

THE UNITED REPUBLIC OF TANZANIA MINISTRY OF WORKS



TANZANIANATIONALROADS AGENCY (TANROADS)

TANZANIA TRANSPORT INTEGRATION PROJECT (TanTIP, P165660)

ADDENDUM TO THE ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

FOR

CONTINGENT EMERGENCY RESPONSE COMPONENT – CERC

AUGUST, 2024

SUMMARY

Tanzania was hit by El Nino rainfall and Hidaya cyclone in 2024 which damaged road infrastructures including bridges, culverts and road embankments with severe impacts throughout the country. Some of the bridges and culverts were completely washed away leading to total road closure. In order to restore this infrastructure, an emergency financing exclusively for immediate recovery of the damaged infrastructures is required.

Therefore, the Government of Tanzania has requested the World Bank to reallocate project funds to support emergency response and reconstruction through the ongoing Tanzania Transport Integration Project (TanTIP). The request was specifically to trigger Component 4 of this financing the Contingent Emergency Response (CERC) component which was allocated zero amount during appraisal of the project. Under this TanTIP component, the government has requested funds for restoration of the 83 identified CERC activities which are eligible emergencies under the TanTIP CERC geographically spread over 23 Regions.

Preparation activities have commenced including Rapid Assessment, submission of the request by the Ministry of Finance, preparation of Emergency response Manual, preparation of Emergency Action Plan and Project Procurement Strategy for Development.

An Environmental and Social Management Framework (ESMF) had been prepared and disclosed by the TANROADS in February 2022. The ESMF sets out general principles, rules, guidelines and procedures to assess the environmental and social risks and impacts associated with the subprojects to be financed under TanTIP and develops general mitigations and E&S instruments to guide the development of subprojects' E&S instruments. This CERC-ESMF Addendum forms part of the ERM which addresses the World Bank's Environmental and Social Standards applicable to CERC activities. All the requirements of the existing ESMF will remain applicable to the CERC activities, and this Addendum is: (i) providing more information about the areas where the CERC activities will take place; (ii) providing screening of expected interventions according to the screening criteria in the original ESMF; (iii) identifying generic environmental and social risks and mitigation measures related to CERC activities and (iv) presenting the stakeholder consultation activities supporting this document.

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LIST OF ACRONYMS

AIDS Acquired Immunodeficiency Syndrome

CERC Contingent Emergency Response Component

CoC Code of Conduct

E&S Environmental and Social EAP Emergency Action Plan

EHS Environmental Health and Safety ERM Emergency Response Manual

ESF Environmental and Social Framework

ESIA Environmental and Social Impact Assessment ESMF Environmental and Social Management Framework

ESMP Environmental and Social Management Plan ESPR Environmental and Social Progress Report

ESS Environmental and Social Standards

FA Financial Agreement
GBV Gender-Based Violence
GoT Government of Tanzania
GRM grievance redress mechanism
HIV Human immunodeficiency Virus
IDA International Development Associ

IDA International Development Association IPF Investment Project Financing Policy LGA Local Government Authorities

LMP Labour Management Plan

NCCS The National Climate Change Strategy

NGO Non-governmental organizations
PAD Project Appraisal Document
PPE Personal Protective Equipment
RAP Resettlement Action Plan

RPF Resettlement Policy Framework

RUWASA Rural and Urban Water Supply Authorities

SEA/SH Sexual exploitation and Abuse/Sexual Harassment

STDs Sexual Transmitted Diseases

TANESCO Tanzania Electric Supply Company
TANROADS Tanzania National Roads Agency
TanTIP Tanzania Transport Integration Project
TARURA Tanzania Rural and Urban Roads Agency

TTCL Tanzania Telecommunication Company Limited

VGPF Vulnerable Groups Planning Framework

1 INTRODUCTION

1.1 BACKGROUND

The Government of Tanzania has received financing from the International Development Association (IDA Credit No. 7117-TZ) for the Tanzania Transport Integration Project (TanTIP), whose development objectives of the project are to improve the safety, climate resilience, and capacity of key road corridors and regional airports, and improve the capacity of relevant transport sector institutions to plan for and manage the sector. The Project's total cost is in the amount of SDR 397.9 million (US\$550 million equivalent). Through this credit, 4 components are financed one of which is Contingent Emergency Response Component (CERC) which had no budget for its financing. The total cost for CERC interventions is estimated to be US\$200.

1.2 RATIONALE FOR CERC ACTIVATION

In March - April 2024 Tanzania was hit by El Nino rainfall and Hidaya cyclone which damaged road infrastructures including bridges, culverts and road embankments with severe impacts throughout the country. Some of the bridges and culverts were completely washed away leading to total road closure. These events caused major adverse economic and social impacts and therefore demand emergency financing exclusively for immediate recovery of the damaged infrastructures.

The TanTIP project contains a zero-value Contingent Emergency Response Component (Component 4) which is designed to provide swift response in the event of an Eligible Crisis or Emergency by enabling the Government of Tanzania to request the World Bank to reallocate project funds (USD 200m) to support emergency response and reconstruction rapidly. Consistent with the objectives of TanTP, the CERC will finance emergency response and critical goods and services to quickly restore livelihoods, lifeline infrastructure and services. The CERC can also finance emergency recovery and reconstruction works and associated consulting services.

The project-specific Emergency Response Manual (ERM) for Component 4 (Contingent Emergency Response Component or CERC) has been prepared detailing; (i) mechanism for activating the CERC; (ii) main instruments under the CERC; (ii) coordination and implementation arrangements; (iii) procurement, financial management, and disbursement aspects; (v) compliance with the Environmental and Social Framework; and (vi) monitoring and evaluation.

This Addendum to the Environmental and Social Management Framework (ESMF) has been developed by the TANROADS to address one of the requirements for triggering CERC from the TanTIP CERC ERM. The triggering mechanism requirements are:

- i. Make a declaration that an Eligible Crisis ¹or Emergency has occurred and obtain the Association's written agreement with such determination,
- ii. Establish adequate implementation arrangements including staff and resources for implementation of said activities, and

¹ An Eligible Crisis or Emergency is defined by the World Bank as an event that has caused or is likely to imminently cause a major adverse economic and/or social impact associated with natural or man-made crises or disasters. This may include: (i) cyclone: (ii) earthquake; (iii) storm; (iv) storm surge and strong waves; (v) tornado; (vi) tsunami; (vii) volcanic eruption; (viii) flood; (ix) landslides; (x) forest fires; (xi) drought; (xii) severe weather; (xiii) extreme temperature; (xiv) high winds; and (xv) any natural disaster.

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iii. Prepare and disclose all ESF instruments required under the Environmental and Social Management Framework (ESMF) for said activities, if any, and implement any actions which are required to be taken under said instruments.

1.3 PURPOSE OF THE CERC-ESMF ADDENDUM

An Environmental and Social Management Framework (ESMF) has been prepared and disclosed **TANROADS** February the 2022 by in (https://documents1.worldbank.org/curated/en/959601653593525756/pdf/Tanzania-Transport-<u>Integration-Project.pdf</u>). The ESMF sets out general principles, rules, guidelines and procedures to assess the environmental and social risks and impacts associated with the subprojects to be financed under TANTIP and develops general mitigations and E&S instruments to guide the development of subprojects' E&S instruments. This CERC-ESMF Addendum forms part of the ERM which addresses the World Bank's Environmental and Social Standards applicable to CERC activities. All the requirements of the existing ESMF which is in use without any problems will remain applicable to the CERC activities, and this Addendum is providing more information about the areas where the CERC activities will take place and providing screening of expected interventions according to the screening criteria in the original ESMF.

Specifically, this ESMF Addendum aims to:

- Identify indicative CERC-related activities;
- Provide positive and negative list and screening form to provide guidance on activities and goods which may be eligible for financing;
- Define procedures to assess the environmental and social impacts of these activities;
- Set out measures/plans to reduce, mitigate and/or offset adverse impacts;
- Define the grievance redress mechanism (GRM) that will be used for CERC-related complaints and grievances; and
- Provide the implementation arrangements for environmental and social management.

2 CONTINGENT EMERGENCY RESPONSE COMPONENT (CERC)

This section of the report describes the scope of potential CERC-related works qualified to be financed under TanTIP. The Government of Tanzania has identified 83 CERC activities spread over 23 regions of Tanzania Mainland (See list in annex III). In accordance with the CERC Emergency Response Manual an Emergency Action Plan (EAP) has been prepared to trigger the CERC and enable the use of project funds for eligible emergency activities. Emergency activities to be financed under the TanTIP CERC will involve financing reconstruction of road embankments, construction/reconstruction of bridges and culverts, and construction of drainage system.

Activities financed under the contingent component will be limited to the provision of critical goods and services, as well as repair or reconstruction of damaged infrastructure outlined in a positive list in the TanTIP CERC Emergency Response Manual. Land acquisition leading to involuntary resettlement and/or restrictions of access to resources and livelihoods is not likely. If it happens that the project leads to involuntary resettlement it will not be implemented because it fall into projects in the negative list. It is also unlikely that changes to the existing ESF instruments of the project will be required. All CERC activities are considered in the existing ESMF.

2.1 CERC Positive List

The purpose of the positive list is to indicate the types of critical imports and emergency works following a loss and needs assessment that would be acceptable to the Bank financeable under Component 4 (CERC). Project funds allocated (USD 200m) to the CERC Disbursement Category may be used to finance any expenditure of the Recipient that is consistent with the Financial Agreement (FA) provisions.

Table 2-1: Positive list of goods, services, non-consulting services, works, and other eligible expenses

Item

Goods

- Medical equipment and supplies
- Non-perishable foods, bottled water and containers
- Tents for advanced medical posts, temporary housing, and classroom/daycare substitution
- Equipment and supplies for temporary housing/living (gas stoves, utensils, tents, beds, sleeping bags, mattresses, blankets, hammocks, mosquito nets, kit of personal and family hygiene, etc.) and school
- Gasoline and diesel (for air, land and sea transport) and engine lubricants
- Spare parts, equipment and supplies for engines, transport, construction vehicles
- Lease of vehicles (Vans, trucks and SUVs)
- Equipment, tools, materials and supplies for search and rescue (including light motor boats and engines for transport and rescue)
- Tools and construction supplies (roofing, cement, iron, stone, blocks, etc.)
- Equipment and supplies for communications and broadcasting (radios, antennas, batteries, and cell phones)

- Water pumps and tanks for water storage
- Equipment, materials and supplies for disinfection of drinking water and repair/rehabilitate of black water collection systems
- Construction materials, equipment and industrial machinery
- Water, air, and land transport equipment, including spare parts
- Temporary toilets
- Groundwater boreholes, cargos, equipment to allow access to affected site, storage units
- Any other item agreed on between the World Bank and the Recipient (as documented in an Aide-Memoire or other appropriate formal Project document)

Services and non-consulting services

- Consulting services related to emergency response including, but not limited to urgent studies and surveys necessary to determine the impact of the disaster and to serve as a baseline for the recovery and reconstruction process, and support to the implementation of emergency response activities
- Feasibility study and technical design;
- Works supervision
- Technical Assistance in developing TORs, preparing Technical Specifications and drafting tendering documents (Bidding Documents, ITQ, RFP).
- Non-consultant services including, but not limited to: drilling, aerial photographs, satellite images, maps and other similar operations, information and awareness campaigns
- Non-consultant services to deliver any of the activities described in the "Goods" section of this table (e.g., debris removal, dump trucks, drones survey)

Works

- Repair of damaged infrastructure including, but not limited to: water supply and sanitation systems, reservoirs, canals, roads, bridges and transportation systems, energy and power supply, telecommunication, and other infrastructure damaged by the event
- Re-establish of the urban and rural solid waste system, water supply and sanitation (including urban drainage)
- Repair of damaged public buildings, including schools, hospitals and administrative buildings
- Repair, restoration, rehabilitation of schools, clinics, hospitals
- Removal and disposal of debris associated with any eligible activity.

Training

- Conduct necessary training related to emergency response including, but not limited to the Implementation of EAP
- Training on rapid needs assessment and other related assessments

Emergency Operating Costs

• Incremental expenses should be borne by TANROADS source of funds for a defined period related to early recovery efforts arising as a result of the impact of an eligible emergency.

2.2 CERC NEGATIVE LIST

In no case shall the activities for financing under the CERC exceed the environmental and social standards guidelines presented in the TanTIP PAD and in the project's ESMF prepared prior to

project approval. CERC activities will not trigger any new environmental and social standards' policies. The following uses of TanTIP resources by the CERC are prohibited:

- i. Activities that would lead to conversion or degradation of critical forest areas, critical natural habitats, and clearing of forests or forest ecosystems.
- ii. Activities affecting protected areas (or buffer zones thereof)
- iii. Land reclamation (i.e., drainage of wetlands or filling of water bodies to create land)
- iv. Land clearance and levelling in areas that are not affected by debris resulting from the eligible crisis or emergency.
- v. River training (i.e., realignment, contraction or deepening of an existing river channel, or excavation of a new river channel).
- vi. Construction of new roads, major realignment of roads, or expansion of roads, or rehabilitation of roads that are currently located on communal lands but will be registered as government assets after rehabilitation.
- vii. Use of goods and equipment on lands abandoned due to social tension / conflict, or the ownership of the land is disputed or cannot be ascertained.
- viii. Use of goods and equipment to demolish or remove assets, Unless the ownership of the assets can be ascertained, owners consulted, assets valued, and losses if happened compensated for in line with the project's RPF.
- ix. Uses of goods and equipment involving forced labor, child labor, or other harmful or exploitative forms of labor.
- x. Uses of goods and equipment for activities that would affect vulnerable groups, unless due consultation and broad support has been documented and confirmed prior to the commencement of the activities as well as preparation of necessary mitigation and plans compliant with environmental and social standards.
- xi. Uses of goods and equipment for military or paramilitary purposes.
- xii. Uses of goods and equipment in response to conflict, in any area with active military or armed group operations.
- xiii. Activities related to returning refugees and internally displaced populations.
- xiv. Activities which, when being carried out, would affect, or involve the use of, the water of rivers or of other bodies of water (or their tributaries) which flow through or are bordered by countries other than the Borrower/Recipient, in such a manner as to in any way adversely change the quality or quantity of water flowing to or bordering said countries.
- xv. Activities not included in the EAP and exceeding the mandated 18 month implementation period

2.3 Proposed activities under TanTIP CERC

From the above negative list of activities which are not eligible under the TanTIP CERC, none of which are included within this CERC project initiative. For clarity, since this project is rated a **Substantial risk**, activities with **High Risk** will not be eligible for funding under this CERCTable 2.2 presents activities to be implemented under TanTIP CERC.

Table 2-2: Projects to be implemented under CERC

Ref.	Actions	Description
2	Carriageway and associated drainage: Temporary	a. Provision of temporary surfacing along lengths of flood eroded road.b. Temporary diversion around spot failure; landslide, small bridge or culvert failure.
3	Carriageway and associated drainage: Repair	 a. Permanent construction of damaged road length on original alignment. b. Construction of road but on slightly shifted alignment – due to bridge site change or landslide avoidance.
4	Bridge	a. Temporary bridge, immediate requirement for connectivity.b. Permanent bridge
5	Earthworks	Emergency works associated with recovery for: a. Large scale natural landslide. Stabilisation with temporary measures and assessment of long-term options b. Cut-slope failure, temporary recovery or long-term construction c. Embankment failure, temporary recovery or long-term construction
6	River/stream bank	Emergency works associated with recovery for: a. Erosion or potential erosion of carriageway. b. Erosion of bridge foundations – see 4a, 4b
7	Culverts/Causeways	Emergency works associated with recovery for collapse, erosion of culverts, causeways, vented causeways etc
8	Investigation	Assessment of long term options for major impacts – e.g. landslides, major bridges. Follow-on from 1b

There are 83 proposed CERC activities which are spread across 23 regions of Tanzania namely Arusha, Coast, Dodoma, Geita, Iringa, Kagera, Katavi, Kilimanjaro, Lindi, Mara, Manyara, Mbeya, Morogoro, Mtwara, Mwanza, Njombe, Rukwa, Ruvuma, Shinyanga, Simiyu, Singida, Songwe, and Tanga Regions. Some of these regions such as Tanga, Kagera, Lindi, Mtwara and Ruvuma already includes TANTIP interventions. The map below presents geographical coverage of TanTIP CERC activities. The dark color are the regions not covered with TanTIP CERC interventions.

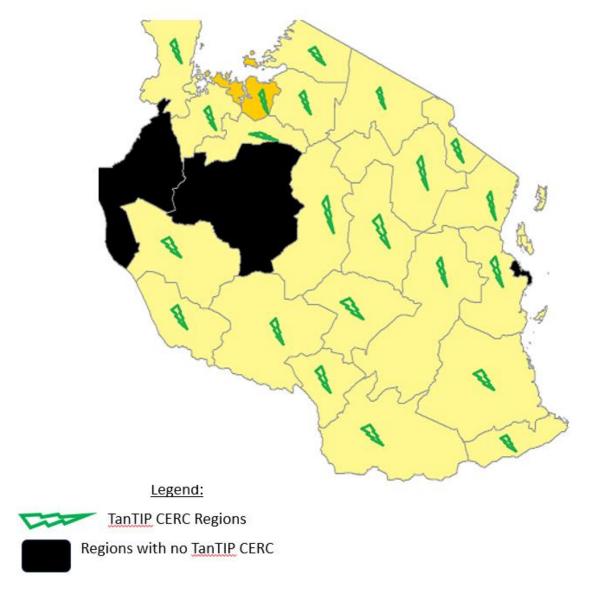


Figure 2-1: Geographical Coverage of TanTIP CERC Interventions

3 LEGAL AND INSTITUTIONAL FRAMEWORK

Tanzania has several policies and laws and has an administrative framework for the management of E&S issues enshrined in the National Constitution. Due to the nature of the activities to be implemented under C intervention, several policies, Acts, and Regulations will be triggered. The detailed description of policy, legal and institutional framework for the project is provided in section 3 of the original ESMF. The list of relevant legal and institutional frameworks to guide the implementation of TanTIP CERC is presented hereunder;

3.1 NATIONAL POLICIES

- The National Environmental Policy (1997);
- The National Gender Policy (2002);
- National Occupational Health and Safety Policy of 2010;
- The National Climate Change Strategy (NCCS) 2012;
- The National Water Policy (2002)
- The National Employment Policy (1997);
- The National Construction Industry Policy (2003)
- The National Transport Policy (2003).

Also, Tanzania has various Acts, Regulations and guidelines on environmental and social issues relevant to the proposed CERC interventions such as the Employment and Labor Relation Act (2004) and Regulations 2017; Worker's Compensation Act, 2008; Antiquities Act (1964 amended in 1979 and 1985; the Roads Act (2007), the Roads Management Regulations (2009), Gender Act, 2004, The Laws of the Child Act 2009, Sexual Offences Special Provision Act 1998, the Employment and Labour Relations Act (2004) and the Occupational Health and Safety Act (2003).

Other important legal provisions providing guidance on environmental and social issues pertaining to road sector are Environmental Assessment and management Guidelines in the Road Sector (2004), Environmental Code of Practice for Road Works (2009), Standard Specifications for Road Works (2000). All these documents shall be used to provide mitigation and monitoring measures to the CERC activities.

3.2 WORLD BANK'S ENVIRONMENTAL AND SOCIAL STANDARDS (ESSS)

The World Bank Environmental and Social Standards (ESSs) set out the requirements for Government of Tanzania (GoT) relating to the identification and assessment of E&S risks and impacts associated with projects supported by the Bank through Investment Project Financing. As stated in the TanTIP ESMF, all ESSs are applicable except for ESS9, the same applies to CERC activities. The standards: (a) support GoT in achieving good international practice relating to E&S sustainability; (b) assist GoT in fulfilling their national and international E&S obligations; (c) enhance non-discrimination, transparency, participation, accountability and governance; and (d) enhance the sustainable development outcomes of projects through ongoing stakeholder engagement. The tools or instruments that should be utilized to oversee E&S issues during the CERC activities are the same developed for TANTIP including ESMF, RPF, LMP, GBV/SEA action plan, SEP, GRM, VGPF as well as ESIA/ESMPs at subproject levels.

Table 3-1: Applicable World Bank's ESSs for the TanTIP CERC interventions

be managed through the original ESMF and this Addendum. Site specific ESMPs and/or ESIAs for al interventions under TanTIP CERC will be prepared. The design of the specific subprojects will be prepared. The design of the specific subprojects will be propared. The design of the specific subprojects will be propared. The design of the specific subprojects will be engaged during implementation of the project. Health and safety standard for workers and ensure fair working conditions will be promoted. ESS 3: Resource Efficiency and Pollution Prevention and Management Procedures; Code of Conduct, GRM for workers, are applicable for the CERC works. Reconstruction of road embankment, bridges, culverts and drainage will generate dust, erosion, sediments, solid and liquid wastes that will need to be properly managed. Proposed subprojects will require raw materials during implementation, local licensed sources shall be considered. Water for construction works may be obtained from local sources, abstraction/use permit shall be acquired from responsible authorities (Water Basins Offices) under the Ministry of Water. The use of fuel energy during construction period will contribute to air pollution. Measures related to pollution prevention and resource efficiency in the ESMF are applicable to CERC activities. Site-specific instruments	ESSs	Yes/ No	Application
Conditions Project. Health and safety standard for workers and ensure fair working conditions will be promoted. ESF instruments prepared for the TANTIP, such as Labor Management Procedures; Code of Conduct, GRM for workers, are applicable for the CERC works. ESS 3: Resource Efficiency and Pollution Prevention and Management	Management of E&S Risks	Yes	•
ESS 3: Resource Efficiency and Pollution Prevention and Management Reconstruction of road embankment, bridges, culverts and drainage will generate dust, erosion, sediments, solid and liquid wastes that will need to be properly managed. Proposed subprojects will require raw materials during implementation, local licensed sources shall be considered. Water for construction works may be obtained from local sources, abstraction/use permit shall be acquired from responsible authorities (Water Basins Offices) under the Ministry of Water. The use of fuel energy during construction period will contribute to air pollution. Measures related to pollution prevention and resource efficiency in the ESMF are applicable to CERC activities. Site-specific instruments		Yes	ESF instruments prepared for the TANTIP, such as Labor Management Procedures; Code of Conduct, GRM for
sources, abstraction/use permit shall be acquired from responsible authorities (Water Basins Offices) under the Ministry of Water. The use of fuel energy during construction period will contribute to air pollution. Measures related to pollution prevention and resource efficiency in the ESMF are applicable to CERC activities. Site-specific instruments	Efficiency and Pollution Prevention and	Yes	Reconstruction of road embankment, bridges, culverts and drainage will generate dust, erosion, sediments, solid and liquid wastes that will need to be properly managed. Proposed subprojects will require raw materials during implementation, local licensed sources shall be
contribute to air pollution. Measures related to pollution prevention and resource efficiency in the ESMF are applicable to CERC activities. Site-specific instruments			Water for construction works may be obtained from local sources, abstraction/use permit shall be acquired from responsible authorities (Water Basins Offices) under the Ministry of Water.
ESS3.			The use of fuel energy during construction period will contribute to air pollution. Measures related to pollution prevention and resource efficiency in the ESMF are applicable to CERC activities. Site-specific instruments will also include measures that fulfill the requirements of ESS3.
and Safety to neighboring communities health, safety if their operational risks are not taken into account to safeguard the public during design. Measures related to community health and safety in the ESMF are applicable to CERC		Yes	Implementation of the sub-projects will likely pose risks to neighboring communities health, safety if their operational risks are not taken into account to safeguard the public during design. Measures related to community health and safety in the ESMF are applicable to CERC activities. Site-specific instruments will also include measures that fulfill the requirements of ESS4.
	=	No	Land acquisition leading to involuntary resettlement and/or restrictions of access to resources and livelihoods

ESSs	Yes/	Application	
and Involuntary	No	is not anticipated but in the event of need for land and /or	
Resettlement		restrictions of access: the project's RPF will be follow	
ESS 6: Biodiversity	Yes	Roads maintenance and bridge and culvert reconstruction	
Conservation and	1.68	maybe associated with direct and indirect impacts on	
Sustainable Management of		natural habitats such as habitat fragmentation, and impacts	
Living Natural Resources		on watercourses and wetlands. Any activity resulting to	
Living ivadual resources		these impacts will be avoided as much as possible.	
		Measures related to biodiversity protection and natural	
		habitats in the ESMF are applicable to CERC activities.	
		Site-specific instruments will also include, as applicable,	
		instruments related to biodiversity conservation and	
		protecting of natural habitats.	
ESS 7: Indigenous	No	A Vulnerable Groups Planning Framework (VGPF) is	
Peoples/Sub-Saharan		necessary given the possibility of the presence of	
African Historically		disadvantaged communities for the subprojects under the	
Underserved Traditional		project.	
Local Communities		During Rapid Assessment and stakeholder engagement,	
		there is no indication of impact to the communities falling	
		under ESS7. However, there will be continued assessment	
		to ensure such elements are never missed out.	
ESS 8: Cultural Heritage	Yes	During TanTIP CERC interventions implementation, it is	
		possible that elements of cultural heritage are found. Some	
		unknown sites with local heritage values (e.g. historical	
		and archaeological sites) may be discovered. There is a	
		potential for chance finds, and therefore such measures	
Egg. 10 G. 1 1 11	X 7	will be included in site-specific instruments.	
ESS 10: Stakeholders	Yes	The project's SEP and the GRM are applicable to CERC	
Engagement and		activities. TANROADS will provide stakeholders with	
Information Disclosure		timely, relevant, understandable and accessible information, and consult with them in a culturally	
		, , , , , , , , , , , , , , , , , , ,	
		appropriate manner, which is free of manipulation, interference, coercion, discrimination and intimidation for	
		the lifespan of the Project.	
		During ESMF Addendum preparation, various	
		stakeholders at the central government and local	
		government authorities' levels were engaged.	
The World Bank Group	Yes	General EHS Guidelines and Roads specific EHS	
Environmental, Health and		Guidelines are applicable to the TanTIP CERC, as they	
Safety General Guidelines		include workplace safety, noise, air quality, and	
(EHSGs)		wastewater quality guidelines.	
,		They also include recommendations that shall be	
		considered during construction activities and subproject	
		operations in vary fields such as wastewater management,	
		hazardous material and waste management, waste	

ESSs	Yes/	Application
	No	management, occupational health and safety, measures to safeguard community health and safety, traffic safety, disease prevention, and specific measures for construction activities.
		These guidelines shall guide development of Site-specific instruments
WB-Good Practice Note on Road Safety	Yes	During implementation of road subprojects, TANROADS will identify, evaluate and monitor the potential traffic and road safety risks to workers, affected communities and road users throughout the project life-cycle and, where appropriate, will develop measures and plans to address them. TANROADS will incorporate technically and financially feasible road safety measures into the subprojects' designs to prevent and mitigate potential road safety risks to road users and affected communities". TANROADS will undertake a road safety assessment for each phase of the TanTIP CERC, and will monitor incidents and accidents, and prepare regular reports of such monitoring. TANROADS will use the reports to identify negative safety issues and will establish and implement measures to resolve them.
WB Managing the Risk of Adverse Impacts on Communities from Temporary Project Induced Labor Influx	Yes	TanTIP CERC interventions are expected to involve construction of civil works for which the required labor force and associated goods and services cannot be fully supplied locally for a number of reasons, among them worker unavailability and lack of technical skills and capacity. In such cases, the labor force (total or partial) needs to be brought in from outside the project area. In addition, construction of large infrastructures are known to attract people in search for business and work opportunities. Job seekers influx are often associated with social impacts such as social conflicts, increase in crime and feelings of insecurity, change in social dynamics, pressure on local public services, GBV, etc. Labour Management Procedure for TanTIP has been prepared to guide identification of risks to and impacts on local communities associated with the temporary influx of labor that typically results from construction works. Labour Management Procedure for TanTIP has been prepared to guide identification of risks to and impacts on local communities associated with the

ESSs	Yes/ No	Application		
		temporary influx of labor that typically results from construction works.		

4 STAKEHOLDER INVOLVEMENT

The need for public consultation for the ESMF Addendum is paramount. The purpose of this consultation was to allow the relevant stakeholders to be aware of the CERC-ESMF Addendum contents, and to provide them an opportunity to comment on issues of relevance to them. The stakeholders targeted included, but were not limited to local government authorities, relevant authorities such as basin water offices and utility owners, village government officials and other relevant stakeholders including TARURA, TANESCO etc. Due to the geographical spread of the TanTIP CERC interventions, consultation was done at a high level to facilitate the preparation of this ESMF. The local community around each subproject will be consulted during the preparation of specific safeguard documents.

4.1 THE CONSULTATION PROCESS

The public consultation for the TanTIP CERC projects was conducted simultaneously with the field work targeting the various groups of stakeholders. The consultations were conducted through the use of consultative meetings, public meetings, key informant interviews and focus group discussions. In-depth interviews were held with staff members/key informants of the government and private institutions, agencies, regional, district levels depending on the type of data required. The interview also, targeted communities residing in the vicinity of the proposed CERC activity areas. These consultations were held to ensure that these groups were informed about the projects and that their views are incorporated in the process of project development. For the purpose of this CERC ESMF, consultations were conducted in few places, considering the geographical spread of the TanTIP CERC is almost nationwide. A list of stakeholders consulted is presented in Annex 1. Detailed consultation and engagement will be carried out during the preparation of specific ESIA or ESMP for the CERC interventions in each region.

4.2 MAJOR ISSUES RAISED BY STAKEHOLDERS

Consultations were conducted in Kiswahili language, hence minutes and raised concerns were recorded in Kiswahili but summarized in English for easiness of ESMF reference. All issues raised were noted and will be addressed in the specific ESIAs, ESMPs and RAPs of each sub-project. Below is a summary of the major issues raised during public consultations.

- The damaged infrastructure are important to socio-economic development thus the need for undertaking the EIA study with urgency to meet the government's demand for the accomplishment of the project so that the roads can resume its service to move people and goods the soonest possible
- Rain season is on the way and the community is looking forward to getting permanent solutions in these areas to avoid the losses that are happening in the event of rains
- Consider the capacity of the new bridge/culverts to accommodate the increased traffic and load following increased investment around the regions (cement factories, gypsum mining, etc.)
- Severely damaged areas mostly bridges and culverts should be given priority and treated with urgency to restore the living of the people around.
- Awareness should be given to the community who are doing mining and agricultural activities upstream of the river and streams that have caused silting downstream

causing regular flooding and the widening of their banks, in some cases by more than four times

- TANROADS to consider immediate restoration of services and other utility infrastructures like the national fiber cable when constructing the bridges and culverts
- TANROADS should put in place a long-term diversion plan (alternative routes) in case of emergency like this year's El Nino effects and Hidaya cyclone
- TANROADS should find a way to curb the shifting trend of the river courses which in turn causes expansion of the flood plains and, flooding, affecting farms and infrastructure
- Detailed plans should be done during design of the structures as some areas are prone to natural hazards

4.3 Public Consultation during CERC Project Implementation

The TanTIP SEP shall be adopted to guide the implementation of CERC activities. The SEP provides guidelines for subprojects to adapt and implement their own stakeholder engagement activities, including guidance on the engagement of vulnerable groups and other key stakeholders

4.4 PROJECT INFORMATION DISCLOSURE TO THE PUBLIC

In compliance with World Bank ESF (ESS 10 & other relevant ESSs) and the ESIA and Audit Regulations, 2005, disclosure of relevant safeguard documents is crucial for helping affected communities and other interested parties understand the scope and associated risks, impacts and opportunities. TANROADS has continued to provide the respective communities and other stakeholders with access to the required information. During consultative meetings and discussions, the following details were further clarified: the purpose, nature, and scale of the project; duration of proposed project activities; potential opportunities, etc.. A list of stakeholders consulted is presented in Annex 1. Detailed consultation and engagement will be carried out during the preparation of specific ESIA or ESMP for the CERC interventions in each region.

The project-wide ESMF was disclosed on TANROADS website before implementation of the TanTIP project. After clearance by the World Bank and before implementation of CERC activities under TanTIP, this CERC ESMF will also be disclosed and made available to the public/communities for review at strategically accessible places (e.g. World Bank website, TANROADS website, TANROADS HQ, and respective TANROADS Regional Offices, at LGAs offices as well as to the most preferable newspapers.) in a form, manner and understandable by the stakeholders.

5 BASELINE CONDITIONS

Since the proposed TANTIP CERC activities are spread across 23 regions out of 26 regions on the Tanzania Mainland, this chapter describes the overall baseline conditions of Tanzania in terms of biophysical environment and socioeconomic context. Originally TanTIP projects had only 8 regions as described in the section 5.1.1 of this addendum and section 2.1 of the Original ESMF. Existing environmental and socio-economic conditions will, in many cases, provide a basis for predicting potential impacts of the TanTIP CERC activities. Since almost all CERC activities includes construction/rehabilitation of bridges and culverts on the already disturbed sites, the key environmental and social issues expected are surface water pollution and community health, safety and security risks (especially traffic management issues and population influx issues). It is also expected that the activities shall generate construction wastes such as rubbles, cement bags etc, whose management shall be detailed in the ESIA/ESMP for specific projects and contractor's ESMPs. Other construction impacts such are noise and vibration, impacts to air quality, soil erosion, occupational health and safety risks are expected but to a small extent. These issues are described in detail in section 5.1 of the original TantTIP ESMF.

5.1 BASELINE ENVIRONMENTAL CONDITIONS OF TANZANIA

5.1.1 Geographical Location

There are 83 proposed CERC activities spread across 23 regions out of 26 regions of Tanzania Mainland including Arusha, Coast, Dodoma, Geita, Iringa, Kagera, Katavi, Kilimanjaro, Lindi, Mara, Manyara, Mbeya, Morogoro, Mtwara, Mwanza, Njombe, Rukwa, Ruvuma, Shinyanga, Simiyu, Singida, Songwe, and Tanga Regions. The three regions which do not have TanTIP CERC activities are Kigoma, Tabora and Dar es Salaam.

Tanzania lies between 29°30'E and 40°30'E, and 1°00'S and 11°48'S. It is a land of contrasts, being the home of Africa's highest mountain (Kilimanjaro, at 5,895 meters amsl) and its lowest point (the floor of Lake Tanganyika, which is 1,470 m deep). Located on the east coast of Africa, it covers an area of approximately 945,000 square kilometers (km2), of which the Zanzibar Islands cover 2,400 km2. The islands of Mafia, Pemba, and Zanzibar are included in this area. Of this area, 61,495 km2 are covered by the inland waters of the Great Lakes (Victoria, Nyasa, and Tanganyika). The country is bordered by Uganda to the north for 396 km; Rwanda and Burundi to the northwest for 217 km and 451 km, respectively; the Democratic Republic of Congo to the west for 459 km (a water border on Lake Tanganyika); Zambia and Malawi to the southwest for about 338 km and 475km, respectively; Mozambique to the south for 756 km; and Kenya to the northeast for 769 km. The Indian Ocean, with shores characterized by coral reefs and small islands, lies to the east. The continental shelf within the 200 m depth contour varies from 4–60 km from the shore.

5.1.2 Climatic Conditions

Tanzania experiences a variety of climatic conditions, ranging from the alpine deserts on the top slopes of Mount Kilimanjaro that are permanently covered by snow, to the tropical coastal areas

that are under the influence of two monsoon winds. The northeast monsoon wind, which blows southwards from December to March, brings the hottest weather, while the southeast monsoon winds that blow northwards from March to September bring intermittent rains. The main rainy season on the coast is from March to May (the long rains) with a second season between October and December (the short rains). Mean annual rainfall varies from 400 mm in the central regions to over 2,500 mm in the highlands and the western side of Lake Victoria. Mean annual temperatures are influenced by altitude, ranging from 21°C in high mountain areas to 29°C at sea level.

Except for the coastal belt and islands, most of the country is part of the Central African Plateau (1,000–1,500 m above sea level) and characterized by gently sloping plains and plateaus, broken by scattered hills and low-lying wetlands. The Central African Plateau is deeply incised by two arms of the Rift Valley: the eastern arm, which includes lakes Natron and Manyara, and the deeper western arm, which contains Lake Tanganyika. Both arms of the rift converge in the south of the country near the northern end of Lake Nyasa/Malawi.

There are seven agro-ecological zones in Tanzania based on climate, physical geography, soils, vegetation, land use and tsetse fly occurrence, which are the main physical factors that influence opportunities and constraints for crop and livestock production.

5.1.3 Water Bodies

Apart from the Indian Ocean, the largest water body that lies to the east of the country, Tanzania shares three major lakes (Nyasa/Malawi, Tanganyika, and Victoria) with other countries in the region. Other lakes in the country include Masoko, Manyara, Natron, Eyasi, and Rukwa. Tanzania also has many permanent and seasonal rivers. Main rivers include the Kilombero, Mara, Pangani, Ruaha, Rufiji, Ruvu, and Ruvuma.

Tanzania's wetlands cover about 10 percent of the country. They are classified as marine and coastal wetlands, inland wetland systems, rivers and inland flood plains, and artificial wetlands. The marine and coastal wetlands include the mangrove estuary swamps, coral reefs, seaweed and grasses, and intertidal mudflats. The inland wetlands include the Rift Valley lakes (Balangida, Eyasi, Manyara, Natron, Nyasa, Rukwa, and Tanganyika), some depression swamps (Bahi and Wembere), and Lake Victoria. The shores of the Rift Valley lakes provide a habitat for birds, while Lake Natron serves as the largest flamingo breeding ground in Africa. The soda lakes (Eyasi, Manyara, Natron, and Ngorongoro) are their feeding grounds. The waters of these lakes and the adjacent land are often inhabited by wildlife, which is a major tourist attraction in Tanzania.

Some swamps are important breeding sites for fish. Lake Tanganyika is home to about 217 endemic fish species, while Lake Nyasa/Malawi has the most diverse fish species population (over 600 species). Both lakes are world famous for their variety of aquarium fish. Lake Tanganyika is important nationally for sardine, while Lake Victoria has a naturally rich and diverse indigenous fish fauna (178–208 species). However, the introduction of Nile perch has led to the disappearance of several indigenous species.

5.1.4 Groundwater Resources

Groundwater availability is mainly controlled by geology and climate, and is unevenly distributed across the country. The groundwater has huge potential for complementing the surface water sources, it accounts for over 97 % of the accessible global freshwater resource. In many countries, Tanzania included groundwater is often the main source for domestic water supply apart from widely being used for irrigated agriculture and industry (NBS, 2017).

As of 2017, there are 65 registered groundwater drilling companies and 13 registered groundwater exploration companies (MoWI, Jan 2018). The main persistent challenge, which continues to be a hindrance to groundwater utilization and development, is paucity of data. More efforts are needed in order to get relevant information on available and minable groundwater resources (NBS, 2017).

5.1.5 Biodiversity and Protected Areas

Throughout the country, a network of freshwater rivers and lakes provides drinking water, sustains agriculture and provides hydropower. Lake Victoria, the largest lake in Africa and recognized for its high levels of endemic fish species, supports a large fishing industry and provides food security and jobs for surrounding residents. Tanzania's coastline hosts numerous fringing and patch reefs, important both ecologically and socio-economically as major fishing grounds and tourist attractions. These resources are key to maintaining healthy and productive landscapes, and are intricately linked with energy generation, agriculture, and human consumption.

The country's biodiversity and unparalleled wildlife are globally renowned. Tanzania hosts diverse, distinct, and iconic ecosystems and species. About a third of the country's total land area is officially under protection, one of the world's highest ratios. Tanzania boasts 19 national parks, including the Ruaha National Park – the largest national park in East Africa (with an area of 20,226 km2), the famous Kilimanjaro National Park, and the Serengeti National Park. The latter is well known for its large herds of wildebeest, and their annual migration, one of Africa's most spectacular natural events. Tanzania also hosts 25 game reserves including the Selous game reserve, a UNESCO World Heritage Site and Africa's largest game reserve (with an area of over 50,000 km2). The country has three marine parks, 15 marine reserves, and multiple forest reserves and woodlands (World Bank. 2019).

5.1.6 Transport and Infrastructure Vulnerability to Disasters and Climate-Related Hazards

According to National Climate Change Response Strategy 2021-2026, Tanzania's transport infrastructure is under growing pressure. The country's high economic growth over last decades (6 - 7%) has increased the usage of transport network that has been facing various challenges. These challenges include floods and overflowing rivers that disrupt trade flow and transportation of goods and passengers. These risks are expected to further increase with climate change. The floods and overflowing of rivers caused severe damages on infrastructure including buildings, roads, airdromes, railways and human settlements.

Additionally, landslides have continuously affected buildings and road infrastructures in Same and Moshi districts. For instance, from 2014 to 2019, floods affected critical infrastructures from the coast to the highlands, destroying roads, bridges and public and private buildings. Implications of

severe weather and extreme events in 2016 included loss of lives, property and severe damages on infrastructures. Heavy rains in Morogoro region destroyed road networks that connect Kilombero and Ulanga districts. Likewise, there was a shutdown of public transport in Dar es Salaam (Jangwani) because of flooded Msimbazi River.

In 2018, Natural Gas Pipeline in Mnazi Bay Mtwara was affected by heavy rains that eroded soil covering section of the pipeline located close to Mnazi Gas Processing plant. This situation necessitated for mitigation measures that were costly to Tanzania Petroleum Development Corporation (TPDC). Similarly, in 2019 the heavy rain caused economic activities like transportation, communication, buildings and power services to a standstill. Up to 15 bridges of the roads managed by the Tanzania Rural and Urban Roads Agency (TARURA) in Handeni district were damaged. The situation was equally felt by the highways operated by the Tanzania National Roads Agency (TANROADS), which include a portion of the Dar es Salaam-Arusha road, Korogwe-Handeni-Mkata section, Mandera Bridge between Korogwe and Segera. In 2020 impacts of extreme rainfall events destroyed the Kiyegeya Bridge connecting Dodoma and Morogoro regions.

With regard to railway transport, flooding events due to extreme rainfall have periodically affected the central railway line. The flood on 4th January 2021 swept away part of railway line at Makutupora area in Dodoma leading to hundreds of passengers stranded after Tanzania Railway Corporation (TRC) suspended services. It was estimated that TRC had lost 150 million shillings per month after the suspension of services.

5.2 BASELINE SOCIOECONOMIC CONDITIONS OF TANZANIA

5.2.1 Population

The national population, currently around 59 million, is expected to exceed 102 million by 2040. The urban population is expected to increase even more quickly, from just over 34 percent of the population in 2018 to 49 percent by 2040 (UN-DESA 2018). Population growth in most Tanzanian cities is driven largely by natural population growth with the exception of Dar es Salaam, where it is driven evenly by net migration and natural population growth. In 2012, four Tanzanian cities produced more than half of the country's GDP and are expected to represent almost 60 percent of the country's GDP in 2030.

5.2.2 Road Network

TANROADS manages a total road network of 37,225.72 km comprising of trunk roads, regional roads and district roads as described in the table below.

Table 5.-1: Road Network Managed by TANROADS

Road Class/Category	Length (km)
Paved Trunk Roads	9,451.56
Unpaved Trunk Roads	2,884.46
Total Trunk Roads	12,336.02

Paved Regional Roads	2,506.56
Unpaved Regional Roads	21,368.34
Total Regional Roads	23,874.91
Paved Designated District Roads	70.53
Unpaved Designated District Roads	944.26
Total Designated District Roads	1,014.79
Total Road Network	37,225.72

Source: TANROADS Website, 2024

5.2.3 Poverty

5.2.4 Poverty

The poverty rate in Tanzania has been declining gradually. The national poverty headcount has improved from 34.4 percent of population in 2007 to 28.2 percent in 2012 and further to 26.4 percent in 2018. Despite Tanzania's impressive GDP growth between 2012 and 2018, poverty reduction slowed, and growth has become less inclusive. Inequality has also risen during this period.

5.2.5 Gender Issues

The FY18-FY22 Tanzania Country Partnership Framework (CPF) notes that gender disparities are still prevalent, cutting into women's well-being, earnings, and standards of living. Women participate in very few decisions related to their health or household purchases. Disparities in education are large; nearly twice as many women as men aged 20-24 years have had no formal education (19 versus 10 percent). Tanzania ranked 67 out of 153 countries in 2020 in the Global Gender Gap Report of the World Economic Forum. In terms of economic participation and opportunity, its rank was 63, with several indicators revealing continuing gaps between men and women.

5.2.6 Gender Based Violence

Gender Based Violence (GBV) has been defined as "any harmful act that is perpetrated against a person's will and that is socially ascribed (gender) to differences between males and females. GBV has a greater impact on women and girls, as they are most of often the survivors and suffer greater physical damage than men when victimized (Odunga, 2021). The term GBV is often used interchangeably with the term "Violence against Women" (VAW). Literature has revealed that the major root cause of gender based violence is discrimination perpetuated by customs, cultural and traditional settings that place women and the girl child at a lower level of social relations. According to the Global 2015 Human Development Report, 35% of women globally have experienced physical or sexual intimate partner violence, which impacts on women's empowerment.

From a situation analysis of National Plan of Action to End Violence Against Women and Children in Tanzania 2017/18 – 2021/22 (URT, 2016), violence is a daily reality for large numbers of women and children in Tanzania. In Tanzania, almost four in ten women have experienced

physical violence, and one in five women report experiencing sexual violence in their lifetime (from the age of 15). Spousal abuse, both sexual and physical, is even higher (44%) for married women. According to the 2010 Demographic Health Survey, 39% of women aged 15-49 have ever experienced physical violence since age 15 and almost one-third of women (33%) aged 15-49 experienced physical violence in the 12 months prior to the survey.

6 ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS OF CERC AND POTENTIAL MITIGATION MEASURES

6.1 SCREENING OF THE CERC ACTIVITIES UNDER THE TANTIP ESMF

The proposed activities to be funded by the CERC include provision of critical goods and services, as well as rehabilitation and reconstruction of damaged infrastructure. The TanTIP CERC ESMF Screening Procedures were used to identify the risks and mitigation measures. From the screening the following was concluded:

- The CERC activities are within or below the level of risk determined for the TanTIP project (Substantial risk)
- The CERC activities do not trigger any new Environmental and Social Standards;
- The CERC activities are part of the CERC positive list (also refer Section 2.3);
- The CERC activities are not on the CERC negative list (also refer Section 2.2); and
- The CERC activities require a site-specific ESF instrument and mitigation measures to control the environmental and social risks due to the magnitude of spread over the country.

In general, the type of CERC investments (construction/rehabilitation of culverts, bridges, road sections and road embankments) are considered of moderate environmental and social risk (According to the screening form in Annex 1 of the original ESMF) if not located in a highly sensitive biodiversity area according to ESS6 (supporting EN or CR species) or in a high value tangible physical culture resource area according to ESS8. In addition, most of the CERC interventions are perceived as positive since they are geared towards mitigating floods risks on already disturbed sites, short term and utilizing small spatial area. As none of the 83 proposed CERC interventions are known to be located in a sensitive area as mentioned above, ESMP will be the suitable site-specific instrument and therefore will be prepared as per format provided in annex IV of the original ESMP. Nevertheless, all CERC subprojects will be screened as detailed in section 6.2 and screening form for potential environmental and social issues (annex 1) of the TanTIP ESMF. The same screening form shall be used because all aspects of environment, social health and safety of the proposed CERC activities are covered in the original TanTIP ESMF, including the exclusion of high risk projects. If the site reconnaissance done during preparing the ESMP proofs that the area has some sensitivities, according to the above criteria, or the type of works would require raising the risk to substantial (such as projects involving large amount of demolition waste that needs to be properly handled) the instrument will be upgraded to an ESIA (contents and format provided in annex 4 of the original ESMF).

This CERC ESMF Addendum and mitigation measures in Table 6.1 have been prepared as a result of the screening and assessment process.

6.2 GENERIC ENVIRONMENTAL AND SOCIAL RISKS AND IMPACT MITIGATION MEASURES FOR THE PROPOSED CERC

CERC interventions will have positive environmental and social impacts as it will improve accessibility and reduce floods in different areas in Tanzania. Detailed impacts and mitigation

measures for CERC activities are found in annex V of the original ESMF. In addition, the following (Table 6.1) are additional mitigation measures which are specific for the CERC interventions.

Table 6-1: Generic Environmental and social risks and impacts of CERC activities

Environmental Impacts and Risks	Generic Mitigation Measures	Monitoring Indicators	Responsibility
Design Phase			
Geohazards risks (esp floods)	The new bridges and culverts designs to incorporate the following key considerations; • to have adequate openings to mitigate vulnerability to flood damage from severe storm events. This will also facilitate better road alignment and access to and egress from the bridges/culverts. • Be of a more durable and permanent structure than the previous structures to accommodate any increase in traffic volume and weight in light of expansion of surrounding communities and economic development • Be climate reliant structure to resist the various climatic change effects and geohards that the region is subjected to. Best practice in bridge and culvert design prevents and limits erosion and sediment mobilisation and limits alteration to the flow regime in the operational phase, these measures for bridges include: • The bridge designed and constructed to accommodate all flow conditions; • The bridge aligned perpendicular to the watercourse; • The watercourse's natural hydraulic regime preserved as much as possible; • The piers and footings placed beyond the channel and above the high water mark to avoid constricting the channel and reducing the flow area;	Measures included in the Designs	TANROADS/ Design Engineers

	 Any piers and footings placed in the channel should be parallel to the flow to avoid directing flow onto the banks; The minimum number of optimally shaped piers used to minimise eddying and scouring of the watercourse; Erosion protection should be included if scouring is likely to occur. Best practice culvert design practices provide good drainage, prevent erosion, and include the following: Water velocities in the culvert should be similar to those at the site before the culvert was constructed; There should also be no differences in the flow rates upstream, in and downstream of the culvert; The culvert should not reduce the cross-sectional area of the channel and infilling of the channel should be avoided; The culvert designed so that its hydraulics is similar to that of the watercourse, with culverts with a natural bed preferred. 		
Construction Phase			
Working at Wetlands and Water Courses	 Except for construction of drainage structures (bridges, culverts) etc, development within 60 meter buffers from wetlands and streams need to be avoided (in compliance to Clause 34 of the Water Management Act of 2009 and the Tanzanian Environmental Management Act of 2004), and where non-essential developments exist, these need to be removed. No dumping of surplus soil, equipment laydown areas, development of access tracks is to be allowed within those buffer areas, within the exception of the authorized routes and adjacent service road. 	Presence of Permit from Basin Authority	TANROADS/ Contractor

	 Extraction of sand shall be done after acquisition of permit from relevant water basin authority Stormwater management of construction sites should be planned in advance and implemented to separate clean and dirty water systems to avoid the transport of contaminants into aquatic systems. Potential contaminated sites, such as fuel and chemical storage areas, heavy equipment parking and maintenance stations should be tested for contamination prior to closure, and remediated in a manner that addresses all hazardous chemicals identified in the test results. Any contaminated sites that develop as a result of accidental spills should be remediated according to a Spill Management and Response Plan that will be developed. Spill response kits should be available at sites where there is a high risk of contamination from fuels, oils and chemicals. 		
Water flows	 The Project will need to consult with the respective Water Basin Office to obtain any water use permits required for construction, in conformance to the requirements of the Water Resources Management Act of 2009. Where possible, in-stream construction activities should be scheduled for during the dry season. Project infrastructure should be designed and located to minimise the impacts to natural water flow. To the furthest extent possible, the disturbance of the natural topography and catchment characteristics should be minimised (e.g. limit large-scale earthworks, vegetation removal, soil compaction etc.), so as to not alter the natural flow characteristics of the rivers. 	Presence of of Water Permit from Water Basin Authority	TANROADS/ Contractor

	 Existing vehicles crossing points over rivers including bridges, fords, and causeways should be used as far as possible for temporary diversions in lieu of creating new crossings. Should new crossings have to be established these should be designed and constructed to international standards to minimise the risk of erosion, such as making use of gabions, fascines, concrete blocks with openings, and soil retention baskets. 		
Water Quality	 The Project should consult with the respective Water Basin Office to confirm the need and applicability for water discharge permits/licenses necessary for the successful construction of the proposed CERC projects. Such permits/licenses will be associated with effluent discharges (viz. stormwater and treated sanitary/domestic sewage). Method Statements detailing spill emergency response and clean-up procedures for spills should be developed. Training regarding proper methods for transporting, transferring and handling hazardous substances that have the potential to impact surface-and groundwater resources should be undertaken. Areas where spillage of soil contaminants occurs should be excavated (to the depth of contamination) and suitably rehabilitated. If any other minor spillage occurs the spillage should be cleaned immediately and the contaminated area should be rehabilitated. All contaminated material should be suitably disposed of. The washing of Project vehicles in any surface water bodies in and around the proposed CERC activities should be prohibited. All Project vehicles should be washed at designated wash bays on site. These wash 	Zero pollution of water sources	TANROADS/ Contractor

- bays should include oil/grease and sediment traps for grey water.
- The ad hoc maintenance of vehicles in and around the area of the proposed CERC projects should be prevented. All vehicles should be maintained at a designated workshop. The workshop should include containment berms and an oil/grease trap.
- All construction areas and associated facilities should be maintained in a good and tidy condition; debris and wastes should be contained in such a way that they cannot become entrained in surface run off during periods of heavy rain.
- Where practical, exposed surfaces and friable materials should be covered / sheeted.
- To the furthest extent practicably possible, construction activities should be conducted
- > 60 m away from water bodies (in conformance to the requirements of the Water
- Resources Management Act, 2009), except where crossings are required.
- Sufficient toilets at active work areas should be provided for site staff and workers and these should be serviced regularly by a competent and suitably qualified person.
- The sewage treatment system (if any) should be managed in a manner that results in zero discharge of raw sewage to the environment, and if treated sewage is discharged into the environment then this should conform to recognised Tanzanian discharge standards prior to discharge.
- All wastewater which may be contaminated with oily substances should be managed in accordance with an approved Waste Management Plan, and no

	 hydrocarbon contaminated water should be released into the environment. Fixed fuel storage infrastructure should be on flat, impermeable surface and surrounded by a bund with a volume of 110 percent of the volume of the storage tank(s), and fuel transfer at fixed stations should be performed on a concrete surface draining to a mechanical oil separator. Position Construction Camps and access roads as far as possible from local streams and rivers (e.g. > 60 m away from water courses and on local high points, to minimise the risk of affecting surface water quality through the generation of silt (e.g.: by erosion) or waste (e.g.: from ablution facilities, refuelling of vehicles etc.). Chemicals storage and dispensing areas should be located no less than 500 m from surface water bodies, and in no instance should they be located within floodplains. Storage should be on flat, impermeable surface and surrounded by a bund or enclosed storage. To avoid siltation of rivers and other surface water bodies, soil stockpile should be located away from surface water bodies. 	
Operational Phase		
Climate Change and Risk Management	 Carrying out regular checks to identify potential damage and stress as a result of thermal expansion before major damage to infrastructure occurs such as bridge failure. Checking the bridge footings for scour, and remove any debris which builds up which could increase the rate of scour. 	TANROADS

 Ensuring that fire policy is in place, and staff are trained and practise drills. Ensuring any cut throughs, bridges and passes are stable, by undertaking surveys and then installing measures which reduce the risk of landslides such as rock anchors and retaining walls. Clearing the roads or tracks of debris and repairing urgently to reduce disruption to operation as much as possible Proper maintenance of culverts during the lifespan of 	
the subprojects.	

6.2.1 Mitigating and Responding to Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH)

The SEA/SH risks for the proposed CERC activities are deemed Substantial due to the emergency nature of the operations, the level of vulnerability of the population and weak protection systems. The project will address these risks, impacts, and grievances as outlined in the TanTIP GBV SEA/SH action plan and the Grievance Mechanisms

Most of the laborers hired for rehabilitation are expected to be local, potentially reducing labor influx-related SEA risks. Bidding documents will include specific requirements to minimize the use of expatriate workers and encourage local hiring. To mitigate SEA/SH risks stemming from project activities, the following measures:

•

- Contractor to have a GBV Action Plan, including a Response and Accountability Mechanism;
- Provision of workers' accommodation where necessary to reduce impacts of GBV to be considered.
- Awareness raising within the local community and labour force on SEA/SH and avenues to report such cases if they arise;
- Economic empowerment through provision of equal employment opportunities for both youth, women, men and people living with disabilities;
- Training all construction workers and stakeholders on SEA/SH responsibilities related to the CoC and consequence for none compliance, ahead of any project related works;
- Development of policies/contractual requirements related to SEA/SH, including investigation and disciplinary procedures;
- Refer all GBV/SEA cases to the programs referral system or partner agency for action.

6.2.2 Other Contingency Risks and Emergency Response

The CERC allows the borrower to receive support by reallocating funds from other project components to mitigate, respond, and recover from the potentially harmful consequences arising from the emergency. Disbursements under this component will be subject to the declaration of emergency and the "Emergency Response Manual" by the Government of Tanzania, agreed upon by the World Bank.

6.3 PREPARATION OF SITE-SPECIFIC ENVIRONMENTAL AND SOCIAL SAFEGUARD INSTRUMENTS

Before the implementation of CERC activities, all 83 sites shall undergo screening procedure set out in section 6.2 and annex 1 of the original ESMF. Based on the screening results and the anticipated level E&S impact and risk, , the project will develop site-specific and relevant Environmental and Social instruments. These instruments will provide detailed guidance relating to ESHS for all sub-activities, tailored to the administrative Region in conformity with the content and format provided in annex 4 of the original ESMF.

As mentioned, the standard instruments for subprojects with moderate Environmental and Social risk will be ESMPs. These plans will cover areas such as bridge reconstruction, culverts, road embankments, and drainages, unless sensitivities regarding ESS2, ESS3. ESS6 or ESS8 are identified, in such cases an ESIA will be prepared. TANROADS shall prepare the ESMPs, or ESIAs, in compliance with national and World Bank requirements as stated in the project ESMF and ESCP. The World Bank will review and approve the ESMPs.

The environmental assessment, design, and preparation of an ESMP for each moderate risk subproject, and ESIAs for substantial risk subprojects, must be closely integrated with the engineering design of the sub-project. The site specific ESMPs will be prepared to identify potential direct and indirect impacts and risks during pre-construction, construction, and post-construction operations and maintenance phases. Standard and specific ESHS terms and conditions will be included in all subprojects tender documents and contracts. This document will guide contractors to prepare the site-specific C-ESMPs, which are specific to the type of intervention during project implementation.

TANROADS shall also prepare and implement EHS procedures to be used during Operational and Maintenance phase.

6.4 COORDINATION AND IMPLEMENTATION ARRANGEMENTS FOR TANTIP CERC ESMF ADDENDUM

TANROADS is the main agency on behalf of the government of Tanzania responsible for the implementation of emergency activities under the TanTIP CERC, including all aspects related to procurement, financial management monitoring & evaluation, and environmental and social standards compliance. Its Environment and Social Department shall have the overall, in-charge responsibility for E&S issues for the TanTIP CERC. The E&S personnel from this department shall be part of the Program Implementing Team (PIT). TANROADS shall utilize E&S staff at regional offices to assist PIT to prepare and implement the ESMPs, hence the E&S staffing in the PIT shall remain as per original ESMF. The following are the roles and responsibilities of PIT in sub-project supervision

- i. Determine the scope of E&S work i.e. identify the magnitude, sensitivity and risk category of the sub-projects;
- ii. Implement the ESMF and supervise the implementation of ESMF by contractors and in compliance with National Legislations and the ESF requirements;
- iii. Review undertakings of E&S management plans (ESMPs) and ESIAs where needed and site-specific ESMPs which will include OHS plans developed by consultants and contractors;
- iv. Ensure all workers are trained and signed the Code of Conduct during recruitment;
- v. Ensure the relevant elements and mitigations of the ESIAs (including budget) are incorporated into final designs and bid documents for contractors;
- vi. Ensure daily monitoring of the implementation of safeguards tools by the contractors;
- vii. Ensure that the necessary environmental authorizations and permits are obtained before subprojects' implementation;
- viii. Ensure Contractor Workers GRMs are in place and operational;

- ix. Ensure E&S safeguard tools are implemented in accordance with World Bank's ESF.
- x. Ensure supervision of the civil works either by hiring a supervision consultant or through designated environmental supervisors in the team of the supervision engineer;
- xi. Ensure that trainings and awareness on GBV/SEA, VGPF, GRM, LMP, CoC, and SEP are provided to workers and general communities; and
- xii. Send progress reports to stakeholders including the World Bank.

The implementation of the CERC ESMF will apply the laws, legislation, regulations, and local rules governing Environmental Management in Tanzania, World Bank E&S Standards (ESSs) as well as the guidelines set in the main TanTIP safeguard instruments. The administrative and institutional arrangements for environmental management in Tanzania that are relevant to the TanTIP CERC program are stipulated in the Environmental Management Act (EMA) No. 20 of 2004.

Other relevant governmental agencies may provide technical assistance to TANROADS as in relation to the compliance with different environmental standards during implementation of CERC interventions.

6.5 MONITORING AND REPORTING

TANROADS is required to supervise the provisions of the CERR ESMF addendum and subproject ESMPs and other subproject E&S terms and conditions during the construction and maintenance and operational phases of the intervention. The safeguards in TANROADS as well as the consultants hired through TanTIP will be responsible for monitoring and evaluating environmental and social compliance of the entirety of the subprojects, as guided by the ESMF. Reports on environmental and social indicators and any incidents that may have adversely impacted the environment and social setting, arising from CERC activities will be prepared by TANROADS after reviewing Quarterly Contractors' Environmental and Social Progress Reports and undertaking site monitoring. These reports will be included into safeguard monitoring reports to be submitted to the World Bank as part of the TanTIP reporting process. The reports will include: (i) the status of the implementation of the CERC ESMF and mitigation measures; and (ii) the findings of monitoring and due diligence audits, (iii) corrective and preventative actions required and compliance and (iv) grievances, incidents and progress on resolution

7 GRIEVANCE REDRESS MECHANISM

TANROADS has established a Grievance Redress Mechanism (GRM) for TanTIP, where complaints, queries, or feedback on the project are received and addressed. This GRM also applies to the CERC ESMF. It allows individuals, communities, or other stakeholders to raise concerns or complaints about the project's implementation, aiming to provide a response or remedy. As a crucial component of the project's accountability and transparency framework, the GRM ensures that the concerns of affected parties are systematically and promptly addressed. Complaints received from beneficiaries, stakeholders, and community members are properly and accurately resolved to improve project management and implementation. This enhances the quality of the project intervention and maximizes benefits to the communities. The GRM permits confidential reporting to protect the identity of the complainant, which is particularly important for sensitive issues like SEA/SH. Additional staff managing the grievance mechanism will be trained to handle SEA/SH complaints appropriately, ensuring they understand the sensitivity of such issues and the need for confidentiality.

GRM principles under the TanTIP include:

- **Protection of beneficiaries' and stakeholders' rights**: beneficiaries and stakeholders have the right to make their voices heard. No retribution will be exacted for participation/use of the GRM system.
- Transparency and Accountability: All complainants will be heard, taken seriously, and treated fairly.
- **Timeliness:** All complaints will be addressed ideally within two to three weeks. Complainants will be informed if their issue requires more time than this.
- **Neutrality, Equity, and Non-Discrimination:** All complaints will be treated with respect and equally regardless of the community groups and individuals, types, ages and gender.
- Accessibility: The GRM will be clear and accessible to all segments of affected communities.
- Confidentiality: Information communicated through the GRM is restricted to a limited number of people and is not disseminated more widely, offering protection and security to the complainant.

7.1 STANDARD OPERATING PROCEDURES FOR PROJECT-GRM

- i. The Project Grievance Redress Mechanism (GRM), will be presented to all affected persons and other key local stakeholders during public consultations.
- ii. Project workers must, as part of inductions, be provided with both Project and contractor specific GRM guidance.
- iii. Communities will be informed of the grievance mechanism at the time of projects commencement and the measures put in place to resolve their grievances.
- iv. In the case of GBV/SEA incidents, reports should be channeled to the GBV/SEA GRM procedures (as detailed in the TanTIP GBV action plan).

To manage these grievances, TANROADS E&S Team will ensure an independent Grievance Redress Committee (GRC) for each CERC sub-project under TanTIP is in place and which must conform to the requirements for the project-wide GRM.

THE ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED TANTIP CERC INTERVENTIONS ${\tt STAKEHOLDERS\ CONSULTED}$

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Appendix III: Liat of stakeholders consulted

THE ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED TANTIP CERC INTERVENTIONS STAKEHOLDERS CONSULTED

No (Na.)	NAME (Jina)	TITTLE AND INSTITUTION (Cheo na Taasisi	DATE (Tarehe)	MOBILE No. (Namba ya Simu)	Signature (Sahihi)
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NAME (Jina) TITTLE AND INSTITUTION (Chee na Taasisi No (Na.) MOBILE No. (Namba ya Simu) DATE (Tarehe) Signature (Sahihi) 5/8/2024 1 GERALD KURAYA RAS Jones TTCL - MAGA LUCAS FARAHANI SOT Elefer Eng. TAWA-IGGR HUJJEIN MEDDAH TXWA-1GGR

Appendix II: List od Stakeholders Consulted

THE ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED TANTIP CERC INTERVENTIONS ${\tt STAKEHOLDERS} \ \ {\tt CONSCLIED}$

No NAM Na.) (Jina		THTLE AND INSTITUTION (Cheo na Taasisi	DATE (Tarche)	мови і 🌭	Signature (Sahihi)
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MUHTASARI WA MIHAO CHA DHARLIRA TAMROD MA WAHAHCHI MILICHOFAMILINA TAR 84107 12034

1-HTUFUHGUA hITEAO

Majumbe Parriga na manandu waliyo uma truta trumatrai itusha

D. THUTADILI BARABARA TA MILLIA ROAD

Mjumbe alisema tama Mji unuongentia Niuro taudabuha Shino taijaa maji- Maji yaliyojaa Mayatautita taitita Mto Lali yanayotivivita tautotia Sehemu Mbalimbali.

Miunte aliongerea truma baada ya mvua trubuo trunyesha udango ulitratika na truriba Matanawati na maji trushindua

trupita turenda upande uso pili-

Magani walitatia tujua Madhara ambayo yamentotizia tiipindi cha mwaa Klojumbe walisima tuwa tiwa nyumba ya Mwananchi mmoja mespata maafa.

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Mjumbr alitako trujuo barabaro za mtrambo ipo chini za Taruro au Tanrod. Walipbu ipo chini za Tarura. Tanrod walita maeletsero barabaro ambaro wanamitiki zenze utrubura uca Mita 60 trutotra tratitrati za barabara.

Baada ja majadiliano wajumbe walishuburu sana tiwa ugeni huo.

AGENDA MO 3. TRUPUMBA TRITADO KINDA FRITINGWO SOO DO: 41 MONORA.

Juma a harure



ANNEX III: LIST OF TANTIP CERC SUBPROJECTS

SN	Regional name	Road Length affected (Km)	Proposed Intervention
1	ARUSHA	0.323	Construction of 3-cells Box Culvert of 4x3m at king'ori
			Flooded Area along Kia Jct - Namanga Road.
2	ARUSHA	0.5	Construction of a New Box Culvert 2-cell of 4x2m at
			King'ori Flooded Area along Kia Jct - Namanga Road.
3	ARUSHA	1	Construction of New Box Culvert with 2-cell of 5x3.5m along TCA Jct - Minjingu Trunk Road at Kisongo (A to Z) Junction
4	ARUSHA	2	Construction of Bridge 40m Span at Tanganyeti (Ch.63+700) along Arusha - Namanga
5	COAST	Section i: 100m	>Raising of Embankment. >Construction of 7 Box culverts at 2 sections: >Section I (KIMANZICHANA): CBC-1cell of (5x4m),
6	COAST	Section ii: 3km	>Section ii (MKAPA BRIDGE EMBANKMENT): 6 CBC- 2 cells of (5x4m)
7	COAST	8km	>Raising of Embankement. >Construction of 3 Beam bridges at 3 sections (20x7m) (GAMA-KISAUKE-SAADANI)
8	COAST	NILL	>Raising of Embankement. >Construction of Box culvert -2 cells of (5x4m), BUNGU-NYAMISATI ROAD (MSIMBAGENGE BRIDGE)
9	DODOMA	0.03	Silwa Additional Box culvert ((5x2.5) cells ,including /milling, raise embankment, stabilisation, and lay Asphalt Concrete layers
10	DODOMA	2	Construction of Mbande Box culvert ((5x2.5) two cells ,including /milling, raise embankment, stabilisation, and lay Asphalt Concrete layers 3km
11	DODOMA	0.06	Construction of Chilonwa (Nzali) bridge 60m span
12	DODOMA		Construction of Box Culvert (5x2.5) 4cells and other drainage works at CBE - Shabiby R/B - Chimwaga Jct. (Morena)
13	GEITA	1.350km	Construction of Wendele - Mlele Box Culvert Lot 1(2 Cells 4x2 & 5cells 4x4)
14	GEITA	1.540km	Construction of Wendele - Mlele Box Culvert Lot 2 (3 Cells 5x3 & 5cells 4x4)
15	GEITA		Construction of New Bridge 30m Span
16	KAGERA	600m	Construction of Kanoni Bridge (20m span) and its Approach road
17	KAGERA	1200m	Construction of Kalebe Bridge (60m Span)
18	KAGERA	2000m	Construction of 45m span Kamishango Bridge
19	KAGERA	1800	Construction of 102m span Kyanyabasa Bridge
20	KATAVI	55m	Construction of Katuma/Sitalike Bridge 55m span
21	KATAVI	32.45m	Construction of Kilida Vented Drift (14 Cells 5x3 and 2Cells 5x2)

22	KATAVI	60m	Construction of Kitumba (60m span Mirumba Bridge)
23	KILIMANJAR	1.6	Construction of series of 7 Box Culverts 5x2.5 and
	O	1.0	raising the embankement by 1.5m for a stretch of 1.6km
24	KILIMANJAR	0.9	Construction of 2x2 and 3x2 Box Culverts
24	O	0.9	Construction of 2x2 and 3x2 Box Curverts
25	KILIMANJAR	1.58	Construction of 3x2 Box Culvert
25		1.58	Construction of 3x2 Box Curvert
26	0	1	G
26	KILIMANJAR	1	Construction of 2cells 5x2.5 Box Culvert and raising
	0		the embankement by 1.5m for a stretch of 1.5km
27	KILIMANJAR	1.725	Construction of series of 7 Box Culverts 4x1.2 and
	0		raising the embankement by 1.5m for a stretch of 2.2km
28	LINDI	15	Construction of Zinga bridge (18m span) and Relief
			Box Culverts 2 Cells 2x2,
			2 Cells 5x2.5 at Flood plain sections
29	LINDI	0.05	Construction of Kimambi bridge (39m span) and Relief
			Box Culverts of 2 Cells 2x2
			2 Cells 5x2.5 at Flood plain sections
30	LINDI	2.00	Construction of Bridge (25m Span) and 2 Cells 5x4
			Relief Box culverts at Kigombo
31	LINDI	1.50	Construction of Bridge (70m Span) and 2 Cells 5x4
			Relief Box culverts at Nakiu
32	LINDI	14.50	Construction of Box culvets
		11.00	1 Cell 5x2.5 at four Locations Ch. 27+100, 27+200,
			27+300 and 27+800
			2 Cells 5x4 at Ch. 26+600,
			4 Cells 5x4 at Ch. 12+500
33	LINDI	25.00	Construction of Bridge (64m Span) and 2 Cells 5x4
33		23.00	Relief Box culverts at Mbwemkuru II
34	LINDI	15.00	Construction of Bridge (20m Span) and Relief Box
34	LINDI	13.00	culverts
			2 Cells 2x2
			2 Cells 5x2.5
			2 Cells 5x4
25	NA NIXA DA	0.20	at Nangano
35	MANYARA	0.20	Construction of New Minjingu Bridge 50m Span (25m -
2 -	3.6.3.77.4.75.4	2.00	25m)
36	MANYARA	2.00	Construction of New Bridge 20m span and protection
L			works.
37	MANYARA	0.12	Construction of New Losinyai Bridge (80m span) and
			protection of river banks using Retaining walls
38	MANYARA	0.20	Construction of Box Culvert (2X4mX2.5m) and Raising
			of Embankment
39	MANYARA	0.40	Construction of new Box Culvert (6x4mx2m) including
			protection works and Raising embankment, construction
			of rock falling retaining structure,
40	MARA	100m	Construction of Grumet Bridge 37.5m span
41	MBEYA		Construction of 36m span Lupatingatinga Bridge
'		1.00	areas of com span Bapaninga Briage
	I	1.00	

40	MDEXA	1	0
42	MBEYA	1.00	Construction of 16m span Bitimanyanga Bridge
43	MOROGORO	1.00	Construction of DOMA Bridge (20m span)
44	MOROGORO		Construction of Ngerengere Bridge (30.6m span)
4.5	Monogono	400.00	W1 1 D 11 C(20
45	MOROGORO	400.00	Kihonda Bridges of (30m span)
46	MOROGORO	1,000.00	Construction of Mjonga Bridge (80m span)
47	MOROGORO	2,000.00	Chakwale Bridge (80m Span)
48	MOROGORO	2,000.00	Nguyami Bridge (100m Span)
49	MOROGORO	2,000.00	Bwage Bridge (20m Span)
.,		500.00	gege (2 p)
50	MWANZA	0.50	Construction of 32m span Mabatini bridge
51	MWANZA	0.50	Construction of 20m span Mkuyuni bridge
52	MWANZA	0.30	Construction of 20m span Nyaluha 1 bridge, Nyaluha 2
32	141 44 7 11 422 1	2.00	box culverts 5x3, raising road embankment and relief structures.
53	MWANZA		Construction of 20m span Kishinda Bridge, raising road
		0.50	embankment and relief structures
54	NJOMBE	0	Construction of Madihani Bridge (15 m) span and Lufilyo Bridge (40m span)
55	RUKWA	0.04	Construction of 40m span Kisa bridge
56	RUKWA	0.05	Construction of 50m Kinambo II bridge
57	RUKWA	0.07	Construction of 60m span Ilemba (Mkanga I and II)
58	RUVUMA	47.7	Construction of 45m span Mitomoni Bridge
59	RUVUMA	0.2	Construction of 20m span Mkili Bridge
60	SHINYANGA	0.3	Construction of Ubagwe II bridge 40m span along
			Mwabomba - Igombe river unpaved regional road
		 	(chainage 59+450 – 59+780)
61	SHINYANGA	0.3	Construction of Kasenga bridge 60m span along
			Mwabomba - Igombe river unpaved regional road
(2)	CHINIXANGA	0.2	(Chainage 72+350 – 72+650)
62	SHINYANGA	0.3	Construction of Ng'hwande bridge 40m span along
			Nyandekwa – Ng'hwande unpaved regional road
63	SINGIDA	1000	(Chainage 56+480 – 56+780) Construction of Bridge 50m span each, protection
0.5	JINOIDA	1000	works and raising of road embankment 1.0km each
64	SONGWE	0.5	Protection for landslide at Ikinga area (45m) at km 5+ 200 - 7+ 900
65	TANGA	50m	Construction of Twin Cell of Box Culvert 5x2.5m and
0.5	IANOA	30111	approach roads (50m)
66	TANGA	200m	Construction of 30m Span Bridge
67	TANGA	70m	Construction of Bridge 39m span
UΙ	IIIIOA	/ OIII	Construction of Dridge 37m span

68	COAST	>Section i: 1.5km >Section ii: 800m	>Raising of Embankement. >Construction of 3 Box culverts at 2 sections: >Section I (NEW RUVU): 2 CBC- 2 cells of (5x2m), >Section ii (RUVU TRC):1 CBC -4 cells of (5x3m)
69	COAST	NILL	>Raising of Embankement. >Construction of 2 Box culverts at 2 sections: >Section I (KIMANGE): 1CBC-4 cells of (5x4m), >Section ii (KWANG'ANDU): 1CBC-2 cells of (5x4m)
70	DODOMA	0.08	Construction of Pandambili Box culvert ((5x2.5) two cells ,including /milling, raise embankment, stabilisation, and lay Asphalt Concrete layers
71	DODOMA	13	Construction of Box culverts (5x3) 2 cells, Three Nos including raising of road Embankment and Construction including /milling, raise embankment, stabilisation, and lay Asphalt Concrete layers
72	KAGERA	1000	Construction of 50m span Kyetema Bridge
73	MBEYA	1.00	Construction of New 30m span Sungwe Bridge
74	MWANZA	0.80	Construction of 50m span Sakanti Bridge, raising road embankment and relief structures
75	MWANZA	0.50	Construction of Malemve 4 Cells 5x3 box culverts, raising road embankment and relief structures
76	SIMIYU	300	Construction of Nyamikoma New Box Culvert 4Cells 5x2
77	SONGWE	0.5	Construction of Mpapa 60m span Bridge
78	SONGWE	0.5	Construction of Kabalisi Bridge 40m span
79	SONGWE	0.5	Construction of 40m span Sange Bridge
80	ARUSHA	0.5	Construction of New Box Culvert with 3 cells of 5x3.5m to accommodate the climatic changes along Makuyuni - Ngorongoro Road.
81	MTWARA	0.35	Construction of Njawala Bridge (39m) height of 5m
82	MTWARA	0.3	Construction of Maparawe Bridge (30m) height of 4m
83	ARUSHA	41m	Construction of Mto Athumani Bridge with a span of 60m along Mto wa Mbu - Loliondo (213Km) a