

REVOLUTIONARY GOVERNMENT OF ZANZIBAR



TANZANIA PUBLIC-PRIVATE PARTNERSHIP PROJECT (TPPP)

Environmental and Social Management Framework (ESMF)

March 2020

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
1 INTRODUCTION.....	1
1.1 Background	1
1.1.1 Objectives.....	3
1.1.2 Scope and Applicability of the ESMF	3
1.2 Users of the ESMF	3
1.3 Approach and Methodology	4
1.3.1 Approach.....	4
1.3.2 Methodology	4
2 TANZANIA PPP PROJECT (TPPP).....	6
2.1 Objectives and Outcomes	6
2.2 TPPP Components.....	6
2.3 Candidate PPPs.....	9
2.4 Beneficiaries	9
2.5 Institutional Arrangements	11
2.6 Roles in Environmental and Social Management	11
2.7 Community Engagement Framework	13
2.8 The Use of Consultants	14
3 ENVIRONMENTAL AND SOCIAL CONDITIONS.....	16
3.1 Introduction	16
3.2 Physical features	16
3.3 Environmental Conditions.....	19
3.4 Socio-Economic Conditions.....	23
4 ENVIRONMENTAL AND SOCIAL IMPACTS AND MITIGATION	32
4.1 Introduction	32
4.2 Potential Impacts	32
4.2.1 Impacts on remnants of natural areas and vegetation	32
4.2.2 Impacts on water resources and management.....	33
4.2.3 Impacts on land, soil and construction mineral resources	33
4.2.4 Materials efficiency and wastes	34
4.2.5 Impacts on air quality and climate change.....	35
4.2.6 Impacts on landscape and visual amenity	35
4.2.7 Impacts on built environment	35
4.2.8 Impacts on land use.....	36
4.2.9 Impacts on community livelihoods	36
4.2.10 Impacts on vulnerable individuals	37
4.2.11 Labor-related impacts	39
4.2.12 Impacts on public health and safety	40
4.2.13 Occupational health and safety risks.....	40
4.2.14 Risks to PPP from natural factors and processes	41
4.2.15 Risks from neighboring anthropogenic activities	41
4.2.16 Impacts on physical cultural resources	42
4.3 Preparation of ESMPs	42
4.4 Public and Community Participation and Disclosure.....	43
4.5 Project Alternatives	45
5 LEGAL REQUIREMENTS AND INSTITUTIONAL FRAMEWORK	46
5.1 WB Safeguard Policies and Guidelines.....	46

5.2	Zanzibar Environmental and Social Management Requirements	49
5.2.1	Policies Relevant to TPPP.....	49
5.2.2	Laws Relevant to TPPP.....	50
5.2.3	Environmental Management Tools Applicable in Zanzibar	52
5.2.4	Legal Requirements by Project Phase.....	57
5.3	Institutional Framework	58
5.3.1	Department and Agencies	59
5.3.2	Local Government Authorities.....	61
6	PPP PREPARATION, APPROVAL AND IMPLEMENTATION	63
6.1	Overview	63
6.2	Steps	65
	<u>Step 1</u> : Initiation	66
	<u>Step 2</u> : Application for ESIA Certificate	66
	<u>Step 3</u> : Screening and Scoping.....	67
	<u>Step 4</u> : Conduct of ESIA	69
	<u>Step 5</u> : Review and Approval of ESIA	70
	<u>Step 6</u> : Final Disclosure	72
	<u>Step 7</u> : Incorporating Mitigation Measures in PPP agreement	72
	<u>Step 8</u> : Approval of Draft PPP agreement.....	72
	<u>Step 9</u> : Transfer of ESIA Certificate	72
	<u>Step 10</u> : Variation of ESIA Certificate (if Needed)	73
	<u>Step 11</u> : Preparation for Implementation	74
	<u>Step 12</u> : Implementation Supervision	76
	<u>Step 13</u> : Monitoring and Reporting.....	78
	<u>Step 14</u> : Review and Audit.....	78
7	CAPACITY BUILDING	79
7.1	Introduction	79
7.2	Training	80
7.3	Learning-by doing	84
	References	86
	Annex A: Stakeholder’s Consulted	88
	Annex B: Environmental and Social Screening Form	96
	Annex C: ESMP Checklist.....	104
	Annex D: ZEMA ESIA Format.....	113
	Annex E: Sample Mitigation Measures.....	117
	Annex F: Sample ESMP and ESMoP Layouts	123

Acronyms

ARAP	Abbreviated Resettlement Action Plan
AIDS	Acquired Immune Deficiency Syndrome
CDO	Community Development Officer
CEF	community engagement framework
CoC	Code of conduct
DC	District Commissioner
DMT	District Management Team
DoURP	Department of Urban and Rural Planning
EA	environmental assessment
EHS	Environmental, Health And Safety
ESIA	Environmental Social Impact Assessment
EMSDA	Environmental Management for Sustainable Development Act
EMA	Environmental Management Act
EO	Environmental Officer
ESIA	Environmental (and Social) Impact Assessment
ESMF	Environmental and Social Management Framework
ESMoP	Environmental and Social Monitoring Plan
ESMP	Environmental and Social Management Plan
GBV	Gender Based Violence
GRM	Grievance redress mechanism
HIV	Human Immunodeficiency Virus
IA	implementing authority
IEC	Information Education and Communication
LGA	Local Government Authority
MC	Municipal Council
MoFP	Ministry of Finance and Planning
NGO	Non-Governmental Organization
PAP	Project Affected People
PPE	Personal Protective Equipment
PPP	Public-Private Partnership
PMT	project management team
RAP	Resettlement Action Plan
RGoZ	Revolutionary Government of Zanzibar
RPF	Resettlement Policy Framework
TNA	Training Needs Assessment
ToR	Terms of Reference
ToT	Training of Trainers
TPPP	Tanzania PPP Project
WB	World Bank
WB/OP	World Bank/Operational Policy
ZAWA	Zanzibar Water Authority
ZEM Act	Zanzibar Environmental Management Act
ZEMA	Zanzibar Environmental Management Authority
ZMC	Zanzibar Municipal Council

EXECUTIVE SUMMARY

Background

The Revolutionary Government of Zanzibar (RGoZ) is implementing public-private partnerships (PPPs) to deliver infrastructure and other public services. Implementation is guided by the PPP Act 2015 and the PPP Regulations 2017.

The proposed \$14 million Tanzania Public-Private Partnership Project (TPPP) financed by the World Bank (WB) will support the PPP Department of the Ministry of Finance and Planning (MoFP), the government's implementing authority (IA) for each PPP, other government agencies and stakeholders engaged in PPPs.¹ The priority for TPPP is the finalization of project preparation through the funding of feasibility studies, safeguard assessments, and advisory support for PPP procurement. Complimentary institutional and capacity development support will also be provided. In Zanzibar, TPPP will be implemented by MoFP's PPP Department, which is responsible for coordinating Zanzibar's PPP program.

Most PPPs are expected to be for the design, financing, construction and operation of modern markets, bus and daladala terminals and student hostels. Some will be brownfield projects that re-develop and improve an existing public facility, while some will be greenfield projects that develop a new facility. The implementing agency for the PPPs (as defined under the PPP Act) is expected to be a local government authority (LGA) in most cases, with an investment of less than \$10 million per PPP. The PPPs to be supported by TPPP will be selected from thirteen candidate PPPs that are preparing feasibility studies under the World Bank(WB) financed \$55 million Zanzibar Urban Services Project (ZUSP) Additional Finance. PPP selection will be finalized once likely feasibility is established under ZUSP.

Environmental and Social Impacts

Implementation of TPPP will result in positive and negative impacts through the individual PPPs supported. Most of the negative impacts will arise from the construction activities of a PPP, while others will arise during the operation phase of a PPP. Potential impacts of the PPPs will include:

Positive impacts:

- Increased quality of facilities and services, as provided by the private partner to the PPP;
- Reduced congestion and improved connectivity;
- Improved safety of customers, traders and service providers;
- Better amenities, such as all-weather facilities and storage facilities for traders and operators;
- Jobs and business opportunities for the local community during construction and operations;
- Increased land value in the vicinity;

¹ The project forms part of the World Bank's Tanzania PPP Support Program (P149535) funded by a £20m grant from the United Kingdom's Department for International Development.

- Improved livelihood of operators, trader, local suppliers and service providers; and
- Improved hygiene conditions and reduced health problems of the tenants (e.g. small traders) and users of facilities (e.g. customers of market and daladala terminals).

Negative impacts:

- Noise pollution from operation of construction machinery, increased road traffic and other economic activities;
- Pollution of land or water resources due to discharge of sewage from possible malfunctioning or otherwise inadequate sanitation and waste-water treatment systems and contaminated surface run-off waste generated from construction and operational activities;
- Pressure on existing groundwater sources and groundwater shortages from overexploitation of local aquifers;
- Land destabilization and soil degradation (in form of erosion, compaction, sealing and/or waterlogging) from construction works (road grading, vegetation clearance and cut-and-fill);
- Increased removal of material in borrow pits for construction resulting in hazardous water sources (acid pools), (if not rehabilitated);
- Ambient air pollution from operation of construction machinery and generators;
- Increased health, security and safety hazards to public and construction workers;
- Increased fire hazard to property and occupants;
- Loss of structure or crops;
- Loss of livelihood or business;
- Loss of or restricted access to facilities;
- Temporary loss of incomes due to the relocation of facilities, and potential permanent loss if rights to existing facilities are not re-instated;
- Potential loss of structures, crops and other non-land assets;
- Marginalization of local content in construction and operational procurement and labor;
- Disturbance of historically or culturally valuable sites and/or resources; and
- Disturbance of local community's social dynamics.

Objectives

TPPP triggers the WB Environmental Assessment Policy (OP/BP 4.01). All PPPs supported by TPPP will be screened for their environmental and social impact then conduct an environmental and social impact assessment (ESIA). TPPP will only support PPP rated category B or C under WB Policies.

PPPs in locations that are ecologically sensitive such as unique or protected habitats and Category A PPPs as defined under OP/BP 4.01 are not eligible for support. PPPs requiring land acquisition will also be excluded from TPPP support. TPPP activities will only take place in

larger urban and peri-urban areas and will not operate in areas where vulnerable groups are present.

Since the specific type and location of PPPs to be supported are unknown or yet to be specified to a sufficient level of detail, this Environmental and Social Management Framework (ESMF) was prepared to set out the procedures, the scope and the requirements to: conduct the environmental and social screening; to complete the ESIA; to specify the review process; and, the approval and implementation of measures for PPPs to be supported under TPPP. The ESMF also identifies roles and responsibilities and how the capacity for effective implementation will be built.

Involuntary resettlement impacts will be addressed in the separate Resettlement Policy Framework (RPF) The RPF addresses the preparation and implementation of Resettlement Action Plans (RAPs) and Abbreviated Resettlement Action Plans (ARAPs).²

Environmental and Social Assessment Process

TPPP will only support the procurement of the private partner to the PPP when an ESIA has been prepared, and the Zanzibar Environmental Management Authority (ZEMA) has issued an ESIA Certificate for the PPP. The ESIA must meet the requirements of the Zanzibar Environmental Management Act (2015) and ESIA Guidelines and Procedures (2009) and WB safeguard policies and guidelines. In most cases, TPPP is expected to fund preparation of the ESIA and securing of the ESIA Certificate. TPPP may also support PPPs that have separately undertaken an ESIA and secured an ESIA Certificate.³

The features of the environmental and social assessment process are:

- i. **Screening:** Before procurement of the private partner to the PPP, the PPP will be screened to: 1) determine eligibility of the PPP for support under the project; 2) assign the risk category in accordance with Zanzibar's Environmental Management Act (2015) and ESIA Guidelines and Procedures (2009) and WB Environmental Assessment Policy (OP/BP 4.01); 3) determine the scope and detailed requirements of the ESIA, when not yet prepared; 4) identify applicable WB safeguards policies and requirements; and 5) identify specific issues for which the PPP units and IAs will require technical assistance.

An Environmental and Social Screening Form (see Annex B) will be completed for all PPPs to be supported by TPPP. The information contained in this form will specify the type, location, sensitivity, scale of the project as well as the nature and magnitude of potential environmental and social impacts. This form will be the basis to determine project categorization under OP/BP 4.01. If a project falls into Category A, it will not be eligible for TPPP support.

The completed and approved Environmental and Social Screening Form will be attached to a scoping report and draft terms of reference (ToR) to the ESIA to be

² WB's Safeguards Policy OP 4.12 - Involuntary Resettlement states that "where impacts on the entire displaced population are minor, or fewer than 200 people are displaced, an abbreviated resettlement plan may be agreed with the borrower....Impacts are considered "minor" if the affected people are not physically displaced and less than 10 percent of their productive assets are lost."

³ For example, TPPP may support preparation of operations and maintenance PPPs for solid waste management facilities developed under a separate World Bank operation.

submitted to ZEMA. The ESIA will often be preceded by a prefeasibility study that includes an environmental and social due diligence, in which case the ToR for the ESIA will draw on the findings of a prefeasibility study. The IA will internally review the environmental and social screening form and the ToR and seek the World Bank's no objection prior to submission to ZEMA. The final ToR will be issued by ZEMA.

- **Development of ESIA and or ESMP:** For PPPs yet to undertake an ESIA, the IA will be responsible for developing an ESIA inclusive of an ESMP.⁴ Experts registered with ZEMA will be engaged to conduct the ESIA. Development of the ESIA and ESMP will follow the process set out in the ESMF, which incorporates requirements of the Environmental Management Act (2015) and ESIA Guidelines and Procedures (2009) and WB safeguard policies and guidelines. The ESIA and ESMP reports will be internally reviewed by the IA and submitted to the World Bank for no objection.ESIAs and ESMPs will be reviewed by ZEMA. For PPPs that are to proceed, ZEMA will submit the ESIA and ESMP to the minister responsible for the environment for approval and issuance of an ESIA Certificate.

For PPPs that have already undertaken an ESIA and secured an ESIA Certificate separately from TPPP, the IA and WB will review the ESIA to verify alignment with the WB's safeguards policies and guidelines and requirements of the ESMF.

- **Obligations to implement the ESMP** and comply with Zanzibar legislation and standards and WB safeguard policies and guidelines will, as relevant, shall be transferred to the private partner of the PPP through the PPP agreement. Any variations or modifications of the ESMP due to any change in the PPP project design, detailed engineering or location of structure or facilities, by the private partner will be screened and assessed by the IA and submitted to the WB for no objection. In addition, ZEMA will conduct its own separate screening and evaluation as may be required by the EMA regulations;⁵ and
- **Monitoring and Evaluation and Audit:** The ESIAs and/or ESMPs will be subject to in-house and external audit. PPP performance will be monitored by the PPP units and the IA.

PPP advisors and other consultants providing PPP-specific advice will only assist on PPPs eligible for TPPP support. They will for example not advise on PPPs rated Category A under WB Safeguard Policies. PPPs will be subject to the environmental and social screening process described above in assessing their eligibility.

⁴ The ESMP is to include, where potential impacts warrant extra attention, a waste management plan, traffic management plan, social management plan inclusive of actions to address gender based violence, a labor influx management plan and an occupational health and safety plan.

⁵ Variations may be needed if the approved design of the PPP changes. Design of a PPP extends beyond the physical design, encompassing other aspects such as the output specifications and performance measures for the services delivered and risk allocations.

Grievance Redress Mechanism

As required in the RPF, each PPP will set up a Grievance Redress Mechanism (GRM). The GRM will handle all complaints about the PPP, including those related to involuntary resettlement impacts and the implementation of RAP/ARAPs. The GRM is explained in the RPF.

Capacity Building

The ESMF makes provisions for MoFP's PPP Department, IAs and other relevant government agencies to develop their capacities on environmental and social management and safeguards. A training needs assessment (TNA) will be carried out in the IAs covered by TPPP. The TNA will be conducted prior to the initiation of an ESIA and the RAP/ARAP. The TNA for safeguards will form part of a broader capacity development plan to be put in place for an IA and its PPPs under TPPP. Technical capacity building sessions, awareness-raising and sensitization and learning-by doing will be provided for.

Disclosure and Stakeholder Engagement

The ESMF the RPF and other subsequent safeguards instruments such as the individual project ESIA reports, ESMPs, RAPs and ARAPs will be cleared by the Revolutionary Government of Zanzibar and the WB and disclosed locally at public and easily accessible sites (e.g. the site of the PPP and the offices and websites of the IA) with a translation of summaries into the local language in a culturally appropriate manner. They will also be disclosed at the websites of the relevant PPP unit and the WB. For any changes to these instruments the same clearance and disclosure protocols will be followed.

During the preparation of this ESMF, stakeholders were consulted to obtain their views and concerns regarding the ESMF and RPF. Stakeholders were consulted on a sample of PPPs being considered for support under TPPP. At each IA, available documents (i.e. environmental / economic / social data and assessments, land use plans and other planning materials) were gathered and interviews/discussions conducted with relevant project implementers and persons in-charge of PPPs. The field work covered environmental and social conditions in the IAs, institutional arrangements, the capacity for environmental and social management, and PPP-specific environmental and social matters. The consultation also addressed the need for the PPP, its mode of operation, willingness to pay, physical design, location-specific issues, temporary relocation, and challenges that are facing existing facilities. Details of stakeholders consulted is in Annex A. Stakeholder views fed into preparation of the draft ESMF and RPF. Stakeholder workshops were held to review the ESMF and RPF in Zanzibar on December 5-6 2018. Stakeholders were encouraged to share comments in open discussion with their peers, facilitated by MoFP staff responsible for safeguards, and to seek the views of safeguard managers within the relevant IA (e.g., their LGA). Stakeholder engagement will continue through the project cycle of the PPP supported by TPPP.

1 INTRODUCTION

1.1 Background

The Revolutionary Government of Zanzibar (RGoZ) is implementing public-private partnerships (PPPs) to deliver infrastructure and other public services. Implementation is guided by the PPP Act 2015 and the PPP Regulations 2017.

The proposed \$14 million Tanzania Public-Private Partnership Project (TPPP) financed by the World Bank (WB) will support the PPP Department of the Ministry of Finance and Planning (MoFP), the government's implementing authority (IA) for each PPP, other government agencies and stakeholders engaged in PPPs.⁶ The priority for TPPP is the finalization of project preparation through the funding of feasibility studies, safeguard assessments, and advisory support for PPP procurement. Complimentary institutional and capacity development support will also be provided.

In Zanzibar, TPPP will be implemented by MoFP's PPP Department. The department is responsible for coordinating Zanzibar's PPP program.

Most PPPs are expected to be for the design, financing, construction and operation of modern markets, bus and daladala terminals and student hostels. Some will be brownfield projects that re-develop and improve an existing public facility, while others will be greenfield projects that develop a new facility. The implementing agency for the PPPs (as defined under the PPP Act) is expected to be a local government authority (LGA) in most cases, with an investment of less than \$10 million per PPP. The PPPs to be supported by TPPP will be selected from thirteen candidate PPPs that are preparing feasibility studies under the \$55 million Zanzibar Urban Services Project (ZUSP) Additional Finance financed by the World Bank (WB). PPP selection will be finalized once likely feasibility is established under ZUSP.

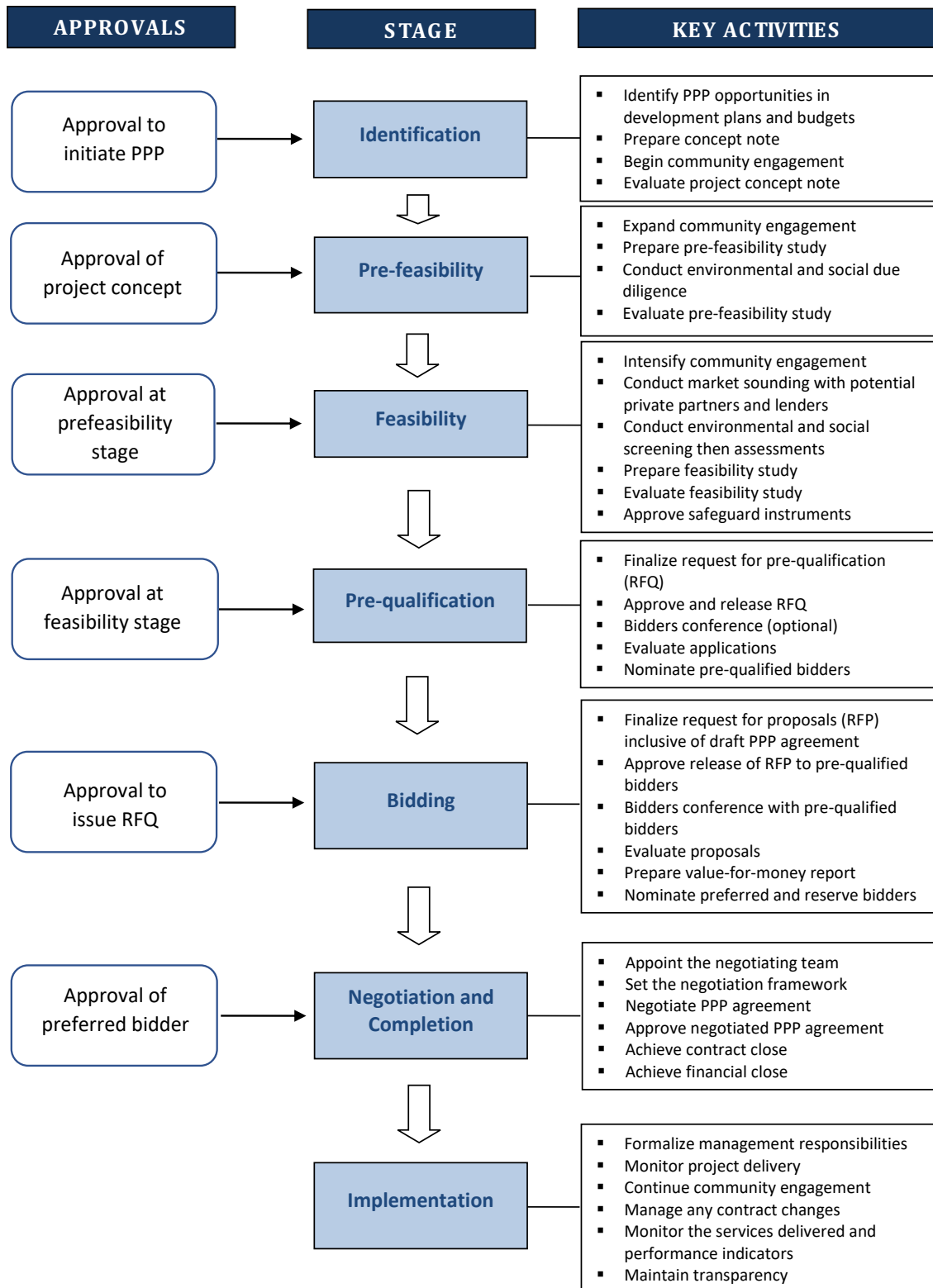
The PPP project cycle to be followed by PPPs supported by TPPP is at the figure below. The project cycle complies with the 2015 PPP Act and 2018 PPP Regulations and good practices for PPPs. TPPP support ends at financial close and excludes the implementation stage.

The exact nature of all PPPs (i.e. their type and location) to be supported by TPPP are still unknown or are yet to be specified to a level of details where an Environmental and Social Impact Assessment (ESIA) or an Environmental and Social Management Plan (ESMP) can be developed and appraised.⁷ This Environmental and Social Management Framework (ESMF) establishes a mechanism to conduct environmental and social screening and prepare ESIA and ESMPs in compliance with Zanzibar's obligations and applicable WB Safeguard Policies and relevant Environmental, Health and Safety (EHS) Guidelines. The ESMF also sets out typical impacts and mitigation activities aligned with good international industry practices for PPPs likely to be supported by TPPP, and activities that TPPP will support to build the environmental and social management and institutional capacity of the PPP units and IAs.

Figure 1.1 PPP Project Cycle

⁶ The project forms part of the World Bank's Tanzania PPP Support Program (P149535) funded by a £20m grant from the United Kingdom's Department for International Development.

⁷ In this report Environmental and Social Impact Assessment has the same meaning as Environmental Impact Assessment or Environmental Impact Statement.



In parallel to this ESMF, a Resettlement Policy Framework (RPF) has also been prepared for TPPP. The RPF document outlines the principles and procedures to be followed when the construction of completely new infrastructure or the expansions and extensions leads to involuntary resettlement (including the potential loss of livelihoods). It describes the process for the preparation, implementation, monitoring and evaluation (M&E) of Resettlement Action Plans (RAPs) and Abbreviated Resettlement Action Plans (ARAP). The RPF will be used in conjunction with the ESMF as required.

1.1.1 Objectives

The aim of this ESMF is to guide the assessment and management of environmental and social impacts of PPPs to be supported under the TPPP. The ESMF will also enable early assessment for potential impacts of proposed PPP, identify appropriate instruments, determine their scope and other requirements. and scope .

Specific ESMF objectives are to:

- Establish clear procedures and methodologies for the environmental and social screening, planning, review, approval, implementation and monitoring of PPPs to be prepared under the TPPP;
- Specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to PPPs;
- Determine the institutional arrangement, staffing and capacity building needed to successfully implement and monitor the provisions of the ESMF; and
- Provide practical information resources for its implementation.

1.1.2 Scope and Applicability of the ESMF

This ESMF is based on Zanzibar's laws and regulations on environmental and social risk management, the WB OP4.01 and an assessment of the likely impacts of PPPs to be supported by TPPP. It sets out the process, procedures, institutional arrangements and requirements for assessing and managing the environmental and social risks and impacts of the individual PPPs to be supported, including grievance redress, and provides for the capacity building of the program management units and prospective PPPs.

This ESMF applies to all PPPs prepared by Zanzibar with the support of TPPP.

1.2 Users of the ESMF

The ESMF provides guidance to a diverse range of users in how TPPP will achieve compliance with Zanzibar's policies, legislation, and WB policies and guidelines relevant to environmental and social risk management. The target users include:

- The senior management of MoFP and IAs that are responsible for individual PPPs;
- Zanzibar's PPP unit–MoFP's PPP Department;
- The project management teams (PMTs) formed in accordance with the PPP Act and Regulations to prepare a PPP;

- The management and staff of Authorities responsible for approving PPPs within LGAs and the Ministries, Departments, Agencies and Authorities;
- The private business sector, and specifically those considering a role as the private partner to a PPP;
- The banks considering lending to PPPs;
- Communities affected by PPPs, and their leaders, representatives and organizations;
- Consulting engineers, contractors and service providers involved in PPPs planning, design, construction and installation works;⁸
- Environmental and social assessment consultants who provide services to IAs; and
- PPP advisors who prepare and procure PPPs.

1.3 Approach and Methodology

1.3.1 Approach

The development of this ESMF follows:

- Identification of key issues for ESMF development, legal and policy requirements;
- Collection of data and information from literature, consultations with key informants and observations at representative PPPs to determine:
 - Baseline conditions of important biophysical and socio-economic receptors emphasizing prevalent trends and indicators;
 - Components of the PPPs likely to interact with this baseline;
 - Potential resulting environmental and social impacts;
 - Best alternative approaches for designing and implementing PPPs;
 - Individual and institutional capacity building needs for implementation of the ESMF; and
- Analysis of gaps in the country's environmental and social impact management system vis-à-vis World Bank system.

1.3.2 Methodology

Desk Review

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 Ministries, Departments, Agencies and Authorities, LGA, web-search, national and local data and information centers/sources including:

- Project documents for WB operations in Zanzibar, including their project appraisal document, ESMF and RPF, ESIA and RAP/ARAP;
- The prefeasibility studies prepared for LGA PPPs on the mainland with World Bank support, which include an initial environmental and social due diligence;

⁸ Design of a PPP extends beyond the physical design and encompasses other aspects such as the output specifications and performance measures for the services delivered and risk allocations.

- The September 2018 back-to-office report of the WB's social safeguards team review of the 13 PPPs in preparation under ZUSP;
- Background literature of the environmental and social conditions;
- Current environmental and social management frameworks in use; and
- Zanzibar's legislation and WB safeguard policies.

Disclosure and Stakeholder Engagement

The ESMF the RPF and other subsequent safeguards instruments such as the individual project ESIA reports, ESMPs, RAPs and ARAPs will be cleared by the Revolutionary Government of Zanzibar and the WB and disclosed locally at public and easily accessible sites (e.g. the site of the PPP and the offices and websites of the IA) with a translation of summaries into the local language in a culturally appropriate manner. They will also be disclosed at the websites of the relevant PPP unit and the WB. For any changes to these instruments the same clearance and disclosure protocols will be followed.

Stakeholders were consulted to obtain their views and concerns regarding the ESMF and RPF. Stakeholders were consulted on a sample of PPPs being considered for support under TPPP. At each IA available documents (i.e. environmental / economic / social data and assessments, land use plans and other planning materials) were gathered and interviews/discussions conducted with relevant project implementers and persons in-charge of PPPs. The field work covered environmental and social conditions in the IAs, institutional arrangements, the capacity for environmental and social management, and PPP-specific environmental and social matters. The consultation also addressed the need for the PPP, its mode of operation, willingness to pay, physical design, location-specific issues, temporary relocation, and challenges that are facing existing facilities. Details of stakeholders consulted is in Annex A. Stakeholder views fed into preparation of the draft ESMF and RPF. Stakeholder workshops were held to review the ESMF and RPF in Zanzibar on December 5-6 2018. Stakeholders were encouraged to share comments in open discussion with their peers, facilitated by MoFP staff responsible for safeguards, and to seek the views of safeguard managers within the relevant IA (e.g., their LGA). Stakeholder engagement will continue through the project cycle of the PPP supported by TPPP.

2 TANZANIA PPP PROJECT (TPPP)

2.1 Objectives and Outcomes

The objective of TPPP is to improve the capacity of participating government agencies to prepare and procure value-for-money PPPs. An emphasis on service delivery will deliver concrete results for communities that lift their living standards. This will impact on the attitudes and behavior of decision makers and other stakeholders. PPPs supported by TPPP will provide an effective basis for building capacity of staff, agencies, and systems through learning-by-doing, thereby ensuring Tanzania has the capacity to prepare and procure value-for-money PPPs.

TPPP will be implemented in accordance with World Bank guidance on the application of safeguard policies to technical assistance.⁹

2.2 TPPP Components

Component 1- Preparation and Procurement of PPPs

The primary function of TPPP is to complete the preparation and procurement of PPPs. Component 1 of TPPP will fund and manage consultants (i.e. advisers) engaged to:

- Prepare feasibility studies that will assess in detail the value for money, affordability, economic, financial, technical, legal, social and environmental viability of PPPs. They will include market soundings and consultation with stakeholders aimed at ensuring a pro-poor PPP design and implementation arrangements and securing buy-in for the PPP. The feasibility studies will identify the key requirements of PPP agreements, provide preliminary physical designs and costings, and identify what contracting authorities need to do if they wish to proceed to procurement. Pre-feasibility studies may also be prepared to assess likely project viability;
- Support community engagement on PPPs. TPPP will fund implementation of a Community Engagement Framework (CEF) for PPPs that both informs communities about PPPs and provides communities an active role in developing the PPP. Community engagement is aimed at awareness creation and consensus building for acceptance by all stakeholders of a PPP, its benefits, costs and risks;
- Undertake environmental and social studies. TPPP will fund the ESIAs, ESMPs, RAPs and RAP/ARAPs needed to ensure compliance with government and WB requirements, as guided by the ESMF and RPF. The results of environmental and social assessments will feed into the final feasibility studies and decisions on PPP design; and
- Support procurement of the private partner to PPPs. TPPP will fund the recruitment of high-quality transaction advisors including financial, legal, engineering, economic, procurement, commercial advisors that can work with contracting authorities. Advisors will assist the PPP units and CA guide projects through procurement to the achievement of financial close. Support will include the negotiation of PPP agreements and the inclusion of the private partner's obligations for community engagement and

⁹ World Bank. 2014. Interim Guidelines on the Application of Safeguard Policies to Technical Assistance (TA) Activities in Bank-Financed Projects and Trust Funds Administered by the Bank.

environmental and social management into PPP agreements. Procurement of the private partner will follow the relevant PPP Act and Regulations. Standardized procurement documents, that accord with the relevant PPP Act and Regulations and include provision for adequate environmental and social management and stakeholder engagement during the implementation of a PPP, will be used.

TPPP will only support a PPP up to the achievement of financial close. TPPP will not support the implementation phase of a PPP. TPPP does not finance any construction related activities.

TPPP does not finance the investment required by a PPP. Financing for a PPP will be secured by the private partner to the PPP from other sources.

The initial PPPs expected to be supported are markets, bus and daladala terminals and student hostels. The scope of PPPs supported is expanding but will remain limited to PPPs that are broadly similar in scale and complexity.¹⁰ A mixture of brownfield projects that re-develop and improve an existing public facility and greenfield projects that develop a new facility are expected.¹¹

Given tight budget constraints across local and other levels of government, TPPP is focused on PPPs that do not require government financial support for implementation of the PPP (e.g., for PPPs that do not require viability gap funding or other forms of government payment). That is, the emphasis is on user-pay PPPs rather than government-pay PPPs. Government-owned land is envisaged as the only government contribution in most cases. The emphasis is on projects with a strong demand from users for better quality public services that will underpin charges set at cost recovery level.

Under the typical PPPs supported, the private partner is expected to design, build, finance, construct, operate and maintain facilities. PPPs supported under TPPP will be limited to the larger urban and peri-urban areas of the mainland and Zanzibar, as they are more likely to support user-pays PPPs that are viable without government financial support. PPPs supported by TPPP will be located on government-owned land that the IA already has the title for, with the land providing a government contribution to the PPP.

TPPP will support solicited proposals only. Unsolicited proposals are not eligible for TPPP support.

Component 1 of TPPP will only support PPPs rated category B or C under WB Safeguard Policies. PPPs in locations that are ecologically sensitive such as unique or protected habitats and Category A PPPs are not eligible for support. PPPs requiring land acquisition will also be excluded from TPPP support. TPPP activities will only take place in larger urban and peri-urban areas and will not operate in areas where vulnerable groups are present.¹²

¹⁰ PPPs for slaughterhouses, abattoirs, airports and airstrips are not eligible for TPPP support.

¹¹ The terms brownfield and greenfield development do not refer to the status of the land or whether any involuntary resettlement is required.

¹² A group must possess all of the following characteristics in varying degrees to be recognised as a vulnerable group:
(a) self-identification as members of a distinct indigenous cultural group and recognition of this identity by others;

Other important considerations when selecting PPPs for support under TPPP are:

- A firm development rationale;
- Clear government ownership and control of the project site including certificates of title;
- Viable alternative sites, for brownfield projects, to temporarily relocate operators while existing facilities are redeveloped; and
- Fiscally affordable levels of compensation for resettlement, when it is required.

The following types of PPPs cannot be financed under WB regulations:

- PPPs that involve the significant conversion or degradation of critical natural habitats;
- Growing or purchase of tobacco or drugs;
- Gambling, casinos and equivalent enterprises; and
- Investment in bars or establishments serving alcohol.

Component 2- Strengthening the foundations of PPPs

TPPP will also strengthen the foundations for PPPs: the PPPs toolkit, capacity development, the legal and institutional framework, and advocacy and communication.

Activities supported under Component 2 may have indirect, diffuse or induced environmental and social impacts, often playing out over a longer term.

To manage environmental and social risks, activities supported under Component 2 will integrate environmental and social objectives. The planning of activities under Component 2 (including the terms of reference of studies, PPP advisors and other consultants) will ensure adequate assessment of environmental and social implications and that the advice provided through TPPP for addressing those implications is consistent with WB Safeguard Policies and TPPP's ESMF and RPF. This is to include provision for adequate engagement with stakeholders and public disclosure during the conduct of activities under Component 2. Initiatives developed under Component 2 should provide for adequate environmental and social management during their future implementation.

Component 3-Monitoring and evaluation

Monitoring and evaluation (M&E) will be integral to implementation. Monitoring will consist of tracking inputs, activities, outputs, outcomes and other program aspects on an ongoing basis during the entire implementation period. Evaluation will assess implementation performance, results, and impact at key stages of project implementation—at least at midterm and near completion—to review program development effects and sustainability. M&E will form an integral part of the management function.

-
- (b) collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories
 - (c) customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; and
 - (d) an indigenous language, often different from the official language of the country or region.

2.3 Candidate PPPs

PPPs are already under preparation. Building on catalytical support from the Private Participation in Infrastructure Facility and ZUSP, support was provided to identify and select projects and initiated prefeasibility studies. The process emphasized the achievement of government ownership and learning-by-doing. ZUSP is preparing feasibility studies for 13 PPPs listed in the table below, which are all located in urban and peri-urban areas. The PPPs to be supported on Zanzibar will be drawn from these 13 being prepared under ZUSP. Exactly which PPPs will be supported is however not yet known.

Feasibility studies will assess in detail the value for money, affordability, economic, financial, technical, legal, social and environmental viability of projects. They will include initial market soundings and consultation with stakeholders aimed at securing buy-in for each project. The feasibility studies will identify the key requirements of PPPs contractual agreements, provide detailed project plans, and identify what contracting authorities need to do if they wish to proceed to procurement.

Component 1 of TPPP will fund the completion of project preparation of several of the 13 PPPs that are established as viable. This will include the conduct of ESIA's and ARAP/RAPs and providing support for the procurement of the private partner to the PPP. The PPPs to be supported will be selected when the feasibility studies are completed under ZUSP in mid-2020. Candidate PPPs will be subject to the environmental and social screening process described in this ESMF before deciding which will be supported by TPPP.¹³

2.4 Beneficiaries

TPPP will provide readily observable and relatively quick improvements to inadequate infrastructure and public services. This will demonstrate how good project preparation and competitive procurement can provide value for money while generating employment and opportunities for local businesses (e.g., as members of PPP consortia).

An emphasis on service delivery will provide concrete results for communities that lift their living standards. Small businesses will benefit from the opportunities created and jobs will be created for the local labor force. Larger markets can host more than 1,000 traders, where households sell their agricultural and other produce and engage in small business activities. Such markets sell produce and basic consumer items to tens of thousands of households. The number of passengers and other users entering a daladala and bus terminal can exceed 10 million per annum.

¹³ Slaughterhouses and abattoirs are ineligible for TPPP support. For PPPs for the O&M of existing facilities, the facilities will be subject to an environmental and social due diligence and only those without significant outstanding issues will be eligible for support from TPPP.

1	Mwanakwerewe Market	Urban Municipal Council	Urban District, Urban West Region	Market	Brownfield	Users pay	3,276	0.3
2	Mombasa market	Urban Municipal Council	West “B” District, Urban West Region	Market	Brownfield	Users pay	8,370	n.a.
3	Mkokotoni market	District Council North A	North “A” District in the North Region	Market	Brownfield	Users pay	2,970	n.a.
4	Kijangwani daladala terminal	Urban Municipal Council	Kijangwani, Urban District	Dala-dala terminal	Brownfield	Users pay	20,185	1.5
5	Chiwini Municipal Market and Dala-dala Terminal	West A Municipal Council	West “A” Municipal Council in the Urban West Region	Market and Dala-dala Terminal	Greenfield	Users pay	27,000	1.9
6	SUZA student hostels	State University of Zanzibar	Tunguu Campus	Student hostels	Greenfield	Users pay	682,000	3.5
7	Zanzibar Convention Centre	Ministry of Trade and Industry	Urban – West Region, West District	Convention centre	Greenfield	Users pay	600,000	n.a.
8	Ng’ambo Tuitakayo residential housing	Zanzibar Housing Corporation	Kisima majongoo , Town Municipal Council	Residential housing	Brownfield	Users pay	140,000	n.a.
9	Machomane Market	Chakechake Town Council	Machomane, Chakechake District, Pemba	Market & shopping mall	Brownfield	Users pay	2,435.17	0.6
10	Changane daladala terminal (Pemba)	Chakechake Town Council	Changane, Chakechake District, Pemba	Dala-dala terminal	Greenfield	Users pay	7,356	n.a.
11	Solar water pumps ^b	ZURA	Unguja	Energy	Brownfield	Users pay	n.a.	5.0
12	Modern car park	Urban Municipal Council	Urban District, Urban West Region	Car park facility	Greenfield	Users pay	1,462	n.a.
13	Solid waste management O&M	North A District Council	North A District, Unguja	Solid waste management	Greenfield	Users pay	n.a.	n.a.

n.a. not available

^a The list is subject to change if PPPs are found to be non-viable.

^b These are for small facilities that may involve water storage tanks but will not involve any dams and/or a weir (water impoundment).

An emphasis on basic infrastructure and public services concentrates benefits among low-income communities. The improvements in how government's work, through introduction of the private sector under performance-based arrangements that fully-fund operations and maintenance, will ensure higher quality basic services to low income communities that is sustainable and can be scaled-up to serve others.

PPPs will provide an effective basis for building capacity of government staff through learning-by-doing, which will be supplemented by classroom-based training under a capacity development plan. Other stakeholders will also benefit from PPP awareness raising and communication. These initiatives will assist Zanzibar to build their capacity to prepare and implement PPPs.

2.5 Institutional Arrangements

TPPP will assist the IAs of PPPs and the responsible PPP unit, MoFP's PPP Department. The IAs are responsible for the preparation, procurement and implementation of the PPP and will enter a PPP agreement on behalf of the government. The IAs will form a PMT chaired by a Project Manager. The responsibilities of the IAs and their operational requirements are set out in the PPP Act 2015 (as amended) and the PPP Regulations 2017.

The role and responsibility of MoFP's PPP Department are established under the PPP Act 2015 and PPP Regulations 2017. The department is responsible for the identification of PPP opportunities, the preparation of guidance material on PPPs, the provision of advice to IAs preparing PPPs, the review of PPPs throughout the project cycle for their compliance with the PPP Act and Regulations, monitoring and evaluation of the PPP program and capacity building and awareness raising for PPPs. MoFP's PPP Department also carries responsibility for managing the PPP Development Fund to be established within the ministry.

Final approval of a PPP rests with the PPP Technical Committee. Procurement of the private partner to a PPP is regulated by the PPP Act 2015 and PPP Regulations 2017. PPP agreements must be approved by the Attorney-General's Chamber. The management of the fiscal impact of PPPs is the responsibility of the MoFP.

MoFP's PPP Department is responsible for the recruitment and supervision of consultants engaged under TPPP. Consultants will be engaged to prepare studies for IAs and the department and to help ensure they can respond in an informed and timely manner as the PPPs are submitted for review and approval.

2.6 Roles in Environmental and Social Management

TPPP will only support the procurement of the private partner to the PPP when an ESIA and RAP/ARAP have been prepared for the PPP, and the ZEMA has issued an ESIA Certificate. This is to ensure a high standard of PPP preparation and the bankability of the PPP.

The ESIA and RAP/ARAP must meet the requirements of Zanzibar's Environmental Management Act (2015) and ESIA Guidelines and Procedures (2009) and WB safeguard policies and guidelines. In most cases, TPPP is expected to fund preparation of the ESIA and securing of the ESIA Certificate. TPPP may also support PPPs that have separately undertaken an ESIA and secured an EIA Certificate, and/or separately prepared a RAP/ARAP.

For PPPs supported by TPPP, the IA will be responsible for ensuring the required environmental and social assessments are conducted, including preparation of the ESIA, ESMP, and RAP/ARAP. The environmental and social assessments are to be undertaken prior to the procurement of a private partner for the PPP, normally jointly with conduct of the PPP's feasibility study. This is to ensure that environmental and social impacts are fully factored into the assessment of viability and design of a PPP. The IA will then be responsible for ensuring implementation of the ESMP, RAP and RAP/ARAP. The respective PPP units will support and guide the IA in undertaking their responsibilities.

The WB will review and approve the terms of reference (ToRs) prepared under TPPP for ESIA's inclusive of ESMPs, and RAP/ARAPs. WB review and approval would be in addition to the review and approval of Zanzibar's regulatory authorities such as ZEMA. The WB will review and approve the PPP's ESIA inclusive of an ESMP, plus its RAP/ARAP. The WB will verify alignment with the WB's safeguards policies and guidelines and requirements of TPPP's ESMF and RPF.

ESIA's inclusive of ESMPs and RAP/ARAPs will also be submitted to Zanzibar's regulatory authorities as required to ensure compliance with Zanzibar's laws.

The ESIA certificate issued by ZEMA upon approval of the PPP Contract would subsequently be transferred to the private partner. The transfer of responsibilities in this way improves value for money by allocating risk to the partner best able to manage it.

The private partner's bid would need to demonstrate readiness to comply with the ESIA certificate, other social and environment requirements of the PPP, and relevant legislation. The private partner and its contractors will normally be responsible for, or share responsibility for, implementing any ESMP and the mitigation measures it contains. The private partner may also participate in the implementation, as required, of a PPP's RAP/ARAP. The environmental and social obligations of the private partner will be set out in the PPP agreement and be subject to the compliance requirements of that agreement.

The main stages of the PPP cycle, the safeguards instrument relevant to that stage, and the broad allocation of responsibilities is as at the table below.

Table 2.3 Hierarchy of Safeguard Instruments

PPPs Stage	Safeguards Instruments	Responsibility for delivery
Prior to project preparation	Environmental and Social Management Framework and Resettlement Policy Framework	PPP Department
Pre-feasibility	Environmental and social due diligence	IA with consultant support
Feasibility	Environmental & Social Impact Assessment with ESMP and RAP/ARAP	IA with consultant support
Procurement	Incorporation of environmental and social management responsibilities into bid documents including the draft PPP agreement	IA with consultant support

Construction	RAP/ARAP implemented by IA in cooperation with the private partner. ESMP implemented by private partner under IA supervision	IA and Private Partner
Implementation	ESMP and as necessary RAP/ARAP implemented by private partner under IA supervision	Private Partner and IA

RAP/ARAP = Abbreviated Resettlement Action Plan, IA = contracting authority, ESMP = Environmental and Social Management Plan

2.7 Community Engagement Framework

Community engagement is pivotal to TPPP support. An effective engagement can create awareness of a PPP and build consensus and acceptance by all stakeholders of a PPP, its benefits, costs and risks.

The CEF is a framework that guides IAs and other practitioners as they undertake community engagement for PPPs. It explains how communities affected by a PPP can engage in the project. The aim is to improve the development outcomes from PPPs and simultaneously creating a smoother operating environment for all parties, including the government and the private sector. It covers the full project cycle, all aspects of a PPP that can affect a community, and all members of the community affected by a PPP. The guide covers the role in engagement of both the government's IA and the private partner procured to deliver a PPP.

The CEF sets out a process that each PPP can use to plan and implement their own community engagement. Using the CEF as a guide helps the PPP to adhere to a consistent, standardized process for community engagement. While tailored for mainland LGAs, the CEF is adaptable to use by all IAs preparing a PPP, and each PPP supported by TPPP will follow the process described in the CEF. The guide was released for public consultation in July 2019.¹⁴

The CEF includes detailed descriptions of each step and examples to help the IA more easily to use the document. Each of the six steps is applied at each phase of the project cycle, ensuring community engagement throughout the life of a PPP from identification through to implementation. The six steps are:

Step 1: Define the purpose of engagement and level of participation. The IA needs to be clear about the purpose of engagement and the key issues to address, as this will set the context for community interactions and managing expectations of those participating in the process. To define the purpose, the IA must first agree on what can be accomplished with the engagement.

Step 2: Decide which community citizens and groups to engage. The IA needs to create a list of who to engage, with all the community citizens, groups and organizations that could have an interest in the PPP or have some influence over the success of the PPP. The list is a living-document and will developed by the IA over time.

¹⁴ The guide for mainland LGA PPPs can be found at: <http://www.tamisemi.go.tz/announcement/guideline-to-community-engagement-and-municipal-ppp-projects>. It applies a global guide for community engagement developed by the WB and IFC. The discussion draft of the global guide can be found at <https://www.commdev.org/publication-library/> and <https://consultations.worldbank.org/consultation/global-guide-community-engagement-ppps>.

Step 3: Community engagement ranking assessment. To complete a community engagement mapping, the IA will need to consider both the interest and influence different community groups, citizens and organizations may have in the project.

Step 4: Select methods for engaging. Different methods can be used by the IA to engage communities. They should develop a project specific community engagement plan that describes proposed engagement strategies, tools, responsibilities and schedule for engagement. The plan should evolve over the different phases of a PPP.

Step 5: Complaints management process. An issue tracking table should be created to document ideas, concerns or questions about the PPP. The IA needs a systematic way of managing and responding to complaints and grievances.

Step 6: Reporting and evaluating. Accurately recording community feedback, sharing it transparently within government and with the community is a critical step in building trust and support among the community.

Using the CEF as a guide, each IA will develop a Community Engagement Plan for the PPP. This will address why they are engaging, who they will engage with and how they will engage. A schedule, a budget and a list of resources that will be used will be provided. The community engagement is a resource that can help each IA to strengthen the preparation of ESIAs, ESMPs, RAPs and ARAPs by providing a vehicle for documenting community views and facilitating community input into the preparation of the PPP and its safeguard instruments.

The Community Engagement Plan will be updated through the project cycle as needed. Elements of the plan will ultimately be implemented by the private partner, with provisions included in the PPP agreement.¹⁵

2.8 The Use of Consultants

Most TPPP funds will be spent on PPP advisors and other consultants, mainly under ‘Component 1 PPP Preparation and Procurement’.

PPP advisors and other consultants providing PPP-specific advice under Component 1 will only assist on PPPs eligible for TPPP support. They will for example not advise on PPPs rated Category A under WB Safeguard Policies. PPP advisors and other consultants will exclude themselves from the provision of advice on PPPs ineligible for support under TPPP. The eligibility of a PPP for TPPP support will be assessed through the environmental and social screening process described in this ESMF.

The PPP units will be assisted by a PPP Advisory Team funded by TPPP. This team will assist PPP units, CAs, the MoFP and other government agencies involved in PPPs. PPPs are new to most of these agencies and PPP units are small and still learning how to manage PPPs. Gaps in skills and experience will be partly filled by advisors from the PPP Advisory Team, with advisor input scaled-back as government capacity builds. The PPP Advisory Team will include at least one environmental specialist and one social specialist, who will mainly assist on Component 1 but may assist on other components of TPPP.

¹⁵ The CEF supplements, and does not replace, the consultation required by national legislation and WB safeguards policies and guidelines

The advice provided by PPP advisors and other consultants engaged under TPPP will accord with World Bank's safeguard policies and TPPP's ESMF and RPF at all times.

3 ENVIRONMENTAL AND SOCIAL CONDITIONS

3.1 Introduction

The PPPs to be supported by TPPP cannot yet be determined as it depends on the outcome of feasibility studies now underway under ZUSP. For this ESMF, a general description of the socioeconomic and environmental conditions in Zanzibar is provided here to illustrate a sample of the conditions that will be faced across TPPP activities. The emphasis is on conditions in Unguja and conditions in the Urban District, which are the most prospective areas for PPPs in Zanzibar.¹⁶

Zanzibar finds itself amid emerging environmental and social challenges, mostly caused by the increase of urban population with less urban infrastructure development. These environmental challenges compelled the Government to institute a new policy of 2015, towards an environmental governance framework that focuses upon the island's environmental and social protections. The Revolutionary Government of Zanzibar (RGoZ) recognizes the need for an urgent action to address these challenges in a multi-pronged approach for the benefit of present and future generations.

The most pressing environmental and social pressures affecting the country relate to:

- Environmental pollution and associated adverse health impacts arising from inadequate management of air and noise emissions, solid waste and wastewater;
- Increasingly depleted freshwater resources, deforestation and destruction of catchments and wetlands;
- Increased demands on land resources with land degradation and pollution;
- Loss of biodiversity and destruction of habitat both from terrestrial and marine environment;
- The adverse effects of climate change;
- More congested and less livable urban areas; and
- A shortage of sustainable livelihood opportunities.

3.2 Physical features

Size and Geographical Location

Zanzibar is a small archipelago comprised of Unguja (commonly referred to as Zanzibar Island), Pemba, and several smaller outlying islands. It is an autonomous part of the United Republic of Tanzania (URT), and therefore has its own government – the Revolutionary Government of Zanzibar (RGoZ) – which oversees internal affairs. However, some agencies (such as the Ministry of Defense and the Bank of Tanzania) serve the union as-a-whole.

Zanzibar is in the Indian Ocean, lying at 39° East and 6° South. It is separated from the mainland by a 40 km channel. The islands of Unguja and Pemba have areas of 1660 km² and 981 km², respectively; together this is equivalent to 250,000 ha of land.

¹⁶ Data and analysis are sourced from ESMFs and ESAs prepared under WB operations.

Administratively, Zanzibar is divided into five sub-regions (three in Unguja and two in Pemba), which themselves are comprised of ten districts, as shown in the table below. The administrative capital and seat of government for Zanzibar is Zanzibar Town (Stone Town). In Pemba, the administrative center is Chace Chake town. However, each district has its own administrative center from which government service is coordinated.

Table 3.1 Administrative districts in Zanzibar

Island	Region	District
Unguja	North Unguja	North A
		North B
	South Unguja	South
		Central
	Urban/West	Urban
		West A
Pemba	North Pemba	West B
		Wete
	South Pemba	Micheweni
		Chake
		Mkoani

Geology and Morphology

Unguja's geological profile is composed of Miocene sediments as considered country rock, overlain by Quaternary sediments derived from Miocene rock. The Miocene sediments are divided as three Miocene (M) layers which are classified as M1, M2 and M3, respectively, from bottom to top. Quaternary sediments also are divided as Q1, Q2 and Q3 due to record periods of higher sea level, marine erosion with wave-cut cliffs and platforms, reworked marine and fluvial sediments.

The M3 strata consist of poorly consolidated but well-bedded calcareous sandstones, detrital limestones, clayey sands and sandy clays. The limestones are soft, chalky, and marl rocks with irregularly calcified hard patches. They are generally pale colored, with buff and light brown colors predominant at the surface, passing down into blues and blue-grey, below the weathering to bright red and reddish-brown colors.

The M2 strata consist of sands and sandstones, forming distinct characteristic horizons throughout the Miocene in the corridor or channel system. The sands are coarse clean and siliceous, distinctly angular and sometimes sugary, white, opaline, glassy and pearly grey. They are friable usually lacking any cementing material. Though they form distinct stratigraphic horizons, they are rather more likely to occur as lenses or deltaic sandbanks and levees. Their average thickness is from 10 to 15 meters, and within the outcrop expression of the M3, they produce distinct landforms of locally open elongated treeless, grassy and water-logged depressions.

The sandstones have a similar lithology of sands, but calcite and siliceous cements occur irregularly. Some siliceous bands are extremely hard and difficult or impossible to drill with small weights of drilling tools. Most deep M2 intersections occur on eastern side of the island

from Cheju through to Upenja, Kibokwa, Chaani and Matemwe. Surface outcrop and shallow intersections are confined to the western side of Zanzibar.

There are three limestones in M1: 1) crystalline limestone which is mainly found in the south east area, 2) sandy limestones and reef limestones which are mainly formed as fringing reefs of the east coast, 3) detrital limestones, which being colluvial in origin and crushed in part by wave action, are a re-cemented rock of calcic clays, broken limestone with crushed shell, corals and shark's teeth. Typically, all the Zanzibar limestones are somewhat detrital, sandy and of marl characteristics. They are regarded as being of a shallow marine origin. The interstratified lenses and continuous limestone horizon are found as subordinate strata in the M3 sediment material, on the north western parts of the island with the main Miocene sequence and in the Makunduchi regions.

Soils

The soils of Zanzibar fall under three main groups depending on the geological feature of parent rocks; 1) sandy soils, 2) calcareous red soils, 3) clay soils. The sand soil group derived from non-calcareous sediments, the sandy group varies from very deep sandy to rather heavy reddish through brown, yellowish grey, to grey shallower types. The calcareous red soils are the free draining soils derived from limestone. The clay soils derived from clays and mudstone. There are five main soil categories called Mchanga, Kinongo, Uwanda, Maweni and Kinamo in Unguja.

Maweni soil is located in the coral rag limestone that forms the extensive eastern and southern portion of the island. This soil covers more than 40% of arable land and supports traditional shifting cultivation. Mchanga soil is found on the western part of the island covering 20% of land area. This soil is suitable for both tree and annual crops. Uwanda soil forms the interface between the plantation area and coral rag zones covering 17% of the area. This soil is generally open grass area for unimproved grazing. Kinongo soil is the most fertile in the island and provides high potential for food crop production. Kinamo soil covers only 5% of the land area and is found in the north and small patches in central and south zones. This soil is suitable for rice cultivation.

Vegetation

Generally, vegetation in Zanzibar falls under regional formations and can be classified into four main physiognomic types encompassing:

- Secondary Grassland
- Secondary Bushland
- Cultivated lands with settlements
- Restoration vegetation

Secondary Grassland covers various opportunistic grass species which are frequently cleared or slashed. The common grass species seen throughout include *Heteropogon contortus*, *Cynodon dactylon*, *Dactyloctenium geminatum*, *Digitalia ciliaris*, *Eleusine corocana* and *Hyparrhenia filipendula*. Secondary Bushland covers an assemblage of woody shrubs and dwarf trees exposed to constant clearing and pruning. Dominant small trees throughout the island include *Blighia unjugata*, *Albizia lebbbeck*, *Annona senegalensis*, *Ziziphus mucronata*,

Balanites aegyptics, *Flueggea virosa*, *Millingtonia hortensis*, *Trema orientalis*, *Sorindeia madagascariensis*, *Suregada zanzibariensis*, *Dryopteris natalensis*, *Syzygium cumini*, *Antidesma venosum*, and *Mallotus oppositifolia*. Dominant herb climbers include *Acalypha claoxyloides* and *Perquetina nigrescens*

Cultivated Lands with Settlements covers various agricultural crops such as Plantains, Cassava, Yams, Coconut, Mangoes, Oranges, Papaya, Almonds, Bread fruit, and other vegetables, etc. Restoration vegetation includes Acacia and Casuarina Trees.

Land Use Land Cover

An analysis conducted by SMOLE project 2004, indicates that, current land uses is rapid ongoing expansion of the city, sprawling and intruding into agricultural lands; rapid decline of unoccupied open space with large tracts either being developed or brought under cultivation. Indeed, if the trend continues it is reasonable to expect that very large tracts will become peri-urban over the coming generation. The vast bulk of the landmass in the urban district remains undeveloped although combined built areas now extend slightly over 100 km² or some 36% of the landmass. Residential uses, including local services, infrastructure and public space, account for fully 81% of the built areas with public services and limited public space (combined 9%), economic (4.7%) and infrastructural uses (>5%), accounting for the balance.

In Zanzibar Town today there are over 840 ha. dedicated to public services, and 54 ha. dedicated to public open space. Combined these are equivalent to 9% of the built area and <3% of the SA. Of these, approximately 200 ha. in total are located in the Inner City.

Climate

The islands of Zanzibar are characterized by an equatorial Monsoon system (Hot and Wet seasons). The long Masika Rains from March to May come before the onset of the South-West Monsoons also known as the Kusi (which blow from April to November) while the short Vuli Rains (September to November) come before the onset of Northeast Monsoon winds known as the Kaskazi which blow from November to April. The rainfall pattern is bimodal in nature. During Masika contributes to 50% of the annual rainfall rain while Vuli contributes between 25% and 30%. On average, Pemba receives more rainfall (1900mm) than Unguja (1600mm). The distribution of rainfall is such that there is more rainfall in the western halves of each island than in the east.

The hot and humid season is between the months of December to March while the cool and dry season is between the months of June to September. Temperatures range between 25 degrees Celsius to 35 degrees Celsius. But, with higher humidity levels, temperatures can be felt to range above 40 degrees Celsius in some occasions. The relative humidity is high, with a monthly average ranging between 75% to 85%.

3.3 Environmental Conditions

Biodiversity

The islands include diverse flora and fauna, with notable endangered and threatened plant and animal species. This includes 276 bird species, endangered and threatened mammal and amphibian species, and coral reefs in surrounding waters. Protective measures for ecosystems

and biodiversity include a network of Marine Protected Areas and forest reserves. Many of these assets are under threat, for example due to deforestation to fuel charcoal consumption and poor water quality due to pollution discharges into waterways.

Climate Change

Recent studies have confirmed that the islands' climate is changing negatively.¹⁷ Currently Zanzibar has been experiencing droughts and municipal floods which have had economic costs in terms of gross domestic product. In this case, Zanzibar is not yet adequately adapted to the current climate change impact and the Government needs to address adaptation deficit to lead to immediate benefit as well as providing resilience to future climate change.

As a least developed country, or part of the contracting party to the United Nations Framework Convention on Climate Change (UNFCCC) Zanzibar produces negligible carbon emissions that do not necessarily or directly impact the global effects of the carbon emissions. According to the study on Economic Impacts of Climate Change in Zanzibar (2012), the total carbon dioxide emissions for Zanzibar in 2010 was 763 Gg carbon dioxide equivalent or 0.6 toned carbon dioxide Emissions per Capita Equivalent. Wastes take up a small share of total carbon dioxide emissions (4%). Energy sector is the leading source of carbon dioxide emissions (39%) followed by Agriculture (28%), and LULUCF (29%). The projected carbon dioxide emissions by 2030 in Zanzibar are expected to climb to 2200 Gg carbon dioxide equivalent with LULUCF, Agriculture and Transport sectors leading in these emissions.

Air Quality

Overall, there are no specific or officially sanctioned quantitative measurements to assess the level of CO, NO_x, SO_x or even SPM. The ambient air quality nonetheless appears to be deteriorating. Major sources of air pollution include burning of woody biomass, production of charcoal, slash-and-burn practices, quarrying, dust emissions from unpaved roads, and the traffic pollution which is increasing in great proportion. Most of the imported vehicles are used cars which would have almost certainly failed general emission testing criteria from their point of origin.

The Zanzibar Bureau of Standards has adopted the Tanzanian Ambient Air Quality and Stack Emissions Standards, but their implementation is yet to be enforced. Under good maintenance, traffic exhaust emissions will be intermittent and atmospheric dispersal of exhaust emissions will maintain the sound ambient air quality. The increased traffic flow expected as the Zanzibar economy expands, and income rises is expected to have significant adverse impacts if inadequately managed. Improved roads and public transport systems are important to addressing the air quality situation.

Noise Emissions

While no official ambient or occupational noise pollution data for Zanzibar is available, ambient noise levels are expected to frequently exceed human threshold during the day time. The most affected areas are the municipal zone and arterial roads where noise levels may exceed 90 to 120 dB. The Zanzibar Bureau of Standards has adopted ambient and occupational

¹⁷ See for example the detailed review of Paul Watkiss, Steve Pye, Gerard Hendriksen, Andrew Maclean and Muriel Bonjean. Narriman Jiddawi, Yohanna Shaghude Mohammed A Sheikh and Zakaria Khamis, (2012) Economic Impacts of Climate Change in Zanzibar. UK Department for International Development

noise standards but implementation and enforcement are yet to be activated. High audible flows need a regulated standard procedure in order to avoid environmental and public health challenges.

Major sources of noise pollution include motor vehicles and trucks. Community consultations have indicated a rising scale of public nuisance caused by increased garbage trucks traffic. Increasing traffic has given rise to traffic jams in congested areas where the repeated hooting of horns by impatient drivers pierce the ears of all road users. Moreover, noise from airplanes using the Zanzibar International Airport has been affecting those living in the vicinity of the Kisauni Airport. Public Address System and the use of loud speakers contributes heavily in its own way towards noise pollution while other miscellaneous sources include automobile repair shops, construction-works, and stone crushing.

Surface Fresh Water Quantity and Quality

According to the Zanzibar Water Authority (ZAWA) Strategic Plan 2013-2018, natural resources for drinking water in Zanzibar are restricted to groundwater. This is in abundance, whereas surface water resources are modest. Past studies of available groundwater resources have pointed to a possible upper abstraction limit of 339 million cubic meters annually (Mm^3/a), as shown in the table below. The present actual abstraction is estimated to be 71 Mm^3/a , while ZAWA abstraction is estimated to be 33 Mm^3/a .

Table 3.2 Annual water availability

Description	Unguja	Pemba	Total
Average annual Rainfall	2,445	1,525	3,970
Estimated groundwater recharge	565	121	686
Acceptable aquifer yield	293	46	339
Estimated actual abstraction	60	11	71
Estimated ZAWA abstraction	23	10	33
Irrigation & private wells	n/a	n/a	n/a

According to a Feasibility Study on Zanzibar Irrigation Master Plan (2010), almost all surface water streams in Unguja have several flooding outputs with peak discharge in a short time in rainy season but have low or no discharge in the dry season. These streams are divided into those that reach the sea and those that do not. The four systems flow to the sea in the northwest sector of island, and there are smaller streams along the western coast, such as at Bububu and Mtoni, but they do not represent a significant economic resource, apart from channeling heavy flow of rain water downstream and into the sea during the heavy rainy seasons. A number of other streams disappear into the coral rag limestone or sink holes known locally as Pokezi or Kibonde. Three examples of such streams are the Kinyasini, Pangenji, and Mwera.

ZAWA does not keep regular track of the baseline data on the percentage (%) of Water Samples Passing Bacteriological Quality Tests or the percentage (%) of Samples of Supplied Water Passing Physical Chemical Quality (Turbidity) Test. There are series of external peer reviewed studies from various locations of the island that provide an indicative picture of the state of fresh water quality.

For example, Abdul A.J. Mohammed et al (2013)¹⁸ assessed the level of total hardness and heavy metals (hexavalent chromium and copper) in springs and underground water sources in some areas of Zanzibar. Levels of copper, hexavalent chromium and total hardness in the studied samples ranged between 1.38 - 11.0 mg/L, 0.05 - 0.4 mg/L and 32.02 - 1009 (as mg/L CaCO₃), respectively. About 77% of all samples had total hardness values higher than the World Health Organization (WHO) guidelines, while the proportion of samples with dangerous concentrations of copper and hexavalent chromium were 70% and 96.6%, respectively. The levels of most of the studied parameters in the drinking water samples exceeded the permissible limits of the WHO drinking water quality guidelines. The results show the urgent need to take immediate mitigation measures and continue the water quality monitoring in Zanzibar, as well as establishing drinking water treatment plants.

Another recent peer-reviewed physical-chemical and microbial analysis study by Abdul A.J. Mohammed et al (2014) reveals the effect of rainfall on pH and electrical conductivity (EC) of Zanzibar groundwater sources¹⁹. In June 2012, thirty water samples were collected from spring and underground water sources for faecal coliforms (FC), total coliforms (TC), alkalinity, phosphate (PO₄-P) and ammoniacal nitrogen (NH₄-N) analysis. The levels of PO₄-P, NH₄-N, and alkalinity in water samples were in the range of 0.08-5.15 mg/L, 0.03-6.71 mg/L and 47-430 (as mg L CaCO₃) respectively.

During dry period, the lowest and the highest EC levels were 181.02 µS/cm and 6180. µS cm respectively, while 167.36 µS/cm and 7985.03 µS/cm were the respective lowest and highest EC levels measured during wet period. The variation of pH levels during dry and rainy period were in the range of 6.31- 8.30, and 7.13 - 8.44, respectively. During dry and wet period, 40% and 17% of the samples respectively had EC level beyond the guideline recommended by World Health Organization (WHO). FC and TC contaminated 43% and 67% of the water sources respectively. The presence of FC, TC and elevated levels of EC in some of water samples show how groundwater quality has been deteriorating with the physical growth of the municipality. Ground water quality at Kibele, the laboratory tests carried by ZAWA in July 2015 shows excessive levels of Calcium, Manganese, Phosphates, and contamination by Fecal and Total Coliforms²⁰.

In recent years there has been a major increase in private well drilling as demand exceeded supply from the ZAWA networks, and as expansion of agricultural irrigation abstraction continued. So far there is no data to give an estimate for these abstractions. ZAWA states that this will be subject of potentially future research. Although there is no immediate risk of depleting the groundwater aquifer, certain areas, particularly in the Eastern areas of Unguja around tourist resorts, have experiencing intrusion of sea water into the aquifer, reportedly due to excessive abstraction of groundwater. This has affected supply in adjacent villages – both in quantity and quality.

Other areas experiencing constraints and possible saline intrusion include the Urban West part of Unguja. Due to the increasing variability of rainfall made worse by climate change as well

¹⁸ Abdul A. J. Mohamed, Ibrahim Abdul Rahman, Sadri A. Said , Lee H. Lim , Islam S. Mchenga (2013). Levels of Hexavalent Chromium, Copper, and Total Hardness in Springs and Underground Water in Zanzibar Island. Asian Journal of Applied Sciences (ISSN: 2321 – 0893) Volume 01– Issue 05, December 2013.

¹⁹ Abdul A. J. Mohamed, Ibrahim Abdul Rahman , Lee H. Lim (2014). Effect of Rainfall Variability on pH and Electrical Conductivity of Springs and Groundwater in Zanzibar Urban West Region. Asian Journal of Applied Sciences (ISSN: 2321 – 0893) Volume 02 – Issue 01, February 2014.

²⁰ ZAWA Laboratory Report taken during the Environmental Scoping of the Kibele Landfill Site in July 2015.

as normal drought cycles, raises the level of risk of saline intrusion as the aquifer limit is approached. On the other hand, pollution of water resources from human settlements with ineffective pollution control measures and from human encroachment in the rainwater catchment areas is imminent. If bacteriological contamination becomes established this will raise ZAWA's cost of treatment of groundwater.

The annual rainfall in the South Region, where Kibele is located, is 392 M m³/year while the annual recharge is 130 M m³/year. The annual acceptable yield is 92 M m³/year while the amount of ground water flow to the sea is 38 M m³/year.²¹

Electricity

Zanzibar is supplied with electricity from the National Grid System via submarine cables. The capacity of these cables of 100MWH is near full capacity. Back-up and own power systems, such as diesel systems, are also widespread.

3.4 Socio-Economic Conditions

Population and Demographics

According to the 2012 Tanzania Census, the total population of Zanzibar is 1,303,569. Of this, 896,721 people live in Unguja and 406,848 people live in Pemba. The average household size for the archipelago is 5.1 people. Zanzibar has one of the fastest-growing populations in the world - the current population growth rate is around 2.8%.

The population of Zanzibar is predominantly rural and young. An estimated 68% of youth live in rural areas, and children less than 15 years of age account for 43% of the population.

The region with the largest population is Mjini Magharibi (Urban West); its population of 593,678

comprises 46% of the total population of Zanzibar, and 66% of the Unguja population. Mjini Magharibi also has the highest population growth rate: the average annual intercensal population growth rate for the archipelago is 2.8%, but this figure leaps to 4.2% for Mjini Magharibi.

Mjini Magharibi also tops the charts in terms of population density. Population density for Zanzibar on average is 1392 people per square kilometer, but in Mjini Magharibi the figure is nearly double, at 2581 people per square kilometer, making it the second most-densely populated region in Tanzania overall, after Dar es Salaam.

Given the tight land constraints on the islands, increasing population density has major implications on future land demand for conflicting uses, such as for agriculture to feed the growing population and secure export crops, forestry to meet the demand for wood, housing and settlement, industries, recreation, and conservation.

Acute poverty

²¹ Revolutionary Government of Zanzibar (2014) Ministry of Lands, Housing, Water and Energy. Zanzibar Water Authority Report: Zanzibar Water Supply and Sanitation Project - Water Resources Management Component: Water Resources Assessment

It is estimated that 22% of the population of Zanzibar lives “in poverty”. This population is distributed unevenly throughout the islands with up to 60% living in poverty in some rural areas. Economic growth in Zanzibar averaged 6% in 2004, and GDP per capita was estimated at \$300 (compared to \$260 on mainland Tanzania).

Education

With a median age of 17 years, Zanzibar has a young population. This signals strong potential for demographic dividends for economic growth and poverty reduction, provided young people can become productively engaged in the labor market. Basic education—primary education and lower secondary education—is essential for imparting the foundational skills required for this productive engagement, but currently the Zanzibar education system is not serving a large proportion of its students in an optimal way.

Students do not master key foundational skills, and these lags persist to higher grades, with no evidence of corrective measures. According to SAQMEQ III (2007), almost 66 percent of Standard 6 students had not mastered nationally defined basic learning competencies. Students’ progress more or less automatically through lower grades (Standard 1 to 6) with no system for identifying and correcting learning gaps, and then are weeded out in large numbers in exit examinations (end of primary (Standard 6), and or middle of lower secondary (Form 2)). Not surprisingly, students perform very badly in these curriculum-driven tests, and those who fail generally drop out of school: student survival rates drop by nearly 50 percent between Forms 2 and 4.

This means low economic and life prospects for young people, despite spending substantial time in the education system. The majority of students who fail leave the system without any formal credentials, and thus have limited chances for entering formal sector jobs. This is especially true for high-growth sectors like tourism, an industry which fills workforce needs by importing labor from mainland Tanzania, and from other countries, despite high levels of un- and under-employment in Zanzibar.

There is also a large stock of young people who have recently left the system and entered the labor force with very rudimentary skills, who will remain in the labor force for a long time.

Gender Issues

Roughly, there is gender parity in access to pre-primary and primary schools – the gender parity index for gross enrolment ratios across districts ranges from 0.97 to 1.1. Imbalances exist in completion rates and access to ordinary secondary schools, where enrolment of girls outnumbers boys in all districts. For children aged 14 to 19, girls are as likely as boys to be out of school (approximately 30%).

As a whole, women in Zanzibar are often poorer than men, own less land and livestock, and have fewer years of schooling. Gender imbalances are rooted and sustained by traditional and cultural values.

In 2010, the RGoZ established Ministry of Empowerment, Social Welfare, Youth, Women and Children, the successor to a previous ministry focused on women and children, which was later to include labor and youth issues. The mandate of the ministry is: *“To improve people’s lives through economic empowerment, the provision of quality social services and good governance,*

and to work towards a well-protected and empowered society that observes human rights and safeguards the interests and concerns of women, children, youth, and the elderly and other vulnerable individuals.” A gender committee has been created to ensure that sectoral investments prioritize the needs of both men and women.

Land ownership is a complex issue in Zanzibar: Zanzibar’s constitution enshrines equal rights to property ownership, but Zanzibar does not have a land policy that explicitly guarantees women’s land rights. Customs also play a role; however, the RGoZ and a number of NGOs have collaborated on awareness campaigns to inform women on their rights and means of advocacy regarding land.

Cultural resources

Unguja and Pemba Islands both have numerous physical cultural resources, among them the World Heritage listed site of Stone Town.

The Stone Town of Zanzibar contains many of the fine buildings that reflect the particular culture of Zanzibar and the homogenous elements of the cultures of Africa, the Arab region, India, and Europe over more than a millennium. The buildings of the Stone Town, executed principally in coralline ragstone and mangrove timber, set in a thick lime mortar and then plastered and lime-washed, reflect a complex fusion of Swahili, Indian, Arab and European influences in building traditions and town planning. It occupies the most western edge of the Town of Zanzibar with a total area of 96 hectares and buffer zone area of 84.79 hectares which make about 5.4 % of the total area of Zanzibar Town.

The major buildings in Stone Town date from the 18th and 19th centuries and include monuments such as the Old Fort, built on the site of an earlier Portuguese church; the house of wonder, a large ceremonial palace built by Sultan Barghash; the Old Dispensary; St. Joseph’s Roman Catholic Cathedral; Christ Church Anglican Cathedral commemorating the work of David Livingston in abolishing the slave trade and built on the site of the last slave market; the residence of the slave trader Tippu Tip; the Malindi Bamnara Mosque; the Jamat Khan built for the Ismaili sect; the Royal Cemetery; the Hamamni and other Persian baths.

The Stone Town was declared as World Heritage Sites by UNESCO in 2000. Considerable efforts have been taken by both government (Stone Town Conservation Authority) and non-governmental Organization to work with communities within Stone Town in preserving its heritage and culture. The rehabilitation of Forodhani Park in line with the requirement of Stone Conservation regulations and reconstruction of Mzingani Sea Wall as an iconic sea face of the Stone Town is some of the recent example of these efforts.

West of Pemba's capital Chake-Chake, on a long stretched peninsula called Ras Mkumbuu, one can find some of the oldest and best preserved series of early ruins on the islands (*Ndagoni ruins*, probably 14th century). East of Chake-Chake one can find the Mkama Ndume ruins at Pujini village (south of the airport) within easy reach by road from Chake-Chake. This is the only known early fortification on the whole Swahili Coast; it is dated to the fifteenth century.

Urban facilities and services

Potable Water

The supply and distribution of portable water in Zanzibar is done by ZAWA. Any development project that will use water during establishment and or operation should be approved by ZAWA. For instance part seven, section 84 (1) of Zanzibar Water Regulation 2007 state that: “No water supply project or part of it shall be undertaken until (a) Surveying of the proposed project area, (2) Drawings,(3) Bill of Quantity, and (4)Project write-up are done and approved by the Authority”:- While Section 84 (2) state that: “No person or institution shall initiate water project and or supply equipment and or materials for water supply project without the technical recommendation and corporation of the Authority in advance.”

However, very often the water supply lines get damaged leading to leakage of water which does not only reduce community access to this important resource but also (and more importantly) may be contaminated by waste water drain from houses, overflow storm water and blocked drainages system thereby increases the risk of gastrointestinal infections that cause diarrhea, vomiting, and abdominal pain. Expanding the coverage is also a big challenge given the increasing population and business establishments in stone town and peri-urban areas that require water and other services. Degradation of surface and ground water resources is ongoing due to encroachment into water retention areas, deforestation of the catchment zones, sewage contamination and climate changes.

Access roads

The network of access roads of in the Urban District was (as of December 2013) made up of 68km of urban roads of which 55km are paved and 12 km are unpaved. Among the paved roads, 29km were in very good conditions, 14 km were good, 7km fair, 3 km were poor and 2km were in very poor condition. Zanzibar Town’s main and most important road is Creek Rd. This four-lane road with bi-directional sidewalks is surrounded by commercial activity and major institutions such as: Darajani Market, Central Dala-Dala Terminus, city council and schools, etc. The narrow streets of the Stone town make most part of the town inaccessible by cars. The ZMC cleaning staff use push carts to take solid waste to the areas that can be taken by trucks for disposal to the dumping sites.

Though the current road network in Zanzibar Town may seem enough to support current traffic volumes, but with the increasing population and motorization growth rates, soon it will not be enough. The in-adequate repair and cleaning of drainages leads to spilling of waste-water around access roads and streets. To improve and sustain clean environment there is a need for more drainages and regular removal of sand and other solid wastes to allow easy flow of storm water.

Urban transportation

The concentration of social services in the Stone Town area results in increased traffic movement in this part of the Urban District. All essential services such as hospital, high court, birth and death registration offices, banks, Zanzibar Port, warehouses, main fish landing site and actions, Government ministries and departments, tourism hotels and restaurants are available in Stone Town. There are also more shops that attract more customers than any other area in Zanzibar. The Stone Town Conservation Authority is controlling (though without success) the movement of vehicles inside Stone Town by limiting the weight of car that can be allowed in this area. The increasing number of vehicles entering Stone Town is a big threat to not only the life of buildings but also to the environment and serenity of the Stone Town. The largest volume of bus pre-load area is located along the main roads at the entrances to Zanzibar

Town. Malawi and Karume roads are the main public transport corridors. Usually of the commuter buses start in five main routes (Kinanzini, Magomeni Amani and Kilimani) and thereafter splitting into various roots in the West District. Minibuses (15-20 passenger seats), Haiss (popularly known as *Chai Maharage*) of 20 seat capacity and Ford Convoys with 17 seats are the most common commuter buses in Zanzibar.

Waste management

The Zanzibar Municipal Council (ZMC) is responsible for collection and disposal of waste from the Urban District. The council are having been estimated to generates more than 220 tons of solid waste per day; however, the current collection capacity is only 100 tons per day which is less than half the total waste generated in the district per day. The remaining waste is not properly collected and therefore accumulated and haphazardly dumped in various places near people's houses.

Stagnant water ponds covering are very common and affects many households. The sewer network is concentrated in and adjacent to the old Stone Town areas, covering a total area of 96 Ha. The sewer network is also available to a limited extent in some parts of some of the surroundings of Stone Town, including Michenzani Flats, the Police Barrack, and beyond Creek Road in areas as Mchangani and Mlandege. Domestic wastewater often combines with storm water and gets disposed into the sea since Zanzibar has no wastewater treatment plant. The rest of Zanzibar Town has no sewerage system and therefore liquid waste discharged haphazardly into the immediate environment. The direct exposure to raw sewage, particularly during the rainy season make the health of residents in Stone Town (including of visitors) endangered. The area often suffers from sewer odors, negatively impacting upon living conditions and the tourism experience. Landfills in Zanzibar are of open dumping types in which waste is disposed without meaningful consideration of health standards.

There have been some community initiatives in waste collection and management. For instance, the non-government organization (NGO) known as Labayka operates waste collection points within their communities to avoid crude dumping within the settlements. There are also some private individuals who collect waste from some hotels outside the Zanzibar Municipal Council. These private companies usually use open trucks to collect and dispose waste somewhere in the forest or farms. Similarly, Vikokotoni Environment Society in Zanzibar Town close to the main market was cleaning up the streets every morning. The Zanzibar Scrapers Environment Association (ZASEA) is a registered NGO in Zanzibar Town established in 2008 to handle recyclable waste fractions. The organization is recognized by the Department of Environment as a registered association with around 100 members. However, the sustainability of these activities is questionable, as the organizations are relying on external aid for financial resources while the ZMC itself is ill equipped to promote and support community initiatives.

Employment

According to the Integrated Labor Force Survey (ILFS, 2006), the employment to population ratio in Zanzibar at 78.4% (84.8% for males and 73.3% for female). In urban areas the employment ratio was below national average which is only 68% i.e. (78.1% for males and 58.9% for female). The Zanzibar Strategy for Growth and Reduction of Poverty 2010-2015 (MKUZA II) targeted a reduction in the youth unemployment rate to 11.4% by 2015. This was to be achieved through creation of enabling environment including imparting entrepreneurship

skills and provision of Labor Market Information to youth. Petty trade, hand craft, construction sector and fishing are the largest employers in urban areas. Most of these activities are carried out informally and uncoordinated. The uncoordinated activities not add little in national wealth because they are not adequately captured in national accounts but also a threat to environment.

With respect to formal employment, the public sector dominates the formal employment in Zanzibar Town with 20% in public administration, 19% in education, over 5% in health and 2% in electricity²². While, Communications (14%) and Accommodation and Food including tourism (13%) are the largest employer among the private sectors in this area. Wages in Zanzibar are low averaging only \$850 p.a. in 2011.

Economic Activities and Livelihoods

Urban Agriculture

Unguja's Urban District is by far the most important urban centre in Zanzibar. The district receives an average annual precipitation of between 1,500 to 2000mm mostly from two main rain seasons. i.e. Masika (long rain season) which rain from March to May and Vuli (short rain season) from October to December). Urban agriculture is a practiced in open places and fairly low density areas in town owned by private individuals or public institutions such as military camps, such as found in Migombani, Bomani, Maruhubi and Mpandae.

In most cases farmers rely on tap water from ZAWA supply lines or produce rain-fed conditions. The main challenges with this agricultural land are that some of these areas have become important storm water drains which may flood the area, pollute and contaminate the farm with waste chemicals and harmful microbes and eventually make the harvests unsafe for human consumption. The existing weak enforcement of laws to control air, water and soil pollution, and sewage discharged is a concern of urban agriculture in Zanzibar. In addition, the land for agricultural production has been declining because of increasing urbanization.

Livestock keeping and business activities

There is no official statistics on the amount and types of animal kept in urban district. However, the biggest beef and chicken markets in Zanzibar are found at Darajani in this district. On average about 19,606 cattle and 3,329 sheep & goats (see the table below) are being slaughtered annually at Kisakasaka in urban west region most of this meat is sent to Central Meat Market at Darajani for wholesaling and retailing. There is no specialized abattoir for chicken in Zanzibar. Chicken are mostly slaughtered at Darajani and Mwanakwerekwe markets.

The challenge here is a lack of appropriate infrastructures and regular maintenance services of the market place. The existing markets generally lack essential infrastructures required for proper maintenance for hygiene and food safety. For instance, Darajani market drain its waste to the Central sewage system of the Stone Town, but very often the market lack potable water, inadequate cleaning leading to the blockage of the drainage and unhygienic conditions in the market.

Table 3.3 Animals slaughtered

²² POFEDP (2013) Technical Assistance for the Preparation of a Diagrammatic Indicative Structure Plan for Zanzibar Municipality and Its Immediate Periphery and Urban Development Policy for Zanzibar Town Review Report October 2013

Year	Animal slaughtered		
	Cattle	Goats	Chickens
2011	17,341	3,996	300,228
2012	19,569	4,845	330,658
2013	20,501	3,001	251,185
2014	18,747	2,142	5,009,311

Sources: Ministry of Livestock and Fisheries (no date)

Fishing and Fisheries activities

Like all other districts in Zanzibar, fishery is an important economic activity in the Urban District. The district houses the largest fish landing sites and auctions at Malindi, Darajani, and Maruhubi and Kizingo. Malindi, Darajani are also the largest retail markets for fish in Zanzibar. There are also small but formal fish markets (such as Kwa Haji Tumbo and Mikunguni). Some informal markets exist in Magomeni, Jangombe, Saateni and Makadara.

These activities and functions are performed by different actors including; Fishers (2,129) who do the actual fish catching, 84-foot fishers (they fish without using vessels), 324 fish mongers and 138 gear repairs. There is high risk of fish contamination with chemical and biological agents discharged from households and industries at various stages of value chain starting from the surrounding sea, landing sites, at auction and retailing sites.

In markets that are close to the sea such as Malindi and Maruhubi the drain is directed to the sea. Sometime, wastes in these markets stay long and produce odors and air pollution.

Table 3.4 Key Actors in the Fisheries Value Chain in the Urban District

District	Fishers	Foot fishers	Fish mongers	Gear repair	Fish fryers
Urban	2129	84	324	138	20
Zanzibar Total	27187	7384	2141	2061	127

Sources: Frame Survey 2010

Fishing not only provides a good source of protein but is also a good source of employment and income. The previous Frame Survey (2010) indicated that about 3097 individuals were directly employed in the fisheries subsector in urban district (see the table below). Of this total, 392 were vessels owners, 2,129 fishers, 84 foot fishers, 324 fisher mongers, 238 gear repairs and 20 fish fryers who fry fish within landing sites. The sustainability of fishing industry requires among other things maintenance of a healthy environment of both in shore and offshore water.

Table 3.5 Fisheries as a source of Employment in Urban District

Types of employment	Vessels owners	Fishers	Foot fishers	Fish mongers	Gear repair	Fish fryers	Total
Number	392	2129	84	324	138	20	3087

Source: Extracted from Frame survey (2010)

Petty Trade

Despite the contribution of petty trade to the employment and income in Zanzibar, petty traders themselves have become a nuisance to motorists and pedestrians. They are obstructing the walking pavements along the famous streets in Stone Town such as Mchngani, Darajani, Kiponda and Gizenga Street. Large part of these streets have been occupied by the traders causing unnecessary jam to vehicles and pedestrians. They claim that they have no alternative livelihood or place to do their businesses.

Several attempts have been made to remove petty traders popularly known as 'Machingas' or Jua kali, from Zanzibar, Darajani area. The RGoZ established Machinga Complex at Mpigaduri (popularly known as Pinda Mgongo) but most of them decided to continue business as usual. All of these attempts have hit a snag due to boldness of the petty traders. This is evidenced by the statement made by State Minister Dr. Mwinyihaji Haji Makame said in the House of representative "Our Municipal council staff are beaten and threatened by stubborn hawkers. We need to educate the traders so that they can shift to new place put aside for them" (13 October 2012 Daily News).

These traders drop huge litter of solid waste every day. They sometime throw in solid waste into the drainage system and cause blockage. They don't even provide adequate space and time for ZMC staff to clean up the area properly.

Business and trade

With the exception of agriculture, Zanzibar Town is a centre of all other activities: commercial, administration, social and cultural. The presence of harbour, central fish market, and fish landing, referral hospital, tourist of tourist hotels and restaurants make the Urban District as the business centre for Zanzibar. The area contains the main harbour in Zanzibar for importing and exporting passengers and Cargo. There are also a number warehouses around port and Saateni areas. Some street of stone is full of shops, tours operators and airline; office banks and the likes.

Tourism

Tourism in Urban Zanzibar is mostly done in Stone Town area. Despite the importance of Stone Town as an important tourism product in Zanzibar, the hygienic and sanitary requirements to support this sector has not been encouraging. The spread of litter, solid waste and spread of liquid waste in the streets due to blockage of drainages system are normal occurrences in this area. The effort to develop tourism industry in Zanzibar should give more emphasis on town cleanliness; since mismanagement of solid waste can lead to pests, odor and disease which may dramatically deter tourism.

Despite the importance of Stone Town for tourism in Zanzibar, the hygienic and sanitary requirements to support this sector has not been encouraging. The spread of litters of solid waste and spread of liquid waste in the streets due to blockage of drainages system are the normal occurrences in this area. The effort to develop tourism industry in Zanzibar should give more emphasis on town cleanliness; since mismanagement of solid waste can lead to pests, odor and disease which may dramatically deter tourism.

Zanzibar has many exciting recreation areas to cater for the need of locals and visitors. This includes; Palace Museums, Forodhani park, white sand beach at Forodhani, Ngome Kongwe, Anglican Church Mkunazini, Botanical Gardens, open places for sports and recreation at Maisara, Mnazimmoja, Kariakoo Recreation Park, Mao Zedong and Amani football stadiums.

The Challenges is however on to keep these areas green and clean and install and maintaining drainage infrastructures for better management of liquid waste and storm water in these areas.

4 ENVIRONMENTAL AND SOCIAL IMPACTS AND MITIGATION

4.1 Introduction

In this ESMF, environment is broadly defined to include the physical environment (air, water and land) and the natural and social environment (ecosystems, humans, socio-economics and health and safety). This section of the ESMF describes how PPPs can respond to the needs for environmental and social management. This section provides generalized guidance on the management of potential environmental and social impacts inclusive of mitigation measures.

Potential direct environmental and social impacts are a result of interactions between the activities of a PPP with the relevant baseline aspects (valued receptors). A IA's PMT, with the support of consultants as needed, will undertake specific impacts identification for each PPP to be supported by TPPP guided by the following:

- Impacts identification linking causes of impacts and identification (cause-effect interactions); and
- All valued receptors—physical, chemical, biological, built or human on PPPs site, immediate vicinity or off-site locations—need to be considered as required during the preparation and procurement of a PPP.

The potential impacts of projects such as the candidate PPPs for TPPP are outlined in the next section. The source of most negative impacts will be the construction activities undertaken by a PPP, while others will arise during the operation phase. The list of impacts are generic but do capture the set of impacts possible for small-scale infrastructures projects located in urban settings. Suggestions are also provided on possible mitigation measures (which are based on best practices measures recommended for the given impact), some management actions are also provided. The specific mitigation measures for each PPP will be included in an ESMP, which will be developed through the conduct of the PPPs ESIA. The section also introduces the ESMP checklist provided at Annex C, which an IA's PT should use in preparing and evaluating an ESMP.²³

4.2 Potential Impacts

4.2.1 Impacts on remnants of natural areas and vegetation

Screening may determine that a PPP is likely to affect natural areas, particularly in peri-urban areas. Such natural areas within or in near vicinity of urban areas may 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: (i) clearance of a natural vegetation and (ii) disturbance of contained fauna and direct pollution.

PPPs in locations that are ecologically sensitive such as unique or protected habitats will not be supported by TPPP. The candidate PPPs for TPPP support are however unlikely to involve significant conversion or degradation of natural habitats as they mostly involve improvements of existing structures in urban areas on land already owned by IAs. It is important that any likely impacts to natural habitats (e.g., caused by runoff) are addressed in the ESMP. Any PPPs

²³ The ESMP checklist will be a living document continuously improved over project implementation.

involving the significant conversion or degradation of natural habitats would not be eligible under TPPP.

Mitigation measures: ESMPs for PPPs are to determine mitigation measures for possible impacts to natural habitats during construction and use with regard to runoff (especially when there is a risk of 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).

Proposed management actions: Ensure the private partner to the PPP has the requisite skills, experience and financial resources. Ensure the private partner's bid outlines how it will implement PPP activities in accordance with the ESMP and the PPP agreement.

4.2.2 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 PPP (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.

TPPP infrastructure development is designed in many respects to improve water management of a site and reduction of associated risks i.e. flooding due to poor drainage systems.

Mitigation measures: The ESMP checklist includes 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.

Proposed management actions: Ensure the private partner to the PPP has the requisite skills, experience and financial resources. Ensure the private partner's bid outlines how it will implement PPP activities in accordance with the ESMP and the PPP agreement.

4.2.3 Impacts on land, soil and construction mineral resources

Depending on type of PPPs 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. 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. Potential impacts on people and assets is covered by the RPF.

Mitigation measures: The ESMP checklist examines the planning by authorities and private partner to a PPP. Instructions to the private partner shall include soil erosion control and land rehabilitation measures and supervision and monitoring during PPPs implementation. The private partner 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: Ensure the private partner to the PPP has the requisite skills, experience and financial resources. This should encompass experience of land management and soil erosion control and the development of management plans for existing quarry sites and new sources of construction materials. Ensure the private partner's bid outlines how it will implement PPP activities in accordance with the ESMP and the PPP agreement.

4.2.4 Materials efficiency and wastes

PPP Project may (i) improve waste collection and disposal facilities so they can handle increased wastes collection efforts and load destined to municipal disposal sites and (ii) potentially 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 PPPs directly into natural habitats may impair qualities of receiving medium: surface water bodies (biochemical oxygen demand, chemical oxygen demand) 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: The ESMP checklist examines the development and implementation of PPPs – specific waste management procedure that (i) identify what type of solid or liquid wastes and categories of wastes the PPPs 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.

Proposed management actions: Ensure the private partner to the PPP has the requisite skills, experience and financial resources. Ensure the private partner's bid outlines how it will implement PPP activities in accordance with the ESMP and the PPP agreement. A waste management plan is to be included in the ESMP where potential impacts warrant extra attention. A waste management plan should, as relevant, address dangerous goods and hazardous materials, solid waste, surplus materials and water and wastewater.

4.2.5 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 plus small quantities of noxious gases such as nitrogen oxides, sulphur dioxides, hydrocarbons and particulate matters. These greenhouse gases 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, doors, and noise etc. cause modifications to air quality.

Mitigation measures: The ESMP checklist examines avoidance strategies for managing air and noise pollution and equipment operations and maintenance measures that minimize emissions of substances into the atmosphere.

Proposed management actions: Ensure the private partner to the PPP has the requisite skills and experience and sufficient resources and implementation plans.

4.2.6 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: The ESMP checklist examines avoidance and minimizing strategies. Proposed management actions include standards on shapes, height, color etc. of buildings and structures erected at sites.

Proposed management actions: Ensure the private partner to the PPP has the requisite skills, experience and financial resources. Ensure the private partner's bid outlines how it will implement PPP activities in accordance with the ESMP and the PPP agreement.

4.2.7 Impacts on built environment

Infrastructure development, upgrade or rehabilitation aim at improving access and services during operation. However, a PPP 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. The construction or operation of a new or redeveloped facility could increase or change traffic flows and cause congestion, if only temporarily, unless well managed.

Infrastructure 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: The ESMF is to look at prior information /notices to and consent by other operators and users of affected infrastructure.

Proposed management actions: Ensure the private partner to the PPP has the requisite skills, experience and financial resources. Ensure the private partner's bid outlines how it will implement PPP activities in accordance with the ESMP and the PPP agreement. 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. A traffic management plan is to be included in the ESMP where potential impacts warrant extra attention. A traffic management plan should, as relevant, address responsibilities, working with police, signs devices and personal protective equipment, standard layout approaches, traffic controls at work sites, diversions, haul routes and on-site record keeping.

4.2.8 Impacts on land use

The involuntary taking of assets (other than land), whether as a permanent or temporary acquisition, owned and/or used by both individuals and by communities may result in several direct social and economic impacts of varying severity. Any resettlement is to be undertaken in accordance with the RPF for TPPP.

Mitigation measures: Any resettlement is to be undertaken in accordance with the RPF for TPPP. A RAP or ARAP is to be in place for each PPP.

Proposed management actions: Ensure the private partner to the PPP has the requisite skills, experience and financial resources. Ensure the private partner's bid outlines how it will implement PPP activities in accordance with the RAP/ARAP and the PPP agreement.

4.2.9 Impacts on community livelihoods

Positive economic impacts of the project include improved quality and coverage of public services. Other direct and indirect positive effects include safe and hygienic services, local employment opportunities, increased land values, business opportunities and improvements that accrue from improved access.

Potential indirect negative impacts include temporary disruption to income earning opportunities, induced settlements (that habitually sprout near new or improved infrastructure) and increased illegal activities (e.g., street-side traders). 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.

Mitigation actions: RAP/ARAPs may be needed to cover both formal and informal traders and other operators, and other dependent such as labor, etc. Baseline socio-economic data will be collected in order to ensure restoration of livelihoods and to monitor implementation of mitigation measures. The potential for indirect and/or cumulative social impacts should be assessed as part of the ESIA.

For existing facilities that are to be rehabilitated, details of the process of temporary relocation, any compensation for the temporary loss of income due to relocation, registering traders and

their interest in relocating to the new facility following the completion of the upgrade and a fair and transparent procedures for assigning spaces to traders and other operators will be needed and will be covered by the PPP's RAP/ARAP. This process will be established in consultation with the traders. The RAP/ARAP will need to explicitly describe how vulnerable women (pregnant women, women with young children) were consulted and how any needs related to security, sanitation and assignment of stalls were addressed.

Proposed management actions: Ensure the private partner to the PPP has the requisite skills, experience and financial resources. Ensure the private partner's bid outlines how it will implement PPP activities in accordance with the ESMP and the PPP agreement. Minimize indirect or cumulative impacts by ensuring compliance with urban development and land-use plans within areas affected by the PPP. A RAP/ARAP should be prepared where resettlement will take place.

4.2.10 Impacts on vulnerable individuals²⁴

Differently abled people, old and infirm, women and children often face barriers to ensuring effective access to and use of facilities. Women and children are especially exposed to the risks arising from construction and to being disadvantaged during the reassignment of trading spaces during rehabilitation of facilities. Women constitute a large proportion of traders at markets and other facilities to be supported under TPPP. While TPPP has been rated lower risk by the World Bank's GBV risk assessment tool, measures to address risks associated with safety, security and harassment including gender-based violence (GBV) are needed.

Mitigation: Project design will need to take into consideration accessibility for all potential users, including differently abled people, the old and the infirm. Pay special attention to ensuring women and children have equal access to benefits and safety and security. Limit the risk of GBV and human trafficking. Put in place a code of conduct (CoC) which addresses GBV. Should GBV risks become apparent during preparation, procurement and implementation of the PPP, mitigations measures should be escalated, such as by hiring specialist GBV advisors or service providers.

Analysis of gender inequalities should be based on: the identification and management of the potential for increased vulnerability of women or men caused by the PPP; their ability to take advantage of project benefits and opportunities, including employment and; the need to include them in the information disclosure, consultation and grievance redress process in a meaningful way. PPP preparation should identify opportunities to incorporate inclusivity measures in the PPP design if risks and impacts relevant to gender equality have been identified as part of potential project impacts.

In relation to GBV, the PPP should:

²⁴ Vulnerable individuals may disproportionately suffer from resettlement. They include:

- Disabled people or people suffering from serious illnesses;
- Orphans, widows and the elderly who lack the means to support themselves;
- Female headed households with dependents and low income;
- Women and children at risk of being dispossessed of their productive assets—including land—as a result of a compensation process that benefits the sole male household head; and
- Those that due to socio-economic or cultural reasons are unable to benefit equally from the Project (this could include excluded individuals who are PAPs).

- Identify and assess the risks of GBV, including through the conduct of social and capacity assessments, and measures for their mitigation;
- Establish GBV risk assessment as a continuous process to be carried out as PPP preparation, procurement and implementation proceeds;
- Ensure that the private partner includes appropriate mitigation actions in their bid and implementation plans;
- Implement the appropriate GBV risk mitigation and monitoring measures on an ongoing basis during project implementation; and
- Responding to any identified GBV incidents, provide for M&E, report incidents and to monitor follow up (see the table below).

Table 4.1 ESMP actions to address GBV risks

Action	Details
Clearly define GBV requirements and expectations in the procurement documents	<ul style="list-style-type: none"> ▪ Require bids to set out clearly how adequate GBV costs will be paid for. For example, by including: (i) line items in bill of quantities for clearly defined GBV activities (such as preparation of relevant plans) or (ii) specified provisional sums for activities that cannot be defined in advance (such as for implementation of relevant plan/s, engaging GBV service providers, if necessary) ▪ Define the requirements for a code of conduct (CoC) which addresses GBV. For example, by including requirements for addressing GBV risks in the World Bank's International Competitive Bidding Standard Procurement Documents
Require the private partner to sign and uphold a CoC	<ul style="list-style-type: none"> ▪ Ensure requirements in CoCs are clearly understood by those signing ▪ Have CoCs signed by all those with a physical presence at the project site ▪ Train project-related staff on the behavior obligations under the CoCs ▪ Disseminate CoCs (including visual illustrations) and discuss with employees and surrounding communities
Training and awareness raising	<ul style="list-style-type: none"> ▪ Have project workers and local community undergo training on sexual exploitation and abuse and sexual harassment ▪ As part of the project's stakeholder consultations, those affected by the project should be properly informed of GBV risks and project activities to get their feedback on project design and safeguard issues. Consultations need to engage with a variety of stakeholders (political, cultural or religious leaders, health teams, local councils, social workers, women's organizations and groups working with children) and should occur at the start and continuously throughout the implementation of the project.
GRM	<ul style="list-style-type: none"> ▪ Ensure that GRM receives and processes complaints to guarantee that protocols are being followed in a timely manner; that complaints are referred to an established mechanism to review and address any GBV complaints.

M&E	<ul style="list-style-type: none"> ▪ Undertake regular M&E of progress on GBV activities, including reassessment of risks
Implement appropriate project-level activities to reduce GBV risks prior to civil works commencing	<ul style="list-style-type: none"> ▪ Have separate, safe and easily accessible facilities for women and men working on the site. Locker rooms and/or latrines should be located in separate areas, well-lit and include the ability to be locked from the inside ▪ Visibly display signs around the project site (if applicable) that signal to workers and the community that the project site is an area where GBV is prohibited ▪ As appropriate, public spaces around the project grounds should be well-lit

Proposed management actions: Ensure the private partner to the PPP has the requisite skills, experience and financial resources. Ensure the private partner’s bid outlines how it will implement PPP activities in accordance with the ESMP and the PPP agreement. A social management plan is to be included in the ESMP where potential impacts warrant extra attention. A social management plan should, as relevant, address GBV actions, CoC, public consultation, employment creation opportunities, minimizing social disturbance, GRM, HIV/AIDs and GBV training and awareness.

4.2.11 Labor-related impacts

Construction of civil works may require a project’s labor force (total or partial) to be brought in from outside the project area. In many cases, this influx is compounded by an influx of other people (“followers”) who follow the incoming workforce with the aim of selling them goods and services, or in pursuit of job or business opportunities. The rapid migration to and settlement of workers and followers in the project area is called labor influx, and under certain conditions, it can affect project areas negatively in terms of public infrastructure, utilities, housing, sustainable resource management and social dynamics. Projects with a large influx of workers may increase the demand for sex work—even increase the risk for trafficking of women for the purposes of sex work—or the risk of forced early marriage in a community where marriage to an employed man is seen as the best livelihood strategy for an adolescent girl.

Mitigation: Project preparation, procurement and implementation will need to take into consideration the scale of labor influx and the absorptive capacity of the local community to accommodate the influx. Prepare a labor influx management plan where such risks are significant.

Proposed management actions: Ensure the private partner to the PPP has the requisite skills, experience and financial resources. Ensure the private partner’s bid outlines how it will implement PPP activities in accordance with the ESMP and the PPP agreement. A labor influx management plan is to be included in the ESMP where potential impacts warrant extra attention. The plan should, as relevant, worker’s camp management plan and requirements (e.g., location, facilities).

Box 4.1 Features of a labour influx management plan

- | |
|---|
| <ul style="list-style-type: none"> ▪ Number of incoming workers, their living arrangements should be discussed and agreed with communities in advance of their arrival |
|---|

- Separate living area for workers- e.g. camp based
- Health and Safety conditions for workers
- Workers code of conduct including training on conduct expectation
- Social and cultural awareness training for workers especially on gender norms
- Raising awareness of workers, about different types of harassment and gender-based violence and informing them about the consequences should they commit it. Functional sub project GRM and ensuring that they are accessible for female community members
- Maximizing local employment.

4.2.12 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 should take into consideration health risks that are prevalent in the project area (e.g., typhoid, malaria, tuberculosis, cholera). The design of PPPs will be completed in accordance with good international practice and the WB EHS Guidelines. Maintenance of completed works should be provided for.

Proposed management actions: Ensure the private partner to the PPP has the requisite skills and experience and sufficient resources and implementation plans.

4.2.13 Occupational health and safety risks

Occupational health and safety risks may arise from materials (e.g., chemical, physical, and biological substances and agents), environmental or working conditions (e.g., working at heights or in confined spaces, excessive hours of work, night work, mental or physical factors, oxygen deficient environments, excessive temperatures, improper ventilation, poor lighting, faulty electrical systems or trenches), or work processes (e.g., tools, machinery, and equipment). Key risks likely to be faced under TPPP are summarized in the table below.

Table 4.2 Summary of potential risks to workers

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

Mitigation actions: The design and implementation process should include the identification of potential hazards and responses including design, testing, choice, substitution, installation,

arrangement, organization, use, and maintenance of workplaces, working environment, and work processes to eliminate sources of risk or minimize project workers' exposure.

Proposed management actions: Ensure the private partner to the PPP has the requisite skills and experience and sufficient resources and implementation plans. An occupational health and safety plan is to be included in the ESMP where potential impacts warrant extra attention. The plan should, as relevant, address: the identification and qualifications of a safety officer; community, construction and worker safety; the competency of vehicle operators; personal protective equipment; training and competency; and incident reporting and investigation.

4.2.14 Risks to PPP 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 PPPs.

Table 4.3 Summary of potential risks to project due to natural factors

Natural process / aspect	Potential risk
Extremes of climatic elements: winds, rains, storms, hurricanes, lightening	<ul style="list-style-type: none"> - Damage of project structures - Disruption of project operations and schedules - Injuries and fatalities to project personnel working on the site or visitors.
Extreme aquatic conditions: waves, tides, currents	
Topography of the area: steep terrain cause erosion, stone dislodging, landslides; low terrain cause flooding.	
Surface drainage (streams, rivers) close to or cutting across PPP	<ul style="list-style-type: none"> Damage of project structures Discharges into project site Water stagnation / flooding of project site
Storm water drainage – causing flooding and overflows.	
Height of hydro-geological conditions: high water table causing floods	
Soil movements (soil erosion)	Damage to project structures
Geology: seismic activities (earthquakes etc.)	
Nearby wildlife areas	Injuries and fatalities to project personnel working on the site or visitors.

Mitigation actions: The ESMP should include risk assessments to determine compatibility and co-existence of the project with nearby natural features, safe distances from neighbouring features, and buffer zones.

Proposed management actions: Ensure the private partner to the PPP has the requisite skills and experience and sufficient resources and implementation plans.

4.2.15 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 PPPs.

Table 4.4 Summary of potential risks to project due to socio-economic factors

Socio-economic aspect / activity	Potential Risk to Project
Land disturbances activities: cultivation (slash and burn, bulldozing, livestock grazing,	<ul style="list-style-type: none"> Destruction of infrastructure or PPP area Conflicts related to trespassing / illegal practices on the project site

Occupation, economic and social status of nearby residences	Theft of materials and portable items with ready-made market or for home use.
Security condition in neighborhood to the project site	Vandalism of structures / equipment Theft of materials and portable items with ready-made market or for home use.
Bush fires practices	Injuries and fatalities to project personnel working on the site or visitors. Destruction of PPP area (wooded groves, planted trees / grass)
Boundary fence and buffer zone separating project from neighboring features	Conflicts related to blocked access to local resources present on the site

Mitigation actions: The ESMP to include risk assessment to determine compatibility and co-existence of the project with nearby natural features, safe distances from neighboring features, and buffer zones.

Proposed management actions: Ensure the private partner to the PPP has the requisite skills and experience and sufficient resources and implementation plans.

4.2.16 Impacts on physical cultural resources

Screening may determine that a PPP could potentially affect physical cultural resources. Sites with potential cultural resources may have further screening requirements from various institutions including UNESCO and the Ministry of Natural Resources and Tourism. Any PPPs involving significant deterioration and leading to significant adverse impacts in physical cultural resources would be ineligible for TPPP support.

Mitigation actions: Local and national authorities, NGOs and project-affected people should be consulted during the ESIA process to determine the potential presence of physical cultural resources. The ESIA should include a section on potential impacts and risks to physical cultural resources and may require a cultural heritage impact assessment. The ESMP should include a Chance Find procedure to avoid and mitigate any potential impacts. This should, as a minimum, require construction to stop if artefacts or other archeological items are found and then call for an external expert (e.g., an archeologist or anthropologist) to make an assessment before continuing work.

Proposed management actions: Ensure the private partner to the PPP has the requisite skills and experience to identify and manage potential impacts at this level. Determine if capacity building is needed early on in the ESIA process.

4.3 Preparation of ESMPs

An ESMP will be prepared for PPPs supported by TPPP that involve physical works and where mitigation measures are required. The process for preparing an ESMP is described in Section 6 below. The basic elements of an ESMP are:

- A description of the possible adverse environmental and social impacts that the ESMP is intended to deal with;
- A description of planned mitigation measures to address adverse environmental and social impacts, 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.

The ESMP is consolidated in an ESMP matrix, as illustrated in the table below. A sample format for the ESMP is provided in Annex F.

Table 4.5 Extract of a Sample ESMP Matrix

Program activity / aspect	Anticipated Effect	Mitigation Measure(s)	Monitoring Parameter	Responsibility	Schedule	Cost and Source of Funds
Oily discharges in runoffs / wash down waters from vehicle parking area	Possible contamination of natural water bodies (lake, sea, river, wetland etc.)	Construct drainage channels to divert cleaning / runoff water	Inspect channel construction	LGA Engineering Department; EO	Construction period	Included in project bill of quantities
			Check condition of drainage channel	EO; LGA Environment Committee	Ongoing	Nil
		Oily water collected in oil traps	Inspect oil traps construction	EO;	Construction period	Included in project bill of quantities
			Check efficiency of oil traps	EO; 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	EO; LGA Engineering Department	Every 6 months until effectiveness of mitigation measures is proven	\$500 a year -- EO

4.4 Public and Community Participation and Disclosure

Public consultations are a requirement in the ESIA regulations during the scoping and review stages. This requirement also supports the existing participatory planning process that has been applied in initiating preparation of the initial PPPs, which has led into preparation of this ESMF. Different stakeholders are already directly involved in the early phases of the PPPs cycle, which starts from identification then progresses to design, procurement and implementation and monitoring. A summary of the persons consulted in the initial preparation of PPPs and the ESMF is in Annex A.

A key early step in PPPs preparation is to conduct consultations with the local communities and all other interested/affected parties during the screening of PPPs. Consultation is to extend to relevant civil society organizations, such as may represent the traders, customers or neighbors of a facility (e.g., for a daladala/bus terminal PPP, consultation should include local daladala and bus associations).

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. Consultation topics should also cover the presence or not of physical cultural resources on the future project site and its vicinity.

To facilitate meaningful consultations, the ESIA Consultants supported by IA PMT (e.g., the EO and CDO of LGAs) will provide all relevant materials and information concerning the PPPs 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.

Box 4.2 ESIA Regulation requirements on public disclosure

Publicizing the proposed project and its anticipated effects and benefits by-

- Posting posters in strategic public places near the project site;
- Publishing a notice on the project in mass media newspaper, radio
- Making an announcement of the notice in both Kiswahili and English languages

Hold (where appropriate), public meetings with affected parties and communities to

- Explain the project and its effects, and to receive their oral or written comments;
- Ensure appropriate notices are sent out at least one week prior to the meetings
- Venue and times of the meetings are convenient for the affected communities and the other concerned parties

Once the PPP has been reviewed and cleared by ZEMA and the respective IA official (e.g., the EO of an LGA), the IA's PMT will inform the public about the results of the review. The PMT will be responsible for disclosing the findings and recommendations of the environmental and social screening and review process. For LGA PPPs this will be in collaboration with the "Ward Development Committee (WDC). The project management team will be responsible for taking the minutes of the public disclosure meeting and will produce and distribute copies of the minutes to relevant offices (e.g., for LGAs, the Municipal Councils, Ward Governments) and other interested/affected parties (community representatives, NGOs, political/religious, and other civil organizations 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:

- The environmental and social screening process outlined in the ESMF includes such a requirement;

- Development of individual infrastructure project ESMP (if required) and RAP/ARAP include such a requirement;
- Once the PPPs has been reviewed and cleared by ZEMA/respective councils, the PPPs management team will inform the public about the results of the review;
- The IA's project management team will undertake both compliance monitoring and effects monitoring throughout the infrastructure project cycle;
- The ESMF and RPF and other subsequent safeguards instruments such as the individual project ESIA reports, ESMPs, RAPs and ARAPs would be available, with a translation of summaries into the local language in a culturally appropriate manner, at the following locations:
 - Information center of ZEMA;
 - The web site of the relevant ministry and/or the PPP Department;
 - The web site of the IA (e.g., the Municipal Director in respective of LGA PPPs);
 - Locally at additional public and easily accessible sites (e.g. the offices of the IA and at PPP sites); and
 - The web site of the WB.

For any changes to safeguard instruments the same clearance and disclosure protocols will be followed.

4.5 Project Alternatives

The alternatives for the PPPs supported by TPPP include the do-nothing or no-project case, delivery through conventional budget financing, or variations of the PPPs with a re-design of components. The alternatives are examined in the prefeasibility study and then feasibility study of each PPPs. The PPPs will only be continued if it is the best alternative, with the design incorporating the best components. The prefeasibility study and then feasibility study are subject to approval by the government in accordance with the PPP Act and PPP Regulations 2017.

5 LEGAL REQUIREMENTS AND INSTITUTIONAL FRAMEWORK

5.1 WB Safeguard Policies and Guidelines

The WB 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.

TPPP has been assigned Environmental Risk Assessment Category B and triggers the following WB Safeguard Policies: (i) Environmental Assessment (OP/BP 4.01); (ii) Natural Habitats (OP 4.04); (iii) Physical Cultural Resources (OP/BP 4.11); and (iv) Involuntary Resettlement Policy (OP/BP 4.12).

The World Bank Group EHS Guidelines containing quantitative limits and good international management practices for different types of industry and sectors, are also applicable to the various PPPs. The applicable sectoral guidelines include, but are not limited to:

- World Bank Group EHS Guideline on Waste Management Facilities;
- World Bank Group General EHS Guideline.

The relevant requirements from these guidelines will apply to TPPP. Where there is also coverage by national regulations, the more stringent of the two apply.

OP 4.01 Environmental Assessment

The WB's safeguard policy OP 4.01 Environmental Assessment (EA) requires that all Bank-financed operations are screened for potential environmental and social impacts (a view shared by the Zanzibar ESIA procedures and processes) to determine the extent and type of the EA process and thus help ensure that they are environmentally sound and sustainable and thus improve decision making. Thus OP 4.01 safeguard policy is triggered if a PPP to be supported by TPPP is screened and found likely to have potential (adverse) social and environmental risks and impacts. The EA process covers impacts on the natural environment (air, water and land); human health and safety; physical cultural resources; and trans-boundary and global environmental aspects.

EA is a process whose breadth, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed project. EA evaluates a project's potential environmental risks and impacts in its area of influence; examines project alternatives; identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout project implementation. The Bank favours preventive measures over mitigatory or compensatory measures, whenever feasible.

OP 4.01 emphasizes that the required environmental and social assessment be carried out based on the screening results. In case the policy is triggered by a particular proposed intervention, OP 4.01 requires that prior to project approval, RGoZ must prepare environmental safeguard instruments whose breadth, depth and type of analysis is befitting to the type of subproject and the nature and scale of potential impacts it causes. The EA instruments can include an ESIA, environmental audits, hazard or risk assessment and ESMP.

TPPP will only support PPPs rated category B or C under WB Safeguard Policies. PPPs in locations that are ecologically sensitive such as unique or protected habitats and Category A PPPs are not eligible for support.²⁵

TPPP will implement an environmental and social screening process for all proposed PPPs. The purpose of this screening is to categorize potential projects according to their potential environmental and social impacts. The IA will ensure an ESIA is carried out to ensure that activities related to the direct and indirect areas of influence of the intervention are clearly identified and that all direct and indirect, as well as cumulative and potential residual impacts, are addressed. The IA will also ensure an ESMP is prepared and implemented according to the type and scope of identified impacts.

OP 4.04 Natural Habitats

This policy recognizes that the conservation of natural habitats is essential for long-term sustainable development. The WB, therefore, supports the protection, maintenance, and rehabilitation of natural habitats and their functions in its project financing, as well as policy dialogue and economic and sector work. The Bank supports and expects the Borrowers to apply a precautionary approach to natural resource management to ensure opportunities for environmentally sustainable development. The Bank does not support projects that, in the Bank's opinion, involve the significant conversion or degradation of critical natural habitats.

While candidate PPP projects are expected to be implemented in urban settings where modified habitats predominate, they may involve some patches of natural habitats such as water courses and other types of natural habitats. Per this operational policy, natural habitats are land and water areas where (i) the ecosystems' biological communities are formed largely by native plant and animal species, and (ii) human activity has not essentially modified the area's primary ecological functions.

For projects with natural habitat components, project preparation, appraisal, and supervision arrangements must include appropriate environmental expertise to ensure adequate design and implementation of mitigation measures.

TPPP will only support PPPs rated category B or C under WB Safeguard Policies. PPPs in locations that are ecologically sensitive such as critical natural habitats and/or protected habitats and Category A PPPs are not eligible for support.

OP 4.11 Physical Cultural Resources

This policy addresses physical cultural resources, which are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Physical cultural resources may be located in urban or rural settings, and may be above or below ground, or under water. Their cultural interest may be at the local, provincial or national level, or within the international community.

²⁵ WB safeguard policy OP 4.01 states: "A proposed project is classified as Category A if it is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works."

Per this policy, impacts on physical cultural resources in projects are to be included in the ESIA process. As an integral part of the process, a physical cultural resources management plan that includes measures for avoiding or mitigating any adverse impacts on physical cultural resources. In addition, provisions for managing chance finds may need to be developed. In any cases, the physical cultural resources management plan should be consistent with the country's overall policy framework and national legislation and takes into account institutional capabilities with regard to physical cultural resources. PPP supported by the TPPP will need to demonstrate that relevant project-affected groups, concerned government authorities and relevant non-governmental organizations have been consulted in order to identify potential sites and determine mitigation measures options. OP 4.11 also calls for providing capacity building in case capacity to manage physical cultural resources is inadequate.

OP 4.12 Involuntary Resettlement

WB's Operational Policy on Involuntary Resettlement (OP/BP 4.12) is triggered in situations involving involuntary taking of land (includes anything growing on or permanently affixed to land, such as buildings and crops), impacts on or loss of assets, loss of income sources or means of livelihood (whether or not the affected person must relocate), and involuntary restrictions of access to legally designated parks and PAs. The policy covers direct economic and social impacts that are caused by the involuntary taking of land resulting in relocation, loss of shelter, loss of assets or access to assets; or loss of income sources or means of livelihood.

The policy aims to avoid involuntary resettlement to the extent feasible, or to minimize and mitigate its adverse social and economic impacts. Where involuntary resettlement and acquisition of land or other assets is unavoidable, it promotes participation of PAPs in resettlement planning and implementation, and its key economic objective is to assist PAPs in their efforts to improve or at least restore their incomes and standards of living after displacement.

WB OP 4.12 prescribes compensation and other resettlement measures to achieve its objectives and requires that borrowers prepare adequate resettlement planning instruments. An RPF is prepared where the project impacts are unknown at the time of project preparation. The RPF guides preparation of Resettlement Action Plan or other appropriate instruments when project locations are known and WB OP4.12 is triggered. Where impacts on the entire displaced population are minor, or fewer than 200 people are displaced, a RAP/ARAP may be prepared.²⁶

PPPs supported by TPPP will take place on land owned by the IA, such as the redevelopment of an existing infrastructure facility, boundaries, and therefore will not result in private land acquisition. TPPP will not support PPPs requiring land acquisition. There is however likely to be a temporary or permanent economic impact, for example on (petty) traders or on crops. The project will follow the provisions set out in the RPF in the preparation of a RAP/ARAP which will be approved prior to project activities impacting the identified assets. TPPP will support voluntary resettlement as an exceptional measure where consent of affected communities has been obtained and documented.

²⁶ Section 25 of WB's Safeguards Policy OP 4.12 - Involuntary Resettlement states that "where impacts on the entire displaced population are minor, or fewer than 200 people are displaced, an abbreviated resettlement plan may be agreed with the borrower....Impacts are considered "minor" if the affected people are not physically displaced and less than 10 percent of their productive assets are lost."

An IA will design, document and disclose a participatory process for preparing a RAP/ARAP before resettlement begins. RAPs or ARAPs will use WB best practice approaches and describe the project activities, establish eligibility criteria for eligible persons/communities, and disclose efforts made to minimize displacement, as well as describe results from census and socioeconomic surveys, all relevant local laws and customary rights that apply, resettlement sites, income/livelihood restoration, institutional arrangements, implementation schedule, stakeholders participation and consultation, accountability and grievance mechanisms, monitoring and evaluation plans, along with costs, budgets and sources of funding.

5.2 Zanzibar Environmental and Social Management Requirements

In recognition of the importance of natural resources to Zanzibar economy and way of life, the country has a comprehensive body of environmental law. The detail of the law is contained in several acts and their regulations, many of which have been recently promulgated as older laws in the country are being revised to reflect the relatively new privatization policy and following the general global trend for greater focus on environmental protection, particularly in relation to natural resources utilization and loss of biodiversity; and to energy production and global warming.

The Zanzibar Environmental Management Act No. 3 of 2015 is the principle Act that establishes and sets out environmental and social management instruments, permitting requirement and bestow enforcement powers and coordinating roles and responsibilities for institutions and bodies at all levels. Authorities relevant to sector specific environmental and social management, aspects are prescribed in the various laws. The Zanzibar Environmental Management No. 3 of 2015 supersedes other Acts in this regard with the exception of the National Constitution.

Below is outline of key policies and laws applicable to TPPP.

5.2.1 Policies Relevant to TPPP

The Zanzibar Environmental Policy (ZEP) was officially launched in 2013 (replaced the old ZEP of 1992). All economic and development sectors including Water, Forestry and non-renewable natural resources, Tourism, Energy, Fisheries and Marine Resources, Health, Agriculture and Livestock, Lands, Industries, Infrastructure, Disaster Management, and Local Government are implemented in accordance with the top priorities laid down in the ZEP of 2013. Other cross cutting sub-sectors considered in the policy include climate change, gender mainstreaming, education, NGOs, private sector, and collaboration with international development partners.

Other key policies include:

- Zanzibar Vision 2020;
- Zanzibar Poverty Reduction and Growth Strategy (MKUZA-II);
- Zanzibar Environment Policy (2013);
- Zanzibar Land Tenure Related Policies;
- Zanzibar Forest Policy;
- Zanzibar Water Policy;

- Zanzibar Disaster Management Policy;
- Zanzibar Tourism Policy;
- Zanzibar Transport Policy (2008);
- Zanzibar HIV/AIDS Policy;
- Zanzibar Information Policy;
- Zanzibar Local Government Policy; and
- Occupational Safety and Health Policy.

5.2.2 Laws Relevant to TPPP

The main laws relevant to the environmental and social management of PPPs include (key laws are described below):

- Zanzibar Constitution;
- Environmental Management Act (2015);
- Zanzibar Land Tenure Act, 1992;
- The Antiquities Act of Tanzania;
- Regional Administration Act;
- Local Government Authority Act;
- PPP Act 2015;
- Zanzibar Forest Resources and Conservation Act;
- Zanzibar Water Act;
- Zanzibar Fisheries Act;
- Zanzibar Maritime Act 2009; and
- Zanzibar Investment Promotion and Protection Act 2018.

Environmental Management Act, 2015

The Zanzibar Environmental Management Act (ZEM Act) No. 3 of 2015 was recently assented to on 27th March 2015 (replaced the former Environmental Management for Sustainable Development Act (EMCDA of 1996). The Act was established to address the environmental management priorities set in the ZEP, 2013. The Act, among other key legal powers, focuses on the implementation of the key environmental management tools namely: Environmental and Social Impact Assessment process, Environmental Audit, Strategic Environmental Assessment, Pollution Prevention and Waste Management, Biodiversity Conservation, Environmental Education and Research, Integrated Coastal Zone Management, Climate Change Adaptation, Non-Renewable Natural Resources, and other matters of environmental emergency. These above management instruments are supposed to be mainstreamed in all pertinent sectors and cross cutting sub-sectors targeted by the ZEP (2013)

The ZEM Act requires an Environmental and Social Impact Assessment (ESIA) to be carried out for the development of any proposed project which is likely to have a significant impact on

the environment. The ESIA provides the institution responsible for environment sufficient information to justify, on environmental, social and community development grounds, the acceptance, modification or rejection of the project and its implementation. More importantly, the ESIA is targeted to provide the basis for guiding subsequent actions of the project life cycle which -through management and monitoring plan - will ensure that the proposed project is carried out considering the environmental, socio-economic issues, and resettlement initiatives identified along with requirements for compliance throughout the project's life cycle.

The Act makes it mandatory for any person to comply with the environmental and social impact assessment requirement of the Project which includes environmental screening, scoping, preparation of the Environmental Impact Statement and its review before the decision on environmental clearance is made. As per the Act, there is ESIA screening, scoping and the review process, while the preparation of the ESIA is carried out by the consultant forwarded by the project proponent and only having been approved by the Zanzibar Environmental Management Authority. The project has to conform to all requirements of environmental clearance and safeguards and they include ESIA, Auditing, Monitoring, and implementation of the environmental and social management plans for the project.

Zanzibar Land Tenure Act, 1992

All natural land within the islands of Zanzibar occupied or unoccupied is declared to be public land is vested in, and at the disposition of the President, to be held by him, for the use and common benefit, direct or indirect, of the people of Zanzibar. Riparian occupiers along non-navigable waterways are required to accord the right of passage over a strip ten (10) meters in width on each bank. Compensation is to be paid to the persons or communities concerned, the compensation shall be equal to the fair market value of the land. All affected people whose houses, properties or farm plots are to be demolished or converted should be compensated accordingly.

The Antiquities Act of Tanzania

This Antiquities Act of Tanzania was enacted by the independent government in 1964 to replace the Colonial Monuments Preservation Ordinance and the Monuments Preservation Ordinance promulgated in 1937. The 1964 Act itself was subsequently amended in 1979. Under this law, the following categories of the cultural property are recognized and protected: relics, monuments, protected objects, conservation areas and ethnographic objects. Under the Act, the minister responsible for cultural heritage is empowered to declare any object, structure or area which is of archeological, historical, cultural or scientific significance a protected object or monument.

Regional Administration Act

The Act specifies powers and function of the Regional, District, and Shehia Government administrators. It covers all matters related to the social, economic, and environmental governance in the lower administrative units such as in the Shehias. Section 22 (1) (d) of the Act states that Regional development committees established under this Act have been given a responsibility to mobilize people to participate, contribute, and if possible, assist in the use and management of natural resources, protection of environment for sustainable development and in all activities of national development. The project proponent should ensure full cooperation towards the Act, collaborate with the regional, district and Shehia governments in the

implementation of social and environmental safeguards of the proposed project, and coordinate with the community in the implementation of the corporate social responsibility.

Local Government Authority Act

The Act specifies on establishment of the Local Government Authority structures with their jurisdictional areas, powers and functions. It covers all matters related to the social, economic, and environmental governance within the defined boundaries of the local government authorities. In the context of environment, the Act has emphasized on the local powers prevent and control public nuisance and ensure sustainable management of land and natural resources. Section 26 (1) of the Act specifies general functions of the council which include maintenance of environmental sanitation, promotion of tourism and other investment opportunities available in their areas, keeping record of land and marine transport vehicles and vessels within their jurisdictional areas, control environmental pollution and prevent private nuisance.

Others include supervising and ensuring measures to combat epidemic diseases; control extraction of stone, sand, wood, and other forms of natural resources, undertake forestation and urban forestry initiatives, implement the land use plan, and deal with cross cutting issues of climate change, disaster management, and population issues. Section 63 provides powers to enter any premise and check if the development has been approved with a permit. Sections 83 and 84 of the Act specify offence under Nuisance and unauthorized land use, respectively. The project proponent should comply with all the requirements within the jurisdiction of the local government council in terms of land acquisition, necessary public works and permits, environmental clearance, prevention of public and private nuisance, and other activities that require certification and permits, etc.

PPP Act 2015

The act provides for the institutional framework for the implementation of PPPs contractual agreements between the public sector and private sector entities, sets rules, guidelines and procedures governing PPPs procurement, development and implementation of PPPs and to provide for other related matters. The Act requires studies take into consideration technical, financial, social environmental impact, economic or any other relevant issues required to establish the viability of a project. The Act is implemented through the PPP Regulations 2017. The Act and Regulations are silent on environmental management.²⁷

5.2.3 Environmental Management Tools Applicable in Zanzibar

Besides the ZEP and ZEM Act several environmental management tools prescribed in the ZEM Act and/or other environment-related Acts of Zanzibar which are in use include:

Strategic Environmental Assessment (SEA)

Established under Part X of the ZEM Act No.3 of 2015 and in accordance to Section 48 of the ZEM Act, SEA is primarily designed to engage the implementation of the strategy, program,

²⁷ The mainland's PPP Act 2010 (as amended) in contrast specifies that where the project requires an environmental impact assessment under the Environmental Management Act, the contracting authority is required ensure that the environmental impact assessment certificate is obtained by the private party before undertaking the project.

and planning for oil and gas exploration and production industry. There are no Regulations as yet or officially recognized procedures or guidelines to implement the SEA.

Environmental and Social Impact Assessment (ESIA)

Initially ESIA was part of the now defunct EMSDA of 1996. The ESIA Regulations of 2002 were established under the old EMSD Act and later supported by the ESIA guidelines, checklists and other tools all developed under the auspices of the Sustainable Management of Lands and Environment-II (SMOLE-II) Project. These tools have not been amended with the advent of ZEM Act of 2015. Identification of the sectors and programs subject to ESIA were developed under the Schedules of the now defunct Environmental Management for Sustainable Development Act. These were later strengthened under the implementation of the SMOLE-II project. According to the Annex of the ESIA Guidelines and Procedures, these included Agriculture and Aquaculture; Extractive Industry; Energy Industry; Production and Processing Factories and Industries; Chemical Industry; Food Industry; Textile, leather, paper & wood industry; Infrastructure projects; tourism development projects; etc.

Social Impact Assessment (SIA)

This is part of the overall ESIA process. There is no legal tool so far dedicated to SIA in the context of ESIA. Most of the time the SIA is done in accordance with methodologies and best practices under the International Finance Corporation methods. The SIA focuses on the social aspects of the programs sectors mentioned in the previous section. There are no detailed guidelines dedicated to SIA but most of the time issues concerning land acquisition, involuntary resettlement, direct and indirect benefits, direct and indirect recruitment, community health and safety, information disclosure, occupational safety and health; and communicable diseases.

Health impact Assessment (HIA)

Still under drafting process from the Ministry of Health Zanzibar as of 2015. The Environmental Health Unit, Department of Preventive Services and Health Education of the Ministry of Health – Zanzibar is formulating HIA procedures under the Zanzibar Public and Environmental Health Act No. 11 of 2012

Environmental and Social Management Plan (ESMP)

It is part of the procedures under ESIA guidelines, checklists, and other tools developed under the Sustainable Management of Lands and Environment -II (SMOLE-II) Project in 2009. According to SMOLE-II Annex of the ESIA Guidelines and Procedures, ESMP must be presented in all ESIA Report for all the programs and projects related to Agriculture and Aquaculture; Extractive Industry; Energy Industry; Production and Processing Factories and Industries; Chemical Industry; Food Industry; Textile, leather, paper & wood industry; Infrastructure projects; tourism development projects; etc.

Environmental and Social Management System (ESMS)

ESMS for Zanzibar in the Drafting process under the Zanzibar Bureau of Standards. The system is fully adopted from the ISO series in mainstreaming and applying environmental safeguards development activities and services. Various sectors, programs and activities with significant impact on environment in accordance with Part IX of the Zanzibar Environmental

Management Act No 3 of 2015 pertaining to Environmental Impact Assessment; and Section 50 of the Zanzibar Environmental Management Act No 3 of 2015 pertaining to powers of the Director of Environment to propose environmental standards to the Zanzibar Bureau of Standards related to noise, water, air, wastewater and in augmenting the quality of environment in general.

Environmental Audit

Established under Part IX of the Zanzibar Environmental Management Act No. 3 of 2015. (Section 46). Could be used interchangeably as the ESIA in accordance with Section 46 (1) (a) of the Act or for programs and projects operating for more than five years securing ESIA clearance in accordance with Section 46(1)(b) of the Act. Both these Sections function under the workings of the ESIA part of the Act.

Environmental Standards

Environmental Standards for Zanzibar are in the Drafting process under the Zanzibar Bureau of Standards in accordance with the arrangement defined in the Zanzibar Environmental Management Act. Various sectors, programs and activities with significant impact on environment in accordance with Part IX of the Zanzibar Environmental Management Act No 3 of 2015 pertaining to Environmental Impact Assessment; and Section 50 of the Zanzibar Environmental Management Act No 3 of 2015 pertaining to powers of the Director of Environment to propose environmental standards to the Zanzibar Bureau of Standards related to noise, water, air, wastewater and in augmenting the quality of environment in general.

Economic Instruments

No specific economic instruments related to environment have been legislated under the Zanzibar Environmental Management Act No.3 of 2015. However, the Concessions Project Act of 2015 on means an exclusive right granted by a Public Authority to a Private Partner for the purpose of building, setting up, owning, operating, renting, leasing, financing, modernizing, managing, maintaining, developing, or transferring an Infrastructure Facility for a specified period of time in accordance with a concession agreement; has been formulated. This is a legal empowerment of a public-private partnership on collaboratively implementing the means, activities or any combination, such as the design, construction and development of new infrastructure facilities, rehabilitation, modernization, and expansion of existing infrastructure facilities; or administration, expansion or other services pertaining to new or existing infrastructure facilities.

Environmental and Social Management Framework (ESMF)

There is no specific ESMF established under the Environmental Law even though most of the ESMF mechanisms from larger internationally financed projects apply. For example, the RGoZ has developed Environmental and Social Management Framework (ESMF) (and Resettlement Policy Framework as stand-alone document) as a tool to be used by for a PPP and others responsible for project design and implementation under TPPP. These tools are yet to be integrated into the Environmental Authority's enforcement requirements. Various sectors, programs and activities with significant impact on environment in accordance with Part IX of the Zanzibar Environmental Management Act No 3 of 2015 pertaining to Environmental Impact Assessment; and according to SMOLE-II Annex of the ESIA Guidelines and Procedures, on Agriculture and Aquaculture; Extractive Industry; Energy Industry; Production

and Processing Factories and Industries; Chemical Industry; Food Industry; Textile, leather, paper & wood industry; Infrastructure projects; tourism development projects; etc.

Resettlement Policy Framework (RPF)

There is no specific RPF established under laws of Zanzibar even though most of the RPF requirements from larger internationally financed projects apply the RAP Framework. There are procedures under the Land Tenure Act of 1992 (as amended) that guides how compensation is to be paid to the persons or communities concerned, compensation being equal to the fair market value of the land under the established rules. The framework should in principle be applied to programs and projects mentioned in the SMOLE-II Annex of the ESIA Guidelines and Procedures, e.g. Agriculture and Aquaculture; Extractive Industry; Energy Industry; Production and Processing Factories and Industries; Chemical Industry; Food Industry; Textile, leather, paper & wood industry; Infrastructure projects; tourism development projects; etc. However, the compensation and relocation procedures practiced by the sectors do not necessarily have to follow the principles of the ESIA process. The RPF will guide how management of land and its use.

Resettlement Action Plan (RAP)

There is no specific RAP legislation established under laws of Zanzibar. There are procedures under the Land Tenure Act of 1992 (Amended various times) that guides how compensation is to be paid to the persons or communities concerned, compensation being equal to the fair market value of the land under the established rules. These procedures are sometimes deemed not compatible with the WB and IFC's standards and practices for the affected parties. The framework should in principle be applied to programs and projects mentioned in the SMOLE-II Annex of the ESIA Guidelines and Procedures, e.g. Agriculture and Aquaculture; Extractive Industry; Energy Industry; Production and Processing Factories and Industries; Chemical Industry; Food Industry; Textile, leather, paper & wood industry; Infrastructure projects; tourism development projects; etc. However, the compensation and relocation procedures practiced by the sectors do not necessarily have to follow the principles of the ESIA process and this creates more challenges in adequately implementing the principles of WB RAP/ARAP requirements given the policy gaps.

Environmental Monitoring and Reporting

Established under Part IX of the Zanzibar Environmental Management Act No. 3 of 2015. (Section 43). Monitoring is required for all the major projects and programs such as e.g. Agriculture and Aquaculture; Extractive Industry; Energy Industry; Production and Processing Factories and Industries; Chemical Industry; Food Industry; Textile, leather, paper & wood industry; Infrastructure projects; tourism development projects; etc.

State of Environment Report

Established under Section 13 (f) of the Zanzibar Environmental Management Act No. 3 of 2015. (Section 43). The Director of Environment is required to develop the State of Environment for Zanzibar every 5 years and to be submitted to the Minister responsible for Environment. The last State of Environment of Zanzibar Report was made in 2004.

Public Awareness and Participation

This is ingrained in Part VIII of Zanzibar Environmental Management Act No. 3 of 2015. (Sections 37 and 38). For ESIA review process, Section 42 of the Zanzibar Environmental Management Act No. 3 of 2015 empowers the Zanzibar Environmental Management Authority to conduct a public hearing in accordance with the procedures that are to be formulated by that Authority. Access to environmental information and environmental research in various key areas prioritized in the Zanzibar Environmental Policy of 2013 have been made mandatory under the Act.

Information Communication and Education (ICE)

This is covered under the theme of “Access to environmental information and environmental research” in which all prioritized areas in Zanzibar’s Environmental Policy of 2013, ICE has been made mandatory by the Zanzibar Environmental Management Act No. 3 of 2015 (Sections 37 and 38).

Permitting Requirements for Project Development

To establish and operate a sustainable project that is environmentally suitable, socially/culturally acceptable and economically feasible the TPPP project implementers need to adhere throughout project cycle to the requirements stipulated by the principal policies and legislations. The below are ESIA approvals for project establishment and operations:

Environmental approval for new development projects is a requirement under Environmental Management Act No. 3 of 2015. This is backed up by the established ESIA Guidelines and Procedures of 2009. ESIA Certificate is issued by the Zanzibar Environmental Management Authority (ZEMA).

Environmental clearance for existing projects is a requirement under Section 46 of the Environmental Management Act No. 3 of 2015. Environmental Audit Certificate is issued by ZEMA.

Conduct of ESIA & Audit by ESIA Experts or Firms of experts is a requirement under Section 41 of Environmental Management Act No. 3 of 2015. The Certified individual and firms are registered and issued an ESIA Expert Certificate by ZEMA.

Changes in existing ESIA Certificate, Transfer of ESIA Certificate, change of name of ESIA Certificate, Surrender of ESIA Certificate and Cancellation of ESIA Certificate are all not defined under ESIA Guidelines and Procedures of 2009 or under Environmental Management Act No. 3 of 2015 2009. May be done administratively (an administrative arrangement for TPPP is presented below).

Establishment of public facilities such as waste disposal site, market, bus stand, slaughterhouse etc. require a number of permits as stipulated by relevant acts and issued by various departments at the Ministry of Lands and / or Zanzibar Municipal Council:

- Town Planning (TP) Drawing: required under Land Tenure Act No. 12 of 1992 and issued by Department of Urban and Rural Planning;
- Survey Plan: required under Land Tenure Act No. 12 of 1992. and issued by Department of Survey and Mapping;

- Rights of Occupancy: required under Land Tenure Act No. 12 of 1992 and Title Deed issued by Department of Land Administration;
- Right of Way (for roads, water supply, sewage, storm water, electricity transmission lines, pipelines etc.) should be done in coordination with relevant utilities; and
- Building Permit: required under Municipal Act No. of 1995 and issued by the ZMC.

Valuation of land, property and assets require a number of approved documents / reports as stipulated by relevant acts and issued by various departments at the Ministry of Lands and / or Zanzibar Municipal Council

- Valuation Report: survey / measurements of property (land, buildings, structures) undertaken by Certified Surveyors; valuation and report prepared by a Certified Valuer and approved by the Chief Valuer at the Ministry of Lands; and
- Compensation Schedule: Prepared by Valuer, approved by Chief Valuer and payments issued by Ministry of Finance.

5.2.4 Legal Requirements by Project Phase

Mobilization phase

Extraction of construction materials from existing borrow pits is carried out under Part VII of the Environmental Management Act No.3 of 2015. Section 33 prohibits any excavation and exploitation of the non-renewable natural resources unless a permit in the form of Mining License, Surface Right (including fees / charges) are given by the institution responsible for non-renewable natural resources, the Department of Forestry and Non Renewable Natural Resources. Extraction is also done under the Zanzibar Regional Administration Act No.8. of 2014 under Section 22 (1) (d) and Local Government Authority Act No.7 of 2014 empowers local authorities (Regional, District and Shehia administrator) to issue permits on excavations under Section 26 (1). Roads authority do not own quarries and rarely are they located on private land.

Extraction of water from natural rivers, lakes, underground aquifers: Water Right issued by ZAWA required under the Zanzibar Water Act No.4 of 2006 under Part IV on Water Resources.

Connecting to Municipal water supply system: permit issued by ZAWA required under the Zanzibar Water Act No.4 of 2006

Connecting to nearby electricity supply system: drawings submitted to ZECO required under Zanzibar Electricity Corporation Act of 2006

Construction / Operation

Emissions into the air: in accordance to Air Quality Standards issued by ZBS, a requirement under Section 17 of the Zanzibar Standards Act of 2011 and also a Discharge Permit issued by the Department of Preventive Services and Health Education of the Ministry of Health as a requirement under Zanzibar Public and Environmental Health Act No. 11 of 2012.

Effluent (waste water) discharge: in accordance to Water Quality Standards issued by ZBS a requirement under Section 17 of the Zanzibar Standards Act of 2011.

Waste Water Discharge: Permit issued by Department of Preventive Services and Health Education of the Ministry of Health, a requirement under Zanzibar Public and Environmental Health Act No. 11 of 2012

Solid waste disposal at Municipal landfill: Tipping Fees paid to facility operator, a requirement under Municipal by-law

Disposal of hazardous substances: Hazardous Waste Disposal Permit issued by ZEMA / DoE, a requirement under Section 56 of the Environmental Management Act No.3 of 2015.

Disposal of Biomedical Wastes: Disposal Permit issued by Department of Preventive Services and Health Education of the Ministry of Health Zanzibar a requirement under Public and Environmental Health Act No. 11 of 2012

Noise emissions in accordance with Environmental Standards on Noise Emission issued by ZBS a requirement under Section 17 of the Zanzibar Standards Act of 2011.

Waste oil collection, transportation and disposal Waste Oil Collection Permit issued by ZEMA/DoE; a requirement under Section 56 of the Environmental Management Act No.3 of 2015

Sludge collection, transportation and disposal: Sludge Collection Permit issued by Department of Preventive Services and Health Education of the Ministry of Health a requirement under the Zanzibar Public and Environmental Health Act No. 11 of 2012

Collection of scrap metal and related transactions: Scrap Metals Permit issued by Department of Trade; a requirement under the Zanzibar Trading Act No.14 of 2013.

Moving extra weight, large loads / vehicles on main highway roads: Permit a requirement under the Roads (Amendment) Act 2013

Oil Spill: Oil Spill Contingency Plan approved by Zanzibar Maritime Authority, a requirement under Zanzibar Maritime Authority Act No.3 of 2009; or ZEMA, DoE under Environmental Management Act No.3 of 2015.

Occupational Health and Safety: Occupational Health and Safety Authority Certificate issued by Directorate of Occupational Safety and Health, a requirement under Occupational Safety and Health Act No.8 of 2005.

Fire: Fire Safety Certificate issued by Fire Brigade, a requirement under Fire Brigade and Rescue Act of 1999.

5.3 Institutional Framework

Zanzibar is a separate state within the United Republic of Tanzania, governed by a Revolutionary Council and House of Representatives whose members are elected or appointed. The administration comprises:

- Government Ministries, Department and Agencies; and

- Local Government Authorities

5.3.1 Department and Agencies

Ministry of Finance and Planning (MoFP)²⁸

MoFP is responsible for the overall management of TPPP activities, providing overall coordination and technical support to Participating institutions: Zanzibar Municipal Council and Pemba Town Councils, Stone Town Conservation Development Authority and Department of Urban and Rural Planning (DoURP). MoFP has established within the Directorate of Policy, Planning and Research a dedicated PPP unit within the Economic Management and PPP Department.

Ministry of Lands, Housing, Water and Energy²⁹

The Ministry of Lands, Housing, Water and Energy (LHWE; known by its Swahili acronym ANMN for Ardhi, Nyumba Maji na Nishati) is a huge Ministry, composed of four Departments or Directorates, three Authorities, one Corporate Entity, one Commission and one Land Tribunal which are responsible for delivery of its various components of the Ministry's Vision and Mission.

The seven Departments are Planning, Policy and Research, Department of Administration, Department of Energy and Minerals. The Authorities are the Zanzibar Water Authority (ZAWA), and Zanzibar Utility Regulatory Authority (ZURA) The Corporate Entity is the Zanzibar Electricity Corporation (ZECO).

The Commission for Lands comprise of three departments (which are the departments of Land, Survey and Mapping and Rural and Urban Planning) together with the Land Registrar Office. The Authorities and the corporate entity are governed by their respective Boards of Directors, whereas the Directorates fall under the direct authority and hierarchy in the ministerial set-up, except for directorates under the Commission for Lands they report to the Ministerial set-up through the Executive Secretary of the Commission. In addition, there is an officer in charge of Pemba (at Directorate level) who 'oversees' the day-to-day operations of Pemba, which also has a similar framework replicated for the Directorates, Authorities and Corporate entity.

Department of Urban and Rural Planning (DoURP)

The Department of Urban and Rural Planning under the Ministry of Energy, Land, Construction and Water is responsible for planning and overseeing implementation of prioritized and approved urban upgrading infrastructure.

Zanzibar Environment Management Authority (ZEMA)³⁰

The Zanzibar Environmental Management Authority (ZEMA) is under the second Vice Presidents Office. The environment is governed by Environmental Management Act of 2015. The act makes ample reference to long term conservation, protection, enforcement and management of Environment of Zanzibar. Under the Environmental Management Act, ZEMA has been entrusted with several functions to help safeguard the environment. ZEMA can: issue

²⁸ <http://www.mofzanzibar.go.tz/en/>

²⁹ <http://www.zanzibar.go.tz/>

³⁰ <http://www.minifuss.com/wp/>

of environmental certificates, permits and approvals, undertake environmental monitoring, promote environmental awareness and enforce regulations and standards (see further Section 22(1) of EMA). If the requirement of the Environmental Management Act and the supporting environmental regulations are violated, ZEMA has the power to act. For example, ZEMA can suspend ongoing projects, revoke permits and penalize offenders (see further Section 23(1) of EMA).

The vision and mission of ZEMA is taken from the Zanzibar Environmental Policy, which reads:

Vision: Sound environment management for sustainable economic and social benefit for present and future generations.

Mission: To promote sound and sustainable environmental management practices through provision of policy guidance, institutional strengthening and cooperation.

Ministry Construction, Industries, Communication and Transport³¹

The Ministry of Construction, Communication and Transportation was established in April 2016 after the general election and replaced the Ministry of Infrastructure and Telecommunications. The Ministry of Construction, Communication and Transport is composed of six departments, the Pemba Central Office, six independent institutions and one Board of Directors. These departments include the Department of Policy, Planning, and Research, Administration and Service, Information and Communication, Road Transport and Licensing, road construction and maintenance by the Department of Real Estate. The independent institution is the Zanzibar Harbor Corporation, the Homes Agency, the Old City Authority, the Zanzibar Shipping Agency, the Sea Transport Authority and the Zanzibar Air Force. The Board of Directors is the Road Transport Board.

Ministry of Regional Administration and Special Departments³²

The Ministry of Regional Administration and Special Departments is responsible for coordination and administration of the connection between different tiers of the government: Regional administration, District administration, and Local government: Municipal Council, Town Council and Village Council. The existing local government structure in Zanzibar based on decentralization and Local Government (District and Urban) authorities Act 1986 (several amendments) and the Regional Administration Authority Act (1998 No. 10) that re-establishes the Regional and District Commissioners. Unguja is divided into three regions which are divided into six districts; Pemba is divided into two regions which are further divided into four districts (as shown in the table below).

Table 5.1 Administrative districts in Zanzibar

Island	Region	District
Unguja	North Unguja	North A
		North B
	South Unguja	South
		Central
	Urban/West	Urban

³¹ <http://www.moic.go.tz/>

³² <http://www.zanzibar.go.tz/>

		West
Pemba	North Pemba	Wete
		Micheweni
	South Pemba	Chake

Regional Administration

Each Region has a Regional Commissioner (RC) who is assisted by a Regional Administrative Officer (RAO) and Regional Development Committee (RDC). The RDC coordinate all development activities in their respective areas and are involved in supervising the implementation of government policy and formulating plans for the area as well as mobilizing the local communities. The Regional Agriculture Development Officer (RADO) deals with natural resources issues.

District Administration

Each District has a District Commissioner (DC) who is assisted by a District Administrative Officer (DAO) and District Development Committee (DDC). The DDC coordinate all development activities in their respective areas. The main entities include:

- District Agriculture Development Officer;
- District subject matter specialists for forestry, fisheries and environment; and
- District level Standing Committee for Protection of the Environment and Social Welfare (established under the District and Town Council Act).

District Councils in Zanzibar have the following functions:

- To formulate, coordinate and supervise the implementation of plans for economic, commercial, industrial, and social development;
- To ensure the collection and proper utilization of the revenues of the Council;
- To make by-laws applicable throughout its area of jurisdiction; and
- To consider, regulate, and coordinate the development plans, projects, and programs of villages and township councils within its area of jurisdiction.

5.3.2 Local Government Authorities

Urban Council (Municipal Council, Town Council)

The urban councils, Municipal or Town Council, are an urban LGA subdivided into Wards which are further subdivided into (urban) Shehia. Both the Municipal and Town Councils operate a Committee system. The Municipal Council has five Committees and five associated Departments. These are: (i) Finance and Economic Development; (ii) Town Planning; (iii) Law and Order; (iv) Labor, Construction and Environment; and (v) Social Services Affairs.

Each Council is subdivided into wards and each ward elects one council member. Three Councilors are nominated for Zanzibar Municipal Council and two for the Town Councils by the Minister. In the case of Zanzibar Municipal Council, the Director is appointed by the President, while in District Authorities the Town Clerk/Secretary are appointed by the Minister.

Zanzibar Municipal Council has the following responsibilities:

- Controlling all public roads and streets within the municipality;

- Naming of streets and numbering of buildings;
- Establishing and maintaining recreation grounds;
- Implementing public health initiatives as required by the Minister (responsible for local government administration);
- Construction, equipment and operation of drainage and sewerage works;
- The administration of public markets; and
- Street lighting.

Town Councils have the following functions:

- Cleaning of main roads;
- Regulation and conduct of public hire vehicles;
- Street lighting;
- Naming of streets and numbering of buildings;
- Formulating, coordinating and supervising the implementation of plans for economic, commercial, industrial and social development;
- Passing of by-laws;
- ensuring that revenues are collected; and
- Considering, regulating and coordinating the development plans, projects and programs of villages and townships within its jurisdiction.

Village Council

A Village Council is a rural Local Government Authority (RLGA) subdivided into Wards which are further subdivided into (rural) Shehia.

Shehia

A Shehia is a demarcated administrative and political unit in urban or rural areas under the responsibility of a “Shehia.” Shehia is the Chief Government Officer in the Shehia appointed by District Commissioner. The Shehia is responsible for all matters including law enforcement in his area and reports directly to the District Commissioner. Each Shehia has an advisory committee of not less than 12 members, a third of whom are required to be 60 years or above; and Committees on different issues.

6 PPP PREPARATION, APPROVAL AND IMPLEMENTATION

6.1 Overview

This section describes an environmental and social assessment and management process that will apply to the preparation, procurement and implementation of PPPs.³³ The process is based on a screening, approval and implementation procedure that links to Zanzibar's procedures and institutions and WB safeguard policies and guidelines.

The purpose of this process is to enable IAs and their PMTs to:

- determine whether the PPPs are likely to have potential negative environmental and social impacts;
- determine the magnitude of the impacts and their significance;
- determine appropriate mitigation measures for activities with adverse impacts;
- incorporate mitigation measures into PPP design;
- review and approve proposed activities or PPPs;
- ensure that the implementation of the PPP's ESMP is part of the private partner's contractual obligations;
- ensure the ESMP is implemented and approval conditions are observed during the mobilization, construction and operation of the PPPs including preparation and execution of environmental and social decommissioning;
- monitor compliance to laws, regulation and standards including local by-laws; and
- monitor performance and report on all aspects articulated in the ESMP and the PPP's ESMoP, including a record of and responding to grievances.

The environmental and social assessment required for PPPs, which is to take place prior to implementation of the PPP, will depend on the outcome of the screening process. To ensure a high standard of PPP preparation and to enhance the bankability of the PPP, TPPP will only support the procurement of the private partner to the PPP when an ESIA (and RAP/ARAP) have been prepared for the PPP, and the ZEMA has issued an ESIA Certificate. The environmental and social screening procedure outlined in the ESMF will guide the preparation of the ESIA inclusive of an ESMP.

The ESIA and ESMP and its ToR will be reviewed and approved by the WB prior to procurement of the private partner to the PPP to verify alignment with the WB's safeguards policies and guidelines and requirements set forth in the ESMF.

Zanzibar's EMA (2015) and ESIA Guidelines and Procedures (2009) require a proponent of activities/projects to undertake an ESIA at the proponent's own cost prior to the commencement of the activity/project. The EMA (2015) and ESIA Guidelines and Procedures (2009) outline projects that require an EIA while allowing for some that may not be subjected to ESIA after an initial screening. All PPPs supported by TPPP will nonetheless prepare an ESIA inclusive

³³ TPPP will only support a PPP up to the achievement of financial close. That is, TPPP will not support the implementation stage of a PPP.

of an ESMP. IAs are required to monitor the preparation, review and approval of ESIA. The enforcement, review and monitoring of implementation of ESIA is the responsibility of ZEMA.

The typical ESIA process under Zanzibar legislation is outlined in the figure below. This process will be adapted under TPPP by preparing an ESIA inclusive of an ESMP for all PPPs. The process excludes steps required to vary an ESIA Certificate, which will only be followed as necessary.

Few if any PPPs supported by TPPP are expected to require variations to the ESIA Certificate. A process for making such variations will however be in place. While the process is described for variations led by the private partner (as it is the most likely scenario), the process will also apply to variations led by IAs. The environmental and social assessment and management process specific for any variation required to an ESIA Certificate, either before or after transfer to the private partner, will be guided by requirements specified in the EMA (2015).

In most cases, TPPP is expected to fund preparation of the ESIA and securing of the ESIA Certificate. TPPP may also support PPPs that have separately undertaken an ESIA and secured an ESIA Certificate.³⁴ For PPPs that have separately undertaken an ESIA and secured an ESIA Certificate, the WB will review the ESIA and ESMP to verify alignment with the WB's safeguards policies and guidelines and requirements of the ESMF.

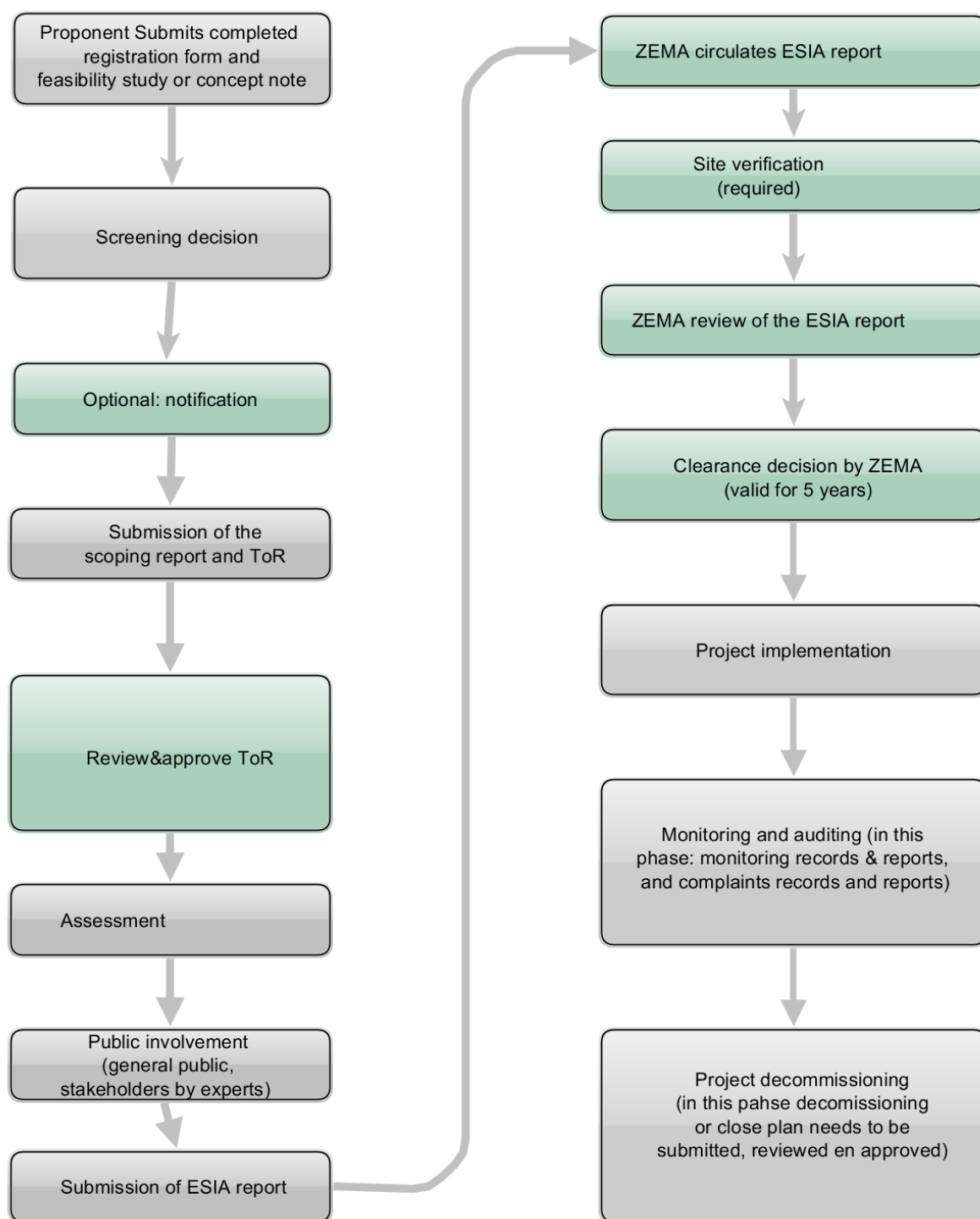
The steps to be followed by the IA under TPPP and the main responsibilities are summarized in the table below.

Table 6.1 Main steps in environmental and social management of PPPs

#	Step	Main responsibility rests with
1	Initiation	IA
2	Application for ESIA certificate	IA (PMT)
3	Screening	ZEMA
4	Conduct of ESIA	ZEMA
5	Review and approval of ESIA	ZEMA/WB
6	Incorporating mitigation measures in the PPP	IA (PMT)
7	Approval of draft PPP agreement	ZEMA
8	Final disclosure	IA (PMT)/WB
9	Transfer of ESIA Certificate	IA (PMT)/Private partner
10	Variation of ESIA Certificate (if needed)	ZEMA
11	Preparation for implementation	Private partner
12	Implementation supervision	IA (PMT)
13	Monitoring and reporting	IA (PMT)
14	Review and audit	IA (PMT)

³⁴ For example, TPPP may support preparation of operations and maintenance PPPs for solid waste management facilities prepared under a separate World Bank operation.

Figure 6.1 Outline of Typical ESIA Process



Note: Grey boxes are depending on the proponent, while the green ones are supported by ZEMA. The ESIA process integrates both environmental and social impacts, both of which are considered at each stage of the process in the figure.

Source: ZEMA
http://www.minifuss.com/wp/our-services/environmental-certificate/eia/env_cert_esia/#attachment/0/

(http://www.minifuss.com/wp/our-services/environmental-certificate/eia/env_cert_esia/#attachment/0/)

6.2 Steps

Step 1: Initiation

The PMT formed for each PPP in accordance with the PPP Act 2015 and PPP Regulations 2017 will include members with skill and experience required for environmental and social management.

For an LGA PPP, each Council Director³⁵ and the Department of Urban and Rural Planning (DoURP) shall ensure that key staff are included in the PMT. Besides the infrastructure sector specialist i.e. Civil Engineer (for roads, drainage etc.) or Environmental Engineer (for sanitation facilities), the team will include³⁶ staff trained and with experience in environmental assessment and management, sanitation management, sociology/community development, economic planning, land and urban planning, etc.³⁷

Coordination and day-to-day activities related to PPPs environmental and social management aspects will be delegated to an official responsible for overall environmental management. For LGA PPPs, this official will be referred to as Environmental Officer (EO) and be from the Council³⁸ or DoURP. The EO shall be the main contact person for the national environmental management authorities (i.e. ZEMA & Department of Environment), MOFP's PPP Department and other stakeholders in all matters related to environmental and social management under the ESMF.

The Council Director or DoURP shall ensure team members are adequately qualified and registered as ESIA Experts at ZEMA. To become qualified for the tasks, the LGA and DoURP officials and other actors will receive training on the use of the ESMP checklist, tools, resource sheets and planning methods.

Equivalent actions to those described above for LGA are needed by Ministries, Departments, Agencies and Authorities for PPPs they implement. These actions include appointment of an EO for the PPPs.

Step 2: Application for ESIA Certificate

For each PPPs the PMT will fill in an ESIA registration Form issued by ZEMA—providing information on:

- Particulars of Proponent;
- Proposed project/activity;
- Proposed site;
- Infrastructure and utilities;
- Environmental and social impacts;

³⁵ In the remainder of this document, Council Director refers to their equivalent position in other LGAs, and Council refers to its equivalent in other LGAs.

³⁶ The number and type of team members will depend on the nature and scope of the PPP.

³⁷ Other opted specialists appointed by the Council Executive Director on need basis depending on nature of the PPP.

³⁸ Adequate funds are to be provided to the EO for their environmental and social management activities and to cover monitoring, allowances, review costs, fuel and stationary. Funding will depend on the nature and scope of the PPP but is expected to typically be at least 10% of funding for PMTs.

- Other environmental issues; and
- Mitigation of impact and environmental enhancement measures.

The IA (or the ESIA Consultant on behalf) will submit dully filled-in and approved Application and support documents together with a prescribed fee for ZEMA to screen the PPP. The prescribed registration and review fees may be paid using TPPP resources.

Step 3: Screening and Scoping

Before procurement of the private partner, each PPP will be screened only once to: 1) assign the risk category in accordance with the Environmental Impact Assessment and Environmental Audit Regulations (2005) as amended in 2018 and WB Environmental Assessment Policy (OP/BP 4.01); 2) determine the scope of the ESIA, when not yet prepared; 3) identify applicable WB safeguards policies; and 4) identify specific issues for which the PPP units and IAs will require technical assistance.

An Environmental and Social Screening Form (see Annex B) will be completed by the IA for each PPP to be supported by TPPP. The Environmental and Social Screening Form sets out the local bio-physical and social environment, likely environmental and social impacts, mitigation measures, and requirements for further environmental and social assessments. The IA's PMT will complete the form with the assistance of qualified and experienced consultants as necessary.

This form will be the basis of a project categorization under WB Environmental Assessment Policy (OP/BP 4.01) by the IA's PMT. If a PPP falls into Category A as defined under OP/BP 4.01, it will be ineligible for TPPP support. If the PPP is found to be ineligible for TPPP support for other reasons set out in Section 2.2 (e.g., if the PPP requires land acquisition and has significant impact on ecologically sensitive locations), it will also be ineligible for TPPP assistance.

The PMT (assisted by ESIA Consultant if already commissioned) will prepare a scoping report and other background information as necessary. Tasks undertaken may entail review of available reports and other information as well as field reconnaissance to determine status of key ecological and social components and consultation with project recipient communities and their leaders and relevant stakeholders. The IA though a qualified consultant from the list of Experts managed by ZEMA also prepares a draft terms of reference (ToR) for an ESIA. The required content of a scoping report is provided in the box below. The draft ToR must encompass the content of ZEMA's ESIA format at Annex D.³⁹ The ESIA will often be preceded by a prefeasibility study that includes an environmental and social due diligence, in which case the draft ToR for the ESIA will draw on the findings of a prefeasibility study.

All PPPs supported by TPPP will prepare a RAP/ARAP in accordance with the WB's Involuntary Resettlement OP 4.12. The IA will prepare the ToR for the RAP/ARAP concurrently with the ToR for the ESIA in accordance with the requirements of the RPF, to ensure an integrated approach to environmental and social management of the PPP. Preparation and implementation of the RAP/ARAP will then follow the requirements of the RPF.

³⁹ A template ToR for an ESIA is provided at Annex E of TPPP's ESMF for the Tanzania mainland.

The IA will guide community engagement during project preparation. This will include consultation with the community during the screening of the PPP to identify key issues and determine how the concerns of all parties will be addressed in the ToR for the ESIA.

The ESMP checklist at Annex C should be applied by an IA's PMT to evaluate the draft ESMP provided with the scoping report. The ESMP checklist identifies mitigation measures and management controls connected to each identified impact. It can be used to check if a PPP's ESMP avoids creating adverse environmental and social impacts, addresses the negative impacts and enhances positive impacts. The PTs may use the generic mitigation measures provided in the ESMP checklist to ensure the ESMP addresses the negative impacts and enhances positive ones.

Box 6.1 Scoping Report Content

Project Description: a description of the PPP pointing out the main components and activities with environmental and social impacts implications including clear definition of the location and areas of influence.

Prevailing Baseline Condition: a synopsis of the status of the PPP's operating conditions that will be affected by the proposed PPP / activities (including an outline of key environmental, social and compliance issues).

Potential 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 natural habitats, biodiversity and species of concern; land use changes and resettlement; use of resources and management of wastes workers health and safety; and community wellbeing, health, safety, and security.

The PT will submit the scoping report and draft ToR for an ESIA, with the Environmental and Social Screening Form Project attached, to the IA's EO, and also DoURP for LGA PPPs, for review and necessary signatures. The respective EO assisted by Community Development Officers (CDOs) / Sociologist will review the application documents for compliance with this ESMF including Zanzibar's legislation and WB safeguard policies and guidelines.

Three copies of the scoping report and draft ToR for an ESIA, with the Environmental and Social Screening Form Project attached, will be submitted to ZEMA for review. ZEMA issues the final ToR for the ESIA. ZEMA thus determines the scope of environmental and social impacts assessment work required. Upon submission to ZEMA of the proposed PPPs, the environmental authority shall advise on the nature of information required for approval decision of the PPP. Screening is based on criteria stipulated under ESIA Guidelines and Procedures of 2009 as well as those set out in the this ESMF. ZEMA determines the requirements for the ESIA in agreement with the IA on specific issues, persons to be consulted, and methodology to be used by the ESIA.

WB will review and approve the draft ToR for the ESIA prior to its submission to ZEMA by the IA. The WB will verify alignment with the WB's safeguards policies and guidelines and requirements of the ESMF. The PPP Department will also review the draft ToR prior to its submission to ZEMA to ensure compliance with the ESMF and legislative and other requirements applying to PPPs.

ZEMA submits the screening results/statement to the IA within 10 days of submission of registration form and project report.

Upon receipt of the screening results/statement, the IA submits to ZEMA the CVs of the proposed ESIA experts (individual or firms)⁴⁰ within 10 working days. ZEMA approves/disapproves the experts with reasons within 5 working days.

Step 4: Conduct of ESIA

The ESIA will implement the ToRs issued by ZEMA (as validated by the WB). While the IA will have responsibility for ensuring the ESIA is undertaken, it shall be conducted by experts or firms of experts registered with ZEMA. The ESIA is expected to take 2-6 months following approval of ToR. The ToRs are subject to review after 6 months. The IA should bear the cost of ESIA study. The ESIA report format is prescribed under ESIA Guidelines and Procedures of 2009 under the Zanzibar Environmental Management Act No.3 and should be as outlined in the ToR.

The study identifies likely impacts assess and evaluate their severity and magnitude and proposed mitigation measures to minimize potential negative impacts and enhance positive benefits (e.g., see the Sample Mitigation Measures at Annex E). The ESIA consultant will undertake the assessment with involvement of certified staff at the IA, and also DoURP for LGA PPPs, coordinated by the EO. The study will include field investigations, including a site visit conducted to determine status of ecological and social receptors and engage with project recipient communities and stakeholders.

The ESIA should include the results of an economic cost benefit analysis, and an assessment of compliance with the requirements of the PPP Act 2010 (as amended) and PPP Regulations 2020 to demonstrate viability, value for money and affordability shall also be included.

The work shall culminate in production of ESIA report, which follows the ESIA format provided by ZEMA (included at Annex D). Key requirements from ZEMA are outlined in the box below. The ESMP checklist at Annex C should be applied by an IA's PMT to evaluate the draft ESMP provided with the draft ESIA. The IA will also prepare a RAP/ARAP consistent with the RPF.

The ESMP is to include, where potential impacts warrant extra attention, a waste management plan, traffic management plan, social management plan inclusive of actions to address gender based violence, a labor influx management plan and an occupational health and safety plan.

The WB's Group EHS Guidelines and when applicable the EHS Water and Sanitation Guidelines will need to be applied when conducting the ESIA. The EHS Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice, which serve as a technical source of information for the implementation of activities. The performance levels and measures set in those EHS Guidelines will need to be adequately incorporated in the PPP's ESMP.

The ESIA Consultant shall complete the assessment work and submit the ESIA report including an ESMP (see the box below and Annex F) and ESMoP for review and approval by ZEMA.

⁴⁰ Experts are required to register with ZEMA following a process similar to project registration and using the same registration form.

WB will review and approve the draft ESIA prior to its submission to ZEMA by the IA. The WB will verify alignment with the WB's safeguards policies and guidelines and requirements of the ESMF. The PPP unit will also review the draft ESIA prior to its submission to ZEMA to ensure compliance with the ESMF and legislative and other requirements applying to PPPs.

Box 6.2 ZEMA requirements for an ESIA

All requirements for submission and format of the IEA are outlined in the ToR issue by ZEMA. An ESIA report (prepared according to format prescribed under section 40 (a) – (f) of the Environmental Act) includes two separate documents: Social Impact Assessment (SIA) prepared first and submitted to ZEMA for review; followed by Environmental Assessment document. The ESIA shall be analytical, specific for project location, with high significant impacts given in detail, less significant mentioned briefly, concise, of necessary length (less than 100 pages), alternatives/mitigations comply with legal requirements and facilitate decision on project. ESIA should address project decommissioning. IA submits to ZEMA four original copies of the ESIA and an electronic copy and pay the prescribed fee for review costs.

Public Consultation

Following WB OP4.01, public consultation is required through the preparation of an ESIA inclusive of an ESMP. Thus, public consultation shall be mandatory when conducting an ESIA for a PPP supported by TPPP. At a minimum the IA must meet the community and other key stakeholders to solicit their views using standard participatory approaches and methodology (see the box below). The IA will undertake stakeholder engagement. To facilitate meaningful consultations, the ESIA Consultants supported by the PMT will provide all relevant materials (e.g. draft ESIA, ESMP) and information concerning the PPP 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 PPP, a public hearing will be done as part of project preparation to better convey concerns and seek inputs from stakeholders.

Box 6.3: ESIA requirements on public disclosure

Publicizing the proposed project and its anticipated effects and benefits by:

- Posting posters in strategic public places in the vicinity of the project site;
- Publishing a notice on the project in mass media i.e. newspaper, radio;
- Making announcement of the notices in both Kiswahili and English languages;
- Hold (where appropriate) public meetings with affected parties and communities to explain the project and its effects, and to receive their oral or written comments;
- Ensure appropriate notices are sent out at least one week prior to the meetings; and
- Venue and times of the meetings are convenient for the affected communities and the other concerned parties.

Step 5: Review and Approval of ESIA

Upon the IA submitting the draft ESIA report, ZEMA will undertake a review process of the ESIA report based on criteria stipulated under ESIA Guidelines and Procedures (2009) and the ZEM (2015). The review will include ZEMA seeking input from relevant stakeholders through:

- Circulation to relevant government bodies for comments;

- Public notification of time and place for review of ESIA and submitting written comments;
- Soliciting comments (written) from people affected by project; and
- Comment period from stakeholders is > 20 but < 30 days.

A preliminary hearing(s) will be organized by ZEMA to gather information for use in the statements as necessary. If more information is required (i.e. design plans, access to relevant sites etc.) IA will be informed before 5 days of the review meeting of the need for more detailed information to adequately assess the ESIA. IA will submit the required information within 20 days. Once the additional information has been submitted, a further review may be necessary.

ZEMA obtain final staff recommendations and makes decision within 14 working days on issuing ESIA Certificate or not. The review will be completed within 30 working days after the comments period.

Environmental decision of the ZEMA:

The outcome of the review will be:

- a) **ESIA approval:** if the review of the ESIA Report by ZEMA indicate the potential impacts and application of mitigation measures in projects design are sufficient, ZEMA will recommend to the Minister responsible for the environment to issue the ESIA Certificate for the PPP.

OR

- b) **ESIA approval (subject to specified conditions)** and issued with ESIA Certificate;

OR

- c) **More information is required** (with reasons and within specified period);

OR

- d) **ESIA not approved** based on criteria stipulated ESIA Guidelines and Procedures of 2009, no ESIA certificate issued and recommend to licensing institution to stop project from proceeding

Should the ESIA approved by ZEMA vary substantially to that previously reviewed by WB, the ESIA will be resubmitted to the WB for further review prior to any issuance of an ESIA Certificate.

Appeals:

Any party who is aggrieved: proponent or licensing institution have the right to appeal within 7 working days to the Minister responsible for Environment. If there is dissatisfaction of any decision reached, the Proponent has the right to appeal to the Environmental Appeals Committee whose decision shall be final.

All ESIA and RAP/ARAPs prepared for PPPs will be submitted to the WB for review and approval.

Step 6: Final Disclosure

Upon final clearance of the PPP's ESIA and/or ESMP, IAs through PMTs will disclose the documents in accordance with this ESMF. More than one avenue can be used. For LGA PPPs, as a minimum the PMT shall ensure that the key findings of the environmental and social impacts and mitigation process are:

- Presented and discussed at least one meeting of relevant Shehia and Ward Management Committees;
- Presented and discussed at least one meeting of Council Environmental Committee and ZMC Full Council or their equivalent for other LGAs;
- Accessible in a public place i.e. notice board, public information point /center/ library, Shehia, Ward, District and Regional offices etc.;
- Presented in an understandable form, manner and language by using the non-technical summaries of the ESMP that is in both Kiswahili and English; and
- Disclosure via the WB website.

Step 7: Incorporating Mitigation Measures in PPP agreement

Upon receipt of the approval, the PMT guided by their PPP advisors shall ensure the mitigation measures of the ESMP are incorporated into the draft PPP agreement. This should take place prior to the commencement of procurement of the private partner (so the draft PPP agreement can be provided to potential bidders with the Request for Proposal). The PMT shall ensure the relevant provisions of the draft PPP agreement are provided to the IA for review and approval.

Step 8: Approval of Draft PPP agreement

The PMT guided by technical specialists such as the EO, CDO, Civil Engineer or Environmental Engineer (assisted by ESIA consultant) shall review and make recommendation on the environmental and social management provisions of the draft PPP agreement.

If the provisions for environmental and social management in the draft PPP agreement are found to be satisfactory, the PMT will clear the draft PPP agreement through to the IA, and also to DoURP for an LGA PPPs.

The IA, and also DoURP for an LGA PPP, will provide review results to the PPPs advisor for any refinements and proceed with PPP preparation in accordance with the PPP Act and Regulations.

Step 9: Transfer of ESIA Certificate

Working with the IA's procurement section (responsible for supervising the tendering process) the PMT will ensure environment and social issues are taken onboard and incorporated in the procurement of the private partner (e.g. bid documents). This will include ensuring that bidders have all relevant resources (human and financial) and implementation plans for proposed

mitigations and implementation of the ESMP inclusive of an ESMoP. The ESIA Certificate would be transferred to the private partner to the PPPs with finalization of the PPP agreement.

Step 10: Variation of ESIA Certificate (if Needed)

Few if any PPPs supported by TPPP are expected to require variations to the EIA Certificate. Should a change in the design of the PPP however change its environmental and social impact, the EIA Certificate may need to be varied.⁴¹

Should a change in the design of the PPP change its environmental and social impact, the ESIA Certificate may need to be varied. If so, an ESIA Consultant will prepare application documents for the ESIA Certificate Holder. This will include a project brief explaining the need for the Variation of ESIA Certificate and the required scope of the variation. The preparatory work shall entail drafting of updates of the ESMP and field investigations to determine status of ecological and social receptors and consultation with PMT, project recipient communities and their leaders and relevant stakeholders. The Environmental and Social Screening Form (see Annex B) will be updated to form will be the basis of a reassessment by the IA of any project categorization under WB Environmental Assessment Policy (OP/BP 4.01).

The ESIA Consultant will provide for each PPPs 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 ESIA report previously approved for the PPPs 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 ESIA process.

The EO will review the draft updated ESMP for compliance with the results and recommendations from the environmental and social screening process and would recommend approval.

On behalf of the IA, the ESIA Consultant will submit project documents including project briefs with draft updated ESMP as necessary to the PMT for approval.

Upon submission to ZEMC of the project documents, ZEMC shall advise on any additional information required to supplement the revised ESMP.

No Additional Assessment Work Required:

⁴¹ Variations may be needed if the approved design of the PPP changes. Design of a PPP extends beyond the physical design and encompasses other aspects such as the output specifications and performance measures for the services delivered and risk allocations.

If the environmental and social screening results by ZEMC indicate the potential impacts and application of mitigation measures in project design are sufficient, the PPPs will not require additional environmental and social assessment. In which case ZEMC will recommend approval of variations and PPPs will be issued with renewed ESIA Certificate approval.

Additional Assessment Work Required:

In some cases, the results of the environmental and social screening process by ZEMC may indicate extra work needs to be done to supplement the draft updated ESMP. ZEMC will provide the nature of additional information required. The private partner (ESIA Consultant on behalf) shall proceed to carry out the supplementary work and seek approvals of the revised ESIA, ESMP and ESIA Certificate in the standard manner, inclusive of disclosure.

If TPPP support for a PPP is in place, the WB will review the ToR to any supplementary ESIA and/or supplementary EMSP and the subsequent ESIA and/or ESMP to confirm alignment with the WB's safeguards policies and guidelines.

Step 11: Preparation for Implementation

Construction Phase

The private partner (with requisite capability/experience in environmental and social impacts mitigation / integration) shall develop the Scope of Work including technology, layout etc.) in accordance with the PPP agreement then execute the Scope of Work including detailed engineering and implementation of ESMP components relevant to mobilization and construction/installation in accordance to international and Tanzania/Zanzibar specifications and standards. Construction supervision consultancies experienced in environmental and social management will be procured to work with PMTs to supervise construction of PPPs and to transfer skills to technical staff.

Operation & Maintenance Phase

Facilities and services will be operated and maintained by the private partner including implementation of operations aspects of the ESMPs linked to PPPs. Depending on the nature of the PPP, the PPP agreement shall cover operations and maintenance of the facility only. IA EOs shall undertake monitoring of operations aspects of the ESMP while coordinating input and involvement of local management committees and communities.

IA Contributions

IAs will continue to make in kind contributions in the form of staff time. MOFP's PPP Department will continue to provide support to assist IAs in the implementation and monitoring of both the construction and operation aspects of the PPPs including organizing technical assistance and training to IAs as relevant.

Permits and Notifications

The PPPs implementation shall be carried out in accordance to international and Tanzania/Zanzibar environment, health, safety and security requirements, standards and best

practices including all conventions ratified by the RGoZ. The equipment and materials used will have all necessary certification/registration and fully compliant with specific requirements for PPP size and purpose.

The private partner will seek and obtain the necessary permits and / or MOUs from relevant authorities and undertake notifications as per environmental management regulations (see the table below).

The PMTs will ensure that all relevant project approvals including ESIA Certificate, Occupational Health and Safety Authority etc. are in place. Most of the authorities listed have been working with TPPP and were visited by the ESIA Consultant and provided with information introducing the TPPP. TPPP and ZMC/PMTCs/DoURP will carry further the consultations before commencement and during the implementation of individual PPPs.

Table 6.2 Permit Requirements and Notification to Relevant Authorities

Type of Permit / Notification	Relevant Authority / Stakeholder
Use of existing Right of Ways (e.g. roadway-leaves)	<ul style="list-style-type: none"> - Roads Department - Road fund (main roads)
Other users of roads Right of Ways	<ul style="list-style-type: none"> - Electricity transmission lines (ZECO) - Water supply system Zanzibar water authority (ZAWA) - Transition cables (e.g., fiber optics) - Gas pipeline (future projects)
Notification to other authorities	<ul style="list-style-type: none"> - ZMA (Zanzibar Marine Authority) - Lands and surveys - Occupational Health and Safety Authority - Fire and rescue - Sources of construction materials
Notification of key stakeholders	<ul style="list-style-type: none"> - DoURP - ZEMA (Director General and Directors of ESIA and Enforcement). - Ministry for Environment (Minister & PS) - Department of Environment) - Regional and Local Government Authorities (Regional Commissioners, District Commissioner, Municipal /Town Directors; Chairpersons of Council Environment Committees). - District environmental officers, District health officers
Building permits	<ul style="list-style-type: none"> - Building permits – Stone town conservation development authority (STCDA) - ZMC- Building permits department (For Zanzibar Municipality)

Community / Public Mobilization and Sensitization

Stakeholders should be directly involved in project implementation and monitoring. Public awareness and mobilization shall be mandatory before commencement and throughout implementation of a PPP. Affected people and stakeholders shall be informed about the outcome and decisions on the ESIA approval process, schedules of project implementation and who, how, where, when they will participate.

Step 12: Implementation Supervision

Implementation of the RAP/ARAP

The PPP will utilize land designated and made available for use by the IA. Compensation and relocation procedures and payment of compensation costs by IAs will be in accordance with any RAP/ARAP prepared and approved for the PPP in accordance with the RPF, as required by WB OP 4.12. The PPP units will assist IAs in the implementation of the RAP/ARAP (see RPF for details).

Implementation of ESMP

The preparation of an ESMP is a requirement of the Zanzibar ESIA Regulations / Procedure and WB OP 4.01. The plan should provide guidance for implementation of the identified mitigation measures, and indicate costs⁴², timeframe and assign responsibilities. Private partners shall be responsible for implementation of the ESMP under the supervision of the IA and other regulatory agencies.

During the construction and operation of the PPPs, IAs will apply a systematic approach to optimize the Health, Safety, Security and Environment (HSSE) performance for the project and ensure that its HSSE objectives and management standards are achieved. The project will continuously undergo a comprehensive planning process to ensure that the management requirements identified are implemented on site through clear designation of roles and responsibilities. The management requirements will be incorporated into implementation strategy for the PPPs via the following key procedures and plans:

- Pre-tender HSSE qualification process including development of environmental specifications;
- Contractual and procedural controls on the private partner to the PPPs (i.e. inclusion of environmental conditions in PPPs contractual agreements);
- General Management Programs and IA management plans to guide the private partner to the PPPs, including:
 - Waste Management Plan;
 - Health, Safety and Security Plan;
 - Stakeholder Management Plan;
 - Emergency Response Plan;
- Direct project supervision; and
- Review/auditing and reporting of environmental performance/improvement of implementation.

TPPP shall support the IA to supervise and monitor all components implemented by the private partner. TPPP shall ensure the necessary supervisory oversight is available to ensure the mitigation measures are implemented. All aspects of the proposed PPPs will be managed to comply with the ESMF and Zanzibar's environmental regulatory requirements and standards (see above).

⁴² The estimated costs for implementing the mitigation measures are usually indicative. Appropriate bills of quantities should provide actual figures. The ESIA consultant must use informed judgement to determine the figures.

Management Controls by the Private Partner

The private partner shall ensure that those mitigation measures that are to be implemented during mobilization and construction and operation are attended to according to ESMP and specific work plans. The private partner shall simultaneously undertake monitoring and reporting of environmental performance/ improvement of implementation. Mitigation implementation shall as necessary include development of PPPs specific work plans, which may include a Waste Management Plan, Health and Safety Plan; and an Emergency Response Plan.

The private partner may also undertake actions identified in the RAP/ARAP, as set out in the Community Engagement Plan and PPP agreement.

Environmental Induction

The purpose of the induction is to encourage environmental and social responsibility among all personnel and ensure that the personnel are made fully aware of the measures required to be implemented to minimize the potential impacts on the environment, prior to the commencement of the project. The personnel with responsibilities in specific environmental practices will be adequately trained to ensure effective implementation of the works instructions and procedures for which they have responsibilities. This induction should address the PPPs Health Safety, Security and Environment Plan (use of personal protection equipment (PPE), fire-fighting facilities); good site practices and housekeeping; sound waste management (handling/clean-up of contaminating spills, storage, use and disposal of hazardous materials/wastes); and interactions with local community.

Community Engagement Plan

A community engagement plan will be developed by the IA with the support of TPPP in accordance with the CEF. The plan is to ensure awareness creation and consensus building for acceptance by all stakeholders of a PPP, its benefits, costs and risks. The community engagement plan will include awareness and sensitization measures and means for recording and acting on feedback from the community. Implementation will be a shared responsibility of the CA and the private partner in accordance with the allocation of roles and responsibilities in the program. The objective is to ensure continued project acceptance by the community, managing expectations and minimizing conflicts. The plan shall be developed mindful of type of communication information, awareness creation tools, communication channels and messages fit for specific targets/audience. Topics may include but are not limited to the schedule of services to be provided by the PPP and their charges, construction schedules and activities and ways the community can engage in and provide feedback on the PPP.

Grievance Redress Mechanism

As required in the RPF, each PPP will set up a Grievance Redress Mechanism (GRM). The GRM will handle all complaints about the PPP, including those related to involuntary resettlement impacts and the implementation of RAP/ARAPs. The GRM is explained in the RPF.

Step 13: Monitoring and Reporting

Objectives for Monitoring

The objectives for monitoring are: (i) to alert project implementing institutions and to provide timely information about the success or otherwise of the ESIA 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.

Monitoring Indicators

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. 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 PPPs meets local standards;
 - Compliance with the Environmental Guidelines for Contractors;
 - 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; and
 - Savings in costs for resources and services required to maintain the infrastructure (water, energy, management of liquid and solid waste etc.).

Step 14: Review and Audit

After a period of implementation, the ESMP should be subject to annual reviews / audits. Annual Reviews of the PPPs will be carried out using external / independent reviewers / auditors as commissioned by MoFP's PPP Department. These are to be Third Party audits (by independent Local Consultant, NGO or Service provider) which will review environmental and social management under the PPPs.

7 CAPACITY BUILDING

7.1 Introduction

IAs and PPP units will receive capacity development in relation to the tools, procedures and content of the RFP and ESMF. This will be integrated across safeguard requirements and linked to the overall capacity building program for TPPP.

Capacity building will include specific training and general workshops and by well qualified specialists. This will cover Zanzibar's requirements, WB Safeguard Policies and guidelines and special topics such as GRM. The PPP units and IAs will also receive general capacity building support from the WB through TPPP. This will focus on support during site visits, assistance developing stakeholder engagement reports, requirements in meeting regulatory requirements such as ZEMA filings, and generally being available on a daily basis to answer questions as needed.

The capacity building will build on training needs assessments (TNAs) to determine readiness to implement the RPF and ESMF. Initial capacity assessment indicates that some experience and capacity for environmental and social management supervision exist at MoFP and among IAs augmented by the links the ministry has established with national environmental and land management authorities. Among some of the key technical staff at LGA level (Environmental Management Officers, Land Officers) there is higher level of knowledge as these individuals implement many of the policy and legal requirements for project, however, there are only few such qualified staff per LGA. Some 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, some may have little experience and knowhow in carrying out ESIA's and RAP/ARAPs and handling of environmental compliance, monitoring and auditing of infrastructure projects i.e. good site practices, health, safety and security measures.

A capacity development plan for safeguard activities will be designed within the Capacity Development Strategy prepared for the Tanzania PPP Support Program.⁴³ The strategy explains how to deliver the skills and experience needed by the wide range of Zanzibar's stakeholders engaged in PPPs. It offers a wholistic, integrated approach to PPP capacity development that combines classroom-based training with learning-by-doing through a partnering of government staff with experienced PPP advisors. The strategy presents a six-step process for approaching capacity development, which will be followed in developing capacity for safeguards—

1. Identify who the stakeholders are and their interests and involvement;
2. Define what capacity is needed (e.g. skills, knowledge), by the various stakeholders. An assessment is needed of why, who, when, where, and to what level;
3. Analyze the state of the capacity, considering the current and projected demand;

⁴³ TPPP is the recipient executed trust fund of the World Bank's Tanzania PPP Support Program, which is funded by the United Kingdom's Department for International Development.

4. Identify strategies that can close gaps between the current capacity and needs, considering time and budget constraints;
5. Monitoring and evaluation of the outputs and impact of capacity building initiatives; and
6. Acting to safeguard service delivery while capacity is being built.

Members of the PPP units and IAs participated in two safeguards briefing by the WB; an event in April 2018 in Dar es Salaam and a second event in Morogoro in October 2018. These briefings, and the ongoing support to be provided by TPPP, supplement initiatives under other WB Group operations that are addressing institutional and capacity weakness in safeguards management. The main operations building capacity are the ZUSP and proposed new WB operations in Zanzibar.

The practices and experience of these activities and of TPPP will inform continuous assessments of the institutional arrangements and the capacity of the PPP Department and participating IAs to implement the RPF and ESMF. The focus will be on:

- Coordination and linkages—between and across sectors, with other infrastructure development initiatives; and up and down management levels;
- Compliance with requirements of policies, regulations, administrative procedures and local By-laws;
- The number and qualifications of staff (e.g., Heads of Department, Councillors' Committees, Local Management Committees and external Contractors) responsible for environmental and social management under the ESMP responsibilities; and
- The presence or otherwise of a dedicated section (not one person) managing environmental and social issues.

Capacity development will be undertaken to close identified gaps. Consultant inputs will be drawn on to ensure that PPP units and IAs have the resources required to ensure service delivery standards are met as capacity is built. As well as advisors for individual PPPs, a PPP Advisory Team will be formed that include one environmental and one social specialist safeguard expert.

7.2 Training

Objectives

The objective of the training for social safeguards is to:

- support staff of the various IA sector departments and sections relevant to PPPs supported under TPPP to priorities their needs, and to identify, prepare, implement and manage the environmental and social aspects of their PPPs;
- ensure that EMOs and CDOs of LGAs and their equivalent in national agencies have the capacity to assist sector departments in preparing their PPPs, and to appraise, approve and supervise the implementation of PPPs; and

- strengthen local service providers to provide technical support (including basic ESMPs and RAP/ARAPs) to IA project management teams in preparing their PPPs.
- Ensure local leaders and decision-makers responsible for coordination and linking various levels have the tools for conflict resolution and good governance for environmental and social management.

As almost all PPPs to be supported by TPPP are expected to be LGA PPPs, training will emphasis LGAs. National government agencies will also receive training support as needs arise.

Training Needs Assessment (TNA)

A training needs assessment (TNA) will be carried out in the IAs covered by TPPP. The TNA will be conducted prior to the initiation of a RAP/ARAP and ESIA so that the findings can feed into the TNA. The TNA for safeguards will form part of the broad capacity development plan to be put in place for an IA and its PPPs.

The TNA for environmental and social safeguards will consider all participants in the safeguards process, including Regional Coordinators, LGA staff, the staff of national agencies, representatives and community leaders, management committees and groups and service providers who will have responsibilities for implementing the ESMP. The TNA will align with the six-step process for approaching capacity development outlined in the capacity development strategy prepared for the Tanzania PPP Support Program.

The TNA is expected to distinguish among different skills and training needs in terms of:

- Detailed technical training for IA project management teams who will need to analyse potentially adverse environmental and social impacts, to prescribe mitigation approaches and measures, and to prepare and supervise the implementation of RAP/ARAPs. It will have a broad range that includes community participation methods; analysis, reporting, and supervision and monitoring;
- Awareness-raising for influential, representatives and community leaders who need to appreciate the significance or relevance of environmental and social issues; and
- 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

Experienced national private or public environmental and social practitioners will carry out the TNA.

Training Plan

Safeguards training will:

- 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;
- Follow an outline, detailed agenda and specification of resource needs including venue, trainers, materials, etc. for each type of training activity; and
- Provide for a training-of-trainers (TOT) in training events as appropriate.

Potential training activities are outlined in the table below.

Table 7.1 Overview of Safeguards Training Course

Description of Training	Participants	Form of Training	Duration	When	Cost USD (estimation)
Stakeholder Consultation for Environmental and Resettlement Management	LGA, other IAs, PPP Department	Workshop	2 Working days	Feasibility Study Phase	10,000
Grievance Redress Mechanism	LGA, other IAs, PPP Department	Workshop	2 Working days	Feasibility Study Phase	10,000
Environmental and Resettlement and Management for Policy Makers	LGA, other IAs, PPP Department	Workshop	3 Working days	Feasibility Study Phase	10,000
Environmental and Resettlement and Management for Practitioners	LGA, other IAs, PPP Department	Training and Training of Trainers	5 Working days	Feasibility Study Phase	20,000
Vulnerable Individuals and Gender Issues in Resettlement and Environmental Management	LGA, other IAs, PPP Department	Workshop	5 Working days	Feasibility Study Phase	10,000
TOTAL					60,000

Detailed technical training

This is primarily intended for staff engaged in social safeguards management (e.g., management of a RAP/ARAP and ESMP). They will predominately be staff in LGA departments (i.e. sector specialists) and other IAs that are responsible for preparation of PPPs proposals and staff designated as CDOs and Land Officers. Training topics would include an overview of environmental and social issues, introduction to ESIA processes, methods for impact identification, analysis and mitigation (management and action plans inclusive of ESMP and RAP/ARAP), ESIA review and the role of the public and stakeholders, GRM, practical ESIA experience in Tanzania and Zanzibar, and case studies.

Some positions, notably the EMOs and CDOs of LGAs and IAs, will receive social safeguards training in the form of Training of Trainers (TOT) that will enable them to train others in the

appraisal and management of PPPs, including supervision and monitoring. This will develop the capacity of these key staff as a key resource for training others within their organizations and enhancing the environmental and social sustainability of PPPs.

An illustrative program for detailed technical training is in the table below. Training could take the form of a one-week (5/6 working days) workshop and be provided by more experienced private or public safeguard practitioners operating at national / international levels.

Table 7.2 Illustrative Program for Environmental and Social Management for Practitioners

Topic/Subject	Duration
Introductory brief	
<ul style="list-style-type: none"> Definitions (environment, components of the environment, environmental management) What Environment Management Tools are available in use in Zanzibar & universal Setting Environmental and Social Assessment Management system, procedures, process 	
Environmental and social assessment process	3 days
<ul style="list-style-type: none"> 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). Preparation of scope (terms of reference) for carrying out ESIA and RAP/ARAP Project categorization as per the WB policies and guidelines Defining valued environmental and social receptors (indicators) in the existing environmental and social conditions Identification and evaluation of impacts: direct, indirect/secondary, cumulative and methods to use and significance criteria etc. Design of appropriate mitigation and monitoring measures for ESMPs and RAP/ARAPs How to review/approve an ESIA report, ESMPs and RAP/ARAPs: conformity list, and the kind of criteria for use in this regard How to incorporate ESMP and RAP/ARAP in project designs and in the PPP agreement How to review and approve safeguard elements of tender proposals Chance find procedure for physical cultural heritage The importance of public consultations in the ESIA and RAP/ARAP process How to monitor and report project implementation Case studies How to undertake inclusive informed consultations Gender issues in the project area GBV/SEA as issues and the GRM How to make the GRM responsive to all PAPs including women 	
Environmental and social requirements (policies, legislation, procedures and sectoral guidelines) & institutional frameworks	2 days
<ul style="list-style-type: none"> Review and discussion of Zanzibar's environmental and social requirements Review and discussion of the WB safeguards policies and World Bank Group EHS Guidelines requirements Review and discussion of specific sectoral guidelines relevant for infrastructure development How to collaboration with institutions at the local, regional and national levels. e.g. ZEMA, Ministry of Lands 	
Selected topics on environmental components and conservation and social issues	1 day
<ul style="list-style-type: none"> How to make environmental and social profiles of a specific urban area Environmental degradation e.g. land degradation (soil erosion), depletion of natural resources Environmental pollution e.g. air quality, water quality, soil quality Management of waste including handling of hazardous materials. Flood protection/control 	

Topic/Subject	Duration
<ul style="list-style-type: none"> • Ground and surface water management • Land and property valuation and compensation • Environmental, health and safety • Management of physical cultural heritage 	

Awareness and Sensitization

The objective is to enhance the appreciation by participants of the significance and relevance of environmental and social issues. This is primarily intended for leaders and decision-makers responsible for review and approving PPPs and the management of safeguards under these PPPs, such as:

- 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.

Subjects covered could include:

- Main social problems and challenges and issues within the sectors (e.g., in infrastructure construction and operation);
- Social assessment and management context, including relevant policies, regulations and procedures;
- Review of social screening and assessment process; and
- How to screen the safeguard aspects of PPPs, inclusive of how to appraise and approve ESMPs and RAP/ARAPs and to supervise their implementation.

7.3 Learning-by doing

Practical-based learning-by-doing will be provided in combination with the classroom-based training. This will be linked to actual PPPs to ensure stakeholder have both the skills and experience required to deliver a sustainable PPP program. Project needs and how they are met will provide a continuous update on the state of capacity and the gaps to be filled. The progress of individuals and agencies in progressively taking on more responsibility and more complex tasks will provide a measure of progress.

External advisors have a critical role to play. They need to provide the missing skills and experience so that projects can be successfully completed. At the same time, advisors must transfer their skills to stakeholders, such as working side-by-side with and mentoring the staff of IAs and PPP units.

LGAs and other IAs without the requisite capacity and knowledge for implementing RAP/ARAPs will require additional technical assistance to fill gaps while capacity is built. Under learning-by-doing, the skilled and experienced environmental practitioners (e.g., from

RAP/ARAP consultants) that fill gaps and prepare project studies carry an important mentoring responsibility for officials and stakeholders.

Learning-by-doing needs to be managed actively. Advisors often feel more comfortable preparing reports and studies. This is the typical responsibility of an advisor and provides clarity to work plans and performance. Adding in a responsibility to build capacity by working side-by-side with clients can take advisors into new, loosely defined ways of working and challenges that are beyond their control and often are poorly understood. Active management can include assigning capacity development responsibilities to only some advisors, with others left to work in the usual way.

References

Consultancy Services for Environmental and Social Impact Assessment for The Development of Solid Waste and Septic Sludge Management / Disposal Systems for Zanzibar Municipal Council Zanzibar Urban Services Project (TPPP) - Terms of Reference (ToR); has already been submitted to ZEMA. Based on the understanding between ZEMA and TPPP Project Unit, the Scoping Study will be carried out to strengthen the key environmental and social issues that will then be incorporated into the final ToR for ESIA study.

Emmanuel Kasimbazi (2009) Compliance with Safeguard Policies of the WB African Development Bank. At the 'IAIA09 Conference Proceedings', Impact Assessment and Human Well-Being 29th Annual Conference of the International Association for Impact Assessment, 16-22 May 2009, Accra International Conference Center, Accra, Ghana (www.iaia.org).

Environmental Impact Assessment Guidelines for Zanzibar, 2009.

<http://www.coastalforests.tfcg.org/pubs/Protected%20Area%20Spatial%20Planning%20Unguja%20and%20Pemba%20WCS%202012.pdf>

http://www.gfdr.org/sites/gfdr.org/files/Chapter_21_Safeguard_Policies_for_World_Bank_Reconstruction_Projects.pdf

http://www.gfdr.org/sites/gfdr.org/files/Chapter_21_Safeguard_Policies_for_World_Bank_Reconstruction_Projects.pdf

<http://www.iucnredlist.org/details/19708/0>

<http://www.worldbank.org/projects/P111155/zanzibar-urban-services-project?lang=en>

International Finance Corporation (1998) Procedure for Environmental and Social Review of Projects.

International Finance Corporation (2002) Handbook for Preparing a Resettlement Action Plan; WB Publications

International Finance Corporation and WB Group (2007) Environmental, Health, and Safety (EHS) Guidelines - General EHS Guidelines: Occupational Health and Safety; WB Group; Page 1-17.

International Finance Corporation and WB Group (2007) Environmental, Health, and Safety (EHS) Guidelines - General EHS Guidelines: Community Health and Safety; WB Group; Page 1-12.

JIIA Environmental Impact Assessment Guidelines and Format.

Protected Area Spatial Planning for Unguja and Pemba Islands, Zanzibar: A Consultancy to the UNDP- GEF: Extending the Coastal Forest Area Protected Area Subsystem in Tanzania; Final Consultancy Report Submitted to World Wide Fund for Nature From Wildlife Conservation Society (WCS); Prepared by Kirstin S. Siex; Zanzibar Project Director, Africa Program, 2300 Southern Blvd, Bronx, NY 10460, December 2011.

Revolutionary Government of Zanzibar (1995) National Land Use Plan; Analysis of Potentials and Issues; ZILEM Project & FINNIDA.

Project Appraisal Document, ESMF and RPF of ZUSP

The United Republic of Tanzania (2003) Zanzibar – The Land Husbandry Improvement Program: Strategy and Action Plan; Report No.03/007 CP-URT; Ministry of Agriculture,

Natural Resources, Environment, and Cooperatives; Food and Agriculture Organization; and Investment Center Division – FAO/WB Cooperative Program.

Project documents for ZUSP and other World Bank operations on Zanzibar, including previous Scoping and ESIA reports, RAPs, Environmental and Social Audit reports

Background literature of the environmental and social conditions (i.e. Zanzibar Sanitation and Drainage Program of 2005); as well as land acquisition and compensation in Zanzibar, conditions at target LGAs, and conditions at representative PPP sites.

Existing environmental and social management frameworks and plans resettlement action plan in use within TPPP area of influence and Zanzibar in general.

RGoZ policies, legislation and guidelines on environment, social, cultural heritage management and land acquisition and compensation; National Spatial Development Strategy; specific ZMC Development Strategy and Structure Plan (i.e. ZMC Indicative Diagrammatic Structure Plan)

WB safeguard policies applicable to TPPP (i.e. OP/BP 4.01 on Environmental Assessment; OP/BP 4.12 on Resettlement and OP/BP 4.11 on Physical Cultural Resources)

Annex A: Stakeholder's Consulted

Stakeholders were consulted to obtain their views and concerns regarding the ESMF and RPF. This was undertaken in two steps. The first step was to consult on a sample of PPPs being considered for support under TPPP, being PPPs in preparation under ZUSP. At each IA available documents (i.e. environmental / economic / social data and assessments, land use plans and other planning materials) were gathered and interviews/discussions conducted with relevant project implementers and persons in-charge of PPPs. The consultation covered environmental and social conditions in the IAs, institutional arrangements, the capacity for environmental and social management, and PPP-specific environmental and social matters. The consultation also addressed the need for the PPP, its mode of operation, willingness to pay, physical design, location-specific issues, temporary relocation, and challenges that are facing existing facilities. Stakeholder views fed into preparation of the draft ESMF.

The second step was to seek views from stakeholders on the draft ESMF and RPF. The draft ESMF and RPF were circulated to stakeholders for comment and review in a clinic held in Zanzibar December 5-6, 2018. The workshop discussed the design and use of the ESMF and RPF. Stakeholders were encouraged to share comments in open discussion with their peers, facilitated by MoFP staff responsible for safeguards, and to seek the views of safeguard managers within the relevant IA (e.g., their LGA). Stakeholder engagement will continue through the project cycle of the PPP supported by TPPP.

A summary of persons consulted is provided in the tables below. Comments raised on the ESMF and RPF are summarised at below.

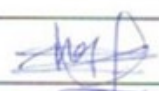

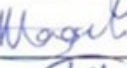




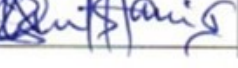
Table A.1 Persons Consulted on the 13 Candidate PPPs 15-16 October 2018

No	NAME	POSITION	TEL NO	EMAIL
1	DR HAROUN AYUB MAALIM	DVC – PFA	0776 650554	harounmaalim@suza.ac.tz
2	Pandu W. Pandu	Head Plang. Department - ruz	077448695	p.pandu@suza.ac.tz
3	HASSAN ALI NASSOR	SUZASO	0772-792816	hassanali.nassor@gmail.com
4	KHAMIS KHA JUMA	SUZASO	0979 894073	khamiskha96@gmail.com
5	MARAME GORA HASI	SUZASO	0773404220	Moram3294@gmail.com
6	SALHA KHAFAN KHAMIS	DO5 Suza	0776296849	salhaand83@yahoo.com
7	AMOUR A. SHAR	ENGINEER	0774-159096	amourhamed@yahoo.com
8	ALI J. ALI	Ag. Dir. DPS	0773 700544	ali.juma@suza.ac.tz
9	ABDULHAKIM HASSAN ALI	PPP OFFICER	0622384337	abdulhakim2417@yahoo.com
10	MARYAM O. ABDALLA	PPP OFFICER	0774 255263	mamoudhahmed@gmail.com

ATTENDANCE LIST – ZANZIBAR

No	NAME	POSITION	TEL NO	EMAIL
1	DR. SONGORO	WB	0752 777 316 asongoro@worldbank.org	asongoro@worldbank.org
2	MARYAM O. YUSSUF	PPP OFFICER	0712 293121 0773 805471	Maryamomy497@gmail.com

ATTENDANCE

NA.	Name	Mobile No.	Signature
1.	MOHD ZUBEIR KOMBO (ZECO D.ENG.)	0772002254	
2.	Endang Nkuyi (Cons. World Bank)	086419141	
3.	Magale Masamba (Cons World Bank)	0977350702	
4.	Alexander Songoro (WB)	0752 777 316	
5.	Ali Juma Ali (Estate Dir SUZA)	0773 700544	
6.	MARYAM O. YUSSUF (PPP)	0773 805471	
7.	ABDI M. SHEHE (PPP DEPT)	0773 190266	
8.	Abdulla M. Khamis (PPP DEPT)	0657-215160	

URBAN MUNICIPAL

ATTENDANCE LIST – ZANZIBAR

No	NAME	POSITION	TEL NO	EMAIL
1	Mzee K. Juma	Municipal Clerk	075777443043	mkjubi@ychoo.com
2	DR. SONGORO	WB	0752 777 316	asongoro@worldbank.org
3	ABDI M. SHEHE	PPP-DEPARTMENT	0773 190266	maaleu@khamis.com
4	MARYAM O. ABDALLA	" "	0774-255263	maryamoclu@khamis.com

UMAWA

ATTENDANCE LIST – ZANZIBAR

No	NAME	POSITION	TEL NO	EMAIL
1	COL M M VUAI-Rtd	MWENYEKITI	0777420118	
2	HASSAN Juma Juma	M/KIS	0777430233	
3	ABDULLAH AHMAD KUNDE KUNDA	KATI BOMIKU	07798679113	
4	ALI AHMAD ALI	AFISA MATUNZO	0773-670047	
5	MANAFI SAID MWINYI	MJUMBE UMAWA	0773520008	
6	ABACIL ABACIL HAJI	Umwa.	0654162744	
7	KAINA Juma KHANIS	MJUMBE	0772085416	
8	ABD SHAKIR KHANIS	MWENYENZI	0655921987	
9	ALLI USAI ALI	MWENYENZI KUNDA	0777-471544	
10	Mussa Salim Juma	MKUSAKABI	0773619483	
11	KHADIJA A YUSUF	KATI BOMIKU	0774221929	

SOKO LA MWANAKWEREKWE

ATTENDANCE LIST – ZANZIBAR

15/10/2018

No	NAME	POSITION	TEL NO	EMAIL
1	MARANI KHANIS	M/WASOHO	0777-873979	
2	Ame Mshindani Ali	M/KAMATI	0776-398606	
3	ABD KARIM ABD	K/WANTABUWA	0655986085	
4	YAHYA ALI MBARUK	K/KAWANABUKU	0716486021	
5	RASHID HAMAD NASSIR	K/MBATATA	0778 75049	
6	Ali HAMAD	Umwa	0773355880	
7	Juma HAJI Ali	-	0777 456193	
8	Ali HAJI AHMAD	-	-	
9	HADI AHMAD	-	0772585900	
10	MKUBWA KHANIS	MATUNDA	0777871008	

SOKO LA MWANAKWEREKWE

ATTENDENCE LIST – ZANZIBAR

No	NAME	POSITION	TEL NO	EMAIL
11	MIBWANA IGA HABANI	M/KWEREKWE	0777807621	
12	KHAMIS HASSAN ZEPAMBA	M/KWEREKWE	0712824590	
13	Makame Madhano	M/Kwerekwe	0777849159	
14	Sunamkame Juma	m/Kwerekwe	0777812487	
15	Uss. Khamsi Haji	M/Kwere	0773515405	
16	MOHAMMAD SALIMU		0977 483961	

No.	INSTITUTION	NAMES	DESIGNATION	PHONE #	E-MAIL
1.	Zanzibar Housing Corporation	Hamza Salum Mohamed	ICT Officer	+2255772030606	keslivol@gmail.com
2.	Zanzibar Electricity Corporation	Mzee M. Simbamba	Renewable Enegry Offcier	+255777243325	mmsimbamba@hotmail.com
3.	Zanzibar Electricity Corporation	Maulid Shiraz Hassan	Engineer	+255774386247	maulid.shiraz@zeco.co.tz
4.	West A Municipal Council	Zainab M. Musa	Legal Offcier	+255773711227	zainabsurumusa@gmail.com
5.	State University of Zanizbar	Rukia H. Abdulla	Director for Finance	+255777475100	rukia.abdalla@suza.ac.tz
6.	State University of Zanizbar	Said S. Bakari	Senior Lecturer	+255773512979	saidbakary@yahoo.com
7.	North A District Council	Mussa A. Makame	Director	+255773189963	kijijini19@yahoo.co.uk
8.	North A District Council	Mlenge H. Hassan	District Health A Administrator	+255773527013	mlengehassan@yahoo.com
9.	North A District Council	Mgeni A. Ussi	Assistant Accountant	+255779245175	damge6@gmail.com
10.	North A District Council	Rashid A. Dunia	Auditor	+255773136544	rashipdunia@gmail.com
11.	North A District Council	Mbarouk M. Mohamed	Procurement Officer	+255776816618	maalum16@gmail.com
12.	Zanzibar Housing Corporation	Riziki J. Salim	Director General	+255773768366	rizikisalim2007@gmail.com
13.	North A District Council	Makame M. Shauri	Material Management Officer	+255777455674	n.a.
14.	North B District Council	Makame M. Haji	District Administrative Officer	+255777427633	makame.mh@gmail.com
15.	Ministry of Trade and Industry	Amauh A. Suleiman	Legal Officer	+255777868988	Amoursuleiman90@gmail.com
16.	West A Municipal Council	Director	Amour A. Mussa	+255777844004	amourali@gmail.com
17.	Ministry of Trade and Industry	Fadhil KH. Yussuf	Procurement	+255779031022	fadhillyz@yahoo.com
18.	Ministry of Trade and Industry	Farid H. Suleiman	Store Keeper	+25577889334	Faridsuleiman09@gmail.com
19.	Ministry of Trade and Industry	Zaina A. Mbarak	Procurement	+255714403571	zaina@gmail.com
20.	Ministry of Trade and Industry	Aziza O. Said	Accountant	+255777462418	azizaosaid@gmail.com
21.	State University of Zanizbar	Ali J. Ali	Engineer	+255773700544	alijuma@suza.ac.tz
22.	Zanizbar Housing Corporaiton	Mafunda A. Khamis	Procurement	+255777474237	Ahmedmakame11@gmail.com
23.	Zanzibar Housing Corporaiton	Mwamaisha H. Suleiman	Accountant	+255777468287	Kidougo2000@yahoo.co.up

27.	Zanzibar Housing Corporation	Yasir Haji Gharib	Planning Officer	+255776900105	gharibyasir@gmail.com
28.	PPP Department	Maryam O. Yussuf	PPP Officer	+255712293121	maryamomy497@gmail.com

Table A.3 Summary Comments on the RPF and ESMF

Comment	Response
Further information is required on the 3 environmental impact categorizations under WP 4.01 and their impact on WB support to a PPP	Additional material has been included in the ESMF to address this point
Further information was sought on brownfield rehabilitation projects, noting ZEMA does not have any guidelines on environmental and social impact for brownfield projects. ZEMA does however have an audit system for brownfield projects and does not require an ESMP.	Brownfield PPPs will be treated the same as greenfield PPPs under the ESMF and RPF, as all candidate projects involve new construction whether they are brownfield or greenfield. The only difference is the brownfield project must manage the replacement or upgrade of an existing facility.
It was emphasized that efforts should be made to closely link the WB processes with the ZEMA processes.	Additional material has been included in the ESMF to address this point
Additional technical assistance and capacity development was called for is much needed on social and environmental safeguards. WB short trainings, seminars and monthly sessions on safeguard issues were proposed.	Additional material has been included in the ESMF and RPF to explain the technical assistance and capacity development that will be provided by TPPP, including the budget.
Key challenges will be faced on social impacts, resettlement, as Zanzibar does not have a clear resettlement policy. Further the resettlement approach currently utilized in Zanzibar does not provide for compensation of land (as constitutionally, all land in Zanzibar where occupied or vacant is publicly owned). The laws of Zanzibar generally provide for compensation of fixed value of crops and structures. It was noted that due to WB approach of ensuring that the PAPs are left better off, the ZUSP project has used market value for compensation.	The challenges are noted. The RPF makes clear that both Zanzibar legislation and WB safeguard policies must be met. The adjustments that Zanzibar has already made work under other WB operations will continue under TPPP. TPPP will not support PPPs requiring land acquisition.
Compensation by cash is problematic in Zanzibar as it has encouraged purchase of land on the black market. Alternatives should be considered, such as including PAPs in government housing schemes. In Zanzibar the principal land law is considered land as public asset. Since independence citizens can access land in two ways, unofficial and official where the government can only recognize the land use rights in any case and not land ownership. Therefore, if we still consider to pay PAPs on their structures and/or crops on cash compensation erected on the land which is not theirs it is very possible to encroach in another piece of land and construct houses or planting crops unplanned which is very risk in the future. Therefore, since, the issue of land use planning and enforcement is not well implemented, it is suggested that WB projects can comply with the long term housing development agenda on constructing planned housing schemes such as Michenzani and Mombasa kwa Mchana which can easily be used for resettlement for those affected PAPs who need to be reallocated instead of giving them cash and can encroach into the marginal areas looking for cheap housing development and can end up with accelerating flooding and disease. If there is physical resettlement, and it is farmed land, farmers may be offered alternative land plots where they can continue farming under the same conditions as previously.	The observations are noted. Entitlements for resettlement or the disruption to livelihoods under TPPP will be as summarised in the RPF's Entitlement Matrix.
It was suggested that further efforts should be made to create synergies on projects and other development efforts from either other development partners, private and public in order to avoid misuse and duplication of resources. This WB projects can be coordinated through ZUSP and can use the well-established safeguards unit under ZUSP project.	Maximum use will be made by TPPP of implementation arrangements established under other WB operations in Zanzibar, including ZUSP. Notably, TPPP has generally adopted the procedures for environmental and social management of ZUSP.

Comment	Response
An approach taken on all safeguard issues should be one of a community-centered approach.	This approach is agreed as an underpinning of TPPP. It is highlighted by the effort made to ensure good stakeholder engagement in all phases of the project cycle, which will support implementation of both the RPF and ESMF.
A member from ZECO noted that his main concern relates to inclusion of land in the compensation amount. He felt that this would substantially increase the government contribution in a proposed PPP, potentially to the point of making many projects unaffordable. Of which, the clarification was once again offered that only privately-owned land is compensated.	TPPP will not support PPPs requiring land acquisition. As TPPP will support relatively small and simple PPPs, and the main impact is likely to be the temporary relocation of users of an existing facility while it is reconstructed, compensation costs should not be a major barrier.
Government valuers should ensure that they expressly categorize their valuations – land value, transport allocation, disturbance allowances, structure and crops	The RPF recognises the important role of government valuers and provides guidance on the conduct of their valuations.
The potential value of a change to laws & policies in relation to compensation in Zanzibar was discussed. It was noted the current law provides very little compensation for crops/vegetation/trees on project lands. An example was given on Palm tree which is valued at 500/= Tanzania Shillings only per tree according to Zanzibar laws.	The point is noted. The treatment of compensation explained in the RPF and summarised in the Entitlement Matrix is to be followed by the TPPP.
Participants enquired about what would happen to reallocation when someone is not satisfied with compensation.	TPPP will establish a grievances redress mechanism following that already in place in Zanzibar WB operations such as ZUSP. This involves Sheha (Ward Chairman) all the way up to District Commissioner.
To have full support from the community during project implementation it is a must to have detailed studies done before implementation of the projects. This will highly reduce conflicts.	This point is endorsed. The RPF and ESMF are important elements of TPPP's approach to ensuring full community support or ending PPPs that do not secure such support.

Annex B: Environmental and Social Screening Form

Implementing Authority	
PPP	
Name of the Mtaa/ Shehia/ District where the PPP is to be implemented	
Head of Project Management Team (responsible for reviewing and approving this form)	Name: Title: Phone number: Email:
Signature Date	

PART A: BRIEF OVERVIEW OF THE PPP

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

2. Provide an overview of actions needed during the development construction of the PPP, 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.

3. Describe how the PPP 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 AND SOCIAL ASPECTS

1. Describe the location, siting, surroundings (include a map)

2. Describe the land formation, topography, vegetation in/adjacent to the site of the PPP. Indicate if vegetation clearing will occur and to what extent.

3. Describe how and when the site was acquired; was the proposed site in use (agricultural, residential, business) prior to acquisition? Please identify any involuntary resettlement (business relocation, crops, buildings) arising from acquisition of the site and how that was managed (compensation, transition assistance). Please list evidence of ownership and control of site including the date of acquisition.

--

PART C: QUESTIONNAIRE

	Yes	No	Additional comments (if yes)
Natural habitats, Environmentally sensitive areas or threatened species			
Are there any natural habitats, environmentally sensitive areas or threatened species that could be converted/adversely affected due to the PPP? If “Yes”, to any of those below, requirements in OP 4.04 on Natural habitats must be followed.			
- Surface water courses, natural springs			
- Wetlands (lakes, rivers, swamp, seasonally inundated areas)			
- Marine and coastal areas			
- Area of high biodiversity			
Are there habitats of endangered/ threatened, or rare species for which protection is required under Tanzania national law/local law and/or per the IUCN Red List on Threatened Species? If “Yes”, the PPP is <u>ineligible</u> for TPPP support			
How far is the nearest wetland (lakes, rivers, seasonally inundated areas, sea)?			
Is there a possibility that, due to construction and operation of the PPP, the river and lake ecology will be adversely affected?			
Is there a possibility that, due to construction and operation of the PPP, marine and coastal ecology will be adversely affected?			
Does the PPP area (or components of the PPP) occur within/adjacent to any protected areas designated by government (national park, national reserve, world heritage site etc.)? If yes, these sites are considered critical natural habitat per OP.4.04, any PPP which could lead to a significant conversion or degradation of those sites and would be <u>ineligible</u> for TPPP support.			
If the PPP 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). If yes, the PPP is <u>ineligible</u> for support by TPPP as it would affect components of a critical natural habitat.			
Forests			
If “Yes” to one of the questions below, OP 4.36 is triggered, the PPP is ineligible for TPPP support			

	Yes	No	Additional comments (if yes)
Would the PPP have a significant impact on the health and quality of natural forest?			
Would the PPP affect the rights and welfare of people and their level of dependence upon or interaction with natural forests?			
Would the PPP bring about changes in the management, protection or utilization of natural forests or plantations, whether they are publicly, privately, or communally owned ?			
Would the PPP involve natural forest harvesting or plantation development that would involve any conversion or degradation of critical forest areas or related critical natural habitats?			
Geology, hydrogeology 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.)?			
Based upon visual inspection or available literature, are there areas that have risks of large-scale increase in soil salinity?			
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.			
Landscape/aesthetics			
Is there a possibility that the PPP will adversely affect the aesthetic attractiveness of the local landscape?			
Historical, archaeological or cultural heritage site			
Based on available sources, consultation with local authorities, local knowledge and/or observations, could the PPP alter any historical, archaeological, cultural heritage traditional (sacred, ritual area) site or require excavation near same? If there are significant adverse impacts the PPP is <u>ineligible</u> for support under TPPP. If “YES” but impacts are less significant, Physical Cultural Resources OP 4.11 is triggered. Consult relevant authorities and ensure mitigation measure are incorporated into the ESMP.			
Resettlement and/or land Acquisition			
Will the PPP require land acquisition? If “Yes” the PPP is <u>ineligible</u> for support under TPPP. If No, the IA should provide evidence of clear ownership and control of the PPP site, e.g. certificates of title?			
Will the PPP otherwise result in involuntary resettlement, relocation of property, or loss, denial or restriction of access to land and other economic resources? If “Yes” Involuntary Resettlement OP 4.12 is triggered. Please refer to the RPF for the required actions.			

Did any resettlement occur during previous stages of the PPP development (e.g. Identification Phase)? If so, was the resettlement implemented in compliance with the RPF requirements? If “No” the PPP is ineligible for support under TPPP.			
Is the PPP a brownfield PPP that would require temporary relocation of operators during development of facilities? If yes, are there a viable alternative site or sites, where operators can be temporarily relocated?			
If the PPP would involve relocation of structures, businesses, loss of crops, loss or restriction of access to livelihood or economic resources, is the cost of the compensation/relocation/resettlement expected to be fiscally affordable?			
Vulnerable Groups			
Will the PPP adversely affect any vulnerable groups? ⁴⁴ If “Yes”, the PPP is ineligible for TPPP support.			
Loss of Crops, Fruit Trees and Household Infrastructure			
Will the PPP result in the permanent or temporary loss of crops, fruit trees, household infra-structure (such as granaries, outside toilets and kitchens, livestock shed etc.), and/or business infrastructure (such as permanent stalls). If “Yes” Involuntary Resettlement OP 4.12 is triggered. Please refer to the RPF for appropriate mitigation measures to be taken. Mitigation for accidental damage will be addressed in ESMP.			
Stakeholder engagement			
Has input from community members and those who may be affected by the PPP been sought?			
Has the PPP received stakeholder agreement including from vulnerable individuals and marginalized groups?			
Has the community stakeholder engagement considered vulnerable individuals and marginalized groups?			
Has the community received information on GRM?			
Does the PPP adversely affect the livelihoods and/or the rights of women?			
Block of access and routes or disrupt normal operations in the general area			
Will the PPP interfere or block access, routes etc. (for people, livestock) or traffic routing and flows?			
Noise and Dust Pollution during Construction and Operations			

⁴⁴ A group must possess all of the following characteristics in varying degrees to be recognised as a vulnerable group:

- (a) self-identification as members of a distinct indigenous cultural group and recognition of this identity by others;
- (b) collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories
- (c) customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; and
- (d) an indigenous language, often different from the official language of the country or region.

Will the operating noise level exceed the allowable noise limits?			
Will the operation result in emission of copious amounts of dust, hazardous fumes?			
Contamination and Pollution Hazards			
Is there a possibility that the PPP will be at risks of contamination and pollution hazards (from latrines, dumpsite, industrial discharges etc.)?			
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?			
Solid or Liquid Wastes			
Will the PPPPPP generate solid or liquid wastes? (including human excreta/sewage, asbestos) If “Yes”, does the PPP include a plan for their adequate collection and disposal?			
Occupational health hazards			
Will the PPP require large number (e.g., more than 100) of staff and laborers from outside the local area?			
Will the PPP require a worker’s camp? If “Yes”, how many workers are expected to occupy the camp?			
Are the PPP activities prone to hazards, risks and could result in accidents and injuries to workers during construction or operation?			
Will the PPP require frequent maintenance and or repair?			
Pest management			
Does the PPP will require the use of pest management technique that could affect the agriculture and /or public health ? If “Yes”, OP 4.09 Pest Management is triggered. TPPP will not support project triggering this OP.			
Dam safety			
Does the project involve the construction of a dam and/or will be dependent of an existing dam? If “Yes” OP 4.37 is triggered and the PPP is not eligible for support under TPPP.			
Existing ESIA			
Based on the Environmental Management Acts and its ESIA Regulations, is the PPP situated on land with an ESIA Certificate issued under the ESIA Regulations? <i>If “Yes”, then a Variation of ESIA certificate may be needed.</i>			

ESIA = environmental and social impact assessment, ESMF = Environmental and Social Management Framework, ESMP = environmental and social management plan, GRM = grievance redress mechanism, PPP – public-private partnership, RPF = Resettlement Policy Framework, TPPP = Tanzania PPP Project

PART D: WORLD BANK ENVIRONMENT CATEGORY

Based on the answers above and other available information, which category does the PPP belong?

Category	Yes
Category A: PPPPPP with potential significant adverse environmental or social risks and/or impacts that are diverse, irreversible, or unprecedented.	
Category B: PPPPPP with potential limited adverse environmental or social risks and/or impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures.	
Category C PPPPPP with minimal or no adverse environmental or social risks and/or impacts	

If the PPP falls within Environment Category A as per World Bank categorization, then the PPP is ineligible for support under TPPP.

PART E: SCREENING RESULT SUMMARY

The PPP is ELIGIBLE for support under TPPP, and is required to prepare and/or undertake the following:			The PPP is <u>INELIGIBLE</u> for support under TPPP due to the following (enumerate the reasons):		The PPP may be resubmitted for consideration with the following recommended revisions:
Documents	Yes	No	Reasons	Yes	
ESIA with ESMP which will identify mitigation measures			Falls within Category A of World Bank		Change of site (please specify)
Resettlement Action Plan following the TPPP RPF			Would involve Land Acquisition		Change in design (please specify)
Abbreviated Resettlement Action Plan following the TPP RPF			Is within a Protected Area		Others (please specify)
Grievance Redress Mechanism in accordance with TPPP ESMF			Would involve significant conversion of critical natural habitat		
Other requirements, please specify		Would have a significant adverse impact on a Physical Cultural Resource			
		Would require the use of pest management techniques that could affect the agriculture and/or public health ?			
		Would involve construction and operation of a dam and/or a weir (water impoundment) and/or being dependent of an existing dam?			
		Is within the TPPP negative list (i.e. involve growing or purchase of tobacco or drugs; investment and/or operation of gambling, casinos and equivalent enterprises; investment and/or operation of bars or establishment serving alcohol)			
		Would affect vulnerable groups?			

ESIA = environmental and social impact assessment, ESMF = Environmental and Social Management Framework, ESMP = environmental and social management plan, GRM = grievance redress mechanism, PPP = public-private partnership, RPF = Resettlement Policy Framework, TPPP = Tanzania PPP Project

Screening undertaken by:

Name:

Title:

Phone number:

Email:

Annex C: ESMP Checklist

Activity / aspect	Anticipated Effect	Likelihood		Avoidance & Mitigation Measures for ESMP (for “Yes” Responses)
		No	Yes	
NATURAL HABITATS				
Physical placement of new infrastructure	Replacement of / direct encroachment of natural vegetation / habitats			Avoidance strategies Siting of PPP circumvent a critical habitat or species
				Compensation measures (i.e. establish and maintain an ecologically similar area).
Land clearing	Loss or damage of vegetation, fauna and biodiversity in a natural habitat			Minimize loss of vegetation
Drainage, dredging, filling or channelization of wetlands	Conversion of wetlands			Avoidance strategies Management plans for affected areas
Sediments and other liquid waste such as oil in runoffs from construction works.	Prevent aeration and Increased turbidity of natural water areas			Use contractors with good equipment Soil erosion control measures
WATER RESOURCES AND MANAGEMENT				
Improved drainage system	Reduce risk of flooding and stagnant pools of water			Enhancement measures
Physical placement of infrastructure on/close to water courses / bodies	Obstruct drainage systems / change of water courses			Avoidance strategies: Observe and enforce setback lines: 30m from riverbanks; 60 m from high water mark of Lake or sea Management Plans for affected areas
Soil disturbance (digging / excavation) increasing erosion and sediments load in runoffs into water body	Change of water courses Increased water turbidity			Soil erosion control measures (see section 3 below
Uncontrolled water extraction or tapping from existing sources	Water sources depletion Increase pressure on the existing water supply systems			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.) Rainwater harvesting at all buildings or channeling to storage troughs.
LAND, SOIL AND CONSTRUCTION MINERAL RESOURCES				
Site preparation Clearing of vegetation)	Soils erosion at PPP site and points of source of materials			Procurement of Private Partner Use Contractors with requisite experience of land management and soil erosion control

Civil works (trenching, digging)				<u>Avoidance / minimization of soil erosion</u> Minimize surface area to be cleared during works Avoid and minimize the removal of stumps, trees and natural vegetation Minimize the extent and exposure time of bare/cleared areas <u>Machinery operations</u> Avoid use of heavy machinery during rainy season to avoid ground compaction, creation of ruts and loss of organic matter <u>Soil erosion control using vegetation</u> Use mulch of vegetation e.g. agricultural plants or any other type of mulch; Use of permanent vegetation such as trees Leaving buffer zones of natural vegetation cover between a cleared area e.g. access roads and water bodies <u>Soil erosion control mechanical measures</u> Use of mechanical process e.g. on roads: stone ripraps, spreading gravel or crushed stone, use nets and matting etc. Design slopes and ditches to prevent erosion Topsoil from stripped areas put aside for later use in areas to be re-vegetated Divert surface runoff from exposed surfaces
Grading of materials: piling and levelling of topsoils, fill and excavated materials	Materials deposition or transportation into water courses.			<u>Avoidance / minimization measures</u> 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 <u>Mechanical measures</u> Materials deposited on the surface of inclined ground must adhere well to the existing ground to avoid sliding Preserve topsoil stockpiled to a maximum height of 1.5 m to be used to landscape the road slopes and other disturbed surfaces 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. 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.
Unintended damage from construction equipment	Accidental damage to crops or agricultural lands			Avoidance / minimization measures Demarcation of crop lands, and high-visibility signage to reduce potential for damage
Uncontrolled excavation / extraction of construction materials (stones/aggregates, sand, gravel, cobblestones, fill materials)	Depletion of construction materials at points of source			<u>Contractor procurement</u> Obtain construction materials only from authorized sites or suppliers
				Management Plans For existing quarry sites, and new sources of construction materials
MATERIAL EFFICIENCY AND WASTES				
Uncontrolled water use (for construction, cleaning purposes,	Reduced volume of water available for various uses			Solid Waste Management Plan Institute measures for reduction of water consumption, wastewater, and pollution by: Reducing water consumption in construction, cleaning and other areas Avoiding spillage and leakage Reusing and/or recycling suitable water sources Reducing wastewater pollution Treating wastewater in an environmentally-sound way Education awareness on measures to minimize water loss (wastewater reuse)
Uncontrolled use of materials e.g. construction materials	Reduced volume of material available for various uses			Institute measures for controlling use of materials Avoiding losses due to spillage and leakage Establishing preventive maintenance programs

				<p>Substituting and/or reducing the use of materials harmful to the environment (e.g. (cleaning agents, disinfectants, leaded fuel)</p> <p>Use materials formulated with internationally acceptable benign (nontoxic) / low toxicity / ingredients</p> <p>Adopt system to recycle the use of the materials</p> <p>Minimize residue through processing by solids control equipment.</p> <p>Use of high standard personnel and equipment.</p>
Discharge of biodegradable / organic wastes: food, cleared vegetation etc.	<p>Increase nutrients in soils and aquatic bodies</p> <p>Proliferation of disease germs and vectors</p> <p>Attract human and animal scavengers</p>			<p>Waste Management Plan</p> <p>Composting</p> <p>Animal feeds</p> <p>Recycling and re-use</p>
Disposal of paper, cardboards, wood & packaging materials	Loss of visual quality			
Disposal of non-biodegradable (metallic, plastic)	<p>Soil degradation</p> <p>Accidental injuries</p>			
Discharge of wastewater	Same as solid wastes			<p>Waste Management Plans</p> <p>Wastewater use for irrigation / watering</p>
Disposal of medical wastes	<p>Health hazards (poisonous materials, accidental injuries);</p> <p>Soil degradation</p>			Waste Management Plan
Disposal of hazardous wastes: used batteries, chemicals, paints etc.	<p>Soil degradation, health hazards (poisonous materials)</p>			<p>Waste Management Plan</p> <p>Proper handling, transportation and storage of materials and products:</p> <p>Applying the first-in-first-out principle</p> <p>Establishing adequate, secure, and controlled storage for hazardous materials</p> <p>Handling dangerous substances with care</p> <p>Properly cleaning and disposing of packaging materials</p> <p>Transport in leak-proof containers that are clearly labelled</p>

Leaks and accidental discharge / spills of fuels, oils, lubricants, vehicle / machinery fluids	Soil and water degradation, Loss of visual quality			<p>Waste Management Plan</p> <p><u>Secure storage area:</u> (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.</p> <p><u>Machinery maintenance site:</u> 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</p> <p><u>Containment/retention:</u> tanks and filling equipment surrounded by a retention dike designed to completely contain the content of each tank inside the basin; Fuel tanks equipped with a reserve basin</p> <p><u>Workers handling and using hazardous materials:</u> 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, to avoid any accidental discharges</p> <p><u>Spills clean- up:</u> 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</p> <p><u>Materials to control discharges:</u> e.g. absorbent material, peat, sandbags, shovels, pumps, machinery, containers, and gloves stored near construction areas</p> <p><u>Machinery operations:</u> avoid use of heavy machinery: closer than 30m from watercourses or lakes; during rainy season.</p> <p>All repairs, maintenance, refilling undertaken offsite</p>
Construction Wastes				
Wastewater from concrete works, washing of aggregates	Soil degradation, Degradation of water quality of receiving water bodies			Avoid / minimize discharging onto land and in water, Conduct works on impervious surfaces, Wastewater contained not to enter environment
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,				Fill material in open pits Recycling and re-use
AIR QUALITY AND CLIMATE CHANGE				
Exhaust fumes (containing greenhouse gases) from construction and operation equipment (generators,)	Reduced air quality GHG effects that affect climate change			Repair and maintain machinery (regular preventive maintenance for all equipment)
				Engines should not be left running unnecessarily to reduce exhaust fumes (also reduce noise, smoke, dust etc.)
Dust from bare land or loose surfaces; fine sand, cement and other materials from construction, excavation, drilling blasting activities.	Caking of surfaces (near vegetation, buildings, streams, and wetlands)			Avoid dust formation; contain fine sand, cement and other materials with a firmly fixed cover Installation of dust filters on equipment Dust-control agents (e.g. wood shavings, mulch) or water spray (e.g. if near buildings, streams, and wetlands) Speed restrictions etc.
Smoke running engines	Reduced air quality, GHG effects that affect climate change			Engines should not be left running unnecessarily to reduce smoke, Repair and maintain engines

Odors (from wastes)	Reduced air quality, Nuisance to receptors			Prevention at source (proper waste management)
LANDSCAPE AND VISUAL AMENITY				
Intrusion of new elements in the natural setting	Impaired visual quality and amenity			Structures blend (height, texture, color etc.) with natural settings
Vegetation clearance	Loss of land value			Revegetate cleared areas; minimize loss of vegetation
Soil erosion, landslides etc.; of landscapes features				Avoidance / minimization measures
Haphazardly disposed wastes				Waste Management Plan
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.			Avoid use of heavy machinery near properties to prevent damage or cracks
Increased rainwater catchment by roofing / paving concentrate rainwater 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 attracts new immigrants	Pressure on existing or proposed public infrastructure			Social Management Plan Labor Influx Management Plan
ACCESS TO FACILITIES AND LAND RIGHTS AND LANDUSES				
Taking of land for PPP	Loss of land rights (statutory and customary) and improvements on the land			<u>Avoid or minimize</u> 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 <u>Valuation and prompt compensation</u> 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 PPP site			<u>Managing existing land use avoid or minimize:</u> 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.
	Loss of access to land or land user rights			<u>Maximize benefits to communities</u> Informing and involving land users in the design and siting of facilities, roads and drainage structures Use of drainage structures and turnouts to benefit communities in water-deprived areas Drainage structures can be designed to allow community to harvest water Use of borrow pits converted to some other use to the community after project completion e.g. water collection pond, dumpsite, etc.
COMMUNITY LIVELIHOODS				

Development of new and improved infrastructure e.g. roads, introducing access to areas which did not exist / accessed before	Local government increased incomes; reduced construction and maintenance costs			Enhancement measures: Regular preventive maintenance
	Increased land values			Enhancement measures
	Employment opportunities at the local, district and regional levels (Laborers to Contractors)			Social Management Plan Enhancement measures: Optimize local employment Allocate jobs fairly /equally among community members using set criteria for allocation: (consider gender, marginalized groups) Involve community leaders/ committees to identify suitable/able people for the jobs: review to avoid bias or favoritism Deliver skills / literacy training to locals particularly youth. Observe national / and international labor standards. Establish a system to manage local expectations.
	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			Social Management Plan 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			Enhancement measures: Regular preventive maintenance
	Improved access and effects on the travel duration and distances			
	Improved markets for local products			
PUBLIC HEALTH AND SAFETY				
Noise emissions from operations generating high-intensity noise	Modifications to the ambient noise level in the project area Disturbances / nuisance to nearby receptors			Traffic Management Plan Occupational Health and Safety Plan <u>Noisy equipment and processes</u> Inspection and maintained of equipment and machinery in good running conditions. Soft start technique Notification to nearby residences / institutions on project activities and schedules <u>Transportation noise</u> Transportation path selected to minimize potential for disturbances. Minimal low speed; no passing close to noise-sensitive areas. Shortest route taken over land. Properly maintained silencers and mufflers. <u>Avoidance strategies</u> Maintain caution/ separation distances.

				<u>Noise from blasting, use of jackhammers, pile driving, rock crushing</u> Carry out operations generating high-intensity noise during day light hours Using the noise-suppressing devices available on certain equipment (e.g. mufflers, side panels on compressors, etc.). Installation of noise protection screens e.g. ridge made from excavated material, wall from plywood, mobile trailers, stacked materials, etc.)
Modifications to air quality (increase of air pollution from emissions, dust, odors from wastes)	Health effects especially on vulnerable individuals (e.g., hospital patients, children, and elderly people);			Avoid or minimize disruption:
Construction site hazards (sharp or falling objects, open pits for foundations, wastewater etc.)	Injuries / fatalities			Occupational Health and Safety Management Plan Warning signs Backfilling of open pits and restating to original condition
Pits filled with water at project site and quarry sites	Creation of new breeding habitats for agents / vectors of diseases (i.e. proliferation of mosquitoes) and increase prevalence of malaria, gastro-enteritis, and other diarrhea illnesses			
Poor sanitation, waste disposal and ventilation	Exposure water-borne or respiratory infections and diseases			Make a proper assessment of water needs. Increase water extraction (underground wells, rainwater harvesting) and storage capacity. Establish water use & saving measures including an Education, Information, and Communication (EIC) package with “DOs and DON’Ts”.
Interactions among newcomers and with local population	Increase incidences of communicable diseases including sexually transmitted diseases HIV/AIDs; and disruption of culture /behavior change and security.			Social Management Plan Consider establishing or promoting existing HIV/AIDs program that will:- Create awareness among the project managers and leaders of infrastructure construction companies; Encourage the adoption of a proactive change in behavior including abstinence and/or fidelity to their spouse, systematic use of condoms, and HIV testing Provide the necessary support to service providers (i.e., medical personnel, educational peers, and community representatives), as well as clinical and psycho-social support to infected persons; Ensure that means of prevention or treatment for STIs and HIV/AIDs are available and accessible to workers and the local community members during the project implementation
Fire	Injuries / fatalities, damage of properties			Occupational Health and Safety Management Plan Minimization of the risk of fire Firefighting equipment 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 Plan <u>Selection of appropriate transportation route</u> with consultations with stakeholders, avoiding large agglomerations. determined <u>Good Site Practices:</u> 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); daytime movements if desired; and parking and on-site traffic movement. Noise and dust control measures (see above) Compliance with all Zanzibar’s transportation laws/standards
Vibrations from heavy equipment	Effects to nearby buildings			
OCCUPATIONAL HEALTH AND SAFETY				
Exposure to dust, noise	Disturbances / nuisance and discomfort			Occupational Health and Safety Management Plan <u>Personal protection equipment (PPE)s</u> 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);
Injuries from sharp / falling objects, falling from heights	Serious injuries			Enforce the correct use of PPE by workers and apply sanctions to workers who are not compliant; <u>Emergency response</u>
Exposure to sun/heat	Sickness and ill-health (reduced manpower)			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; <u>Training</u> 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 <u>Working environment</u> Provide adequate sanitation, potable water, and rest areas and periods to workers; Signing during construction
Exposure to water-borne infections from food, drinking water	Sickness and ill-health, fatalities			
RISKS TO PROJECT FROM NATURAL FACTORS				
Extremes of climatic elements: winds, rains, storms, hurricanes, lightning	- Damage of project structures - Disruption of project operations and schedules - Blocked access to the road network and facilities; - Injuries and fatalities to project personnel working on the site			<u>Choice of materials and designs</u> 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. <u>Physical placement</u> of infrastructure and facilities observe setback lines and other siting standards
Extreme aquatic conditions: waves, tides, currents				
Soil movements: erosion, stone dislodging, landslides				
Surface drainage (streams, rivers) and storm water				

drainage causing flooding and overflows.	Discharges into project site			
Hydro-geological conditions: height of water table	Water stagnation / flooding of project site			
Geology: seismic activities (earthquakes etc.)	Damage to project structures			
RISKS TO PROJECT FROM NEIGHBOURING ACTIVITIES AND DEVELOPMENTS				
Land disturbances activities: cultivation, bulldozing, livestock grazing	Destruction of infrastructure o			<u>Stakeholders Information, Education and Communication</u> 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. <u>Resources Mapping</u> Entailing identification and mapping of any ecologically sensitive habitats and species or human settlement features. First step is baseline survey followed by sustain communications with relevant affected / interested parties to avoid (where possible) sensitive natural, social, economic and cultural resources and/or to use alternative resources and routes. <u>Project Area Layout/Plan</u> Reviewing layouts of land use at project site and immediate vicinity enables: Restriction of project activities to the project primary areas of impact; Choice of access/transportation routes that cause minimum impact (i.e. use existing routes); Marking of exclusion zone around project site / activities. <u>Initiating and Maintaining Good Neighborliness</u> 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
Occupation, economic and social status of nearby residences	Theft of materials and portable items with ready-made market or for home use.			
Security condition in neighborhood to the project site	Vandalism of structures / equipment Theft of materials and portable items with ready-made market or for home use.			
Bush fires practices	Injuries and fatalities to project personnel working on the site or visitors. Destruction of PPP area (community forest, wood grove, planted trees / grass)			
Boundary fence and buffer zone separating project from neighboring features	Conflicts related to blocked access to local resources present on the site			

Annex D: ZEMA ESIA Format

Cover Page:

The cover page must display important information prominently and facilitate referencing. It should therefore contain information such as:

- Title of the Environmental & Social Impact Statement
- Location (s) of the proposed Project's activities
- Project Proponent
- Lead Consultant(s)
- Contact Addresses – post office box number, fax and phone numbers, and email
- Reviewing Authority
- Approving Authority
- Date of completion of the report

Table of Contents:

The page of contents should contain the following:

- List of major sections of the report
- List of Tables
- List of figures (including maps, graphs and plates) and illustrations
- List of appendices
- Page numbers of the report

List of Acronyms

Definitions of technical terms

Non-Technical Executive summary of the Environmental & Social Impact Statement in both English and Swahili

Chapter 1: Introduction

- Brief description of the project – name, nature, size, location of the project, its importance and justification, etc.
- Land description - Project location, Shehia, District, etc.
- Profile of the project proponent, organization, project consultants, etc.
- Objectives, Scope, and Study Methodologies
- ToR

Chapter 2: Project Description

- Project Feasibility Study and references from Detailed Project Document
- Details about description of the project site, geology, soil, topography, hydrological survey, ground water survey, wetlands, biodiversity, socio-cultural environment of the surrounding area, economic aspect of the project for the local communities and for the country, etc. should be included.
- Quantity of raw materials involved during the construction phase along with their source of origin.

- Use of existing public infrastructure such as other road networks, water supply lines, electricity lines, built-up environment, etc. in the construction activities should be elaborated.
- Cost and budget, financial projection, etc. of each project component should be highlighted
- Details of land acquisition, compensation, resettlement, incentives.
- Resources, manpower and time frame involved, etc.
- Monitoring and Evaluation of the construction phase, etc.

It is extremely important that the following maps and drawings be presented:

- Maps specifying project locations
- Land Use Map showing activities of the surrounding areas
- Site layout plan showing all details of design, construction and operations.

Chapter 3. Description of the Environment:

This section should include a detailed biophysical profile of the project location.

- Topography of the proposed site should be clearly stated.
- Geology of the proposed site including soil profile and quality;
- Meteorological Data of the study area;
- Hydrological and Ground water survey of the project sites.
- Water quality assessment of surface and ground water in the project zone.
- Soil quality and atmospheric pollution assessment in the zone.
- Drainage and watershed survey.
- Biological Environment (Baseline data of flora and fauna, whether there are endangered species in the surrounding areas)
- Socio-economic and occupational health hazards (socio-economic survey, demography of the surrounding human settlements, health status of the communities, existing infrastructural activities, employment status, etc.)

Chapter 4: Policy, Legislative and Regulatory Framework

This Chapter will cover all the relevant and existing policy, legislative, and the regulatory frameworks associated with the proposed project. The project proponent also will be required to show relevant legislative and administrative linkages with other sectorial plans and programs. And other relevant policies, acts, guidelines as may be required in the process. Moreover, the consultant shall cite national policy provisions and institutional set-up on relevant issues and matters concerning the proposed project activities.

Chapter 5: Public Consultations and Stakeholder Analysis

The project proponent shall present the findings of all the stakeholders consulted in the stakeholder analysis process. These stakeholders shall include the following:

- Zanzibar Environmental Management Authority (ZEMA)
- Department of Environment, Zanzibar.
- Department of Forestry and Non-Renewable Natural Resources, Zanzibar.
- Department of Lands and Registration
- Department of Rural and Urban Planning
- Department for Roads Construction, Zanzibar

- Department of Health and Health Education
- Zanzibar Water Authority (ZAWA)
- Zanzibar Electricity Corporation (ZECO)
- Zanzibar Municipal Council
- Central District Administrative Office
- Communities from Shehias forming boundaries with the proposed site.
- People whose lands, plots, crops, trees, etc. directly affected by the project

Chapter 6: Evaluation of Predicted Impacts

The following considerations should be included for each identified impact: -

- Statement of impact or effect
- Brief description of the impact or effect
- Group(s) affected
- including landowner(s)
- Statement of criteria for determining significance (could include magnitude, geographic extent, duration, frequency, risk or uncertainty, size of group affected)
- Significance of or effect without mitigation
- Suggested measures for mitigation or optimization
- Significance of impact with mitigation or optimization measures.

The predicted impacts should reflect key issues highlighted during the findings of the ZEMA scoping study.

Chapter 7: Analysis of the Project Alternatives

This chapter should include analysis of issues such as the design, location, cost-benefit analysis, or any other feasible alternative to the current arrangement.

Chapter 8: Mitigation Measures

This section will show how the mitigation measures proposed against the identified impacts. For each of the environmental effect identified in the evaluation of impacts, the mitigation measure should be elaborated.

Chapter 9: Environmental and Social Management Plan

This section will show how the proponent is committed to implementing the mitigation measures proposed against the identified impacts. Responsibility for carrying out monitoring by other institutions has to be shown under this section as well

Chapter 10: Environmental and Social Monitoring Plan

This section will show how the proponent will finance the implementation of the environmental and Social Management Plan. For each of the identified environmental effect, the project proponent should show how the mitigation measure should be implemented under specified cost and budget.

Chapter 11: Conclusion and Recommendations

Technical Appendices

- Input into the logical framework planning matrix of the project design – intervention logic, indicators, assumptions and preconditions.
- Maps of the project area and other illustrative information not incorporated into the main report.
- Other technical information and data, as required.
- Records of stakeholder engagement.

Other appendices

- Study methodology/work plan (2–4 pages).
- Consultants' Itinerary (1–2 pages).
- List of stakeholders consulted or engaged (1–2 pages).
- List of documentation consulted (1–2 pages).
- Curricula vitae of the lead consultants (1 page per person).
- ToR

Annex E: Sample Mitigation Measures

Impact	Mitigation Measure	Time Frame	Responsible Entity	Relative Cost/ Source of Funds	Monitoring
Increased air pollution due to transportation of construction materials and stockpiling	<ul style="list-style-type: none"> Avoid excavation, handling and transport of erodible materials under windy conditions. Institute traffic management and safety program including proper signage and training of heavy machine/vehicle operators and drivers, enforcement of speed limits, maximum loading restrictions and compliance with Zanzibar transportation laws and standards especially when crossing inhabited or sensitive areas. Vehicles carrying fine construction materials must be covered during transportation. Wet working areas without causing erosion or runoff. Ensure regular cleaning of access roads and unpaved areas to avoid dust pollution due to wind or movement of vehicles and equipment. 	During Mobilization and Construction	Private partner	Under the Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant
<i>Increased noise pollution and vibrations</i>	<ul style="list-style-type: none"> Adopt and maintain moderate vehicle speed and traffic when crossing inhabited or sensitive areas. Noise emissions shall comply with applicable national laws, standards and regulations. Maintain construction equipment in good running condition, enforce vehicle/road restrictions and carry out routine inspection of construction equipment Operate noise generating equipment for short periods or during the times they will cause less community disturbance i.e. daylight. Stationary noise generating equipment shall be placed as far away as possible from sensitive receptors and/or shall be housed inside a shed or covered to reduce the propagation of noise 	During Mobilization and Construction	Private partner	Under Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant
<i>Surface and groundwater pollution</i>	<ul style="list-style-type: none"> Ensure appropriate handling of fuels, oils, cement and other materials to avoid spills including storing them in impermeable, bunded containers and undertaking fueling of machinery and vehicles in concrete floors previously identified within the site. Ensure that all construction activities that could endanger water quality is avoided or controlled, through site planning and design of construction activities and preparation of site procedural protocols. No discharge of muddy water should be permitted from the work areas into the adjacent water courses and/or bodies. 	During Mobilization and Construction	Private partner	Under Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant

Impact	Mitigation Measure	Time Frame	Responsible Entity	Relative Cost/ Source of Funds	Monitoring
	<ul style="list-style-type: none"> Ensure that wastewater containing pollutants like cement, concrete, lime, chemicals and fuels are discharged into temporal tank for subsequent removal from site. Contaminated water should in no way be discharged into municipal sewer systems. Avoid deliberate disposal of wastes (even temporarily), on the banks and beds of water drainage lines. Maintenance of equipment and vehicles should be done on concrete ground/floor to avoid soil and surface and underground water pollution. Establish awareness raising program for city dwellers to avoid disposing waste and contaminated effluents into the storm water drainage systems. Undertake appropriate and regular cleaning and maintenance of ditches and channels to avoid water stagnation. 				
Soil erosion and sedimentation	<ul style="list-style-type: none"> Stockpiling of soil overburden should be confined to areas previously disturbed or ploughed and clearly marked and accessible by vehicles. Plant vegetation with properties to prevent soil erosion, like indigenous creepers and herbs where necessary. Material stockpiles must be appropriately protected against wind and water erosion 	During Mobilization and Construction	Private partner	Under Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant
Traffic disruption and congestion	<ul style="list-style-type: none"> Institute traffic management and safety program including proper signage and training of heavy machine/vehicle operators and drivers, enforcement of speed limits, maximum loading restrictions and compliance with Zanzibarian transportation laws and standards especially when crossing inhabited or sensitive areas. Prohibit construction of new roads unless it is necessary. Access to the construction site and work areas should be confined to existing roads. Construction of physical barrier such as road humps should be undertaken where necessary to control speed Decide for traffic diversions via establishment of Traffic Management Plan. 	During Mobilization and Construction	Private partner	Under Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant
Waste generation and stockpiling	<ul style="list-style-type: none"> Small volumes of organic waste that can easily decompose must be disposed-off in environmental friendly manner such as the use of pits. Large volumes of wastes produced, including construction and demolition debris, must be collected by licensed 	During Mobilization and Construction	Private partner	Under Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant

Impact	Mitigation Measure	Time Frame	Responsible Entity	Relative Cost/ Source of Funds	Monitoring
	<p>private/municipal service providers for appropriate disposal e.g. in land-fills.</p> <ul style="list-style-type: none"> Office waste should be sorted and storage in four different types of waste bins i.e. for paper materials; organic materials; glass wastes; and plastics; and separately disposed. Construction sites, temporary warehouses and yards should be cleaned to prevent indiscriminate fires, burial or abandonment of waste. Burning, burying and/or dumping of wastes by the contractor is prohibited 				
<i>Lack of/slow restoration of areas damaged by construction</i>	<ul style="list-style-type: none"> Restore cleared areas such as exhausted borrow pits, disposal areas, workers' camps immediately completion of construction works followed by appropriate landscaping, adequate drainage and re-vegetation of open areas using indigenous species. Spoil heaps and excavated slopes shall be re-profiled to stable batters and grassed to prevent erosion. Plant trees on exposed land and on slopes to prevent or reduce land slippage or collapse and keep slopes stable. Remove any soil contaminated with chemicals or hazardous substances and dispose them appropriately. 	During construction	Private partner	Under Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant
Occupational and community health and safety risks	<ul style="list-style-type: none"> Comply with Zanzibarian and WB and other international standards and regulations on health and safety requirements Develop and implement in-house manual/guidelines on health and safety Keep detailed incident reports in the case of accidents Implement community sensitization programs on the risk for public health and safety caused by project implementation. Attach warning signs, barriers, and other precautionary signs on all areas of potential risk. Prepare and implement action plan to cope with risks and emergencies including having emergency first aid equipment available at construction sites. Train workers in occupational health and safety regulations. Provide separate passageways for pedestrians and vehicles within and outside construction areas. Ensure that workers wear/use appropriate personal protective equipment (PPE), such as safety glasses, face shields, hard hats, safety shoes, noise protection ear muffs etc. 	During Mobilization and Construction	Contractor	Under Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant

Impact	Mitigation Measure	Time Frame	Responsible Entity	Relative Cost/ Source of Funds	Monitoring
	<ul style="list-style-type: none"> When working in confined spaces, such as deep excavation (trenches) use dewatering, adequate side-wall supports (shoring) and slope gradients that minimize the risks of collapse, entrapment or drowning. 				
Risks to historical, archaeological or cultural resources	<ul style="list-style-type: none"> Adhere to the UNESCO 2003 Convention for Safeguarding Living Heritage; International Council of Museum (ICOM); the International Centre for the Preservation and Restoration of Cultural Property (ICCROM) and the International Network on Cultural Policy (INCP). Adhere to the Stone Town Conservation Master Plan and relevant guidelines In case any historical/cultural remains or artifacts are incidentally found, the workers shall be educated to stop works and notify Antiquities Department or Archaeologist and work will only resume when the conservation specialist (Archaeologist) has completed the work. Should graveyards and any sacred places be found in the project area, the contractor shall take precaution to avoid disturbing or destroying them and the process for their relocation shall be in accordance with Graveyard Removal Act (No. 9 of 1969) and local customs. 	During Construction	Private partner	Under Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant
Vegetation clearance	<ul style="list-style-type: none"> Prepare a clearance, re-vegetation and restoration management plan for prior approval by the Construction Supervision Engineer and ensure strict compliance. Prohibit cutting of any tree unless explicitly authorized in above-referred plan. When needed, erect temporary protective fencing to effectively protect all trees before commencement of any works within the site. Confine overburden material to specifically designated sites away from sensitive locations. 	During Construction	Contractor	Under Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant
Soil pollution/contamination	<ul style="list-style-type: none"> Ensure that soil overburden removed before construction is stored and immediately re-used for replacement at the closure of opened trenches. Undertake appropriate cleaning maintenance of ditches and channels. Ensure immediate replacement of the soils removed during the opening of trenches Provide training of personnel in proper storage, handling and clean-up of contaminating materials into the environment. 	During Mobilization and Construction	Private partner	Under Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant

Impact	Mitigation Measure	Time Frame	Responsible Entity	Relative Cost/ Source of Funds	Monitoring
Change in scenic and aesthetic quality	<ul style="list-style-type: none"> Minimize soil and landscape disturbance/change by re-planting vegetation with indigenous species Confine overburden material to specifically designated sites away from sensitive locations. Ensure that soil overburden removed before construction is stored and immediately re-used for replacement at the end of construction. 	During Mobilization and Construction	Private partner	Under Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant
Increased risk of HIV/AIDS and sexually transmitted diseases	<ul style="list-style-type: none"> Workers must be educated about sexually transmitted diseases, HIV and AIDS. Disseminate information on HIV/AIDS and sexually transmitted diseases through education promotion materials such as leaflets, placards, shirts, arts, etc. Provide Voluntary Counselling and Testing (VCT) centers for HIV/AIDS at work place, Enforce HIV/AIDS law and regulations 	During Mobilization and Construction	Health Authorities; /Private partner/DLAs; NGOs	LGA	Construction Supervision Consultant and Independent Supervision Consultant in collaboration with Resident Engineer
Destruction/ disruption of utility services	<ul style="list-style-type: none"> Undertake prior consultation and contingency planning with utility providers and local authorities about the consequences of service failures and establish appropriate construction schedules and alternative service provision. Install lighting at night (where necessary), to ensure safe traffic movement. 	During Mobilization and Construction	Private partner	Under Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant
Increased burden on local authorities	<ul style="list-style-type: none"> Maintain open communication with the local government and concerned communities on agreed schedules of construction activities nearby sensitive places or at sensitive times. Copies of the ESMPs and of other relevant environmental safeguard documents in Kiswahili be available to local communities and workers at the site. Maintain early consultations on any loss of amenities such as playground space, car parking with those affected, providing opportunities for investigation and implementation of alternatives. Disseminate project information affected parties through community meetings before construction starts; Monitor community concerns and information requirements as the project progresses; Respond to telephone inquiries and written correspondence in a timely and accurate manner. 	During Construction	Private partner	Under Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant
Increased risks of accidents	<ul style="list-style-type: none"> Impose speed limits at work sites and place appropriate traffic signs along access roads. 	Private partner	During Mobilization and	Under Contract ToR	Construction Supervision Consultant

Impact	Mitigation Measure	Time Frame	Responsible Entity	Relative Cost/ Source of Funds	Monitoring
	<ul style="list-style-type: none"> Comply with all applicable laws and regulations regarding road transport and safety. Prohibit construction of new roads unless it is necessary. Access to the construction site and work areas should as much as possible be confined to existing roads. Construction of physical barrier such as road humps should be undertaken where necessary to control speed Decide for traffic diversions via establishment of Traffic Management Plan. Provide hard hats and industrial boots and enforce their proper use. Develop, operationalize (including carrying out regular rehearsals) of contingency plans for dealing with incidents and hazards. Train and enforce occupational health and safety practices (including PPE) to workers Provide First Aid and evacuation facilities Abide to national and international quality standards 		Construction		and Independent Supervision Consultant
Disruption of local hydrology	<ul style="list-style-type: none"> Ensure the drainage designs utilize as much as possible the existing channels and drains Where possible, the designs shall leave some unpaved space alongside the road for water to seep into the ground The design shall provide controlled and effective storm water dispersion by installation of appropriate drainage structures. 	Private partner	During Design and Construction	Under Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant
Excavation and depletion of construction materials	<ul style="list-style-type: none"> Consult Local Government Authorities on authorized borrow pits or quarry sites for exploitation of construction materials. Under no circumstances would materials like sand be excavated and exploited within the boundaries of the City of Dar es Salaam All mined construction minerals (gravel, stone, sand etc.) must be procured from authorized sites with licenses per the Mining Act (2010) 	Private partner	During mobilization and construction	Under Contract ToR	Construction Supervision Consultant and Independent Supervision Consultant
Unintended damage from construction equipment (Accidental damage to crops or agricultural lands)	<ul style="list-style-type: none"> PPP ESMP <u>Avoidance / minimization measures</u> Demarcation of crop lands, and high-visibility signage to reduce potential for damage 				

Annex F: Sample ESMP and ESMoP Layouts

Table F.1: Sample ESMP Layout

Anticipated Effect	Mitigation Measure(s)	Monitoring	Responsibility	Schedule	Cost and Source of Funds
Environmental impacts					
Socio-economic impacts					
Public health and safety impacts					

Table F.2: Sample ESMoP Layout

<u>Potential impact</u>	<u>Proposed mitigation measure</u>	<u>Monitoring Parameter</u>	<u>Target level/Standard</u>	<u>Monitoring frequency</u>	<u>Status</u>	<u>Comments</u>
Environmental impacts						
Socio-economic impacts						
Public health and safety impacts						