machinery: closer than 30m from watercourses or lakes; during rainy season. All repairs, maintenance, refilling undertaken offsite away from nh</td>
<td>Construction Wastes</td>
</tr>
<tr>
<td>Waste water from concrete works, washing of aggregates</td>
<td>Soil degradation, Degradation of water quality of receiving water bodies</td>
</tr>
<tr>
<td>Rubble, chunks of pavement, pieces of concrete and masonry, slags. Non-fermentable crushed or shredded residue not containing dangerous wastes Non-reusable excavated material Scrap wood, metallic wastes: iron sheets, grills,</td>
<td>Fill material in open pits Recycling and re-use</td>
</tr>
<tr>
<td>Dust from bare land or loose surfaces; fine sand, cement and other materials from construction, excavation, drilling blasting activities.</td>
<td>Caking of surfaces (near vegetation, buildings, streams, and wetlands)</td>
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<tr>
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</tr>
<tr>
<td>Smoke running engines</td>
<td>Reduced air quality, GHG effects that affect climate change</td>
</tr>
<tr>
<td>Odours (from wastes)</td>
<td>Reduced air quality, Nuisance to receptors</td>
</tr>
</tbody>
</table>

### LANDSCAPE AND VISUAL AMENITY

<table>
<thead>
<tr>
<th>Intrusion of new elements in the natural setting</th>
<th>Impaired visual quality and amenity Loss of land value</th>
<th>Structures blend (height, texture, colour etc) with natural settings.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetation clearance</td>
<td>Revegetate cleared areas; minimize loss of vegetation.</td>
<td></td>
</tr>
<tr>
<td>Soil erosion, landslides etc; of landscapes features</td>
<td>Refer to measures in Part 3 above.</td>
<td></td>
</tr>
<tr>
<td>Haphazardly disposed wastes</td>
<td>Waste Management Plan, refer to measures in Part 4 above.</td>
<td></td>
</tr>
</tbody>
</table>

### BUILT ENVIRONMENT

| Existing infrastructure upgraded, rehabilitated | Access and services improved during operation | Enhancement measures: Regular Preventive Maintenance Plan. |
| Physical presence or construction works | Existing infrastructure damaged or access restricted causing disturbance, travel longer distances etc. | Machinery operations: Avoid use of heavy machinery near properties to prevent damage or cracks. |
| Increased rainwater catchment by roofing / paving concentrate rain water hitting the ground | Existing infrastructure, roads, land, buildings, etc. damaged by erosion | Water harvesting. Paving and / or landscaping areas surrounding infrastructure (buildings, roads). Construct storm water drainage from facility. |
| Connection to existing facilities and supply systems (water, electricity, sewerage, storm drainage) | Pressure on existing or proposed public infrastructure | Connection to authorized existing Municipal / community facilities and supply systems. |
| Improved infrastructure attract new immigrants | Pressure on existing or proposed public infrastructure | Specific ESMP for individual subproject (roads). |

### LAND RIGHTS AND LANDUSES

<p>| Taking of land for subproject | Loss of land rights (statutory and customary) and improvements on the land | Avoid or minimize land and property acquisition: Road construction or rehabilitation works to maintain the same road alignment. Avoid removal and/or damage to existing structures and infrastructure during construction. Valuation and prompt compensation. Census of people whose land will be taken (even temporarily) and inventory of their assets and properties. |
| Change or modification of existing or potential land uses at sub-project site | Managing existing land use avoid or minimize: Removal of trees or plants with economic or food-source functions (e.g., teak wood or fruit and nut trees). Access roads that will result in individuals or communities to lose any assets e.g. land used for urban agriculture. Siting of new borrow areas that will result in land use conflicts. Locating drainage structures and outlets that will pose problems to land users e.g. a steep ditch that cannot be easily crossed preventing access to services/land across the road. |</p>
<table>
<thead>
<tr>
<th>Loss of access to land or land user rights</th>
<th>Maximize benefits to communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informing and involving land users in the design and siting of facilities, roads and drainage structures</td>
<td></td>
</tr>
<tr>
<td>Use of drainage structures and turnouts to benefit communities in water-deprived areas</td>
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</tr>
<tr>
<td>Drainage structures can be designed to allow community to harvest water</td>
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<tr>
<td>Use of borrow pits converted to some other use to the community after project completion e.g. water collection pond, dumpsite, etc.</td>
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</table>

**COMMUNITY LIVELIHOODS**

<table>
<thead>
<tr>
<th>Development of new and improved infrastructure, e.g. roads, introducing access to areas which did not exist / accessed before</th>
<th>Local government increased incomes; reduced construction and maintenance costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhanced measures:</td>
<td></td>
</tr>
<tr>
<td>Regular Preventive Maintenance Plan</td>
<td></td>
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<table>
<thead>
<tr>
<th>Increased land values</th>
<th>Employment opportunities at the local, district and regional levels (Laborers to Contractors)</th>
</tr>
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<tbody>
<tr>
<td>Enhanced measures:</td>
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<tr>
<td>Optimize local employment</td>
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<tr>
<td>Allocate jobs fairly / equally among community members using set criteria for allocation: (consider gender, marginalized groups)</td>
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<tr>
<td>Involve community leaders/ committees to identify suitable/able people for the jobs: review to avoid bias or favouritism</td>
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<tr>
<td>Deliver skills / literacy training to locals particularly youth.</td>
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<tr>
<td>Establish a system to manage local expectations.</td>
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</tbody>
</table>

| Attract new economic migrants: |
| Induced settlements in vicinity |
| New economic activities |
| Increased illegal developments and activities |
| Additional demand for natural resources, water & Competition / conflicts over resources |
| Additional pressure on social services |
| LGA Management Plans for exploitation of water & other resources in the area |
| Alternative strategies to avoid / minimize water extraction |
| Conflict avoidance / resolution mechanism |

| Improve trade and supply of commodities to the project sites and effects on tourism |
| Improved access and effects on the travel duration and distances |
| Improved markets for local products |
| Enhanced measures: |
| Regular Preventive Maintenance Plan |

**PUBLIC HEALTH AND SAFETY**

<table>
<thead>
<tr>
<th>Noise emissions from operations generating high-intensity noise</th>
<th>Modifications to the ambient noise level in the project area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disturbances / nuisance to nearby receptors</td>
<td></td>
</tr>
<tr>
<td>Sub-project Health and Safety Plan consider:-</td>
<td></td>
</tr>
<tr>
<td><strong>Noisy equipments and processes</strong></td>
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<tr>
<td>Inspection and maintained of equipments and machinery in good running conditions.</td>
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<tr>
<td>Soft start technique</td>
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<tr>
<td>Notification to nearby residences / institutions on project activities and schedules</td>
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<tr>
<td><strong>Transportation noise</strong></td>
<td></td>
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<tr>
<td>Transportation path selected to minimize potential for disturbances.</td>
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<tr>
<td>Minimal low speed; no passing close to noise-sensitive areas.</td>
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<tr>
<td>Shortest route taken over land.</td>
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<tr>
<td>Properly maintained silencers and mufflers.</td>
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<tr>
<td><strong>Avoidance strategies</strong></td>
<td></td>
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<tr>
<td>Maintain caution/ separation distances.</td>
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<tr>
<td>Modifications to air quality (increase of air pollution from emissions, dust, odours from wastes)</td>
<td>Health effects especially on vulnerable groups (e.g., hospital patients, children, and elderly people)</td>
</tr>
<tr>
<td>Construction site hazards (sharp or falling objects, open pits for foundations, waste water etc)</td>
<td>Injuries / fatalities</td>
</tr>
<tr>
<td>Pits filled with water at project site and quarry sites</td>
<td>Creation of new breeding habitats for agents / vectors of diseases (i.e. proliferation of mosquitoes) and increase prevalence of malaria, gastro-enteritis, and other diarrhoeal illnesses</td>
</tr>
<tr>
<td>Poor sanitation, waste disposal and ventilation</td>
<td>Exposure water-borne or respiratory infections and diseases</td>
</tr>
<tr>
<td>Interactions among new comers and with local population</td>
<td>Increase incidences of communicable diseases including STDs HIV/AIDS; and disruption of culture /behavior change and security.</td>
</tr>
</tbody>
</table>
| Fire | Injuries / fatalities, damage of properties | Sub-project Health and Safety Plan consider: - Minimization of the risk of fire - Firefighting equipments and procedures - Training to facility personnel / occupants and fire drills. - Establish a First Aid and ER facility at project location taking into considerations treatment and ER capabilities of local medical services providers and hospitals.
| Transport / construction traffic hazards (e.g., road deviations, transport of dangerous goods etc) | Effects on traffic safety, inconvenience related to vehicles causing accidents, congested traffic, material spillage, increased travel duration and distance | Traffic Management and Safety Procedure (TMSP) consider: Selection of appropriate transportation route with consultations with stakeholders, avoiding large agglomerations. determined 
Good Site Practices: Informing locals of transportation proposals. Signage and signal personnel where appropriate; vehicle lighting (front and back). Training and testing (i.e. vision tests) of heavy equipment operators and drivers Requirements that all companies and drivers have licenses and insurance. Transportation restrictions: vehicle movement restricted to pre-determined routes; maximum load restrictions; restrictions on movement of vehicles and speed limits (zoned according to sensitivity of the area); day time movements if desired; and parking and on-site traffic movement. Noise and dust control measures (see above) Compliance with all Tanzanian transportation laws/standards |
<table>
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</thead>
<tbody>
<tr>
<td>Vibrations from heavy equipments</td>
<td>Effects to nearby buildings</td>
<td></td>
</tr>
<tr>
<td><strong>OCCUPATIONAL HEALTH AND SAFETY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exposure to dust, noise</td>
<td>Disturbances / nuisance and discomfort</td>
<td></td>
</tr>
<tr>
<td>Injuries from sharp / falling objects, falling from heights</td>
<td>Serious injuries</td>
<td></td>
</tr>
<tr>
<td>Exposure to sun/heat</td>
<td>Sickness and ill-health (reduced manpower)</td>
<td></td>
</tr>
<tr>
<td>Exposure to water-borne infections from food, drinking water</td>
<td>Sickness and ill-health, fatalities</td>
<td></td>
</tr>
<tr>
<td>Sub-project Health and Safety Plan consider:- PPEs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide all workers with required PPE (i.e., supply safety equipment based on a worker’s responsibilities, e.g., provide dust masks to workers working in dusty conditions); Enforce the correct use of PPE by workers and apply sanctions to workers who are not compliant; Emergency response Prepare for accidents (e.g., identify nearest doctor and hospital) to ensure a swift response when health issues arise; Provide on-site First Aid kits and that at least 2 persons per worksite have received First Aid training; Training Train employees on health risks, on measures to ensure safety, on how to use Personal Protective Equipment (PPE), on the importance of using safety equipment, and on what to do when accidents occur; Train workers handling toxic substances and dangerous machinery on relevant ‘best practices’; Delegate one staff who has been trained in OHS as Safety Officer Working environment Provide adequate sanitation, potable water, and rest areas and periods to workers; Signing during construction</td>
<td></td>
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</tr>
<tr>
<td><strong>RISKS TO PROJECT FROM NATURAL FACTORS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremes of climatic elements: winds, rains, storms, hurricanes, lightening</td>
<td>- Damage of project structures - Disruption of project operations and schedules</td>
<td></td>
</tr>
<tr>
<td>Extreme aquatic conditions: waves, tides, currents</td>
<td>- Blocked access to the road network and facilities;</td>
<td></td>
</tr>
<tr>
<td>Soil movements: erosion, stone dislodging, landslides</td>
<td>- Injuries and fatalities to project personnel working on the site</td>
<td></td>
</tr>
<tr>
<td>Choice of materials and designs resilient to extremes of natural events i.e. able to with stand pressures/forces i.e. welded and seamless wrought steel pipes; valves, end closures, connectors and swivels made of corrosive-resistant materials. Physical placement of infrastructure and facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface drainage (streams, rivers) and storm water drainage causing flooding and overflows.</td>
<td>Damage of project structures, discharges into project site</td>
<td>observe setback lines and other siting standards</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Hydro-geological conditions: height of water table</td>
<td>Water stagnation / flooding of project site</td>
<td></td>
</tr>
<tr>
<td>Geology: seismic activities (earthquakes etc.)</td>
<td>Damage to project structures</td>
<td></td>
</tr>
</tbody>
</table>

**RISKS TO PROJECT FROM NEIGHBOURING ACTIVITIES AND DEVELOPMENTS**

<table>
<thead>
<tr>
<th>Land disturbances activities: cultivation, bulldozing, livestock grazing</th>
<th>Destruction of infrastructure or assets</th>
<th>Stakeholders Information, Education and Communication (IEC) Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation, economic and social status of nearby residences</td>
<td>Theft of materials and portable items with ready-made market or for home use.</td>
<td>Continuous engagement with project affected individuals and groups prior to project. IEC plan includes early formal notification to relevant stakeholders of the scope and schedules of the intended project activities.</td>
</tr>
<tr>
<td>Security condition in neighbourhood to the project site</td>
<td>Vandalism of structures / equipments Theft of materials and portable items with ready-made market or for home use.</td>
<td>Resources Mapping</td>
</tr>
<tr>
<td>Bush fires practices</td>
<td>Injuries and fatalities to project personnel working on the site or visitors. Destruction of subproject area (community forest, wood grove, planted trees / grass)</td>
<td>Project Area Layout/Plan</td>
</tr>
<tr>
<td>Boundary fence and buffer zone separating project from neighbouring features</td>
<td>Conflicts related to blocked access to local resources present on the site</td>
<td>Initiating and Maintaining Good Neighbourliness</td>
</tr>
</tbody>
</table>

**Initiating and Maintaining Good Neighbourliness**
Incorporate in the IEC plan information dissemination, public awareness on potential dangers of project activities to humans and properties. Engage communities in the running of project: employment opportunities, project benefits sharing etc. Engage individuals or private company or Government agencies offering security services.
Annex 5: Sample Application Form for Variation of ESIA Certificate

Form No. 5                                                                 (Regulation 35(1))

Application Reference No………………………………

Certificate No…………………………………..FOR OFFICIAL USE

ENVIRONMENTAL MANAGEMENT ACT, 2004 APLICATION FOR VARIATION OF ENVIRONMENTAL IMPACT ASSESSMENT CERTIFICATE

PART A

PREVIOUS APPLICATIONS

........................................................................................................................................................................
........................................................................................................................................................................
........................................................................................................................................................................

PART B

DETAILS OF APPLICANT

Name (Individual or firm):
Business Registration No:
Address:
Name of contact person:
Position of contact person:
Address of contact person:

Telephone: Email :

PART C

DETAILS OF CURRENT ENVIRONMENTAL IMPACT ASSESSMENT CERTIFICATE

Name of the current Environmental Impact Assessment certificate holder

Application No. of the current Environmental Impact Assessment certificate

Date of issue of the current Environmental Impact Assessment certificate

PART D

PROPOSED VARIATIONS TO THE CONDITIONS IN CURRENT ENVIRONMENTAL IMPACT ASSESSMENT CERTIFICATE

Conditions in the current Environmental Impact Assessment certificate

 Proposed variation(s)
 Reasons for variation(s)
Describe the environmental [and social] changes arising from the proposed variation(s)

Describe how the environment and the community might be affected by the proposed variation(s)

Describe how and to what extent the environmental[and social] performance requirements set out in the EIA report previously approved or project profile previously submitted for this project may be affected

Describe any addition measures proposed to eliminate, reduce or control any adverse environmental impact arising from the proposed variations and to meet the requirements in the Technical Memorandum on Environmental Impact Assessment Process

PART E

DECLARATION BY THE APPLICANT

I hereby certify that the particulars above are correct and true to the best of my knowledge and belief. I understand the environmental impact assessment certificate may be suspended, varied or cancelled if any information given is false, misleading, wrong or incomplete.

………………………….……………………………………………………………..
Name Position Signature

On behalf………………………….………………………………………………...

Company name and seal Date

PART F

FOR OFFICIAL USE

Decision of the Council…………………………………………………………………..

Comments…………………………………………………………………………………

……………………………………………………………………………………………

Officer……………………….Signature………………………………Date……………

Important notes

Please submit-
3 copies of this complete form; and
The prescribe fees, to:

Director General
The National Environmental Management Council
P.O.Box 63154,
Dar es Salaam.
Tel: 255(022)2134603 Fax: 255 (022) 2111579
Email: nemc@yahoo.com

*Delete where applicable
### ANNEX 6: SUMMARY ENVIRONMENTAL AND SOCIAL MITIGATION PLAN (EMP) FOR THE TSCP ADDITIONAL FINANCING

<table>
<thead>
<tr>
<th>Project Activity</th>
<th>Mitigation Measures</th>
<th>Responsible Implementing Agency</th>
<th>Monitoring Responsibility</th>
<th>Time Horizon</th>
<th>Cost estimates (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of infrastructure projects</td>
<td>Staff capacity and regulatory changes</td>
<td>Project Team</td>
<td>Project Team at PO-RALG</td>
<td>At planning stage</td>
<td>$ 50,000</td>
</tr>
<tr>
<td>Environmental and Social Screening</td>
<td>LGA Project Team (assisted by Municipal EMO &amp; CDO)</td>
<td>LGA Project Team / Municipal EMO; CDO</td>
<td>At planning stage</td>
<td>Included in project</td>
<td></td>
</tr>
<tr>
<td>Public Consultations/ Sensitization</td>
<td>LGA Project Team</td>
<td>Municipal EMO; CDO</td>
<td>Throughout project cycle</td>
<td>Included in project</td>
<td></td>
</tr>
<tr>
<td>Prepare RAP as necessary</td>
<td>LGA Project Team / Consultant</td>
<td>Municipal EMO; CDO</td>
<td>After screening results</td>
<td>Included in project</td>
<td></td>
</tr>
<tr>
<td>Complete Environmental and Social Checklist</td>
<td>LGA Project Team (assisted by Municipal EMO; CDO)</td>
<td>Municipal EMO; CDO</td>
<td>At planning stage</td>
<td>Included in project</td>
<td></td>
</tr>
<tr>
<td>Carry out Environmental Assessment Work / update ESMPs / RAPs</td>
<td>LGA Project Team / Consultant</td>
<td>Municipal EMO; CDO</td>
<td>As required</td>
<td>$ 120,000</td>
<td></td>
</tr>
<tr>
<td>General Technical Assistance (translation in Kiswahili and dissemination of ESMF)</td>
<td>Project Preparation Facility at PO-RALG</td>
<td>Project Preparation Facility at PO-RALG</td>
<td>Before Appraisal</td>
<td>$ 120,000</td>
<td></td>
</tr>
<tr>
<td>Construction stage</td>
<td>Environmental Guidelines for Contractors /Implementers</td>
<td>LGA Sector Specialist / Design Consultant</td>
<td>LGA Project Team / Design Consultant</td>
<td>On-going</td>
<td>Included in contract</td>
</tr>
<tr>
<td>Operation and Maintenance</td>
<td>Regular Maintenance of infrastructure projects</td>
<td>LGA Sector Specialist / Design Consultant / /Contractors</td>
<td>LGA Project Team / Design Consultant</td>
<td>On-going</td>
<td>Included in project</td>
</tr>
<tr>
<td>Public Education Awareness Raising on waste management and security of infrastructure</td>
<td>LGA Project Team (assisted by Municipal EMO; CDO)</td>
<td>LGA Project Team / Municipal EMO; CDO</td>
<td>On-going</td>
<td>Included in project</td>
<td></td>
</tr>
<tr>
<td>Leakage detection &amp; regular maintenance (i.e. water points, septic tanks, latrines)</td>
<td>LGA Project Team</td>
<td>Municipal EMO; CDO</td>
<td>On-going</td>
<td>Included in project</td>
<td></td>
</tr>
<tr>
<td>Training Needs Assessment for 8 Participating LGAs &amp; CDA</td>
<td>Consultant</td>
<td>PCU at PO-RALG</td>
<td>At planning stage</td>
<td>$ 180,000</td>
<td></td>
</tr>
<tr>
<td>Train the Trainer: ESIA training for designated LGA Project Team</td>
<td>LGA Project Team / EMO /CDO/ Consultant</td>
<td>Project Team at PO-RALG</td>
<td>Project Team at PO-RALG</td>
<td>At planning stage</td>
<td>$ 630,000</td>
</tr>
<tr>
<td>Workshop for Decision makers (LGA level) at 8 Participating LGAs &amp; CDA</td>
<td>LGA Project Team and CDO/ Consultant</td>
<td>Project Team at PO-RALG</td>
<td>Project Team at PO-RALG</td>
<td>At planning stage</td>
<td>$ 240,000</td>
</tr>
<tr>
<td>Workshop for Decision makers (community level) at 8 Participating LGAs &amp; CDA</td>
<td>LGA Project Team and CDO/ Consultant</td>
<td>Project Team at PO-RALG</td>
<td>Project Team at PO-RALG</td>
<td>At planning stage</td>
<td>$ 80,000</td>
</tr>
<tr>
<td>Specific Technical Assistance</td>
<td>Project Team at PO-RALG</td>
<td>LGA Project Team and CDO/ Consultant</td>
<td>As required</td>
<td>$ 250,000</td>
<td></td>
</tr>
<tr>
<td>Reviews</td>
<td>Project Team at PO-RALG</td>
<td>LGA Project Team / Municipal EMO; CDO</td>
<td>At planning stage</td>
<td>$ 40,000</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$ 171,000</strong></td>
</tr>
</tbody>
</table>