

THE UNITED REPUBLIC OF TANZANIA



**MINISTRY OF HEALTH, COMMUNITY DEVELOPMENT, GENDER, ELDERLY
AND CHILDREN**

**TANZANIA COVID-19 PANDEMIC EMERGENCY FINANCING FACILITY
PROJECT**

Environmental and Social Management Framework

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Executive Summary

The Government of Tanzania (GoT) through her Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) has requested World Bank for her financial support to respond to the immediate health sector needs for the COVID-19 epidemic. The project has three main components including, strengthening laboratory diagnosis capacity; improving management of COVID-19 cases, and implementation management and monitoring and evaluation. The project will be implemented in seven (7) regional referral hospital of Dar es Salaam, Geita, Mbeya, Manyara, Ruvuma, Dodoma and Mtwara. Strengthening laboratory diagnosis capacity will go hand in hand with procurement and installation of Liquid Oxygen Generating Plants and oxygen supply system, and supply of oxygen cylinders to neighboring health facilities. The project will also procure essential medicines and supplies; and conduct training to biomedical technicians on production and management of oxygen plants. Nurses on other hand will be trained on proper provision of oxygen gas to patients while laboratory staff will be trained on diagnosis of COVID-19.

Projects and programs financed by the World Bank need to comply with the Environmental and Social Framework (ESF) for Investment Project Financing as well as the national environmental and social legislations. Consequently, this Environmental and Social Management Framework (ESMF) is central in meeting World Bank standards and national laws. Thus, its contents and development is informed by WB –Environmental and Social Standards, national laws and Occupation, Health and Safety (OHS) measures as outlined in WHO guidelines.

According to the World Bank ESF, the project environmental and social risk rating is classified as Substantial. Project activities might compromise the health of hospital workers, patients and contractor workers, let alone the nearby community. For instance, explosion of oxygen plants if not handled properly have health hazards risk to both hospital workers and nearby community. Project activities also expose contractors and hospital workers to the risk of contracting COVID -19. In addition, mismanagement of medical and health care wastes like PPEs, especially during transportation and their subsequent disposal, expose hospital workers and those involved in waste management to the risk of contracting COVID 19 let alone their impact on public health.

With this understanding, this ESMF is prepared to assist the Government through the MoHCDGEC in developing environmental and social (E&S) instruments in response to COVID-19 pandemic as per the national regulations and the World Bank’s Environmental and Social Framework (ESF). This ESMF includes templates for the preparation of Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Plans (ESMP) and Stakeholder Engagement Plan (SEP). The Infection Control and Waste Management Plan (ICWMP) which had already been prepared by the Government of Tanzania will be used as a separate document and will be acknowledged by this ESMF. In addition, it includes section on Labour Management Procedures to be observed for the purpose of containing any possible risks and protecting workers from safety hazards related to this project. Issues of environmental, social, health and safety (ESHS) associated with the construction, installation and operation of health care facilities (where applicable) in response to COVID-19 are mentioned in this ESMF and the reference should be made from the WB ESHS Guidelines during implementation. Consequently, the ESM consist of seven (7) chapters, each designed to address specific issues in relation to addressing potential project impact.

The implementation of the Project is designed to be environmentally and socially responsible. It will avoid any undesirable adverse consequences of the given interventions on hospital workers, contractor and consultant workers while ensuring public health. and hence ensure the achievement. Stakeholder Engagement Plan (SEP) has been developed as standalone document in accordance with

the World Bank ESF requirements as per ESS10. This will ensure that all Project stakeholders are adequately engaged in all stages of Project activities. SEP also stipulate the Grievance Redress Mechanism (GRM) to ensure that all Project grievances are heard and addressed.

Acronyms

COVID-19 -
GDP – Gross Domestic Products
HNP - health, nutrition and population
GoT – Government of Tanzania
RCCE - Risk Communication and Community Engagement
WHO – World Health Organization
PEF - Pandemic Emergency Financing
CPF - Country Partnership Framework
IHR - International Health Regulations
WB – World Bank
ESF – Environmental and Social Framework
EIA/ESIA – Environmental (and Social) Impact Assessment
ESMP – Environmental and Social Management Plan
ESMF – Environmental and Social Management Framework
ESHS – Environmental, Social, Health and Safety
ESCP – Environmental and Social Commitment Plan
SEP – Stakeholder Engagement Plan
LMP – Labour Management Plan
GRM – Grievance Redress Mechanism
NEMC – National Environmental Management Council
MoHCDGEC – Ministry of Health, Community Development, Gender, Elderly and Children
NPHL - National Public Health Laboratory
PMT – Project Management Team
TACAIDS – Tanzania Commission for Aids
TAC – Technical Advisory Committee
EIS – Environmental Impact Statement
EMO – Environmental Management Officer
EHSg – Environment, Health and Safety Guidelines
PEA – Preliminary Environmental Assessment
ESS – Environmental and Social Standard
ICWMP – Infection Control and Waste Management Plan
CHF – Community Health Fund
MDG – Millennium Development Goal
NAPHS – National Action Plan for Health Security
NPHL – National Public Health Laboratory
PPE – Personal Protective Gears
CDC – Center for Disease Control
SEA – Sexual Exploitation and Abuse
GBV – Gender Based Violence
OSHA – Occupational Health and Safety Authority
ILO – International Labour Organization
CMA - Commission for Mediation and Arbitration
LESCo - Labour Economic and Social Council

Chapter One

Introduction

1.1 Background

The outbreak of coronavirus disease (COVID-19) caused by the 2019 novel coronavirus (SARS-CoV-2) has been spreading rapidly across the world since December 2019, following the diagnosis of initial cases in China. On March 11, 2020, the World Health Organization (WHO) declared the outbreak a global pandemic. As of July 30, 2020, the outbreak had resulted in an estimated 17,109,335 infections and 668,949 deaths globally. Tanzania reported its first COVID-19 case on March 16, 2020, and as of April 29, 2020, recorded a total of 509 cases with 21 deaths; no further updates on COVID-19 cases and deaths are available since then. The economic impact of COVID-19 on Tanzania is still evolving but is expected to erode the gains made in recent years. Current estimates indicate GDP growth rate slowing to 2.5 percent¹ in 2020, compared to 6.0 percent in 2019. The unprecedented economic impact is likely to adversely affect the entire population particularly the poor and low-income groups as well as the service sectors. Not only are resources needed to respond to the pandemic, there is also a need to maintain the delivery of essential health, nutrition and population (HNP) services to avoid reversing the gains made thus far in improving HNP outcomes and to mitigate the economic impact of the pandemic.

To respond to the outbreak of COVID-19, the Government of Tanzania (GoT) has taken critical steps to limit further spread of the virus. These measures include strengthening detection and surveillance at points of entry including airports and border crossings; strengthening capacity for infection and prevention control; training health care staff on case management; designating public and private hospitals to serve as COVID-19 treatment centers; effective Risk Communication and Community Engagement (RCCE); closure of educational institutions; suspension of public meetings, sporting and social events and international passenger flights²; and making it mandatory to wear masks in public places. In addition, the GoT operationalized contact tracing, quarantining of contacts in designated places, and strengthened laboratory capacity to collect samples and test for COVID-19.

GoT has developed a National Response Plan for COVID-19, aligned to the WHO's COVID-19 Global Strategic Preparedness and Response Plan, which outlines public health measures for a response to COVID-19 and prevention of future outbreaks of emerging infectious diseases. The COVID-19 National Plan prioritizes key areas of interventions clustered around ten pillars³. The Plan was initially prepared in April 2020 and revised in July 2020 to adapt the national response to the international evidence emerging about COVID-19. The changes include: (i) advising mild cases to self-isolate instead of being admitted; (ii) discontinuing institutional quarantining of contacts as well as international passengers; (iii) decentralizing laboratory testing of COVID-19; (iv) using community health workers to follow mild cases and contacts at home; and (v) strengthening capacity to care for moderate to severe cases of

¹ Tanzania Economic Update, June 2020 of the World Bank

² Some of the measures including opening of schools were reversed in June 2020.

³ Coordination; case management/infection prevention and control; water, sanitation and hygiene; strengthening laboratory capacity; RCCE; psychosocial support; surveillance, Points of Entry, logistics, traditional medicine/research. In addition, the plan prioritizes continuity of HNP services delivery

COVID-19 at health facilities. To date, the GoT has raised US\$78 million⁴ of the total requirement of US\$150 million for the COVID-19 response.

The Insurance Window of the Pandemic Emergency Financing Facility (PEF), which provides financial support to IDA-eligible countries in case of major multi-country disease outbreaks, was triggered for COVID-19 and has made available a total of US\$195.84 million for 64 PEF eligible countries, including Tanzania, which was allocated US\$3.9 million. The COVID-19 PEF project is prepared under the global framework of the World Bank COVID-19 response financed under the PEF.

The proposed project is consistent with the World Bank's Country Partnership Framework (CPF, Report No. 121790-TZ, 2018), particularly focus area 2: "Boost human capital and social inclusion - A life cycle approach to human development challenges", aimed at improving the quality of health care services. The proposed project is also fully aligned with the GoT's National Health Policy (2007), which focuses on addressing health security threats and preventing and controlling epidemic diseases through resilient and sustainable systems. The proposed project contributes to the implementation of the International Health Regulations (IHR) (2005) and the Global Health Security Agenda and complements the development partner investments in health systems strengthening, disease control and surveillance. Finally, the proposed project builds on the ongoing World Bank support to the sector – East Africa Public Health Laboratory Network Project (EAPHLNP, P111556, 2010-2020), which is supporting strengthening of laboratory diagnosis capacity, and Strengthening Primary Health Care for Results Program (P152736, 2015-2021), which focuses on provision of primary health care services and plays a vital role in disease outbreaks detection, prevention and response.

As part of the project operation some of the documents including those detailing the management of environmental and social issues need to be prepared as per the WB Environmental and Social Framework (ESF). One of the main documents is the Environmental and Social Management Framework (ESMF) which the borrower, for this case the Government of Tanzania shows how issues of environmental and social as a result of preparation, implementation of the project and use of the project facilities will be handled.

1.2 Rationale of the ESMF

Projects and Programs financed with World Bank's resources need to comply with the Environmental and Social Framework (ESF) for Investment Project Financing as well as the environmental and social legislation of the GoT. Since details of sites and specific locations of the project are not known at this stage, site-specific Environmental and Social Assessments cannot be conducted. What is possible at this stage would be to carry out an identification of generic issues that are typically associated with activities that are funded by the project and apply the information to site specific environmental and social assessments, as and when they

⁴Includes US\$6.5 million in the Health Basket Fund to which the ongoing World Bank-financed project (Strengthening Primary Health Care for Results, P152736) contributes to support provision of personal protective equipment to primary health care facilities countrywide and the proposed US\$3.79 million from PEF. Other development partners include the International Monetary Fund (IMF, US\$14.3million), Arab Bank for Economic Development in Africa (BADEA, US\$1.7million), European Union (EU, US\$44.2million), South Korea (US\$0.5million), Global Fund for AIDS, Tuberculosis and Malaria (GFATM, US\$6.2million), Others (US\$1.5million)

are identified. This Environmental and Social Management Framework (ESMF) is prepared to assist the Government of Tanzania in developing environmental and social (E&S) instruments in response to COVID-19 pandemic financed by the PEF project as per the national regulations and the World Bank's Environmental and Social Framework (ESF). This ESMF includes templates for the preparation of Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Plans (ESMP) and Resettlement Action Plan where necessary. The Infection Control and Waste Management Plan (ICWMP) which had already been prepared by the Government of Tanzania will be used as a separate document and will be acknowledged by this ESMF. Issues of environmental, social, health and safety (ESHS) associated with the construction, installation and operation of health care facilities (where applicable) in response to COVID-19 are mentioned in this ESMF and the reference should be made from the WB ESHS Guidelines during implementation.

The ICWMP focuses on proper infection control and healthcare waste management practices during operation of healthcare facilities and will be considered or in use parallel with the with the ESMP. Other E&S instruments as required by the ESF, such as Stakeholder Engagement Plan (SEP) shall be appropriately summarized or referenced in this ESMF as well as the ESMPs. The type of E&S instruments and their timings of development and implementation are defined in the project Environmental and Social Commitment Plan (ESCP). These instruments will be made available for public review and comment in appropriate locations in the Tanzania and in World Bank's external website in accordance with World Bank's requirement on access to information by the public. It is expected that detailed environmental and social assessments (ESIAs, ESMPs) for sites and/or for activities will be carried out (in accordance with this Framework) by the implementing agencies through a registered Consultant and will be reviewed and cleared by the WB as well as the National Environmental Management Council (NEMC) where necessary for all physical activities prior to the approval of disbursement of funds.

1.3 Objective of the ESMF

This Environmental and Social Management Framework (ESMF) for the Tanzania COVID 19 Pandemic Emergency Financing Facility Project is prepared to ensure proper assessment and mitigation of potential adverse environmental, and social impacts, for the construction and rehabilitation of the laboratories and other project facilities. The ESMF also includes issues related to operation of the laboratories and those which need to be addressed for waste management.

The ESMF outlines an environmental and social screening process, focusing on the following steps:

- (i.) completion of the Environmental and Social Screening processes,
- (ii.) carrying out the appropriate level of environmental work as per the proposed project activities,
- (iii.) review and clearance of the screening results, and
- (iv.) procedures for the preparation of EIA and ESMP as necessary,
- (v.) Procedures for review and approval of environmental and social reports.

The ESMF includes guidelines for monitoring and development of appropriate project indicators and capacity building measures for environmental and social management. It also includes a summary of the Bank's Environmental and Social Framework an Environmental and Social Checklist to be used for screening of the proposed project activities. The ESMF will

facilitate environmentally and socially sustainable construction of oxygen facilities and rehabilitation of the laboratories in all the project areas.

1.4 Scope of the ESMF

This ESMF includes guidelines for development and implementation of the following:

- (i.) Infectious Control and Waste Management Plan (ICWMP) which will help strengthening the function of the existing health-care infectious control and waste management system including facilities and human capacity. This has already been prepared by the government and this ESMF will provide procedure for use of ICWMP together with other E and S documents such as ESIA and ESMP.
- (ii.) Community Health and Safety measures;
- (iii.) Labour Management Procedures (LMP); and
- (iv.) An E and S risk management Capacity Building Plan.

The ESMF provides guidelines for gathering of environmental and social baseline information and an analysis of key risks of the project. Social baseline information includes the risk of the most vulnerable people in the society not being able to access project benefits. Access to project benefits by all groups in the society is crucial at this era where the challenges of COVID 19 are facing all levels in the society hence the necessity to ensure project wide coverage. Chapter two of the ESMF provides information on the Project description while Chapters three and four briefly present policies, legal and institutional settings as well as country's baseline information on health sector specially those related to the spread and management of COVID 19. Chapter Five talks about Potential Environment and Social Risks and Mitigation while Chapter Six Addresses Procedures to Address Environmental and Social Issues. Chapter Seven explains about Labour Management Procedures and Chapter Eight narrates Implementation Arrangements for Environmental and Social Issues, Responsibilities and Capacity Building.

1.5 Potential users of the ESMF

The ESMF has been prepared as a reference manual for use by key stakeholders to be involved in the planning, implementation, management and operation of the proposed Tanzania COVID 19 Pandemic Emergency Financing Facility Project. As a reference material, the ESMF would be useful to the following project key stakeholders:

- Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC);
- The Laboratories and Regional Referral hospitals where the project will be implemented;
- Other government and non-governmental institutions which will be involved in the implementation of the project;
- Senior Government officials responsible for policy making and development planning on health and related sectors;
- National Healthcare waste management Programme;
- Any other important stakeholder to the project.

1.6 Approach and Methodology for ESMF Preparation

One of the key objectives of the ESMF is to provide a screening process for potential environmental and social impacts for the planned future project activities of the Tanzania

COVID 19 Pandemic Emergency Financing Facility Project and to recommend generic management and monitoring plans for addressing the potential negative impacts. In the preparation of this ESMF a high degree of consultation with various key stakeholders was employed. The rationale of these extensive consultations was to solicit views of a cross section of key stakeholders including key officials of Government Departments involved in the project. The strategies for executing this assignment followed the steps listed below:

- Review of documents for project concept and implementation processes for the proposed project activities;
- Review of the East Africa Public Health Laboratory Network Project (EAPHLNP, P111556, 2010-2020) ESMF;
- Review of the WB environmental and social framework in order to guide preparation of this ESMF and eventually ensure that project activities will be implemented as per the laid framework.
- Review of other relevant literature and government regulations for environmental management and preparation of EIAs;
- Identification and analysis of potential generic environmental and social impacts the project activities are likely to cause and generate within and around the project sites;
- Identification of appropriate generic mitigation measures for the negative environmental and social impacts
- Development of the appropriate screening process for project sites and project activities, and;
- Compilation of a capacity development and training plan to assist the client and other key stakeholders address E&S challenges during implementation, operation and maintenance of the project activities.

Chapter Two

Project Description

2.1 Introduction

This project will support implementation of specific aspects of the revised COVID-19 Response Plan addressing two critical areas: (i) supply of laboratory equipment and sustaining the supplies for COVID-19 testing; and (ii) ensuring the supply of medical oxygen at selected health facilities. The main components of the project are briefly described in this chapter.

2.2 Project components

Component 1: Strengthening Laboratory Diagnosis Capacity [Indicative amount: US\$1.33 million]

This component would mobilize immediate support to limit further spread of COVID-19 and support enhancement of disease detection capacities by ensuring prompt case finding and contact tracing. The project would support improving operational capacity of the National Public Health Laboratory (NPHL) to ensure it is fully functional and is able to test at least 500 samples per day by the end of the project period. It will finance procurement of laboratory equipment, supplies and reagents for testing COVID-19 specimens and capacity building of laboratory staff in SARS-CoV-2 testing.

Component 2: Improving Management of COVID-19 Cases [Indicative amount: US\$2.37 million]

This component would help improve case management of COVID-19 through: (i) procurement and installation of liquid oxygen generating plants and oxygen supply system at seven regional referral hospitals⁵ as well as supply of oxygen cylinders to 126 neighbouring health facilities; (ii) procurement of COVID-19 essential medicines and supplies; and (iii) training biomedical technicians on production and management of oxygen plants and health workers on proper provision of oxygen therapy.

Component 3. Implementation Management and Monitoring and Evaluation (M&E) [Indicative amount: US\$0.09 million]

This component would support strengthening of existing government structures for coordination of project activities as well as project management, including financial management and procurement arrangements. Specifically, it will support: (i) project coordination/operational costs; (ii) implementation of environmental and social safeguards related activities including stakeholder engagement and waste management; and (iii) monitoring of implementation progress to track achievements against targets and address implementation challenges as well as evaluation workshops.

2.3 Project Beneficiaries

The general population (including people infected with COVID-19 as well as those vulnerable to contracting the virus) will benefit from the facilities financed by the project.

⁵ In Dar es Salaam, Geita, Mbeya, Manyara, Ruvuma, Dodoma and Mtwara

2.4 Project Implementation and Coordination Arrangements

2.4.1 Institutional and Implementation Arrangements

The MoHCDGEC will be responsible for overall project implementation. A Project Management Team (PMT) has been designated under the Department of Policy and Planning of MoHCDGEC to implement project activities, while the Directorate of Curative Services will provide technical support (**Figure 1**). The PMT will be responsible for procurement and distribution of equipment and medical supplies. Staff with appropriate skillset and experience of working with World Bank-financed projects have been assigned responsibilities under the PMT to ensure smooth implementation of the project. The PMT has a dedicated project coordinator reporting to the Director Policy and Planning of MoHCDGEC, along with a procurement officer; a financial management officer; a social safeguard and environmental officer; and an M&E officer. The staff working for the PMT will have specific terms of reference defined. Other technical staff/consultants will be included in the PMT based on need.

The PMT will be responsible for: (i) collecting and compiling data relating to project activities; (ii) regularly reporting on results; and (iii) evaluating achievement of results against targets. The PMT will perform its functions in accordance with the existing government rules and procedures. The results framework includes indicators that reflect incremental improvements in diagnosis, case management, and outbreak response. The PMT will regularly report on these intermediate outcomes helping to improve the efficiency and guide project implementation to ensure the PDO is achieved. The M&E focal person will collect data and information from all relevant sources to report back to the PMT every month.

2.4.2 Coordination during project implementation

Existing government structures for coordinating and providing technical oversight for the national COVID-19 response will be used for the proposed project. This includes the National Technical Committee led by the Permanent Secretary (Health) along with Technical Sub-Committees (on laboratory, case management, oxygen and infection prevention and control), as well as the development partner coordination platforms (**Figure 1**).

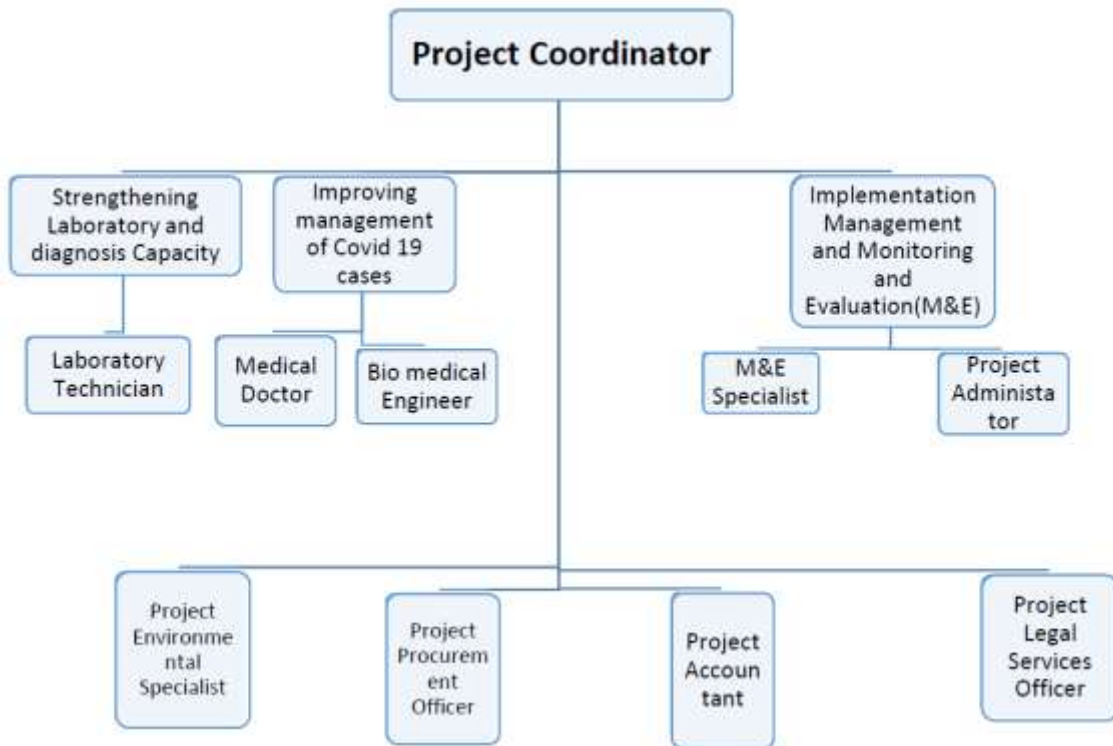


Figure 1: Organization Structure Showing Project Implementation and Coordination Arrangement

Chapter Three

Policy, Legal and Regulatory Framework

3.1 Policies and Guidelines

3.1.1 National Environment Policy (1997)

The Tanzania National Environment Policy (NEP, 1997) provides the general direction on environmental management in the country. It focuses on natural, environmental and social concerns, and advocates the key principle of sustainable development. The policy is the basis for guiding specific environmental legislation for Government agencies and those deemed responsible for regulating and accounting for environmental management. It provides strategic direction on environmental management at all levels and in all sectors of development. The policy also outlines the approach for defining and mainstreaming environmental issues for decision-making on sectoral policy action plans. The policy identifies six key environmental problem areas as: *land degradation, lack of access to good quality water, environmental pollution, loss of wildlife habitat and biodiversity, deterioration of aquatic ecosystems and deforestation.*

The policy requires environmental assessment for development projects to ensure that they are implemented in an economically sustainable manner, while safeguarding environmental and social issues for the benefit of the present and future generations. Civil works construction to build or rehabilitate the laboratories under the Tanzania COVID 19 Pandemic Emergency Financing Facility Project *are meant to conform to this policy objective by avoiding or minimizing environmental degradation through implementation of this ESMF.*

3.1.2 National Policy on HIV and AIDS (2001)

This policy, formulated by the Government under technical support from the World Health Organization Global Programme on AIDS (WHO-GPA), led to the establishment of National HIV and AIDS Control Programme (NACP) in the Ministry of Health and Social Welfare. The Commission provides leadership and coordination of national multi-sectoral response to the HIV and AIDS epidemic. The Policy identifies HIV and AIDS as a global concern and as an impediment to social and economic development, with serious negative and direct consequences on human capital, social services and welfare in all sectors. It recognizes the linkage between HIV and AIDS and poverty, as well as the vulnerable groups of the society.

The main policy objective is reflected well in the establishment of TACAIDS and its strategic objectives to deal with the specific problems of transmission, testing, care for Persons Living with HIV and AIDS (PLHAS), enhancement of sectoral roles, research and dissemination of information as well as development of HIV vaccine. The policy provides direction for development and enactment of legal instruments on HIV and AIDS ethics and legal status of HIV and AIDS affected persons.

Other objectives of the policy include monitoring and safeguarding rights of infected or affected people; preventing human rights abuse, discrimination and social injustice; providing effective treatment for opportunistic infections; fighting against drug substance abuse;

prohibiting misleading advertisements on drugs and other products for HIV and AIDS prevention; and treatment and care.

COVID-19 is closely connected to the HIV and AIDS pandemic because people living with HIV/AIDS are also affected by COVID 19. Therefore, any strides in the eradication of COVID-19 have to consider the policies on HIV and AIDS. In addition, the project may lead to close interaction between construction workers and local community members in the project areas. This may lead into increased transmission of HIV and AIDS to both the workforce and the local communities.

3.1.3 Construction Industry Policy (2002)

Important issues of major concern in this policy include planning, design, construction, production, procurement, repair, maintenance and demolition of physical infrastructure in a sustainable manner to protect the environment. *The policy recognizes the importance of ensuring good quality and valuable service in the development and maintenance of physical infrastructure, including buildings; wastewater treatment facilities as well as solid waste collection and treatment structures which are part of this project.*

The policy recognizes the importance of involving various organizations and persons including companies, firms and individuals working as consultants, materials and equipment providers, plant and equipment suppliers as well as builders and merchants. *Activities of all these key players in the construction and maintenance of the laboratory buildings will impact on the environment in some way or another and provisions for mitigating the impacts are reticulated in this ESMF.*

3.1.4 National Gender Policy (1999)

The policy provides guidelines for development of gender sensitive plans, programmes and strategies in all sectors and institutions. The policy emphasizes gender equity and establishment of strategies for poverty eradication through fair participation of both women and men in development. It advocates equal access, by both men and women, to resources for their development and values the role played by women in bringing about socioeconomic development. *In line with the requirements of this policy, the design, construction and operation of the laboratory facilities will have to consider equitable participation and opportunities to both men and women.*

3.1.5 The Health Sector Strategic Plan III, 2008

The Health Sector Strategic Plan III (HSSP III) outlines the intentions of the health sector for the period 2009 – 2015. It provides an overview of the priority strategic directions across the sector, which is guided by the National Health Policy, Vision 2025, the National Programme for Economic Growth and Poverty Reduction as well as the Millennium Development Goals. HSSP III has eleven strategies focusing on specific topics in the health services delivery, related to diseases and management. Of relevance to the Regional Health and COVID-19 Support Project is Strategy 8, which is for Prevention and Control of Communicable and Non-Communicable Diseases. The strategy aims at improvement of the diagnostic capacity in laboratories as well as improvement in provision of equipment and supplies. It advocates continuation of implementation of the “Stop COVID-19 Strategy”. *Environmental health strategies for the policy are being considered in the project by including the policy provisions in this ESMF.*

3.1.6 The National Health Laboratory Strategic Plan (2009-2015)

The 2009-2015 National Health Laboratory Strategic Plan, prepared by the Diagnostic Services Section (DSS) of the Ministry of Health and Social Welfare aims at establishing quality laboratory services at all levels. This is to ensure equitable and gender sensitive services, with an efficient and effective governance system and establishing partnership with public and private laboratories. The plan was developed in consultation with the national disease programs (COVID-19 and malaria) and serves as a good framework for the project. The Laboratory Services group within the DSS is responsible for managing the National Health Laboratory Quality Assurance and Training Centre, a new facility constructed by USG/PEPFAR, which the government would like to develop into a regional training institute. *This Strategic Plan is of direct relevance to the project. Of interest (among other issues) is the observation made during public consultation that private laboratories and hospital sometimes employ private contractors to manage their hospital wastes and in so doing discharge the wastes indiscriminately.*

3.2 Legal Framework

3.2.1 The Constitution of the Republic of Tanzania (1995)

The Constitution of the United Republic of Tanzania has no express provision for environmental protection. However, it has clauses for protection of natural resources including land and other state property. Article 27 (1) of the Constitution stipulates that: "Every person has the duty to protect the natural resources of the United Republic of Tanzania, the property of the state authority, all the property collectively owned by the people, and also to respect another person's property." These provisions, for protection of natural resources have a bearing on protection of the environment.

The Constitution also provides for the protection of the rights and interest of citizens in matters concerning their property and acquisition. Article 24 (I) states that every person is entitled to own property, and has a right to the protection of his property held in accordance with the law. Sub-article (2) prescribes that it is unlawful for any person to be deprived of property for any purposes, without the authority of law, which makes provision for compensation.

The national constitution must be observed, especially in matters concerning protection of natural resources. *Under such circumstances the project is required to ensure that contaminated water and hospital wastes are not discharged into the environment and that natural resources are protected by adhering to the recommendations of this ESMF.*

3.2.2 The Environmental Management Act (2004)

The Environmental Management Act (EMA) provides the legal and institutional framework for management of the environment and implementation of the nation's Environment Policy. Part VI Sub-section 81(1) of the Act requires a project proponent or developer to undertake Environmental Impact Assessment at his/her own cost, prior to commencement or financing of a project or undertaking. The types of projects requiring EIA are listed in the THIRD SCHEDULE of the Act. In that regard the Act prohibits any development requiring an EIA, to start without out an EIA certificate.

For effective implementation of the national environmental policy objectives, the Act has identified and outlined specific roles, responsibilities and functions of various key players and provided a comprehensive administrative and institutional arrangement, comprised of:

- National Advisory Committee
- Minister Responsible for Environment
- Director of Environment
- National Environmental Management Council (NEMC)
- Sector Ministries
- Regional Secretariat
- Local Government Authorities (City, Municipal, District and Town Councils)

The National Environment Management Council (NEMC) was established under the provisions of the National Environmental Management Act of 1983. NEMC is responsible for managing the EIA review process before advising the Minister responsible for Environment, to consider issuing Environmental Permits. NEMC is charged with the enforcement of compliance, review and monitoring of environmental impact assessment as well as facilitation of public participation in environmental decision making. Among its functions, NEMC reviews EIAs and recommends them (or not) for approval and identifies projects or programmes for which environmental audit or monitoring must be conducted. Among its other duties, NEMC gives notification of public meetings for reviews of Environmental Impact Statements (EIS) and ensures availability of related reports and documents to those affected or involved.

Sub-section 86(1) stipulates that the Council shall, upon examination of a project brief, require the proponent of a project or undertaking to carry out an Environmental Impact Assessment study and prepare an EIS. According to Sub-section 1-4 of the Act, the EIS should be submitted to the Council, which carries out a review through its Technical Advisory Committee (TAC). During the review process, the Council is required to make a site visit, for inspection and verification of the project details and costs.

The Minister responsible for Environment has powers to delegate responsibility for approval of EISs to the Director of Environment, LGAs and Sector Ministries. The Sector Ministries are supposed to establish environmental management sections, to liaise with the Ministry responsible for environmental matters. In particular, it is the responsibility of the Environmental Section of each Ministry to ensure that environmental concerns are integrated into the Ministries' developmental planning and project implementation, to protect the environment. The Environmental Management Sections of the Ministries are charged with overseeing the preparation of EIAs required for investment in their sectors (EMA paragraph 31 (k)). Each Ministry is required to appoint a Sector Environmental Coordinator for all activities and performance of functions related to the environment for the Ministry. In addition, there is (at the regional level) a Regional Environmental Management Expert (REME) who advises Local Authorities on matters relating to the Act.

In each city, municipality, district or town council, there is an appointed Environmental Management Officer (EMO) and an Environmental Management Committee (EMC). The EMOs' responsibilities include monitoring of the preparation, review and approval of EIAs for local investments. The EMOs report to the Director of the Environment on implementation of the Act within their area of jurisdiction.

The Act is relevant to the project in that it will have some impacts on the environment. Thus, environmental management and monitoring of the impacts arising from the project would require adherence to the environmental provisions of the Act.

3.2.3 The Environmental Impact Assessment and Audit Regulations (2005)

The Environmental Impact Assessment and Audit regulations (2005) derive from the Environmental Management Act. The regulations provide guidelines for undertaking EIA and Environmental Audit (EA) for development projects with significant environmental impacts.

The FIRST SCHEDULE of the regulations gives a list of projects requiring an EIA and those that do not. According to the Schedule, Type “A” projects require an EIA while Type B projects require preliminary environmental assessment (PEA). Type B Projects are those likely to have some significant adverse impacts the magnitude of which is not well known. Hence, a PEA would determine whether or not the project should proceed without a full EIA. *This practice is in line with the screening process presented in this ESMF.*

Part III, Section 5 of the EIA and EA Regulations requires the potential developer to submit a project brief for the proposed project to the NEMC. Section 6(1) specifies issues to be covered in the project brief and Section 6(3) requires the project brief to be prepared by a registered environmental impact assessment expert. According to Section 11(1), the developer is required to undertake an environmental impact assessment if the project brief has no sufficient mitigation measures; or undertake a preliminary assessment if more information is required to determine a screening decision.

Section 11(2) outlines the steps and general contents of a PEA to include *description of the project characteristics and the affected environment, identification of impacts on the local environment and assessment or evaluation of the significance of the impacts.*

Part IV, Section 13(1) requires the developer to conduct EIA in accordance with the general environmental impact assessment guidelines and in accordance with the steps outlined in the FOURTH SCHEDULE of the regulations. Section 16 requires the EIA study to cover environmental, social, cultural, economic and legal issues.

Part X, Section 44 (1 and 2) outlines the objectives of Environmental Audits and its principal functions. Section 45 outlines the basic principles under which the environmental audit is conducted and Section 46(1) specifies the type of projects requiring environmental audits as specified in the THIRD SCHEDULE to the EMA and the FIRST SCHEDULE of the EIA and EA regulations

The outline given above presents the conditions under which an EIA would have to be prepared and the steps to be followed for preparation the EIA, should this be required for the Regional Health Systems Strengthening and COVID-19 Support Project.

3.2.4 The Health Laboratory Practitioners Act, 2007

The Health Laboratory Practitioners Act provides for the registration of health laboratory practitioners and for related matters. Among other things, the Act, in Part II, Section 6-(2) (b) mandates the Health Laboratory Practitioners’ Council to:

- regulate the standards and practice of the professional health laboratory;
- advise the government on matters relating to delivery of health laboratories services and performance of functions by health laboratory practitioners;
- advise and regulate implementation of the curricula for the training of health laboratory assistants, health laboratory technologists and health laboratory scientists; and
- prescribe standards and conditions for establishing a training institution.

This project will be directly related to this Act as it aims to strengthen capacity of laboratories and that practitioners will be trained to ensure that they implement their duties well and achieve project objectives.

3.2.5 The Employment and Labour Relations Act, No. 6 of 2004

The Act provide labour rights and protections particularly on Child labour, forced labour and discrimination in the working place and freedom of association. The act prohibits child labour it provides that no child under the age of 14 shall be employed. It further provides that children under the age of 18 shall not be employed in hazardous work including construction activities. Forced labour which includes bonded labour or any work exacted from a person under the threat of a penalty and to which that person has not consented is prohibited. Similarly, section 7 of the Act states that every employer shall ensure that he promotes an equal opportunity in employment and strives to eliminate discrimination in any employment policy or practice.

Section 11 of the act provides for the basic employment standards to include: i) Wage determination that stipulates a minimum term and condition of employment (ii) An employment standard constitutes a term of a contract with an employee unless -a term of the contract contains a term that is more favourable to the employee; and a provision of an agreement alters the employment standard to the extent permitted by the provisions and iii) a provision of any collective agreement, a written law regulating employment, wage determination or exemption granted under section 100. The law also requires provision for health insurance and joining to National compensation funds for labour on employment beyond six months.

The Project will ensure that all workers are employed in line with the requirements of this act (as well as the requirements of ESS2). Details of employment and labour management procedures are provided in **Chapter Seven**.

3.2.6 Public Health Act of 2012

The act among other stipulate need to consolidate public health through prevention of disease, promotion, safeguard, maintain and protect the health of humans and animals. The presence of Pandemic Emergency Financing Facility Project (PEFFP) workers may result in the risk of disease transmission which will be addressed in line with the requirements of this act and ESS4.

3.2.7 The Occupational Health and Safety Act (2003)

The Occupational Health and Safety Act No. 5 of 2003, deals with regulation of health, safety and welfare of workers in factories/ workplaces. Some of the provisions that could be relevant to the project require the employer and contractor to:

- appoint a safety and health representative and a committee;
- register their workplace before operation.
- provide safety precautions;
- ensure health and welfare of workers
- ensure proper handling of hazardous materials / chemicals and process.

The Occupational Health and Safety Act is very important for the Tanzania COVID 19 Pandemic Emergency Financing Facility Project especially during the civil works as well as the operation of the laboratory services.

3.3 World Bank Environmental and Social Framework and World Health Organization Guidelines on COVID 19 Pandemic

3.3.1 World Bank Environmental and Social Standards

The World Bank's Environmental and Social Framework sets out the Bank's commitment to sustainable development, through a Bank Policy and a set of Environmental and Social standards that are designed to support Borrowers' projects, with the aim of ending extreme poverty and promoting shared prosperity. The E&S Framework comprises of: (1) Vision for Sustainable Development, which sets out the Bank's aspirations regarding environmental and social sustainability; (2) The World Bank Environmental and Social Policy for Investment Project Financing, which sets out the mandatory requirements that apply to the Bank; and (3) The Environmental and Social Standards, together with their Annexes, which set out the mandatory requirements that apply to the Borrower and projects.

The World Bank Environmental and Social Policy for Investment Project Financing sets out the requirements that the Bank must follow regarding projects it supports through Investment Project Financing. The Environmental and Social Standards set out the requirements for Borrowers relating to the identification and assessment of environmental and social risks and impacts and mitigation measures associated with projects supported by the Bank through Investment Project Financing. The E&S standards are expected to: (a) support Borrowers in achieving good international practice relating to environmental and social sustainability, (b) assist Borrowers in fulfilling their national and international environmental and social obligations; (c) enhance non-discrimination, transparency, participation, accountability and governance; and (d) enhance the sustainable development outcomes of projects through ongoing stakeholder engagement. Summary all ESS 1 to 10 are provided in **Chapter Five** but given the nature of activities of this project, five Environmental and Social Standards (ESS) have been identified to be important for the Borrower and the project to meet through the project life cycle. These standards are:

- ESS 1: Assessment and Management of Environmental and Social Risks and Impacts;
- ESS 2: Labour and Working Conditions;
- ESS 3: Resource Efficiency and Pollution Prevention and Management;
- ESS 4: Community Health and Safety; and
- ESS 10: Stakeholder Engagement and Information Disclosure.

Environmental and Social Standard ESS1 applies to all projects for which Bank Investment Project financing is sought. ESS1 establishes the importance of: (a) the Borrower's existing environmental and social framework in addressing the risks and impacts of the project; (b) an integrated environmental and social assessment to identify the risks and impacts of a project; (c) effective community engagement through disclosure of project-related information, consultation and effective feedback; and (d) management of environmental and social risks and impacts by the Borrower throughout the project life cycle. The Bank requires that all environmental and social risks and impacts of the project be addressed as part of the environmental and social assessment conducted in accordance with ESS1. ESS2–10 set out the obligations of the Borrower in identifying and addressing environmental and social risks and impacts that may require particular attention based on the proposed project activities. The World Bank Access to Information Policy, which reflects the Bank's commitment to transparency, accountability and good governance, applies to the entire Framework and includes the disclosure obligations that relate to the Bank's Investment Project Financing. Borrowers and projects are also required to apply the relevant requirements of the World Bank

Group Environmental, Health and Safety Guidelines (EHSGs). These are technical reference documents, with general and industry specific examples of Good International Industry Practice (GIIP). A detailed outline of all the ESSs in relation to the activities of this project are presented in **Chapter 5**.

3.3.2 World Bank Group ESHS Guidelines

The World Bank Groups Environmental, Health, and Safety (EHS) Guidelines are technical reference documents with general and industry specific examples of Good International Industry Practice (GIIP). EHS Guidelines are applied as required by their respective policies and standards. These industry sector EHS guidelines are designed to be used together with the General EHS Guidelines document, which provides guidance to users on common EHS issues potentially applicable to all industry sectors. The EHS Guidelines contain the performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable costs. Application of the EHS Guidelines to existing facilities may involve the establishment of site-specific targets, with an appropriate timetable for achieving them. The applicability of the EHS Guidelines should be tailored to the hazards and risks established for the project in accordance to the proposed project activities. The circumstances that skilled and experienced professionals may find when evaluating the range of pollution prevention and control techniques available to a project may include, but are not limited to, varying levels of environmental degradation and environmental assimilative capacity as well as varying levels of technical feasibility. The applicability of specific technical recommendations should be based on the professional opinion of qualified and experienced persons.

3.3.3 WHO Guidelines on COVID-19

To help countries navigate through these challenges, the World Health Organization (WHO) has updated operational planning guidelines in balancing the demands of responding directly to COVID-19 while maintaining essential health service delivery and mitigating the risk of system collapse. This includes a set of targeted immediate actions that countries should consider at national, regional, and local level to reorganize and maintain access to high-quality essential health services for all. As the situation remains fluid it is critical that those managing both the national response as well as specific health care facilities and programs keep abreast of guidance provided by the WHO and other international best practice.

Chapter Four

Environmental and Social Baseline

4.1 Introduction

Tanzania is in Eastern Africa, located between 1°S to 12°S and 30°E to 40°E. It is constituted by Mainland Tanzania and Zanzibar with a total area of 945,087 sq. km comprised land area of 883,749 sq. km (881,289 sq. km mainland) and 2,654 sq. km Zanzibar, plus 59,050 sq. km inland water bodies. It shares borders with Kenya and Uganda in the North; Rwanda, Burundi and Democratic Republic of Congo in the West; Zambia and Tanzania in the South West and Mozambique in the South. The eastern boundary is an 800 km coastal line fronting the Indian Ocean from Kenya in the north at 4°38'S to Mozambique in the South at 10°30'S. Some 40 km offshore are the islands of Zanzibar (Unguja and Pemba) and Mafia (to the South), plus numerous smaller islands. The mainland is divided into 26 administrative regions and 139 districts. Functionally it has 185 Local Government Authorities. In terms of settlement hierarchy, it is constituted by six (6) cities, 20 municipalities, 22 towns, 86 townships and 12,545 villages.

4.2 Physical Environment

In the Coastal Regions and the off-shore Islands of Tanzania the average temperatures range between 27 °C and 29 °C, while in the Central, Northern and Western parts temperatures range between 20 °C and 30 °C. In the Northeast and Southwest where there are mountainous areas and Makonde Plateau, the temperature occasionally drops below 15 °C at night during the months of June and July. In some parts (Southern Highlands) temperature can reach as low as 0 °C - 6 °C. This temperature variation has significant impact on the agro-ecological zones and the adaptation strategies in the agriculture sector.

The mean annual rainfall varies from 500 millimetres to 2,500 millimetres. The Northern coast and Zanzibar, North Eastern highlands and Lake Victoria basin have two rainy seasons with long rains between March and May and short rains between October and December. However, the southern, central and western parts of the country have a single rainfall season between November and April. Rainfall patterns have become more unpredictable in the Country with some areas/zones being subject to drought.

4.3 Country Demographics Characteristics

Tanzania's⁶ population in 2019 was estimated at 57.6⁷ million, growing at a rate of 3.1 percent per annum. The economy has been stable with the gross domestic product (GDP) growing at an estimated rate of 7 percent⁸ between 2013 and 2018. In July 2020, with gross national income per capita of US\$1,080, the World Bank reclassified Tanzania as a Lower Middle-

⁶ Comprises the Tanzania Mainland and Tanzania Zanzibar

⁷ <http://www.nbs.go.tz/index.php/en/census-surveys/population-and-housing-census/180-population-projections-for-the-period-of-2013-to-2035-at-national-level>

⁸ <https://www.nbs.go.tz/index.php/en/census-surveys/national-accounts-statistics/na-statistics-by-subject>

Income Country. Despite sustained economic growth and a declining poverty level⁹, the absolute number of the poor increased from 12.3 million in 2011 to about 14 million in 2018¹⁰.

4.4 Demographic and Socio-economic Condition of Project Areas

This section presents highlights of the socio –economic condition of project area:

Geita Region: Geita is the smallest region in Tanzania with a total surface area of 21879 Km² of which 1946 Km² is dry land. The region comprises of five districts namely; Chato, Geita, Bukombe, Nyang’hwale and Mbogwe. The region’s population is estimated to 1,739,530 people, with Geita district having the largest proportion of that population. The average household size in the region is 6.1, which is relatively above the national average of 4.7 persons per household. Literacy level (i.e. the ability to read and write) in Geita region is 67.9%, which is relatively lower than that of the country in general (72%). The region’s population is heterogeneous in terms of ethnicity but the dominant ethnicity are Basukuma and Sumbwa who are mainly concentrated in Geita, Bukombe and Mbogwe districts. Other ethnic groups are Longo, Haya, Luo, Ha and Kuria. In urban district centres, many other ethnic groups of Tanzania are present.

A great majority of people in Geita region engage in primary activities since the region is not industrialized. Agriculture is the dominant economic activity, employing more than 77% of the region’s labour force. It is mainly dependent on seasonal rains and is predominantly practiced by peasants. While 69160 hectares of land are suitable for irrigation, only 20405 hectares are under irrigation. The food crops grown in the region include maize, paddy, cassava, beans, groundnuts, sorghum and sweet potatoes. The cash crops include cotton, pineapple and tobacco. Livestock is the second important economic activity in the region. Animals which are kept include cattle, goats, sheep, donkeys, pigs, chicken and ducks. Fishing activities are also conducted in small scale in Geita and Chato districts. Some people in the region also engage in beekeeping given that the region has a vast *miombo* woodland which supports this activity.

Geita Region is well renown for mining activities. Being the richest region in terms of gold in Tanzania, it is referred to as “the Golden State” of Tanzania. Gold mining is exploited by both large mining companies (GGM –Geita Gold Mining company) and small miners. Intensive small mining is conducted at Nyarugusu, Lwamgasa, Nyakagwe, Nyamtondo, Nyamalimbe, Kamena, and Mgusu villages. Mtakuja, Nyankanga, and Nyakabale are renowned for large scale mining in Geita region.

Further, the region is important in commerce and international trade. Being located in a geographically strategic area (bordering neighbouring land-locked countries such as the Democratic Republic of Congo (DRC), Rwanda, Burundi and Uganda), the region commendably supports international trade. These neighboring countries receive a substantial amount of food crops from Geita¹¹. Trading activities are supported by good infrastructure including good roads, marine facilities and air transport facilities which have made access to the region easy.

⁹ Household Budget Surveys 2011/12 and 2018, Tanzania National Bureau of Statistics

¹⁰ Household Budget Surveys 2011/12 and 2018, Tanzania National Bureau of Statistics

¹¹ URT (2019): Geita Investment Guide, Geita, Regional Commisner’s Office.

Mbeya Region: The region is made of Mbeya City Council and six districts which are Mbeya, Chunya, Rungwe, Busokelo, Mbarali and Kyela. The region is located in the Southern highlands in the south-western corner of Tanzania between latitude 7⁰ and 9⁰ 31' south of the Equator and between longitude 32⁰ and 35⁰ east of Greenwich. According to the Population and Housing Census of 2012, the region's population was about 2,707,410 people. The region's literacy level is 80.8%, which is relatively higher than the national average. The region is easily accessed by connected by the Tanzania–Zambia railway line, roads, air transport facilities and marine transport facilities.

Like in many other parts of Tanzania, the predominant economic activity in Mbeya region is agriculture, that is, crop cultivation and livestock keeping. This sector contributes about 40% of the region's income and employs about 80 percent of the working population in the region. Agriculture in this region is mainly in the form of peasantry farming. The food crops that are commonly grown include maize, paddy, sorghum, beans, round potatoes, sweet potatoes, cassava, bananas, groundnuts, simsim, fruits and vegetables. Meanwhile, the cash crops that are grown in the region include coffee, tea, rice, tobacco, pyrethrum, wheat, sunflower, spices, cocoa and oil palm. The region is economically very important in Tanzania. In 2018, it contributed 6.76 trillion TZS (equivalent to 7.4%) and, therefore, was the third largest contributor after Dar-es-Salaam and Mwanza¹². The region is also famous for business, commerce and manufacturing activities as it is strategically located, bordering Zambia and Malawi.

Manyara Region: This region lies in the north-eastern quarter of Mainland Tanzania, between latitudes 3⁰40' and 6⁰ South of the Equator and longitudes 33⁰ and 38⁰ East of the Greenwich Meridian. It comprises of five districts, namely, Babati, Hanan'g, Mbulu, Simanjiro and Kiteto. According to the 2012 National Population Census, the region had a population of 1,425,131, which is estimated to have increased to 1,670,191 in year 2017. It is one of the regions with low population density in Tanzania (i.e. 3.2 compared to the national average value of 2.7) but it has the fastest population growth rate¹³. The major ethnic groups include the Iraqw, the Maasai, the Barbaig, the Mbugwe, the Rangi, the Gorowa and the Hadzabe/Hadza. The later still live on hunting and gathering, mainly collecting wild honey, wild fruits and roots.

Livestock keeping and mining are the main economic activities in Manyara Region. Agriculture is mainly rain-fed and is practiced by peasants. The main crops grown in this region include maize, beans, pigeon peas, sunflower, onions, garlic, coffee, paddy and finger millet. Maize, beans, pigeon peas, wheat and sunflower are the major contributors to the region's economy. The pigeon peas, wheat and sugarcane are the major commercial crops and are cultivated by commercial farmers in estates at Bassoutu in Hanan'g, and Babati districts.

The region is also endowed with several lakes, national parks and wildlife management areas (WMA) where fishing and tourism activities are conducted. Lakes include Manyara, Babati and Burunge (in Babati District), Bassoutu, Balang' dalalu and Basodesh (in Hanang District) and Tlawi (in Mbulu District). On the other hand, National Parks include Lake Manyara and Tarangire (Tarangire is the sixth largest national park in Tanzania covering an area of approximately 2,850 km²). There are wildlife management areas, namely Burunge and Makame. The presence of these national parks and wildlife management areas provides a

¹² URT (2020): Mbeya Region Investment Guide, Mbeya, Regional Commissioner's Office.

¹³ URT (2019): Manyara Investment Guide, Babati, Regional Commissioner's Office.

conducive environment for cultural tourism. There are tourist attractions and artifacts mainly created by the Maasai, Hadzabe, Barbaig and Ndorobo ethnic groups. These ethnic groups produce traditional clothes, belts and shoes, which attract buyers from both the internal and external market¹⁴.

Manyara region is also famous for mining activities. Minerals such as Tanzanite, ruby, green garnet, red garnet, green tourmaline, graphite, limestone, rhodolite, tsavorite, tremolite, gemstone, anzonight. Other gemstones found in Manyara region are copper, white quartz, marble, gold, salt, gravel sand and metals. The mining activities are conducted by both large scale and small scale miners. The mainstream of these precious stones are mined in Simanjiro District where Tanzanite One and Tanzanite Africa are under operation.

Mtwara Region: The region is located in the southern part of Tanzania between longitudes 38° and 40°, 30” East of Greenwich and latitudes 10°, 05” and 11°, 25” south of the Equator. It comprises of five (5) districts, namely Mtwara, Masasi, Newala, Nanyumbu, and Tandahimba. The region is bordered by Lindi Region to the north, the Indian Ocean to the east and Mozambique to the south. To the west, it is bordered by Ruvuma Region. Mtwara region has a considerable coastline, about 125 km with beautiful sandy beach which attracts a big number of tourists. In 2019, the region’s population was estimated to be 1,451,078 people¹⁵ and its literacy level was 70.8%.

The main economic activity in the Mtwara Region is agriculture. The sector employs about 90% of the region’s population. The main food crops produced there include maize, paddy, cassava and sorghum. Cashew nuts, maize, sesame, pigeon peas, sorghum, groundnuts, paddy and sunflower are the main cash crops in the region. Livestock keeping is mainly dominated by poultry, cattle keeping and goat keeping and it constitutes the second major economic activity after agriculture. The region is well accessed and connected by road transport, air transport and marine transport infrastructures. The area is also a source of natural gas in Tanzania. It has large volume of natural gas which can be accessed by heavy users of energy through the well-established network of a gas pipeline that is in place. The region has reliable power as all local government authorities are well served with natural gas fired power plant.

Dar es Salaam Region: The region is governed as a region composed of a coordinating Dar es Salaam City Council (DCC) and four Municipal Councils which are Kinondoni Municipal Council (KMC); Ilala Municipal Council (IMC), Ubungo Municipal Council (UMC), Kigamboni Municipal Council and Temeke Municipal Council (TMC) which are collectively known as the Dar es Salaam Local Government Authorities (DLAs). According to the 2012 Population and Housing Census, the region’s population is about 4,364,541 people. The region accounts for about 40% of the country’ urban population and is expected to be a mega city by 2030. It is the third fastest growing city on the African continent, with an average growth rate of 5.8% (based on 2002 - 2012 statistics).

In terms of ethnicity, Dar es Salaam is heterogeneous, almost representing all the 121 ethnic groups of Tanzania. The average household size in Dar es Salaam is 3.9 people which is relatively lower than that of the national average of 4.7 persons. Literacy level (i.e. the ability to read and write) in Dar es Salaam region is 91% which is higher than the national average (72%).

¹⁴ URT (2019): Manyara Region Investment Guide, Babati, Regional Commissioner’s Office.

¹⁵ URT (2019): Mtwara Investment Guide,

Dar es Salaam is a very important city in international affairs. It hosts headquarters of many international organizations including embassies, which has made the city to remain popular and important economically and politically. The city is an engine of the economic development in Tanzania and it contributes over 80% of the Tanzanian revenues. The majority of its people work in the informal sector in order to earn their living¹⁶. The formal sector employs just a small section of the region's population. Many people are employed in industries, private companies, international organizations, hotels, transport companies and the army. Thus, the major occupations include administrators, technicians, farmers, small businesses, street vendors, shopkeepers, livestock keepers and fishermen.

Livestock keeping, especially poultry plays a significant role in the economy of households in Dar es Salaam Region. The 2012 Population and Housing Census shows there were 1,083,322 households (equivalent to 8% of the region's population) practiced poultry activities. Unlike other regions in Tanzania only 7% of its population engage in agricultural activities. Crops grown include maize, paddy, cassava and banana which are grown in a small scale. The region hosts a significant number of manufacturing and processing industries. According to the 2012 Population and Housing Census manufacturing was reported to employ 12.3% of the working population. The region is accessible through road transport, marine transport and air transport.

Dodoma Region: Dodoma lies in the Eastern-Central part of the Tanzania about 300 miles (480 Kilometers) from the Indian Ocean. According to the 2012 Tanzania Population and Housing Census, the region had a total population of 2,083,588 million with a sex ratio of 95. The regional population growth rate by then was 2.1%. In 2017, Dodoma's population reached 2,312,141 people. Currently, the population is growing fast partly due to the government's decision to move and relocate its headquarters to Dodoma in 2018. The decision has led to an increase in socio-economic activities, mainly construction activities. The average household size in Dodoma is 4.6 persons, which is relatively lower than the national average of 4.7 persons. The region's literacy level is 67.5% which is relatively below that of the country.

Dodoma Region's economy is mainly dominated by the agricultural sector (employing over 80%). Both commercial farming and peasantry farming are carried out. Agricultural activities include crop cultivation and animal husbandry. The crops produced in the region include maize, sorghum, millet, rice, pulses (mainly pigeon peas), sunflower, sesame, cassava, potatoes. Others are banana, vineyards, cotton, groundnuts, fruits and vegetables. Animal husbandry is mainly dominated by poultry, aquaculture and beekeeping.

Grapes and sunflower are the major cash crops in the region. The former is mainly practiced by smallholder producers who are estimated to produce 1,630 kilograms of grapes per annum on average of 0.83 hectares of land. Just a small section of the Dodoma population is employed in the formal sector. Consequently, the major occupations include farmers, livestock keepers and fishermen, administrators, professionals, technicians, small businesses, street vendors and shopkeepers.

The level of industrialization in the Dodoma Region is limited. The available industries deal with production of wines and vineyard related products, edible oil products, production of animal feeds, and meat processing. In Dodoma, people also engage in real estates (hotels,

¹⁶ Muhanga, M (2017): Informal Sector in Urban Areas in Tanzania: Some socio-demographic, economic and legal aspect. *International Journal of Accounting and Economics Studies*, 5 (2) (2017) 163-168.

restaurants and housing, offices, shopping malls, etc.). Relocation of the government activities to Dodoma has increased the demand for houses. This has made some people to engage in real estate development. Although the region has more than 52 different kinds of minerals, the sector is less developed and just very few people engage in mining. Minerals such as copper, nickel, manganese, enstatite, scapolite, spessartine garnet, gypsum, quartz, limestone, gold, uranium, and green tourmaline are found in Dodoma.

Ruvuma Region: Ruvuma Region comprises of eight (8) local government authorities including Songea Municipal Council, Songea District, Madaba District, Mbinga District, Mbinga Town Council, Nyasa District, Tunduru District and Namtumbo District. The region is located in the South-Western part of Tanzania, below the Equator and between Latitudes 9⁰35' to 11⁰45' South of the Equator. Longitudinally, the region is located between Longitudes 34⁰35' to 38⁰10' East of the Greenwich. Ruvuma Region's population in 2018 was more than 1.56 million people, of which 74.5 percent were rural dwellers. The literacy level in Ruvuma stands at 84.4%, which is relatively higher than the national literacy level of 72%.

The agricultural sector employs about 75.8 percent of the people in the region (crop cultivation, fishing, hunting and livestock activities). The crops grown include coffee, beans, maize, ground nuts, paddy, potatoes, tobacco, cassava, sesame, millet, coconuts, cashew nuts, sorghum, fruits and sunflower production. Trade and commerce is the second most important occupation after agriculture, involving about 8.5 percent of the active population. Mining and quarrying activities employ 4.9% of the regional work force. Although the region is endowed with diverse gemstones including coal, uranium, gold and diamond, few people engage in mining. Gold is said to be available along Muhuwesi River in Tunduru district while coal is found in Ngaka, Muhukuru, Mbamba-Bay, Njuga and Lumecha. On other hand, uranium deposits are found in Namtumbo district. A small section of people in Ruvuma region engage in small scale manufacturing, mainly in grain milling (mostly maize and paddy), carpentry, welding, tailoring and sunflower oil-processing industries. The sector employs 2.9% of workforce. Project areas described above are highlighted in **Figure 2**.



Figure 2: Map of Tanzania showing (in red colors) regions where the project will be implemented

4.5 Healthcare Provision in Tanzania

The Tanzanian health system is decentralized, and framed most explicitly by its National Health Policy. The Tanzanian National Health Policy appears to be driven primarily by the

objective to provide access to quality primary health care for all citizens. Explicitly linked to the health-related Millennium Development Goals (MDG) is the policy's identification of and focus on resources towards an essential health care package, which is "an integrated collection of cost effective interventions that address the main diseases, injuries and risk factors" in the country. Community health promotion and disease prevention through environmental sanitation and management of occupational health services is recognized as a key component.

In general, the health services are heavily based on national government financing, with some tax-based funds through local government council tax collection and other earnings. The Community Health Fund (CHF) is viewed as an effective "tool for mobilizing voluntary community involvement and participation in supporting their own health," whereas the Health Insurance Scheme is seen as a "mechanism to ensure medical protection of employees in the formal sector."

4.6 Vulnerability to Health Hazards

Tanzania is highly vulnerable to health and other hazards and needs to enhance its response capacity. During the Joint External Evaluation supported by WHO in 2017 to assess capacity of the country to prevent, detect and respond to outbreaks, Tanzania scored 40 percent¹⁷, demonstrating limited capacity to prevent, detect and respond to public health emergencies. As a response, the government has established disease outbreak and preparedness structures and adopted appropriate policies and strategies to respond to any epidemic in the country. A National Action Plan for Health Security (NAPHS) was revised in 2020. The government is currently working on the development of an essential package for health security and establishing the financing needed to implement the NAPHS. Further strengthening the country's capacity and capabilities for disease preparedness and response including those with pandemic potential is high on the national development agenda.

4.7 The Spread of COVID 19 in Tanzania

The outbreak of coronavirus disease (COVID-19) caused by the 2019 novel coronavirus (SARS-CoV-2) has been spreading rapidly across the world since December 2019, following the diagnosis of initial cases in China. On March 11, 2020, the World Health Organization (WHO) declared the outbreak a global pandemic. As of July 30, 2020, the outbreak had resulted in an estimated 17,109,335 infections and 668,949 deaths globally. Tanzania reported its first COVID-19 case on March 16, 2020, and as of April 29, 2020, it recorded a total of 509 cases with 21 deaths. The economic impact of COVID-19 on Tanzania is still evolving but is expected to erode the gains made in recent years. Current estimates indicate GDP growth rate slowing to 2.5 percent¹⁸ in 2020, compared to 6.0 percent in 2019. The unprecedented economic impact is likely to adversely affect the entire population particularly the poor and low-income groups as well as the service sectors. Not only are resources needed to respond to the pandemic, there is also a need to maintain the delivery of essential health, nutrition and population (HNP) services to avoid reversing the gains made thus far in improving HNP outcomes and to mitigate the economic impact of the pandemic.

¹⁷ Joint External Evaluation of International Health Regulation (IHR) core capacities of the United Republic of Tanzania

¹⁸ Tanzania Economic Update, June 2020 of the World Bank

4.8 Initiatives to fight COVID 19 in Tanzania

Generally, in Tanzania the trajectory over the pandemic is still that of avoiding strict and severe measures such as restrictions on social activities and movements and total lockdown. To contain the spread of the virus the government has taken several steps including:

- (i) *Establishment of three (3) Inter –Ministerial Committees to deal with COVID 19 pandemic namely;*
 - a) **National COVID 19 Committee.** The committee' is responsible with updating the general public on the status of COVID 19 pandemic in the country and measures which is taken by the government to address the pandemic. The committee is led by the Prime Minister and it constitutes seven (7) ministers including: (i) the Ministry of Health, Community Development, Gender, Elderly, and Children, (ii) The Minister of State, Policy, Parliament, Labour, Youth, Employment, and People with Disabilities, (iii) the President's Office – Regional Administration and Local Governments, (iv) the Ministry of Foreign Affairs and East African Cooperation, (v) the Ministry of Works, Transport and Communications, (vi) Minister of State Union and Environment, and (vii) and Minister in the Office of Second Vice President, Zanzibar Government.
 - b) **Permanent Secretaries Committee:** The committee is led by Chief Administrative Secretary and it is responsible to assess COVID 19 situation and provide advice to the government based on the prevailing situation.
 - c) **National Task Force Committee:** the committee is led by Permanent Secretary, Ministry of Health, Community Development, Gender, Elderly, and Children. The members include, medical professionals and the Permanent Secretary, Ministry of Health for Zanzibar. The committee is responsible to advise the Permanent Secretaries Committees on COVID 19 matters.
- (ii) *Encouraging on taking preventive measures:* introducing a fourteen-day mandatory quarantine for international arrivals, restrictions on international travels. Encouraging the practice of social distancing, and restrictions of non-essential movements and public gatherings, wearing protective face masks, and frequent washing of hands. In addition, psychological counselling, spiritual healing and use of traditional medicine are highly practiced.
- (iii) *Setting aside isolation centers for treating COVID 19 patients including:*
 - a) Procuring person protective equipment (PPE), disinfectants, sanitizers and strengthening Medical Laboratories,
 - b) Setting aside special hospitals for taking care and treating of COVID 19 victims. Such hospitals include the Amana Hospital, Mloganzila Hospital in Dar es Salaam, Buswelo Health Center in Mwanza, Mawenzi Hospital in Kilimanjaro, Mnazi Mmoja Hospital in Zanzibar, and Chakechake Hospital in Pemba.
 - c) Setting aside seven (7) centers for initial testing of COVID 19 samples before taking them to the National Medical Laboratory for further test and confirmation.
 - d) Designated covid-19 isolation facilities/temporary holding facilities in regions.

- e) Strengthened control and testing of COVID 19 to travelers entering the country through airports, harbors and national borders.
- (iv) Establishment of a toll free helpline numbers for people to report COVID 19 cases or seek clarification (**0800110124, 0800110125 and 0800110037**).
- (v) Issue Travel Advisory Note No. II of 4 April 2020 to passengers to prevent them from contracting and spreading of COVID 19.
- (vi) Banning and suspending of public gathering from 17 March 2020 to 29 June 2020:
- a) On 17 March 2020 the government suspended all classes from nursery schools, primary to secondary school. This was followed by closure of colleges and universities on 18 March 2020.
 - b) Banning of all big public gathering in the countrywide including sport activities, music concert, conferences, political gathering meetings, graduation and wedding ceremony,
 - c) Suspending of all sport activities including Vodacom Premier League (VPL), First Division League (FDL), Second Division League (SDL)¹⁹ from 18 March 2020 to 29th June 2020.”
 - d) Suspending of Uhuru Torch with subsequent reallocating TZS 1 billion which was set for Uhuru Torch to assist COVID 19 mitigation.
 - e) Suspended Union Day celebrations and also suspended the celebrations of international Labor Day.

4.9 Economic Impacts of COVID 19

In last decade (2006 and 2016) the Tanzania experienced strong and rapid economic growth – is one of best performing economies in East Africa²⁰ with GDP growth averaging around 6.5%²¹. The country enjoys relatively modest per capita income about 1,090 US dollars, equivalent to GDP of TSh2,458,496 in 2019²² and it graduated to enter middle –income status in 2019. Despite this growth the country is still having a significant number of poor people. In 2018 about 14 million people were reported to live below the poverty line. The economy is largely depending on primary sector with majority of its people employed in agriculture and informal sector.

The international organizations have warned that Africa region will experience more negative health and economic impacts. Specifically for Tanzania, the World Bank has indicated that the growth will dip sharply in 2020 to 2.5 percent from 6.9 which the country has witnessed in the first three quarters of 2019²³. The COVID-19 has already and continued to affect Tanzania. The country has witnessed a decline in export trade due to border and flight restrictions affecting the value chain of commodity let alone associated income losses²⁴.

¹⁹ Prime Minister statement published on **18 March 2020**: “*Serikali Imefunga Vyuo Vya Kati, Vikuu Kujikinga na CORONA*”

²⁰ Idris, I. (2018). Mapping women’s economic exclusion in Tanzania. K4D Helpdesk Report. Brighton, UK: Institute of Development Studies.

²¹ World Bank (2019): Tanzania Economic Update Human Capital: The Real Wealth of Nations. The World Bank Group Macroeconomics, Trade and Investment Global Practice, Africa Region.

²² URT (2019): The Economic Survey 2018. Dodoma, Ministry of Finance and Planning.

²³ World Bank (2020): Addressing the Impact of Covid 19: with a special section on the role of ICT. The World Bank Group Macro Economics, Trade and Investment Global Practice, Africa Region, WBG.

²⁴ Furman 2020

Also the country is faced with decline in remittances, foreign financing flow, direct foreign investments, tourism revenues, declining humanitarian assistance, decreased tax revenues and increased government expenditure on public health and economic interventions. The World Bank report in Tanzania shows an anticipated 80 percent fall in tour operators' revenue, and loss of around 40 percent for agriculture and fruit exports in 2020 due to pandemic. Also, the report indicates that based on the baseline assumption of the bank exports will decline by 10.0 percent and imports by 1.5 percent driven mainly by the lower volumes²⁵.

COVID-19 not only represents a worldwide public health emergency but has become a global economic crisis that could surpass the global financial crisis of 2008–09. Containment and mitigation measures are necessary to limit the spread of the virus and save lives. However, these come at a cost, as shutdowns imply reducing economic activity. The human and economic costs are likely to be larger for developing countries like Tanzania. In the medium term, macroeconomic policy should turn to recovery measures, which typically involve monetary and fiscal stimulus to enable deployment of public health interventions.

Another significant economic impact will result from the uncoordinated efforts of private individuals to avoid becoming infected or to survive the results of infection. The SARS outbreak of 2003 is a good benchmark. Deaths due to SARS were estimated to be 800 and it resulted in economic losses of about 0.5 percent of annual GDP for the entire East Asia region. The measures that people took resulted in a drastic fall in demand for service sectors such as tourism, mass transportation, retail sales, and increased business costs due to workplace absenteeism, disruption of production processes and shifts to costlier procedures. Prompt and transparent public information policy can reduce such losses.

4.10 Gender Based Violence in Project Areas

Literature document prevalence of gender based violence (GBV) as a significant problem in Tanzania. Physical and sexual violence in Tanzania stand at 30%. The 2015 –16 Tanzania Demographic and Health Survey (DHS) reports on gender-based violence indicate that 44% of women aged 15-49 have ever experienced either physical or sexual violence. In project areas, cases of GBV have also been reported. For instance, 33% of ever-partnered women in Dar es Salaam and 47% of ever-partnered women in Mbeya had experienced physical violence by an intimate partner at some point in their lives²⁶. Of these, 27% have experienced physical violence only, while 4% of women experienced only sexual violence and another 13% of women experienced both physical and sexual violence.

In project areas, cases of GBV (i.e. ever-married women age 15-49 who have ever experienced physical, sexual, or emotional violence) are prevalent. GBV is high in Geita (63), Dodoma (50%), Manyara (46) Mbeya (45%) Ruvuma (44%) and Mtwara (33%)²⁷. Cases of female

²⁵ World Bank (2020): Addressing the Impact of Covid 19: with a special section on the role of ICT. The World Bank Group Macro Economics, Trade and Investment Global Practice, Africa Region, WBG.

²⁶ Seema Vyas & Jessie Mbwambo (2017) Physical partner violence, women's economic status and help-seeking behaviour in Dar es Salaam and Mbeya, Tanzania, *Global Health Action*, 10:1, 1290426, DOI: 10.1080/16549716.2017.1290426.

²⁷ Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) [Tanzania Mainland], Ministry of Health (MoH) [Zanzibar], National Bureau of Statistics (NBS), Office of the Chief Government Statistician (OCGS), and ICF. 2016. *Tanzania Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS) 2015-16*. Dar es Salaam, Tanzania, and Rockville, Maryland, USA: MoHCDGEC, MoH, NBS, OCGS, and ICF.

genital mutilation (FGM) are also prevalent in some parts of the project area. The percentage of women 15-49 who have been circumcised is especially high in Manyara (71%) and Dodoma (64%) regions²⁸. To avoid the project to escalate GBV, the PIU will put measures to address GBV.

4.11 HIV/AIDS Prevalence

HIV/AIDS is prevalent in many parts of Tanzania, including the regions that constitute the project area. Understanding the prevalence of HIV/AIDS in the project area is important because people who are suffering from this disease (i.e. living with HIV) are highly vulnerable to COVID-19. According to Tanzania HIV impact survey (THIVS) of 2016 –2017²⁹, HIV prevalence peaks at 12% among females aged 45 to 49 while it stands at 8.4% among males aged 40 to 44. HIV is prevalent among adults aged 15+ in the project area. It is higher in Mbeya (9.3%), Ruvuma (5.6%), Geita (5%), Dodoma (5%) and Dar es Salaam (4.7%). Mtwara and Manyara regions have low level of HIV infection among adults aged 15+. THIVS data also indicates prevalence of chronic active hepatitis ‘B’ among HIV positive adults aged 15 –64 in Tanzania.

²⁸ NBS & MEASURE DHS, ICF Macro (2010): 2010 Tanzania Demographic and Health Survey Fact Sheets, Dar es Salaam, NBS.

²⁹ Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC), Ministry of Health (MoH) Zanzibar, NBS, and Office of Chief Government Statistics (OCGS) (2017): Tanzania HIV Impact Survey (THIV) 2016 –2017, Dar es Salaam.

Chapter Five

Potential Environment and Social Risks and Mitigation

5.1 Environmental and Social Risk Classification of the project as per the World Bank ESF

Environmental and social risks are rated as **Substantial**. This project is not expected to involve any land acquisition. Renovation required at health facilities to accommodate space for oxygen generating plants will be done within existing structures. Activities to be supported under the project may have environmental effects as a result of the generation of biohazard/health care wastes emanating from increased capacity in testing at the NPHL as well as in case management at health facilities. Social risks include potential exposure of health and construction workers to COVID-19 due to lack of provision or poor management of personal protective equipment (PPE) and community health and safety risks related to construction and operations of the facilities. Given the short duration of the project, no long-term risks related to environmental or social standards are likely. Other potential environmental and social risks and their mitigation measures are elaborated in the relevant section of the appraisal summary.

This ESMF provides for initial risk assessment and classification based on the available documentation and data. Implementation of the project activities will be positive and urgently needed. As this project will finance procurement of drugs, supplies and medical equipment – which has limited, if any, impacts – the environmental risks result from the operation of the labs, the quarantine and isolation centres, and screening posts at land crossings, as well as with the appropriateness of the medical waste management system to be put in place by the client.

5.1.1 ESS 1 - Assessment and Management of Environmental and Social Risks and

Impacts

The project will have positive impacts as it will improve capacity for surveillance, monitoring and containment of COVID-19. However, the project could also cause environmental, health and safety risks due to the dangerous nature of the pathogen (COVID-19) and reagents and equipment to be used in the project-supported activities. These include risks associated to transportation and delivery of medical supplies as well as laboratory or health care facilities associated infections if occupational health and safety standards and specific infectious control strategies, guidelines and requirements as suggested by WHO and CDC are not in place and implemented, leading to illness and death among laboratory workers and communities. Health care facilities which will treat COVID 19 exposed patients and laboratories which will use COVID-19 diagnostic testing will generate biological waste, chemical waste, and other hazardous bi-products and represent pathways for exposure to the virus. Hence, laboratories or clinical facilities supported by the project will increase exposure to COVID-19 that can have the potential to cause serious illness or potentially lethal harm to patients, suppliers, laboratory staff and to the community that may be in contact with the virus. Therefore, effective administrative and infectious controlling and engineering controls should be put in place to minimize these risks.

Component 2 involving procurement and installation of liquid oxygen plants could lead to risks of explosion and that may endanger the neighboring community, hospital workers and persons in the hospitals. These risks may result from: (i) oxygen enrichment of the atmosphere from leaking equipment; (ii) use of materials not compatible with oxygen; (iii) use of oxygen in equipment not designed for oxygen service; (iv) incorrect or incautious operation of oxygen equipment; (v) improper disposal of pressurized containers. The design of these plants, choice of location within the medical facilities, selection of materials used in their maintenance and training of the medical personnel on use and maintenance will be cognizant of necessary risk management. Environmentally and socially sound capacity building, training, case detection, containment and treatment of COVID-19 will require adequate provisions for minimization of occupational health and safety risks, proper management of hazardous waste and sharps, use of appropriate disinfectant as well as PPE's. Appropriate chemical and infectious substance handling, transportation and disposal procedures is required. Other notable risks associated with the project include marginalization of vulnerable groups such as women and disabled populations being unable to access health facilities and services during operations of the hospitals in response to COVID-19.

To mitigate these risks, the MoHCDEC will need to update, consult, disclose and adopt the Environmental and Social Management Framework (ESMF) for the East Africa Public Health Laboratory Networking Project to include a ICWMP addressing all the findings of the assessment of the existing system and in line with GIIP including WHO guidelines, as well as national regulations. This will also include a chapter on Labor Management Procedures (LMP) within thirty (30) days of project effectiveness. which will describe all the practices for handling, storing, treating, and disposing of hazardous and non-hazardous waste, as well as types of worker training required. This will also include training of staff to be aware of all hazards they might encounter.

All project activities shall be subjected to environmental and social screening and where necessary specific instruments shall be prepared before commencement of applicable project activities. Specific mitigation measures will be outlined in the site-specific ESMPs and implemented, when necessary. This will provide for the application of international best practices on COVID-19 diagnostic testing and handling the medical supplies, disposing of the generated waste, and road safety. Safe work protocols shall be developed and implemented for hazardous tasks such as work-at heights, confined spaces, hot-works or those involving electrical circuits. Health screening and COVID-19 prevention measures for workers should be incorporated into the OHS procedures outlined in the ESMPs. Emergency response and handling procedures shall be developed to handle any accidents/incidents onsite. Construction waste shall be managed in line with the local provisions at each site, but in overall compliance with the National Waste Management Regulations and the World Bank's Environmental, Health and Safety Guidelines for Health Care Facilities.

To mitigate the risks of vulnerable individuals and persons missing benefits of the project, they will be sensitized through the SEP to inform them of the project and availability of services. Arrangements will also be in place in the ESMF to provide for access to the vulnerable groups and vulnerable individuals to project financed facilities Under Component 1 and 2 in the RRHs and Mabibo National Laboratory. Siting of liquid oxygen plants: The liquid oxygen plants will be located away from main hospital buildings, electrical generators, incinerators, etc. They should be protected from extremes of temperature. Disposal of pressurized containers:

Pressurized oxygen containers and cylinders will be separated from general health care waste. Disposal by incineration will not be employed due to explosion risks.

5.1.2 ESS 2 - Labour and Working Conditions

The project workers will include: (i) PMT staff; (ii) hospital staff receiving and assisting in the installation of laboratory equipment (iii) construction workers installing facilities under Components 1 and 2 of the projects. COVID-19 associated infections in the project may result from inadequate adherence to occupational health and safety standards and can lead to infection of the workers installing the project related interventions in Component 1 and 2 and laboratory/healthcare workers.

Component 2 involving procurement and installation of liquid oxygen plants could lead to risks of explosion and that may endanger the neighboring community, hospital workers and persons in the hospitals. These risks may result from: (i) oxygen enrichment of the atmosphere from leaking equipment; (ii) use of materials not compatible with oxygen; (iii) use of oxygen in equipment not designed for oxygen service; (iv) incorrect or incautious operation of oxygen equipment; (v) improper disposal of pressurized containers. The design of these plants, choice of location within the medical facilities, selection of materials used in their maintenance and training of the medical personnel on use and maintenance will be cognizant of necessary risk management.

To minimize or avoid risk for health care workers, PMT staff and project construction workers, the client will abide by the LMP which will be part of the updated ESMF in such a way that (i) it responds to the specific health and safety issues posed by COVID-19, and (ii) protect workers' rights as set out in ESS2. The health care staff within the targeted health facilities and project construction workers will be trained and kept up to date on WHO advice (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>) and recommendations on the specifics of COVID-19 by the PMT.

5.1.3 ESS 3 - Resource and Efficiency, Pollution Prevention and Management

Medical wastes and chemical wastes (including water, reagents, infected materials, etc.) from the labs and screening posts to be supported (drugs, supplies and medical equipment) can have significant impact on environment and human health. Wastes that may be generated from construction and rehabilitation works and medical facilities/ labs could include liquid contaminated waste, chemicals and other hazardous materials, and other waste from labs and medical centers including of sharps, used in diagnosis and treatment and used PPEs. Liquid contaminated waste may find its way to the soil or any nearby water body if not properly managed. Each beneficiary medical facility/lab will be required to follow the requirements of the site specific ESMPs to be updated for the Project (following the updating of the ESMF), WHO COVID-19 guidance documents, and other best international practices, will be used to prevent or minimize such adverse impacts. Any activities that have been screened for environmental and social risks will not be carried out until an updated, consulted and disclosed. The ESMP will include guidance related to transportation and management of samples and medical goods or expired chemical products. Resources (water, air, etc.) used in the facilities and labs will follow standards and measures in line with country's guidelines on the

management of medical waste, US-Center for Disease Control (CDC), WHO environmental infection control guidelines for medical facilities and WB EHS guidelines.

5.1.4 ESS 4 - Community Health and Safety

In line with safety provisions in ESS2, it is equally important to ensure the safety of communities from infection with COVID19. As noted above, medical wastes and general waste from the labs and health centers have a high potential of carrying micro-organisms that can infect the community at large if they are not properly disposed of. There is a possibility for the infectious microorganism to be introduced into the environment if not well contained within the laboratory or due to accidents/ emergencies e.g. a fire response. Laboratories and the medical centers will thereby have to follow respective procedures with a focus on appropriate waste management of contaminated materials as well as protocols on the transport of samples and workers cleaning before leaving the workplace back into their communities. Component 2 involving procurement and installation of liquid oxygen plants could lead to risks of explosion and that may endanger the neighboring community, hospital workers and persons in the hospitals. These risks may result from: (i) oxygen enrichment of the atmosphere from leaking equipment; (ii) use of materials not compatible with oxygen; (iii) use of oxygen in equipment not designed for oxygen service; (iv) incorrect or incautious operation of oxygen equipment; (v) improper disposal of pressurized containers. The design of these plants, choice of location within the medical facilities, selection of materials used in their maintenance and training of the medical personnel on use and maintenance will be cognizant of necessary risk management.

During implementation, the risks of SEA/SH to suspect cases will be assessed, and mitigation measures put in place. The MoHCDEC will ensure the avoidance of any form of SEA/SH by relying on the WHO Code of Ethics and Professional Conduct for all workers implementing the project as well as the provision of gender-sensitive infrastructures such as segregated toilets in the construction sites. PMT and construction workforce will be supplied with Personal Protective Equipment (PPE) as they engage in the implementation of project related activities. To mitigate this public risk, the government will ensure that all project workers are adequately instructed and trained, on a regular basis, on prevention and reporting procedures available for SEA and SH as set out in ESMP and SEP. The community neighboring the RRH will also be made aware of the GRM that can be utilized to raise concerns or complaints regarding the conduct of project related workers.

5.1.5 ESS 5 – Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

It is not envisaged that economic and physical displacement will arise due to project implementation as all works will be confined in existing facilities where all land is owned by GoT. Under this project, no activities are cleared which would require provisions under ESS 5. Thus, ESS 5 is not relevant for this project.

5.1.6 ESS 6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources

Minor construction or rehabilitation activities may be anticipated in this project and all works will be conducted within the existing facilities. Hence, likely impacts of the project on natural resources and biodiversity are low and so this standard is not considered relevant.

5.1.7 ESS 7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

This standard is not relevant to this project.

5.1.8 ESS 8 - Cultural Heritage

The medical facility rehabilitation activities related to installation of Liquid Oxygen generating plant in Regional Referral Hospitals (RRH) which are existing and operational medical facilities hence the potential for risks to and impacts on cultural heritage are very low. Thus, ESS 8 is not considered relevant for this project.

5.1.9 ESS 10 - Stakeholder Engagement and Information Disclosure

To guide participation of stakeholders during project implementation, a draft SEP has been prepared and will be disclosed prior to appraisal of the project. The SEP will guide consultations with various stakeholders who will be identified as being directly and indirectly affected by the proposed intervention. These include government ministries, health institutions benefiting from the project and professionals working in them, media houses and communities neighboring project target facilities. The SEP includes guidelines to ensure that the risk of spread of COVID-19 among stakeholders during consultations is minimized. The SEP outlines the proposed Grievance Redress Mechanism (GRM) for the project and refer to mechanisms already in place for members of the public to register complaints related to the project. The finalized SEP will contain information on how the project GRM will operate including details of designated offices and contact numbers that the public can use to register complaints. The GRM will integrate GBV-sensitive measures, including multiple channels to initiate a complaint and specific procedures for SEA, such as confidential and/or anonymous reporting with safe and ethical documenting of GBV and SEA cases. Through the SEP the project will ensure that information is meaningful, timely, and accessible to all affected stakeholders and particularly populations that are most at risk project sites neighboring community, hospital staff, waste handlers and the project workers.

5.2 Environment and Social Risks and Mitigation

5.2.1 Potential Environmental Risks

The main environmental risks related to both construction and rehabilitation of the project activities may include (i) the occupational health and safety issues related to handling of supplies and the possibility that they are not safely used by laboratory technicians and medical crews; (ii) medical waste management and community health and safety issues related to the handling, transportation and disposal of healthcare waste, disposals of PPE's should also be considered, and (iii) health and safety risk to staff and surrounding communities related to explosion of oxygen plant due to mishandling or when exposed to extreme heat. WHO has reported that 20% of total general healthcare waste would be infectious waste, and improper handling of health care waste can cause serious health problem for workers, community and the environment. Transmission of disease through infectious waste is the greatest and most immediate threat from healthcare waste. If waste is not treated in a way that destroys the pathogenic organisms, dangerous quantities of microscopic disease-causing agents—viruses, bacteria, parasites or fungi will be present in the waste. These agents can enter the body through punctures and other breaks in the skin, mucous membranes in the mouth, by being inhaled into the lungs, being swallowed or being transmitted by a vector organism.

Wastes that may be generated from the seven (7) Regional hospitals supported by the COVID-19 readiness and response will require special handling and disposal as it may pose an infectious risk to healthcare workers with contact or handle the waste. There is a possibility for infectious microorganisms to be introduced into the environment if they are not contained due to accidents/ emergencies e.g. a fire response. The contamination of the laboratory facilities, and equipment may result from laboratory procedures: performing and handling of culture, specimens and chemicals. In view of that, appropriate medical waste management system/plans and public awareness mechanisms need to be put in place by the client to reduce risks linked to clinical operations and infections generated by exposure to COVID 19. These risks will be managed through the update of the existing ESMF with a dedicated chapter on LMP and a SEP prepared for the project. Disposal and overall management of pressurized containers will be looked at as part of the Infection Control and Waste Management Plan (ICWMP) which will either be customized from the existing guidelines on waste management or prepare a new plan (such as an ESMP as will be stipulated in the updated ESMF) based on the identified risks associated with waste.

5.2.2 Potential Social Risks

The Social risk is rated Substantial. The main social risks associated with the project include: (I) health workers exposure to COVID-19 due to lack of provision or poor management of PPE; (ii) community health and safety due to exposure to infectious waste handling and transportation; (iii) exposure of the construction workers to infection in hospitals while installing the liquid oxygen concentration plants and associated works and the laboratory equipment; (iv) cross infection of patients from workers accessing the facilities to install the plants financed in Component 1.1 and 21 of the project; (v) lack of engagement and risk prevention communication to health facilities' neighboring communities, project workers and health care personnel in targeted facilities; (vi) exposure of persons visiting the health facilities to construction related hazards during implementation of Component 1 and 2 of the project; (vii) possibility of sexual harassment and sexual exploitation and abuse due to the interaction of construction workforce with the neighboring communities and persons in the health

facilities; (viii) exclusion of vulnerable individuals such as the poor from benefiting from facilities financed by the project due to cost limitations; and (ix) potential risk of discrimination against marginalized and vulnerable groups.

5.2.3 Environmental and Social Impacts During Planning and Design Stage

This section describes expected project impacts and potential mitigation measures to address them at the planning and design stage.

5.2.3.1 Procurement of goods and supplies

The Project will engage in the procurement of goods and supplies as indicated in project components in Chapter two and they include PPEs, testing cartridges, ambulances, oxygen concentrators, Paracetamol, Chloroquine, biosafety cabinets, quarantine tents and ventilators and the PMT will be responsible for ensuring that the required technical specifications are met as per WHO guidelines and GIIP. Procurement of incorrect standard or quality of PPE would lead to spread of infection to healthcare workers and cleaners.

Mitigation Measures:

- i. Procure goods and supplies based on technical specifications provided by WHO interim guidance for coronavirus disease 2019;
- ii. Distribute goods or services on basis of need, while ensuring that the distribution systems is not compromised due to elite capture; and
- iii. Ensure that the disadvantaged and vulnerable groups have equal if not better access to these resources.

5.2.3.2 Incorporation of Environmental Design Recommendations

The PMT will screen each proposed project activities for potential environmental and social risks as per the World Bank ESF as well as ESHS Guidelines, WHO COVID-19 Guidelines, and the screening form contained in **Annex 1**.

Mitigation Measures: PMT will enforce screening that will include:

- i. Determination of any needed design changes in the facility or its operation;
- ii. Identification of the scope of works expected;
- iii. Incorporate universal access standards;
- iv. Determination that utilities (power, water, heat, etc.) are adequate for planned works;
- v. Identification of how such works might interfere with normal operation of the facilities;
- vi. Determination as to whether external or additional security personnel are needed; and
- vii. Preparation of a site-specific ESMP based on the preparation procedure narrated in this ESMF.

5.2.3.3 Medical waste management and disposal.

The PMT in the MoHCDGEC will screen medical waste management and disposal practices for all health facilities and hospitals where the project will be implemented to determine if they are in keeping with the World Bank ESF and ESHS Guidelines and current WHO Guidelines for COVID-19. Through visits of the PMT to health facilities, the MoHCDGEC will ensure that where adequate measures for waste management are not being followed then technical backstopping or necessary equipment will be provided. It is the intention of the MoHCDGEC

that all implementing health facilities observe set of guidelines for management of health care waste and where need be, they are supported accordingly. However, if the case is that proper disposal cannot be provided at the facility then the facility will ideally be supported with the technical as well as equipment to ensure that project activities proceeds as smooth as required.

Mitigation Measures: PMT in the MoHCDGEC will enforce screening that will include:

- i. Identification of current methods of medical waste management and disposal at the health facilities and hospitals where the project will be implemented;
- ii. Identification of any on-site facilities for disposal of medical waste including incinerators, pits for burning medical waste, pits for burial of medical waste, etc. as per the requirement of any guidelines;
- iii. Identification of any off-site disposal of medical waste, including how material is gathered and stored, routes taken to the disposal facility, and disposal procedures;
- iv. Review of protocols for dealing with medical waste specifically related to infectious diseases like COVID-19;
- v. Review of training needs and procedures for healthcare workers and hospital employees for medical waste management and disposal; and
- vi. Preparation of a facility specific ICWMP, based on the country's generic ICWMP.

5.2.3.4 Protecting healthcare workers.

Poor design of laboratories and healthcare facilities (e.g. isolation and treatment centres) that do not meet layout and engineering as well as health requirements for nosocomial infection control, could increase risk of spreading COVID-19 in health facilities, especially to healthcare workers. PMT will conduct a review of the health facilities and hospital protocols for protecting healthcare workers from infectious disease based on current WHO Guidelines for COVID-19 and other government available guidelines.

Mitigation Measures: PMT will conduct a review that will include:

- i. Determination of the new designs (if applicable) of facility should meet requirement for healthcare facilities and take into account guidance from WHO and/or CDC as well as other government guidelines on COVID-19 management and infection control;
- ii. Determination to assess if training given to healthcare facility workers and other hospital employees is adequate;
- iii. Determination if healthcare facility staff and hospital employees are trained on how to deal with the remains of those who might die from COVID-19, including those conducting autopsies;
- iv. Determination if adequate stores of PPE are available on-site; and
- v. Identify if healthcare workers shall be provided with medical personal protective equipment (PPE) includes: Medical mask, Gown, Apron, Eye protection (goggles or face shield), Respirator (N95 or FFP2 standard), Boots/closed work shoes.

5.2.3.5 Access to appropriate and timely medical services, hand hygiene and PPEs

Considering the geographic location of various healthcare facilities and hospitals which will be part of the project implementation assessment of timely medical assistance and availability of personal protective equipment is important. The PMT will conduct a review the healthcare facilities and hospital protocols for securing quick access to appropriate and timely medical services based on current WHO Guidelines for COVID-19 and other available national guidelines.

Mitigation Measures: PMT will conduct a review that will include:

- i. Number of ambulance teams and equipment available to cover distance locations and timelines of medical services to be reached;
- ii. Pain medications, antibiotics and other routine medicines needed for the emergency unit identified to handle critical and non-critical cases of COVID 19;
- iii. Staff at all centers identified for handling COVID 19 patients are trained in COVID-19 care and infection prevention, as well as longer-term capacity building in critical care provision;
- iv. Emergency referral mechanism in other geographically challenged areas which will be part of the project to access timely medical services;
- v. Determination if adequate stores of hand sanitizes and PPE are available in all healthcare facilities and hospitals which will be part of the project; and
- vi. Identification of supply lines for required PPE.

5.2.4 Environmental and Social Impacts During Construction stage

This section identifies key E and S risks and impacts associated with construction (including expansion, upgrading and rehabilitation) of healthcare facilities and related waste management facilities and set out generic mitigation measures.

5.2.4.1 Increased generation of dust

Dust will be generated from construction activities especially during site clearing and excavation activities (where applicable) which may affect air quality and induce human health implications.

Mitigation Measures: The contractor will ensure the following:

- i. Ensure that the generation of dust is minimized and implement a dust control plan to maintain a safe working environment and minimize disturbances for patients, staff and surrounding community;
- ii. Undertaking works shall implement dust suppression measures (e.g. water paths, covering of material stockpiles, etc.) as required. Materials used shall be covered and secured properly during transportation to prevent scattering of soil, sand, materials, or generating dust.
- iii. Ensure compliance with relevant national legislation with respect to ambient air quality; and
- iv. Provide dust masks to workers exposed to dust.

5.2.4.2 Noise and Vibrations

Use of heavy machinery during construction may generate a lot of noise and vibrations in the project area which may negatively affect workers.

Mitigation Measures: The contractor will ensure the following:

- i. Provide appropriate PPE to workers;
- ii. Limit the use of heavy machinery;
- iii. Install silencers in exhaust pipes for machinery;
- iv. Avoid carrying out construction activities generating high level of noise during healthcare activities, especially when services are being delivered to the clients; and
- v. Ensure compliance with relevant national legislation with respect to noise and vibration

5.2.4.3 Solid waste generated from minor civil works

Construction activities will generate waste comprising of materials such as concrete, wooden pallets, steel cuttings/fillings, packaging paper or plastic, wood, plastic pipes, metals, etc. Construction workers will also generate refuse consisting of food waste, plastic glass, human waste, aluminium cans and waste paper.

Mitigation measures: The building contractor engaged to carry out rehabilitation works shall conduct the following as will be stipulated in the ESMF:

- i. Ensure onsite latrine be properly operated and maintained to collect and dispose wastewater from those who do the works;
- ii. Develop and follow a brief site-specific solid waste control procedure (storage, provision of bins, site clean-up, bin clean-out schedule, etc.) before commencement of any rehabilitation works;
- iii. Use litter bins, containers and waste collection facilities at all places during works. The contractor(s) may store solid waste temporarily on site in a designated place prior to off-site transportation and disposal through a licensed waste collector;
- iv. Dispose of waste at designated place identified and approved by local councils. Open burning or burial of solid waste at the hospital premises shall not be allowed. It is prohibited for the contractor(s) to dispose of any debris or construction material/paint in environmentally sensitive areas (including watercourse); and
- v. Recyclable materials such as wooden plates for trench works, steel, scaffolding material, site holding, packaging material, etc. shall be segregated and collected on-site from other waste sources for reuse or recycle (sale).

5.2.4.4 OHS risks for construction workers

Workers involved in construction works will be exposed to various occupational risks, the project activities will bring about hazards such as use of large machinery and equipment, working in close proximity with water, working at height, use of electrical tools, trips and falls, use of hazardous and flammable chemicals just to mention a few.

Mitigation measures: The building contractor engaged to carry out rehabilitation works shall, as stipulated in the ESMP:

- i. Develop an Occupational Health and Safety approach, which aims to avoid, minimize and mitigate the risk of work place accidents. This would include identifying potential risks and identifying safe working practices, using only trained workers, using safe machinery and equipment and providing necessary personal protective equipment (PPE);
- ii. Comply with all national and good practice regulations regarding workers' safety;
- iii. Prepare and implement a simple action plan to cope with risk and emergency (e.g., fire, earthquake, floods, COVID-19 outbreak);
- iv. Have receive minimum required training on occupational safety regulations and use of personal protective equipment; and
- v. The contractor(s) shall provide safety measures as appropriate during works such as installation of fences, fire extinguishers, first aid kits, restricted access zones, warning signs, overhead protection against falling debris, lighting system to protect hospital staff and patients against construction risks.

5.2.4.5 Increased risk of COVID-19 Transmission

Close working and poor living conditions in labour camps may create conditions for the easy transmission of COVID-19 and the infection of large numbers of people, especially vulnerable groups. Guidance such as the World Bank's ESF/Safeguards Interim Note: COVID-19 Considerations in Construction/Civil Works Projects will be enforced in all sites.

Mitigation measures: The building contractor engaged to carry out rehabilitation works shall implement COVID-19 prevention measures as follows:

- i. Consider ways to minimize/control movement in and out of construction areas/site;
- ii. If workers are accommodated on site require them to minimize contact with people outside the construction area/site or prohibit them from leaving the area/site for the duration of their contract;
- iii. Implement procedures to confirm workers are fit for work before they start work, paying special attention to workers with underlying health issues or who may be otherwise at risk;
- iv. Check and record temperatures of workers and other people entering the construction area/site or require self-reporting prior to or on entering;
- v. Provide daily briefings to workers prior to commencing work, focusing on COVID-19 specific considerations including cough etiquette, hand hygiene and distancing measures;
- vi. Require workers to self-monitor for possible symptoms (fever, cough) and to report to their supervisor if they have symptoms or are feeling unwell;
- vii. Prevent a worker from an affected area or who has been in contact with an infected person from entering the construction area/site for 14 days (with insurance in place to ensure they can continue to access salary, as per the LMP);
- viii. Preventing a sick worker from entering the construction area/site, referring them to local health facilities if necessary or requiring them to isolate at home for 14 days (with insurance in place to ensure they can continue to access salary, as per the LMP);
- ix. Develop contingency plans with arrangements for accommodation, care and treatment for workers self-isolating; workers displaying symptoms and getting adequate supplies of water, food and supplies.

5.2.4.6 Risk of Gender-Based Violence (GBV) and Sexual Abuse and Exploitation (SEA)

Implementation of the project will generally have positive impacts on communities. However, where benefits are introduced within communities and households, community and household relations can shift and raise the potential for Gender Based Violence (GBV) and Sexual Exploitation and Abuse (SEA). Such incidences may arise in situations where contractor workers interact with poor communities, where household representatives that receive project benefits are forced to surrender the cash to spouses, where benefits may be used to lure adolescents into unsafe sexual practices, or in cases of forced sexual relationships in return for favours.

Mitigation measures: The contractor engaged to carry out rehabilitation and any works during implementation of project activities shall ensure the following:

- i. Provide GBV/SEA requirements in bid documents and signing and adherence to Workers' Code of Conduct;
- ii. Establish and operationalize GRM whose approach is sensitive to issues of GBV and SEA;
- iii. Work closely with existing service providers to provide services to GBV/SEA

- survivors; and
- iv. Community engagement and consultation to include GBV/SEA sensitization.

5.2.4.7 Increased incidences of child labour

According to the International Finance Corporation (IFC, 1998), poverty is the main reason children are forced to work and the supply of child labour is directly linked to the need for children to provide supplemental income for their families or to support themselves.

Mitigation measures: The contractor engaged to carry out rehabilitation works shall:

- i. Avoid employing under aged (less than 18 years) workers and this should be included in the Contractors Code of Conduct;
- ii. Learners should not be engaged in any construction related activities; and
- iii. Conduct community sensitizations on child labour; and
- iv. Implement the Grievance Redress Mechanism (GRM).

5.2.4.8 Increased risk of disturbance to flow of traffic

Construction/rehabilitation activities could cause traffic disruption on roads serving the project area. This may also lead to increased incidences of accidents in the absence of road safety signage.

Mitigation measures: The contractor engaged to carry out rehabilitation works shall:

- i. Develop traffic management plan and enforce its use;
- ii. Install road signs include speed limit signs; and
- iii. Provide detours for vehicles and pedestrians.

5.2.4.9 Increased transmission of communicable diseases including HIV/AIDS

This will be mitigated as follows:

- i. Sensitization and health awareness campaigns to all involved in the project including service providers.
- ii. Integrate monitoring of HIV/AIDS preventive activities as part of the construction supervision. Basic knowledge, attitude and practices are among the parameters to be monitored, and particularly on provision of condoms, status testing and use of ARVs, as well as sexual health and rights;
- iii. The contractors at the time of Project implementation will develop appropriate training on potential spread and awareness materials for Information, Education and sensitization of workers during project construction phase.

5.2.5 Environmental and Social Impacts During Operation Stage

The PMT in collaboration with relevant MoHCDGEC departments will provide tailored training to healthcare facilities and hospital employees in different aspects related to management of COVID 19 pandemic. These trainings will be delivered as per the World Bank EHS and current WHO Guidelines for COVID-19 as well as available government guidelines on the management of COVID 19. Furthermore, the PMT will conduct supervisory role to healthcare facilities and hospitals where the project will be implemented. Through the supervision by the PMT the MoHCDGEC will ensure that guidelines for COVID 19

management are being adhered to and in cases lapses are identified technical backstopping or necessary equipment shall be provided. The main risks during operation phase are described in this section together with mitigation measures.

5.2.5.1 COVID-19 testing and diagnosis.

Improper collection of samples and testing for COVID19 and appropriate laboratory biosafety could result in spread of disease to medical workers or laboratory workers, or population during the transport of potentially affected samples.

Mitigation Measures: The PMT and the entire MoHCDGEC team will ensure the following:

- i. Collection and transport of samples and testing of the clinical specimens from patients meeting the suspect case definition should be performed in accordance with WHO interim guidance Laboratory testing for coronavirus disease 2019 (COVID-19) in suspected human cases as well as any available national guidelines on handling of CORONA 19 cases. Tests should be performed in appropriately equipped laboratories (specimen handling for molecular testing requires BSL-2 or equivalent facilities) by staff trained in the relevant technical and safety procedures;
- ii. Samples that are potentially infectious materials need to be handled and stored as described in WHO document Guidance and any available national guidelines on handling of CORONA 19 cases to minimize risks for facilities collecting, handling or storing materials potentially infectious for corona virus; and
- iii. For general laboratory biosafety guidelines, see the WHO Laboratory Biosafety Manual, 3rd edition as well as the available national guidelines on the overall management and operation of COVID 19 cases.

5.2.5.2 Weak compliance with the precaution measures for infection prevention and control

Weak compliance with the precaution measures in isolation and treatment of COVID-19 infections in healthcare facilities may lead to transmission to health workers and patients.

Mitigation Measures: The PMT and HCF will ensure the following: Health facilities should establish and apply Standard Precautions including:

- a. Hand Hygiene (HH);
- b. Respiratory hygiene/cough etiquette.
- c. Use of personal protective equipment (PPE);
- d. Handling of patient care equipment, and soiled linen;
- e. Environmental cleaning;
- f. Prevention of needle-stick/sharp injuries; and
- g. Appropriate Health Care Waste Management.
- ii. Health facilities should establish and apply Transmission based precautions (contact, droplet, and airborne precautions) as well as specific procedures for managing patients in isolation room/unit;
- iii. Establishment of Standard precautions and Transmission based precautions should be in line with any available national guidelines for the control of infectious diseases in healthcare facilities and take into account guidance from WHO and/or CDC on COVID-19 infection control;
- iv. Regular delivery and proper storage of goods, including samples, pharmaceuticals, disinfectant, reagents, other hazardous materials, PPEs, etc.;
- v. Ensure handwashing and other sanitary stations are always supplied with clean water,

- soap, and disinfectant;
- vi. Ensure equipment such as autoclaves are in working order; and
 - vii. Provide regular testing to healthcare workers routinely in contact with COVID-19 patients.

5.2.5.3. Poor Management of Medical Waste

Medical waste is contaminated with COVID-19 virus. Improper collection, transport, treatment and disposal of infectious waste becomes a vector for the spread of the virus.

Mitigation Measures: The PMT and the entire MoHCDGEC will ensure the following:

- i. Each healthcare facility and hospitals where the project will be implemented is operated in accordance with the ICWMP prepared and other relevant documents prepared for the documents;
- ii. Waste segregation, packaging, collection, storage disposal, and transport is conducted in compliance with the ICWMP and WHO COVID-19 Guidelines;
- iii. Onsite waste management and disposal will be reviewed regularly and training on protocols contained in the ICWMP conducted on a weekly basis;
- iv. The PMT will audit any off-site waste disposal required on a monthly basis and institute any remedial measures required to ensure compliance;
- v. The treatment of healthcare waste produced during the care of COVID-19 patients should be collected safely in designated containers and bags, treated and then safely disposed;
- vi. Open burning and incineration of medical wastes can result in emission of dioxins, furans and particulate matter, and result in unacceptable cancer risks under medium (two hours per week) or higher usage; and
- vii. Waste generation, minimization, reuse and recycling are practiced where practical in the COVID-19 context.

5.2.5.4 Poor sanitation and improper management of wastewater

Poor sanitation and improper management of wastewater related to COVID-19 diagnosis and treatment services transmit diseases to communities and pollute environment.

Mitigation Measures: The PMT and all healthcare facilities as well as hospitals where the project will be implemented will ensure the following:

- i. Provision of safe water, sanitation, and hygienic conditions, which is essential to protecting human health during all infectious disease outbreaks, including the COVID-19 outbreak; and
- ii. Health facilities shall establish and apply good practices in line with WHO guidance on water, sanitation and waste management for COVID-19 and National guidelines for Infection Prevention and Control healthcare facilities.

5.2.5.5 Poor handling and Management of Hazardous Materials

Hazardous materials used and generated during the provision of COVID-19 diagnosis, care and treatment services and hazardous chemicals in the hospitals and health care centres are limited to small volumes of laboratory reagents, chemicals, solvents, medicinal gases etc.

Mitigation Measures: The PMT will ensure the following:

- i. Hazardous material management procedures are in place as per the ICWMP and other national and relevant documents for the project:
 - a. inventory of hazardous materials in the health care facilities;

- b. proper labelling of hazardous materials;
 - c. safe handling, storage and use of hazardous materials;
 - d. use of protective equipment procedure for managing spill, exposures and other incidents; and
 - e. procedure for reporting of incidents.
- ii. Hazardous materials should be handled in accordance with the accepted practices.
 - iii. Only trained personnel should handle the materials and precautions taken when handling materials by using required protection equipment such as ventilation hoods and personal protective equipment.

5.2.5.6 Increased risk of risk of females catching COVID-19

Social norms in Tanzania expect women and girls to be responsible for domestic work including nursing sick family members. This norm is likely to exacerbate the risks of females contracting COVID-19.

Mitigation Measures: The MoHCDGEC through the PMT shall do the following:

- i. Ensure that there is dissemination of guidance for home care for COVID-19 patients;
- ii. Ensure that there are identified centres available for those households that cannot manage to provide home care for COVID-19 patients;
- iii. Provide support and help cover basic needs;
- iv. Ensure that care givers protect themselves when caring for someone who is sick by reducing contact, avoiding sharing of personal items and eat in separate rooms; and
- v. Ensure that home care givers practice frequent handwashing there is use of masks by both the patient and the care giver.

5.2.5.7 Increased risks of Sexual Exploitation and Abuse (SEA), Harassment and Gender Based Violence (GBV)

In general, crisis exacerbate social risks, and there is indeed empirical evidence to indicate that during implementation, the risks of Sexual Exploitation, Harassment, and Abuse might be prevalent and mitigation measures should be put in place. Gender-based violence (GBV), sexual exploitation, harassment and abuse incidents may surge if restrictions on movement or quarantine measures are put in place. In recognition of this risk Chapter 7 on Labour Management procedure has details on how to address SEA and GBV.

5.2.5.8 Increased incidences of school dropout, child labour cases and/or early marriages

Children face additional risks as when schools are closed due to the risky of spread of COVID 19 girls may be less able to access health, hygiene, and protection messaging and their caregiving burdens may increase. The economic impact of public health emergencies may force families to take their children, particularly girls out of schools, potentially exposing them to risks associated with transactional sex or early/forced marriages.

Mitigation Measures: The MoHCDGEC will ensure the following:

- i. Engagement with local communities to provide access to information for all populations, accounting for age, disability, education, gender, sexual orientation, and the existence of pre-existing health conditions in this engagement, and take cognizance of the fact that no group is homogenous;
- ii. The MoHCDGEC will commit to the provision of services and supplies based on the urgency of the need, in line with the latest data related to the prevalence of COVID-19 cases;

- iii. Ensure that COVID 19 information are packaged and disseminated in a manner that reaches marginalized and vulnerable social groups; and
- iv. Set up a Grievance Mechanism for addressing any concerns and grievances raised. The Project will emphasize citizen engagement aspects within the SEP.

5.3 Environmental and Social Management Plan

The environmental and social management plan is provided to ensure than impacts to biophysical environment as well as to the community within and outside project areas are minimized. The possible impacts and their mitigation measures are provided and should be applied in the event where the stipulated impacts have occurred. The ESMP provided here does not mean that all the impacts will occur as stipulated but rather provides guidance for in case such impact occurs as a result of project implementation. **Table 1** Shows Environmental and Social Management Plan for the identified Impacts which are likely to be caused by project activities

Table 1: Environmental and Social Management Plan (ESMP)

Project Stage / Environmental Components	Impacts	Mitigation Measures	Responsible persons/Institution	Responsible WB ESS and the Country Laws and Regulations
During Plan and design stage				
Soil	Exposing and loosening of soil	-Limit extent of site and vegetation clearing for the preliminary activities	Consultant and MoHCDGEC	ESS 1, EMA 2004
Vegetation	Destruction of trees and vegetation	-Limit extent of site and vegetation clearing for the preliminary activities	Consultant and MoHCDGEC	ESS 1, EMA 2004
Ecosystems	Disturbance to micro-organisms	-Limit extent of site and vegetation clearing for the preliminary activities	Consultant and MoHCDGEC	ESS 1, EMA 2004
Health (ergonomics)	Infection of staff due to inappropriate working conditions	-Design laboratory to include adequate space and ventilation	Consultant and MoHCDGEC	ESS 1, ESS 2, ESS 4, EMA 2004, OHSA, 2007
	Accidents	-Design laboratory to include adequate space for free and safe movement	Consultant and MoHCDGEC	
During Construction				
Soil	Soil exposure, loosening, breaking up and erosion	-Limit extent of vegetation clearing on construction sites, materials mining sites, working areas and service roads -Control movement of vehicles, heavy plant and equipment on earth roads and working sites -Regular use of water sprays and compacting soil on earth roads and around working areas	Contractor and MoHCDGEC	ESS 1, EMA 2004
	Soil contamination from cement, paints, lubricants, and fuels.	-Store and contain construction materials on lined surfaces, in covered areas. -Provide drains and oil interceptor where necessary	Contractor and MoHCDGEC	

Project Stage / Environmental Components	Impacts	Mitigation Measures	Responsible persons/Institution	Responsible WB ESS and the Country Laws and Regulations
	Loss of productive topsoil	-Limit extent of topsoil removal. -Replace topsoil after construction	Contractor and MoHCDGEC	
Vegetation	Removal and destruction of trees and vegetation	-Limit extent of trees and vegetation removal -Re-plant trees and vegetation after construction	Contractor and MoHCDGEC	ESS 1, EMA 2004
Landscape and landform	Solid waste from construction and packaging materials such as rubble, cement bags, paint tins and other materials will pollute and deface land.	-Collect and dispose wastes in designated disposal sites as required by the Local Authority	Contractor and MoHCDGEC	ESS 1, EMA 2004
	Change in natural slopes and landform, affecting scenery and peoples' movement	-Terrace, level grounds and backfill all voids after construction	Contractor and MoHCDGEC	
Surface water	Change in natural drainage flow pattern and surface water runoff	-Provide adequate and effective drains leading to natural drainage systems	Contractor and MoHCDGEC	ESS 1, ESS 2, ESS 4, ESS 3, ESS 6, EMA 2004, OHSA, 2007
	Changes in flow of surface water runoff due to clearing of vegetation	-Provide effective drains to direct surface water to natural drainage systems	Contractor and MoHCDGEC	
	Drainage clogging resulting in impeded water flow and creation of stagnant water pools	-Keep all drains clear of silt and debris and backfill voids regularly and after construction	Contractor and MoHCDGEC	
	Water contamination from rubble, cement, paints, lubricants and fuels as well as makeshift toilets	-Collect and dispose wastes in designated disposal sites as required by the Local Authority	Contractor and MoHCDGEC	
	Surface water siltation due to loosening of soils by movement of vehicles and due to mining of materials	-Use water sprays on roads and construction sites and compact loose soils.	Contractor and MoHCDGEC	

Project Stage / Environmental Components	Impacts	Mitigation Measures	Responsible persons/Institution	Responsible WB ESS and the Country Laws and Regulations
	Water pollution from construction wastes as well as on-site makeshift toilets	-Collect and dispose wastes in designated disposal sites as required by the Local Authority -Provide appropriate and approved temporary toilets	Contractor and MoHCDGEC	
Air	Air pollution from emissions from construction machinery and from dust	-Maintain construction machinery regularly as recommended by dealers -Use water sprays on roads and construction sites and compact loose soils.	Contractor and MoHCDGEC	ESS 1 and EMA, 2004
Ecosystems	Destruction/disruption of any micro organisms	-Limit extent of site and vegetation clearing.	Contractor and MoHCDGEC	ESS 1, ESS 3, ESS 6, EMA, 2004
	Contamination of biota	-Collect and dispose wastes in designated disposal sites as required by the Local Authority	Contractor and MoHCDGEC	
Social / economic	Temporary loss of access to Services such as water telephones and electricity due to possible damage by contractor	-Identify location of water pipes, telephone and electric cables before construction	Contractor and MoHCDGEC	ESS 1, ESS 2, ESS 4, ESS 3, ESS 6, EMA 2004, OHSA, 2007
	Noise and vibration disturbances due to movement of heavy plant and equipment	-Construction to be during official government working hours. -Vehicles, plant and machinery to be regularly maintained as recommended by dealers	Contractor and MoHCDGEC	
	Disturbance of traffic and movement of people	-Provide alternative routes and passages with appropriate directional signs, where appropriate	Contractor and MoHCDGEC	
	Temporary obstruction of walkways due to road and sidewalk barriers.	-Provide alternative routes and passages with adequate and appropriate directional signs	Contractor and MoHCDGEC	
	Potential for accidents due to slow movement of heavy vehicles, general traffic and pedestrians near the construction sites	-Provide alternative routes and passages with adequate and appropriate directional signs	Contractor and MoHCDGEC	

Project Stage / Environmental Components	Impacts	Mitigation Measures	Responsible persons/Institution	Responsible WB ESS and the Country Laws and Regulations
	Aesthetics	-Remove and dispose wastes regularly in appropriately designated disposal site. -Use shields to isolate and enclose construction sites.	Contractor and MoHCDGEC	
Health and Safety	Accidents to staff and public on construction sites and project activity areas	-Provide appropriate protective clothing for staff and ensure they use them -Provide appropriate signs for staff and public. -Provide first aid boxes. -Acquire appropriate workman's compensation and insurance for staff	Contractor and MoHCDGEC	ESS 1, ESS 2, ESS 4, ESS 3, ESS 6, EMA 2004, OHS, 2007
	Spread of COVID-19, STIs, HIV and Aids	-Conduct awareness meetings	MoHCDGEC in collaboration with National Aids Commission	
During Operation and Maintenance				
Soil	Soil contamination from detergents and chemicals	-Use appropriate waste drainage system leading to septic tank or public sewerage facilities; as provided by contractor	MoHCDGEC	ESS 1, ESS 3, ESS 6, EMA, 2004
Surface water	Surface water pollution from detergents and chemicals	-Use appropriate waste drainage system leading to septic tank or public sewerage facilities; as provided by contractor	MoHCDGEC	

Project Stage / Environmental Components	Impacts	Mitigation Measures	Responsible persons/Institution	Responsible WB ESS and the Country Laws and Regulations
Air	Air contamination from COVID-19 infectious persons and waste	<ul style="list-style-type: none"> -Ensure adequate ventilation in laboratories and treatment areas -Ensure proper handling of specimen and laboratory waste by staff and contracted personnel -Ensure that staff know and use the recommendations in the HCWMP -Conduct staff awareness campaigns quarterly 	MoHCDGEC	ESS 1, EMA, 2004
Ecosystem	Contamination of biota from laboratory wastes	-Dispose laboratory waste in designated places	MoHCDGEC	ESS 1, ESS 3, ESS 6, EMA, 2004
Health and Safety	Transmission of diseases and spread of STIs and HIV and Aids	-Conduct civic health education	MoHCDGEC	ESS 1, ESS 2, ESS 4, ESS 3, ESS 6, EMA 2004, OHSA, 2007
	Spread of COVID-19 in communities, hospitals, on specimen handling and transportation routes, in laboratories and in handling and disposal of laboratory waste	-Conduct civic health education and implement the health Care Waste Management Plan		
	Accidents and risks of fire	<ul style="list-style-type: none"> -Provide protective clothing and firefighting equipment -Raise awareness on staff about accidents and fire risks bi-annually 	MoHCDGEC	

Chapter Six

Procedures to Address Environmental and Social Issues

6.1 Environmental and Social Screening Process

The environmental and social screening process helps to:

- assess whether project activities are likely to have potential negative environmental and social impacts;
- determine appropriate mitigation measures for activities with significant adverse impacts;
- review and approve project activities; and
- monitor environmental parameters during project implementation.

The extent of environmental and social work required and to mitigate adverse impacts for the project activities will depend on the outcome of the screening process. For the strengthening of laboratory testing of COVID-19 and case management of COVID-19 Project, environmental screening will be done by completing the Environmental and Social Screening Form (ESSF) attached as Annex 1.

6.2 Completing the Environmental and Social Screening Form

The environmental and social experts at the PMT (representing the MoHCDGEC) will guide and facilitate completion of the Environmental and Social Screening Form for each proposed activity which will involve any physical activities within the project areas.

Other members of PMT depending on their expertise, will participate in filling the form. The checklist in **Annex 1** as well as the screening criteria as provided for in the Second Schedule under Regulation 9 (1) of the Tanzania ESIA and EA Amended Regulations of 2018 (**Annex 2**) will guide the E and S Experts to identify appropriate mitigation measure for the proposed physical project activities.

Cases of land acquisition as narrated in ESS 5 (Land Acquisition, Restriction on Land Use and Involuntary Resettlement) will not apply in this project because the selected project areas are located within the existing healthcare facilities, hospitals and/or government compounds and any project activities requiring land acquisition for the Tanzania COVID 19 Pandemic Emergency Financing Facility Project will not be eligible for funding.

6.3 Assigning Appropriate Environmental Category

The screening process will lead to four safeguard options:

- No further action, if the sub project has no significant impacts on the environment;
- Simple Environmental Review that may lead to the preparation of ESMP to be carried out for project activities likely to result in a few minor environmental problems that can easily be mitigated.
- Limited Environmental Review leading to the preparation of ESMP for project activities that may create minor environmental problems requiring frequent site visit or construction modifications to minimize or eliminate impact.
- Full Environmental Impact Assessment for project activity resulting in potentially significant direct or indirect adverse impact.

6.4 Requirement for Conducting Environmental and Social Impact Assessment

After reviewing the completed Environmental and Social Screening Form (**Annex 1**) and in reference of the criteria as provided for in the Second Schedule under Regulation 9 (1) of the Tanzania ESIA and EA Amended Regulations of 2018 (**Annex 2**), and the sub project environmental checklist, the Environmental and Social Experts will determine the extent of environmental and social work required (i.e. whether application of mitigation measures outlined in the environmental checklist will suffice or not). Some design modifications can be incorporated in the project designs as well as costs at this stage, in order to minimize or avoid environmental impacts.

Depending on the magnitude of the environmental impacts identified, the designated Environmental and Social Experts with the PMT will carry out environmental and social management plan (ESMP) for the specific project area. Where results of the environmental and social screening process indicate the need to carry out a full EIA, the systematic procedure for preparation of the EIA, which begins from registration of project brief/scoping report to the National Environmental Management Council (NEMC) to issuing of an EIA certificate by the Minister responsible for environment following recommendations provided by NEMC (as provided for in the Environmental Management Act (EMA) of 2004, EIA and Audit Regulations of 2005 and its Amended Regulations of 2018) shall be followed which include hiring of a registered Environmental Expert to conduct the assignment on behalf of the MoHCDGEC.

The Tanzania COVID 19 Pandemic Emergency Financing Facility Project will pay for the EIA study, to be done by a registered consultant and also pay for the review and approval costs charged by NEMC. The full EIA requires inputs from teams of specialists who will consult the relevant key stakeholders. The Environmental and Social Experts from the PMT will oversee the recruitment of an appropriate EIA Consultant and supervision of the consultant activities.

6.5 Review and Approval

If the proposed project activity has satisfied all the environmental and social requirements on the screening form and the check list and the proposed appropriate environmental and social report prepared and approved by relevant authorities such as the World Bank (WB) and the Tanzania National Environmental Management Council (NEMC), the PMTs' Environmental and Social Expert will clear the project activities and recommend to the MoHCDGEC for approval and subsequent funding. Any proposed project activities that do not comply with the requirements of this ESMF, the completed screening form and the World Bank ESF as well as the country's environmental laws and regulations will not be cleared for approval.

6.6 Public Consultation and Disclosure

Public consultations are critical in preparing an effective and acceptable project activities. All project activities, environmental, social and planning reports as well as appraisal reports have to be available for public examination at suitable and accessible locations including the main desk at the entry gate as well as in offices of various departments within the MoHCDGEC and in the offices of other relevant stakeholders.

Consultation with the local communities and all other interested and affected parties is important during preparation of relevant document as well as afterward to ensure that the project is well understood. The MoHCDGEC will be responsible for conducting consultations at all stages.

The consultations should identify key issues and determine how the concerns of all parties will be addressed. To facilitate meaningful consultations, the Tanzania COVID 19 Pandemic Emergency Financing Facility Project team and the consultant for EIA will provide all relevant material and information concerning the project activities in a timely manner, prior to the consultation. As far as practicable, this material and information will be in a form and language to be easily accessible and understood by the people being consulted. Depending the extent of public interest in the potential impacts of the project activity, a public hearing may be requested, to better convey public concerns and to facilitate elaboration of the project activities and their impacts. The PMT will be responsible for taking the minutes of the public hearing or disclosure meeting and keep records. A summary of the outcome of the public consultation or disclosure meeting will be prepared and 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 EIA process. The appeal process will be according to the Environment Management Act No. 20 of 2004 and its EIA and Audit Regulation of 2005 and its Amendment of 2018.

Chapter Seven

Labour Management Procedures and Grievance Redress Mechanisms

7.1 Introduction

This chapter describes the labour working requirements needed for the COVID-19 Pandemic Emergency Financing Facility Project. This desire stems from the fact that the Ministry of Health, Community Development, Gender, Elderly and Children (MOHCDGEC) recognizes provision of safe and healthy working conditions as central to project success. The project implementation requires labour throughout its cycle (i.e. both contracted workers and Civil Servants from MOHCDGEC). During construction, for instance, labour will be required during the installation of oxygen plants, oxygen supply manifold systems and laboratory equipment in the targeted hospitals. Equally, operation of improved laboratories will require hospital workers and consultants to facilitate disease detection, case finding and contact tracing.

The aforementioned activities might compromise the health of hospital workers, patients and contractor workers, let alone the nearby community. For instance, there are effects that might emanate from explosion of oxygen plants if not handled properly. Also, the project exposes contractors and hospital workers to the risk of contracting COVID -19. With this understanding, the project is putting in place rigorous Labor Management Procedures (LMPs) for the purpose of containing any possible risks and protecting workers from safety hazards related to this project. Likewise, the project will ensure that employment standards are observed and workers are fairly treated and are provided with valid employment contracts.

In addition, LMPs are central in meeting the donor's requirements as well as the national and international safeguard requirements. Projects and programs financed by the World Bank need to comply with the Environmental and Social Framework (ESF) for Investment Project Financing as well as the national environmental and social legislations. Consequently, this labour management procedure is informed by WB –Environmental and Social Standard 2 (ESS2 –labour and working conditions); Environmental Social Standards 4 (ESS4 – Community Health and Safety); and Environmental and Social Standards 10 (ESS10 – Stakeholder Engagement and Information Disclosure) have informed this chapter.

ESS2 requires that appropriate measures should be provided to protect project workers (including direct workers, contracted workers, primary supplies workers and community workers) from project related impacts and risks. Thus, it requires Project Management Team (PMT) to provide these groups of workers with a safe and healthy working environment by promoting fair treatment, non-discrimination and equal opportunity of project workers³⁰. ESS4 on the other hand stresses on the need of the project to avoid or minimise risks on community

³⁰World Bank (2017): The World Bank Environmental and Social Framework, Washington DC, International Bank for Reconstruction and Development/The World Bank.

health and safety, that would result from its activities, its equipment and its infrastructure throughout the project cycle. Equally important is ESS10, which recognises the importance of open and transparent engagement between PMT and project stakeholders. For this purpose, a project Stakeholders Engagement Plan (SEP) has been prepared to inform the project stakeholders (i. e. project affected parties and interested parties) on what is transpiring in the project throughout its cycle. Transparent engagement between PMT and Project Stakeholders is an essential element of good national and international practice. It helps in ensuring project sustainability, enhancing project acceptability and making significant contribution to successful project design and implementation.

Like the World Bank Environmental and Social Standards, national laws including the Employment and Labour Relations Act No. 6/ Cap. No. 366 of 2004, the Labour Institutions Act No. 7/ Cap 300 of 2004 and the Rules of 2007 Employment and Labour Relations (Code of Good Practice), G.N No. 42 recognise the importance of protecting labourers. With respect to worker's health and safety, the Occupational Health and Safety Act of 2003 and the Occupational Safety and Health (First Aid and Welfare Facilities) Rules of 2015 by OSHA have provisions meant to protect workers by ensuring that they work under safe and healthy environments. This chapter also has considered issues of Sexual Exploitation and Abuse, which are equally important in the work place.

Consequently, this LMP is meant to identify the main labour requirements and risks associated with the project and to determine the required resources. LMP is a living document which will be reviewed as the project unfolds. The key objectives of LMP include the following, among others:

- To promote Safety and Health at Work sites for hospital, contractors and consultant workers;
- Incorporating labor requirements into the ESHS specifications of the procurement documents and contracts with contractors and supervising firms;
- To promote fair treatment, non-discrimination and equal opportunity for all project workers;
- To protect project workers, including vulnerable workers such as women, persons with disabilities, children, contracted workers, community workers and primary supply workers, as appropriate;
- To prevent the use of all forms of forced Labour and Child Labour;
- To support the principles of freedom of association and collective bargaining of project workers in a manner consistent with National Labour Laws, regulations and ESS2;
- To provide a Grievance Redress Mechanism for project workers to raise their concerns;
- To ensure that the project stakeholders are well informed on the project and its associated risk and impacts.

7.2 Types of Project Workers Employment Required in COVID-19 Project

The project will involve Civil servants from the Ministry of Health, Community Development, Gender, Elderly and Children (MOHCDGEC) and contracted workers. The latter will provide

technical expertise to PMT and the supporting activities such as procurement, safeguards, monitoring and finance. On other hand, construction workers will include firms which will be contracted to install oxygen plants, oxygen supply manifold systems and laboratory equipment in the targeted hospitals.

The project will also involve facilitators and consultants who will provide technical support on: operation and use of laboratory equipment; training of biomedical technicians on production and management of oxygen plants; proper provision of oxygen gas to patients and laboratory staff on diagnosis of COVID-19. It will also involve consultants who will work on project awareness raising and capacity building, preparation of safeguards documents, and provision technical support in procurement, finance and auditing, and evaluation and monitoring of project implementation. As well, consultants will be required in developing guidelines, manuals and operation and maintenance frameworks (O&MF) for newly improved laboratories. In total, the project is anticipated to generate over twenty 50 employments. Some of them (like consultants and contractors) will be employed on short terms while others such as health workers will be employed on permanent basis.

7.3 Procedure to Protect Workers

Workers deserve to be protected from the health and social risks associated with project activities. Such risks include among others: (i) the occupational health and safety issues related to handling of supplies and the possibility that they are not safely used by laboratory technicians and medical crews; (ii) mismanagement of medical waste related to the handling, transportation and disposal of healthcare waste, and PPE disposals; and (iii) the risk of explosion in oxygen plants due to mishandling. WHO has reported that 20% of total general healthcare wastes would be infectious such that improper handling of health care waste can cause serious health problems for workers, the community and the environment. Also, workers and the nearby community have to be protected from Sexual Exploitation and Abuse, especially during the course of project implementation.

In addition, literature on large construction sites in Tanzania has indicated unsatisfactory labour management (ILO, 2005). There are findings showing high casualization of employment which makes provision of contracts to workers nonbinding, characterised by; lack of welfare facilities to casual and temporary labourers (such as drinking water, catering facilities, and sanitary facilities); and inadequate supply of personal protective equipment (including first-aid facilities), training, protective gear, emergency transport and safety officers. Also, cases of underpayment, long working hours without compensation, and indiscriminate termination of employment are reported (ILO, 2005). LMP is needed in order to protect workers and the community from such misfortunes.

In Tanzania, the Employment and Labour Relations Act No. 6 of 2004 comprises of provisions for core labour rights, establishes basic employment standards, and provides a framework for collective bargaining and mechanisms for prevention and settlement of labour disputes. On other hand, the Labour Institutions Act No. 7 provides for the establishment of labour

institutions, legislation, their functions, powers and other matters related to them. Such institutions include Commission for Mediation and Arbitration (CMA); Labour Economic and Social Council (LESCo); Wage Board; Essential Service Committee, Labour Court; and Labour Administration and Inspection. PMT, constructors, consultants and project employees will be made aware of this law and the labour institutions. The project shall, from time to time, consult Tanzania Labour Department for the purpose of raising the awareness of workers on basic employment rights and responsibilities. Before the work begins, every employee will be provided with a valid employment contract by their respective employer. In addition, employees will be required to sign codes of conduct depending on the nature of work they are involved in. Likewise, unskilled labourers' rights will be protected by ensuring that employers observe Section 39 of the Labour Institutions Act No 7 of 2014 on minimum wage for private sectors. In a nutshell, as a requirement to protect workers, employers in this project will be required to;

- Observe employment standards ³¹as stipulated in Employment and Labour Relations Act No. 6 of 2004. Labour standards include, among other, employment contracts that specify the type of contract; variation and flexibility; public holidays, hours of work, night works, overtime, remuneration, deduction, leaves, termination of employment, and general provisions;
- PMT will make employers understand employment standards as per labour law;
- PMT and Labour Department will conduct periodic inspection to see whether consultant and contractors abide by the labour requirements;
- PMT to conduct periodic inspection and maintenance of Oxygen Plants to assure that are intact;
- Stakeholders engagement will be implemented throughout the project cycle to ensure that stakeholders are inform on project stage, involved risks, and available employment opportunities.

7.4 Gender Based Violence/Sexual Exploitation and Abuse

Literature indicates existence of Gender Based Violence in Tanzania. The Tanzania Demographic and Health Survey (2015-16) report shows that 44% of the women aged between 15 and 49 years have ever experienced either physical or sexual violence³². Although implementation of the project will generally have positive impact on communities in terms of creation of employment, there is also possibility of GBV to occur. In some cases, where benefits are introduced within communities and households, community and household relations can shift and raise the potential for GBV and Sexual Exploitation and Abuse (SEA). Such incidences may arise in situations where contractor workers interact with poor communities, where household representatives who receive project benefits are forced to

³¹ Minimum terms and condition of employment as stipulated in the Employment and Labour Relations Act No. 6 of 2004

³² URT (2015-16) Tanzania Demographic and Health Survey and Malaria Indicator Survey, Tanzania National Bureau of Statistics, Dar es Salaam.

surrender the cash to their spouses, where benefits may be used to lure adolescents into unsafe sexual practices, or in cases of forced sexual relationships in return for favours.

This project will not tolerate any forms of gender violence and project's activities will take into account gender considerations as needed. Acts of GBV will include but not limited to; unwelcomed sexual advances, request for sexual favors, verbal or physical conduct of a sexual nature, unacceptable groom which provokes people, and any other form of humiliating, degrading or exploitative behavior. All acts of GBV will constitute grounds for penalties and/or termination of employment. Gross GBV misconducts will be referred to the Police for further legal procedures where appropriate. Other mitigation measures shall include:

- Promptly review of all allegations of unlawful or abusive acts of any personnel involved in the implementation of project activities, take action (or request appropriate parties to take action) to prevent recurrence;
- Providing GBV/SEA requirements in bid documents and signing and adherence to Workers' Code of Conduct;
- Training all construction workers and stakeholders on SEA and sexual harassment responsibilities related to the CoC and consequence for none compliance, ahead of any project related works;
- Awareness raising within the local community and labour force on sexual exploitation and abuse and avenues to report such cases if they arise;
- Establishing and operationalizing GRM whose approach is sensitive to issues of GBV and SEA;
- Map out GBV/SEA service providers in the project areas;
- Community engagement and consultations to include GBV/SEA sensitization topics.

Actions to be taken into consideration in SEP will include:

- tailored mass media messaging incorporating gender considerations; and
- female participation in training activities as well as female representation in emergency management groups and decision-making committees.
- monitoring project performance indicators will be disaggregated by gender, where feasible.

7.5 Prevention of Child Labour

Child Labour is defined by the International Labour Organization as work that deprives children of their childhood (aged 5 -17 years), their potential and their dignity, and that is harmful to their physical and mental development'. Child labor is prevalent in Tanzania where about 2.4 million children were engaging in child labor in Tanzania in 2006³³. Poverty, the fall of education standards, cultural factors (including illiteracy rates among the adult population, and unequal gender relations), desire to search for better life, and cheap labor are some of the reasons for child labor.

³³ Baregu, K. M. (2011). Situational analysis on child labor in Tanzania Mainland and Zanzibar. Washington, D.C.: U.S. Department of Labor, Bureau of International Labor Affairs.

The Tanzanian Employment and Labor Relations Act No. 6 of 2004 prohibits, or place conditions on the employment of children under eighteen years of age, determines the forms of work referred to in sub-section (4) of this Act and provides for the regular revision and updating of the list of hazardous forms of work. Generally, the Act prohibits employment of children, in which based on the nature of activities. Based on this law and the health hazard potential surrounding the project child labor will be restricted in construction sites. Similarly, ESS2 directs PMT to take appropriate measures to protect and address vulnerable people including children. Thus, the project will strictly prohibit all forms of child labour and will constitute all grounds for penalties and/or termination of service. Sensitization of the community on child labour issues will be one of SEP's agendas and contractors' codes of conduct will include the requirements on the same.

7.6 Workers' Health and Safety

As indicated from the very outset, this project is associated with occupational health and safety risks. Most of the activities supported by the project will be provided by health workers, who are civil servants employed by MOHCDGEC. The key risks for them include contamination of COVID-19 and being vulnerable to explosions of oxygen plants. These have potential to happen upon mishandling of the medical supplies used by laboratory technicians and medical crews and exposure of the oxygen plants to high temperature. In addition, mismanagement of medical and health care wastes like PPEs, especially during transportation and their subsequent disposal, expose hospital workers and those involved in waste management to the risk of contracting COVID 19.

The project and PMT in particular will be required to protect workers' health and safety. Frequent awareness raising on existence of risks will be made to protect workers and hospital staff including those working in the laboratory. Apart from provision of appropriate PPEs to the staff and construction workers, the project will be registered with OSHA – Occupation, Safety and Health Regulatory Authority (OSHA). This is important for the authority to conduct periodic inspection of the health and safety measures in the working place. Similarly, the Occupational Safety and Health (First Aid and Welfare Facilities) Rules of 2015 by OSHA will have to be observed strictly.

In addition, the PMT will be required to observe Public Health Act of 2012 particularly on provision requiring consolidating public health through prevention of disease, promotion, safeguard, maintain and protect the health of humans and animals. The project safeguards team will also be required to offer trainings on health and safety in civil works. Where necessary, Oxygen Plant rooms shall be equipped with temperature detection devices in order to prevent them from being exposed to extreme heat. The PMU will develop Emergency Response Plan (ERP) to contain any form of fire explosion. Hospitals will be equipped with fire extinguishing equipment. Fire safety plans including designated and trained fire wardens, emergency evacuation procedures will be provided. For efficiency implementation of ERP drills involving of key personnel will be regularly conducted. In addition, contractors and consultants will be required to provide their staff with health insurance policy.

Similarly, the project will ensure the application of OHS measures as outlined in WHO guidelines which include:

- Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected, issued on March 19, 2020
- Infection prevention and control at health care facilities (with a focus on settings with limited resources), issued in 2018
- Laboratory biosafety guidance related to coronavirus disease 2019 (COVID-19), issued on March 18, 2020
- Infection Prevention and Control for the safe management of a dead body in the context of COVID-19, issued on March 24, 2020
- Coronavirus disease (COVID-19) outbreak: rights, roles and responsibilities of health workers, including key considerations for occupational safety and health, issued on March 18, 2020
- Rational use of personal protective equipment for coronavirus disease 2019 (COVID-19), issued on February 27, 2020
- Water, sanitation, hygiene and waste management for COVID-19, issued on March 19, 2020
- Safe management of wastes from health-care activities, issued in 2014.

These predetermined measures constitute procedures for entry into health care facilities, including minimizing visitors and undergoing strict checks before entering; procedures for protection of workers in relation to infection control precautions; provision of immediate and ongoing training on the procedures to all categories of workers, and post signage in all public spaces mandating hand hygiene and personal protective equipment (PPE); ensuring of adequate supplies of PPE (particularly facemask, gowns, gloves, handwashing soap and sanitizer); provision of well stocked first aid kits and first aid training to all site workers; contractor shall develop, adopt and sensitize all site workers on Standard Operating Procedures guiding working in heights, lifting operations, driving under the projects, excavations, hazardous materials, machines and maintenance, health and hygiene (as applicable to the sub-project); Each active work site to have an OSHA trained and certified first-aider; and overall ensuring of adequate OHS protection in accordance with General EHSGs and industry specific EHSGs and follow evolving international best practice in relation to protection from COVID-19. Also, the project will regularly integrate the latest guidance by WHO as it develops over time and experience addressing COVID-19 globally.

7.7 Grievance Management Procedures for Workers and Contractors

The purpose of grievance management is to address the legitimate concerns of the project affected parties, entities, and or interested parties whose interests are compromised in the course of implementing the project. Such complaints might be related to occupational health and safety emanating from project activities or mismanagement of medical wastes leading to public health hazards: Gender Based Violence and /or Sexual Exploitation and Abuse. Others can be complaints from contractors and consultant workers, including cases of accidents, underpayment of laborers, long working hours without compensation; and lack of welfare

facilities to casual and temporary labourers (such as inadequate supply of personal protective equipment including provision of first-aid facilities, training, protective gear, emergency transport and safety officers).

GRM is therefore meant to provide a formal avenue for the affected person/s, groups or interested stakeholders to formally have their project-related concerns addressed. Project SEP explains in detail the mechanism in place, including the structure of GRM, intake channels for grievances (including submission of anonymous complaints), procedures for resolution of grievances, appeal process, mechanism for informing the complainant, etc., that will be put in place to ensure timely, effective and efficient resolution of complaints and grievances that satisfies all parties involved. Health workers and project construction workers will be also be encouraged to register any complaints or concerns that they may have related to the project using contact numbers provided in the GRM. A separate avenue will be put in place in liaison with contractor Human Resource personnel to manage received workers grievances.

7.8 Stakeholder Engagement Plan

The project has developed a separate Stakeholder Engagement Plan (SEP) which explains in details the grievance management mechanism, including the structure of the GRM, intake channels for grievances (including submission of anonymous complaints), procedures for resolution of grievances, appeal process, mechanism for informing the complainant, etc., that will be put in place to ensure timely, effective and efficient resolution of complaints and grievances that satisfies all parties involved.

Chapter Eight

Implementation Arrangements for Environmental and Social Issues, Responsibilities and Capacity Building

8.1 Implementation Arrangements Environmental and Social Issues

The overall in-charge of Environmental and Social safeguards implementation for the COVID 19 Pandemic Emergency Financing Facility Project will be the environmental and social safeguard Experts for the PMT at the MoHCDGEC. The Environmental and Social Safeguard Experts based at the PMT will be responsible for managing and monitoring of all safeguard interventions at all levels of project implementation. In healthcare facilities and hospitals designated environmental and social officers will be appointed to foresee all E&S issues for the project. Environmental and Social Experts at the PMT as well as those designated at healthcare facilities and hospitals will ensure that Consultants for the preparation of ESIA as well as those responsible for project implementation such as contractors implement adequately all safeguard requirements as specified in safeguard documents such as ESMF, ESIA and ESMP, and will receive reports from the contractor and/or Consultant works. The E&S Experts with the PMT will share all the reports received from healthcare facilities and hospitals with the WB to ensure that all project activities are implemented as planned and in compliance with the WB ESF as well as country laws and regulations.

8.2 Capacity Assessment of the Implementing Entity

MoHCDGEC is anticipated to have experience in implementing World Bank-financed projects because currently the Ministry is implementing an ongoing project namely – East Africa Public Health Laboratory Network Project (EAPHLNP, P111556, 2010-2020), which is supporting strengthening of laboratory diagnosis capacity, and Strengthening Primary Health Care for Results Program (P152736, 2015-2021), which focuses on provision of primary health care services and plays a vital role in disease outbreaks detection, prevention and response. In these projects, the MoHCDGEC has been able to manage environmental and social risks of the project despite a few challenges such as lack of clear procedures for management of environmental and social risks, lack of attention to social safeguards, and inadequate budget allocation for environmental and social supervision. The MoHCDGEC has also demonstrated a capacity to adapt, learn and improve at each stage and has designated a focal person for management of environmental and social risks. All the regional referral hospitals have at least one Environmental Health Officer. The MoHCDEC's Environmental and Social Focal point person who will be part of the PMT will be responsible for environmental and social management of the project. The MoHCDGEC needs to implement the following risk mitigation measures: (i) adopt a systematic way to address, document, manage and track grievances and concerns related to projects; and (ii) arrange training for assigned persons who are tasked with overseeing environmental and social risk management in the project to understand the ESMF requirements and its compliance.

8.3 Capacity Building Plan

The proposed areas of training should be based on the topics outlined in **Table 2** and the training material should be prepared to suit the three different levels. The trainings are mainly targeting management and staff of the MoHCDEG, PMT, staff and employees from healthcare facilities as well as hospitals where the project activities will be implemented and all other necessary stakeholders as will be identified during implementation. There will also be sensitization of community leaders on how to handle issues of E&S caused by construction workers and on GRM. Construction staff will be trained onsite by safeguards specialists from the contractor/consultant team. As such the training needs will be indicated in the specific ESMPs. The cost of training will be determined during implementation. Overall the budget for training and implementation of ESMF and other safeguard document is estimated to be **300,000USD**.

Table 2: Issues to consider for training, target group and duration during implementation of capacity building plan

Type of training, target group and training duration	Training Topic
Sensitization of top level management staff of the Ministry of Health and Social Welfare - 1 Day	-Introduction to the Regional Health Systems Strengthening and COVID-19 Support Project -Introduction to ESMP and ICWMP for the Regional Health Systems Strengthening and COVID-19 Support Project -Relevant Tanzania environmental legislation and World Bank ESF; and compliance requirements -Importance of environmental management and health care waste management, -Importance of approving and supporting the needs and activities of front line staff to implement environmental management activities and training programmes
Training to staff of the Ministry of Health and Social Welfare - 2 days	-Introduction to the Regional Health Systems Strengthening and COVID-19 Support Project -Relevant country environmental legislation and World Bank ESF and compliance requirements -Importance of environmental management and health care waste management -Environmental, social and economic impacts of the Regional Health Systems Strengthening and COVID-19 Support Project and on health -Introduction to ESMP and ICWMP for the Regional Health Systems Strengthening and COVID-19 Support Project and the HCWMP <ul style="list-style-type: none"> ○ role of various players in implementation and monitoring of the EMP and HCWMP; ○ conducting or supervising the screening process; ○ carrying out or supervising the Environmental Review process; ○ carry out or supervising Limited Environmental Assessments; ○ Elements of a full EIA and EA ○ selecting and supervising an appropriate contractor to do a full EIA ○ monitor implementation of the EMP by the civil works contractor ○ monitoring implementation of the HCWMP

	<ul style="list-style-type: none"> ○ preparing sub-project interim and final evaluation reports; and -General coordination of laboratory environmental work and Health Care Waste Management activities
<p>Training of staff from healthcare facilities and hospitals including district health officers – 3 Days</p>	<p>-Introduction to the Regional Health Systems Strengthening and COVID-19 Support Project</p> <p>-Relevant environmental legislation and World Bank Safeguards and compliance requirements</p> <p>-Importance of environmental management and Health Care Waste Management, -Standards and procedures for managing healthcare waste in all regional and district hospitals</p> <p>-Environmental, social and economic impacts of the Regional Health Systems Strengthening and COVID-19 Support Project and on health</p> <p>-Introduction to ESIA and EMP for the Regional Health Systems Strengthening and COVID-19 Support Project</p> <ul style="list-style-type: none"> ○ role of various players in implementation and monitoring of the EMP; ○ conducting or supervise the screening process; ○ carrying out or supervising the Environmental Review process; ○ carrying out or supervising Limited Environmental Assessments; ○ Elements of a full EIA ○ selecting and supervising an appropriate contractor to do a full EIA ○ monitoring implementation of the EMP by the civil works contractor ○ preparing sub-project interim and final evaluation reports; and ○ monitoring laboratory environmental work and Health Care Waste Management activities
<p>Sensitize representatives and leaders of community groups (who will in turn relay the message to their communities) – 3 Days</p>	<p>-Introduction to the Regional Health Systems Strengthening and COVID-19 Support Project and the HCWMP</p> <p>-Community group roles in achieving environmental sustainability;</p> <p>-Linkages between environmental and social impacts and health;</p> <p>-Gender, Nutrition, COVID-19, HIV and AIDS and the Regional Health Systems Strengthening and Support Project</p> <p>-Mitigation measures for the negative impacts of the Regional Health Systems Strengthening and COVID-19 Support Project</p> <p>-Implementation and monitoring of the EMP and the Health Care Waste Management Plan</p>

Annex 1: Screening Form for Potential Environmental and Social Issues

The evaluator should undertake the assignment after;

- Gaining adequate knowledge of baseline information of the area
- Gaining knowledge of proposed project activities for the area
- Having been briefed/trained in environmental and social screening.

The form is to be completed with the consensus of at least three people, knowledgeable of the Screening processes (such as the Environmental Management Officers)

Name of project:

Name of Institution:

Contact details of the person who is responsible for filling out this form

Name:

Title;

Telephone Number:

Fax number:

E-Mail address:

Date:

Signature:

1. Project Description

Please provide information on the type and scale of the project (project area, area of construction buildings, access roads, and landscape), waste generated (solid, liquid and air).

2. The Natural Environment

a) Describe the vegetation/trees in/adjacent to the project area.

.....

b) Estimate and indicate where vegetation/trees might need to be cleared

.....

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

YesNo

i. Natural Forests Yes No

ii. National Parks Yes No

Iii. Rivers Yes No

iv. Lakes Yes No

v. Wetlands (swamps, seasonally inundated areas)

YesNo

vi. Habitats of endangered species for which protection is required under Tanzania laws And/or international agreements

Yes No

vii. Others (describe). Yes No

3. River Ecology

Is there a possibility that, due to the installation of structures, such as houses and water system, the river ecology will be adversely affected? Attention should be paid to water quality and quantity, the nature, productivity and use of aquatic habitats and variations of these over time.

Yes.....No.....

4. Protected Areas

Does the project component area (or components of the project) occur within/adjacent to any Protected areas designated by government (national park, natural reserve, world heritage site Etc.)?

Yes.....No.....

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

Yes.....No.....

5. Geology and Soils

Based upon visual inspection or available literature, are there areas of possible geologic or soil

Instability (erosion prone, landslide prone, subsidence prone)?

Yes.....No.....

Based on visual inspection or available literature, are there areas that are at risk of a large-scale

Increase in soil leaching and/or erosion?

Yes.....No.....

6. Landscape/aesthetics

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

Yes.....No.....

7. Invasive Plant species along feeder roads routes

Is the sub project likely to result in the spread of invasive plant species (along feeder roads)?

Yes.....No.....

8. Historical, Archaeological or cultural heritage sites

Based on and local knowledge available source, and after consultation with local authorities and/or observations, could the project component alter any historical, archaeological or cultural heritage sites or require excavation near these sites?

Yes.....No.....

9. Resettlement and/or Land Acquisition

Will involuntary resettlement, land acquisition, or loss of access to land as defined by World Bank ESS5 be caused by project component implementation?

Yes.....No.....

10. Loss of Crops, Fruit trees and Household Infrastructure

Will the project component result in the permanent or temporary loss of crops, fruit trees and household infrastructure?

Yes.....No.....

11. Noise pollution during construction and Operations

Will the operating noise level exceed the allowable decibel level for the zone?

Yes.....No.....

12. Will the project have adverse impacts on natural habitats that will not have acceptable Mitigation measures according to ESS 6Natural Habitats?

Yes.....No.....

13. Public Consultation Process

Briefly describe the sub project consultation process in terms of when consultations took place, where they took place, who participated and what criteria were used to select participants in this process that were the contributions from the participants, was it recorded and were the contributions from participants included in decision making, (use separate sheet if necessary).

.....

14. Did the consultation and participatory process described in 13 above involve the following

Social/ vulnerable groups?

Women: Yes.....No.....

The elderly: Yes.....No.....

Widows/widowers: yes.....No.....

Orphans: Yes.....No.....

15. Will the groups (in 14 above) have access to and benefit from this project component?

Yes.....No.....

Annex 2: Screening Criteria Provided in the Second Schedule under Regulation 9 (1) of the Tanzania ESIA and EA Amended Regulations of 2018

These screening criteria are meant to demonstrate how the Tanzanian regulation screen projects to decide on the risks levels and the possible safeguard tool to be prepared. These criteria are here for comparison purposes and will be used to supplement screening criteria already outlined in **Annex 1**.

The following shall be screening criteria to be used for purposes of these Regulations:
The Environmental Management (Environmental Impact Assessment and Audit)
(Amendment) Regulations

1. The project will not substantially use natural resources in a way that pre-empts the use or potential use of that resource for any other purpose.
2. Potential residual impacts on the environment are likely to be minor, of little significance and easily mitigated.
3. The type of project, its environmental impacts and measures for managing them are well understood in Tanzania.
4. Reliable means exist for ensuring that impact management measures can and will be adequately planned and implemented.
5. The project will not displace significant numbers of people, families or communities.
6. The project is not located in, and will not affect, any environmentally sensitive areas such as:
 - (a) National parks;
 - (b) Wetlands;
 - (c) Productive agricultural land;
 - (d) Important archaeological, historical and cultural sites;
 - (e) Areas protected under any law;
 - (f) Areas containing rare or endangered flora or fauna;
 - (g) Areas containing unique or outstanding scenery;
 - (h) Mountains or developments on or near steep hill-slopes;
 - (i) Dry tropical forests, for instance brachystegia woodlands;
 - (j) Development near lakes or its beaches;
 - (k) Development providing important resources for vulnerable groups such as fishing communities along the lake-shore;
 - (l) Development near high population concentrations or industrial activities where further development could create significant environmental problems; and
 - (m) Prime ground-water re-charge areas or areas of importance for surface run off of water.
7. The project type shall not result in:
 - (a) Policy initiatives which may affect the environment such as changes in agricultural pricing subsidies or the tobacco liberation;
 - (b) Major changes in land tenure; or
 - (c) Changes in water use through irrigation, drainage promotion or dams, changes in fishing practices.
8. The project shall not cause:
 - (a) Adverse socioeconomic impact;
 - (b) Land degradation;
 - (c) Water pollution;
 - (d) Air pollution;
 - (e) Damage to wildlife and habitat;
 - (f) Adverse impact on climate and hydrological cycle; and

The Environmental Management (Environmental Impact Assessment and Audit)
(Amendment) Regulations.

(g) Creation of by-products, residual or waste materials which require handling and disposal in a manner that is not regulated by existing authorities.

9. The project shall not cause significant public concern because of potential environmental changes. The following are guiding principles:

(a) is the impact positive, mainly benign or harmful;

(b) What is the scale of the impact in terms of area affected numbers of people or wildlife;

(c) What is the intensity of the impact?

(d) What will be the duration of the impact?

(e) Will there be cumulative effects from the impact;

(f) Are the effects politically controversial?

(g) Have the main economic, ecological and social costs been quantified;

(h) Will the impact vary by social group or gender; and

(i) Is there any international impact due to the proposal projects?

10. The project shall not necessitate further development which is likely to have a significant impact on the environment.

Annex 3: List of Stakeholders Consulted and Issues Discussed

Ministry of Health, Community Development, Gender, Elderly and Children (MOHCDGEC)

S/N	Name of the Participant	Name of the organization and Contact	Issues and comments on the project	How the issue have been accommodated

Annex 4: Potential Labour Risks and Mitigation Measures

Potential Risk as Identified in ESMF	Type of Worker Likely to be affected	Magnitude of the Potential Risk	Mitigation measures

Annex 5: Infection Control and Waste Management Strategic Plan (ICWMP)

Although several isolated attempts have been made to improve the situation in some of the medical institutions, the management of health – care waste in Tanzania remains below minimum international standards, resulting in significant risks to health – care workers, patients, community and the environment. The hygiene conditions linked to the handling and disposal of HCW cannot guarantee a satisfactory control on the transmission of nosocomial infections within the HCFs.

The backstopping and monitoring capacities of the Central, Regional and District Authorities to support the medical institutions remain limited. Furthermore, the legal framework is not sufficiently developed and enforced. Direct and indirect costs resulting from this situation are difficult to estimate but are certainly significant.

A standardized health- care waste management system must be developed for the country. The health – care facilities must be provided with appropriate equipment to implement safer procedures. The differentiation of the health – care waste streams within the medical institutions of Tanzania must be progressively upgraded taking into consideration the Tanzania context.

The Government has already formulated the National Healthcare Waste Management Policy Guidelines and Standards more broadly to prevent and control infections and improve hygiene in the hospitals. It is of the utmost importance that this strategic plan will support the Health Authorities and Healthcare waste Stakeholders in implementing adequate standards for the safe management of health – care waste. Among many the National Strategic Plan for Healthcare Waste (2018 -2022) will focus on;

- The standardization of the current health-care waste management practices with the application of on-going management and monitoring procedures which will comprise of
 - i. The establishment of annual health-care waste management plans to progressively lead the medical institutions and the administrative authorities to consider health-care waste management a routine issue and reinforce progressively their organizational capacities;
 - ii. The designation of a Health-Care Waste Management Officer in large health facilities who should be given the responsibility to operate and monitor the health-care waste management system on a daily basis;
 - iii. Standardised segregation procedures should be set-up in all Tanzania HCFs by implementing a three bins systems that should be systematically associated with a colour coding and labelling procedure;
 - iv. The application of a strict procedure for the most hazardous waste generated in medical institutions such as chemical pre-treatment of the highly infectious waste in a solution of sodium hypochlorite in concentrated form and a centralized disposal of the Cytotoxic and Hazardous Pharmaceutical Waste supervised by the health authority;
 - v. Use of environmentally sound technologies for specific treatment/disposal of healthcare waste according to the type and the location of the health-care facility where the waste is generated. This includes use of Autoclave machine, Centralized medical waste treatment system and recycling of waste materials;
 - vi. Priority areas for inclusion in annual plan and budget allocation at all levels.
- The review of the legal framework and the reinforcement of the existing rules and regulatory documents.
- Implementation of the best practices for the medical staff to ensure hygiene and control occurrence of nosocomial infections in a healthcare facility.
- The development of on-going awareness and training programmes as well as the review of the curricula of medical and paramedical staff.

- The involvement of private sector is crucial in the management of the health-care waste at all levels.

Therefore, this National Strategic Plan should be implemented over a five-year period (2018-2022) to progressively upgrade the current health-care waste management practices and target objectives at all levels of the Health Services for an approximate initial cost of 6.6 billion TSH (3.3 million USD). The National Steering Committee on Health Care Waste Management should steer up the implementation process to ensure the co-ordination and the supervision of the Health-Care Waste Management Plan at all levels.

STRATEGIC PLAN IMPLEMENTATION MATRIX

Table 3: Strategic Plan Implementation Matrix

Strategic Objective	Activities	Performance indicators	Responsible	Assumption/risk
Priority Area 1: Policy guidelines, Standards and Regulations				
Review and disseminate HCWM policies, Regulations, Guidelines and standards by 2021	Review HCWM policies, Regulations, Guidelines, and standards	Number of HCWM documents reviewed	MOHCDGE	Inadequate funds
	Print 7,000 copies each of policies, regulations and standards	Number of printed copies available	MOHCDGEC, LGAs	Inadequate funds
	Disseminate policies, guidelines, standards and regulations in all regions	Number of dissemination session and reports conducted to RHMTs and CHMTs	MOHCDGEC, LGAs	Delayed release of funds
	Conduct 30 advocacy meetings to decision makers on policies, regulations and standards	Number of advocacy meetings conducted and reports	MOHCDGEC, LGAs	Delayed release of funds.
Priority Area 2: Infrastructure, equipment and supplies and treatment and disposal options				
Improve infrastructure, equipment and supplies and treatment and disposal options for HCWM by June 2021	Rehabilitate HCWM storage bays for all regional referral hospitals and district hospitals	Number of HCWM storage bays rehabilitated	MOHCDGEC, LGAs	Delayed release of funds.
	Scale up non-incineration technologies in all regions and districts	Number of non-incineration technologies available	MOHCDGEC, LGAs	Delayed release of funds.
	Introduce centralized HCW treatment options in all regions	Number of regions with centralized HCWM treatment options	MOHCDGEC, LGAs	Delayed release of funds

Strategic Objective	Activities	Performance indicators	Responsible	Assumption/risk
	Construct standard placenta pits at all health facilities	Number of standard placenta pits	MOHCDGEC, LGAs	Delayed release of funds.
	Construct waste water treatment system in all regional referral hospitals	Number of functional waste water treatment systems	MOHCDGEC, LGAs and MOWI	Delayed release of funds
	Construct placenta biogas system in all regional referral hospitals	Number of functional placenta biogas system	MOHCDGEC, LGAs and NEMC	Lack of funds
	Promote best affordable environmental technologies for all rural healthcare facilities	Number of best technologies constructed	MOHCDGEC, LGAs	Lack of funds
Increase accessibility of equipment and supplies for HCWM by June 2021	Procure 30 standard trucks for healthcare waste management at all regions	Number of standard trucks	MOHCDGEC, LGAs	Delayed release of funds.
	Procure standard colour coded waste bins and bin liners for HCWM in HCFs	Number of standard color coded and bin liners	MOHCDGEC, LGAs	Delayed release of funds.
	Procure at least 1 standard truck for HCWM for each district hospitals	Number of trucks purchased	MOHCDGEC, LGAs	Delayed release of funds.
	Sensitize all National, Zonal, Specialized and councils hospitals to procure essential supplies for HCWM	Number of institutions with essential supplies for HCWM	MOHCDGEC, LGAs	Delayed release of funds.
Priority Area 3: Institution Capacity				
Strengthen the institution capacity on HCWM by 2021	Conduct needs assessment for HCWM in all zones	Report of needs assessment	MoHCDGEC/ LGAs Private sectors	Financial constrains Inadequate trained human resource
	Review HCWM training curricula for pre service personnel	Reviewed curricula	MoHCDGEC/ LGAs Private sectors	Inadequate funds Inadequate trained human resource
	Conduct training on HCWM to in-service personnel	Number of in-service personnel trained	MoHCDGEC/ LGAs Private sectors	Inadequate funds Inadequate trained human resource

Strategic Objective	Activities	Performance indicators	Responsible	Assumption/risk
	Conduct supportive supervision on HCWM in all regions	Reports	MoHCDGEC/ LGAs Private sectors	Inadequate funds Inadequate expertise/personnel
	Develop and run short courses in HCWM to healthcare workers	Number of short courses developed Number of short courses conducted	MoHCDGEC/ LGAs	Inadequate funds Inadequate trained human resource
	Conduct training to healthcare workers on infection prevention and control in all districts	Number of healthcare workers trained	MoHCDGEC/ PORALG	Inadequate funds Inadequate training materials
	Enhance collaboration among institutions dealing with HCWM	MoU and meeting reports	MoHCDGEC/ LGAs	Inadequate trained human resource
	Carry out periodic inspections of HCW handling and practices in all HCFs	Number of HCFs inspected Reports	HCFs In-charge LGAs	Inadequate funds Inadequate trained human resource
	Landscaping and beautification of all HCFs by 2021	Number of facilities beautified	HCFs In-charge	Inadequate funds Inadequate trained human resource and expertise
Priority Area 4: Awareness and commitment among decision makers				
Conduct advocacy to raise awareness and commitment among decision makers in HCWM by 2021	Identify priority issues to communicate regarding safe HCWM	Number of priority issues on HCWM identified.	MOHCDGEC , LGAs Private sector Media companies	Delayed release of funds. Media companies commitment
	Conduct advocacy to decision makers.	-Number of meetings conducted and reports	MOHCDGEC , LGAs Private sector	Delayed release of funds. Availability of targeted audience
	Develop HCWM communication package/tools	Communication tools developed	MOHCDGEC, LGAs Private sector	

Strategic Objective	Activities	Performance indicators	Responsible	Assumption/risk
		Number of interpersonal and media channels identified	Media companies	
	Disseminate and distribute IEC materials to public places and HCFs	Number of IEC material disseminated and distributed	MOHCDGEC, LGAs Private sector Potential supporters	Delayed approval and release of funds.
Priority Area 5: Resources for HCWM				
Provide adequate resources for efficiency in HCWM by 2021	Conduct sensitization meetings to stakeholders in all zones	Number of meetings conducted and reports	MOHCDGE, PORALG Private sector	Competing priorities for resources
	Conduct advocacy meetings for HCWM agenda with stakeholders at all levels ()	Number of meetings conducted and reports	MOHCDGE/ LGAs Private sector	Inadequate funds Inadequate human resource
	Dissemination of HCWM Plan of Action	Number of meetings and reports	MOHCDGEC Private sector	Inadequate funds
	Fund raising meeting for HCWM interventions	Number of meetings and reports	MOHCDGEC Private sector LGA's	Inadequate funds and Political will
	Conduct social marketing for recyclable materials from HCF	Number of customers involved	MOHCDGEC, PORALG, HCFs Private sector	Inadequate funds Traditional culture
Priority Area 6: Best Environmental Practices				
Promote best practices on HCWM stream by 2021	conduct orientation through demonstration of best practices to HCF in all zones	Number of oriented HCF's and reports	MOHCDGEC, PORALG HCFs Private sector	Inadequate funds
	mapping of best practices on HCWM in public and private health facilities	Number of facilities with BEP and reports	MOHCDGEC, PORALG Private sector	Inadequate funds Inadequate trained human resource
	Conduct experience sharing on HCWM among HCF.	Number of forums conducted and reports	MOHCDGEC, PO RALG Private sector	Inadequate funds
	conduct best practice competition on HCWM to health facilities	Number of competition sessions conducted and reports	MOHCDGEC, LGA's	Inadequate funds

Strategic Objective	Activities	Performance indicators	Responsible	Assumption/risk
	Development of IEC materials	Number of IEC materials	MOHCDGEC	Inadequate funds and trained human resource
	Institute vector control measures in all HCFs	Number of HCFs with vector control measures	MOHCDGEC /LGAs	Lack of Funds
	Promote Water, sanitation and hygiene measures in all HCFs	Number of HCFs with improved water and sanitation facilities	MOHCDGEC /LGAs	Lack of funds
	Conduct cleanliness completion among P&P health facilities	Number of champion hospitals	MOHCDGEC /LGAs	Lack of funds
Priority Area 7: Public Private Partnership				
Promotion of PPP in HCWM by 2021.	Utilize effectively PPP on technical and financial resources to improved HCWM	Number of PPP involved	MoHCDGEC/ LGA's Private sector	Inadequate funds and Political will
	Promote collaboration with the private HCFs and other private health service providers	Number MoU and meeting reports	MoHCDGEC/ LGA's Private sector	Inadequate funds
	Conduct supportive supervision and monitoring.	Supervision and monitoring reports	MoHCDGEC/ LGA's Private sector	Inadequate funds and skilled human resource
Priority Area 8: Monitoring, Evaluation and Operational research (OR)				
Conduct operational research on HCWM by 2021	Identify operational problems and develop research agenda on HCWM	Priority research agenda identified	MoHCDGEC/ LGA's Private sector Research Institution	Inadequate funds and skilled human resource
	Promote collaboration with research and training institutions	Number of institutions collaborating	MoHCDGEC/ LGA's Private sector Research Institution	Inadequate funds
	Carry out operational research	Numbers of operational research conducted and reports	MoHCDGEC/ LGA's Private sector Research Institution	Inadequate funds and skilled human resources
Strengthen monitoring and evaluation system for HCWM by 2021	Conduct baseline assessment for HCWM country wide	Baseline assessment reports	MOHCDGEC /LGAs/Private	Inadequate funds
	Develop HCWM data management registers	Registers in place	MoHCDGEC/ LGA's Private sector	Inadequate funds and skilled human resources

Strategic Objective	Activities	Performance indicators	Responsible	Assumption/risk
	Conduct training sessions on data management registers to all healthcare workers	Number of sessions and reports	MoHCDGEC/ LGA's Private sector	Inadequate funds and skilled human resources
	Appoint data managers for monitoring of HCWM information system in all HCFs	Data managers appointed	MoHCDGEC/ LGA's	Inadequate human resource
	Operationalize NS-MIS for HCWM parameters	NS-MIS integrated and operationalized	MoHCDGEC/ LGA's	Inadequate funds and skilled human resource
	Integrate HCWM data into the national HMIS	HCWM data integrated	MoHCDGEC/ LGA's	Inadequate funds and skilled human resource

Monitoring indicators

Table 4: Strategic Plan Monitoring Indicators

<i>Priority 1: Dissemination of healthcare waste management policies, regulations, guidelines and standards.</i>		
Strategic Objectives	Specific Objectives	Indicators
Policies, Regulations, Guidelines and Standards of HCWM to be disseminated by June/2021.	Print 20,000 policies, regulations and standards by June/2021.	Number of policies, regulations, and standard printed.
	Distribute 20,000 policies, regulations, guidelines and standards to all levels of healthcare facilities by June/2021.	Number of policies, regulations, and standard printed and distributed.
	Orient 27,600 health service providers on policies, regulations and standard by June/2021.	Number of health service providers oriented.
	Conduct 164 advocacy meetings to key political leaders on policies, regulations and standards by June 2021.	Number of advocacy meetings conducted.
<i>Priority Area 2: Improvement of infrastructure, equipment and supplies for HCWM</i>		
Strategic Objectives	Specific Objectives	Indicators
Infrastructure for HCWM to be improved by June, 2021.	Renovate 1500 Storage bays of healthcare waste at health facilities by June 2021	Number of storage bays improved.
	Rehabilitate 1000 existing storage structures at health facilities June 2021	Number of structures rehabilitated.

	Construct 2500 structures for installation of autoclaves for healthcare waste treatment at health facilities by June 2021.	Number of structures for installation of autoclaves constructed.
	Rehabilitate 1000 existing incinerators for treatment of healthcare wastes at health facilities by June 2021.	Number of incinerators rehabilitated.
	Construct 2000 standard placenta pits at health facilities by June 2021.	Number of placenta pits constructed.
Accessibility and availability of equipment and supplies for HCWM to be improved by June, 2021.	Procure and purchase 138 special/standard trucks for healthcare waste management by June 2021.	Number of trucks purchased
	Procure and purchase 100,000 colour coded containers and other supplies for healthcare waste management by June 2021.	Number of colour coded containers and other supplies purchased.
	Distribute 100,000 colour code containers and other supplies to health facilities by June 2021.	Number of colour coded containers and other supplies distributed.
Priority Area 3: Capacity building and training on HCWM		
Strategic Objectives	Specific Objectives	Indicators
Capacity building and training strengthened by 2021	To conduct needs assessment for HCWM training in 8 zones	Number of assessment conducted per zone
	To review HCWM contents for pre-service personnel	Module for HCWM available
	To review HCWM contents in-service personnel	Number of Training manual prepared
	To conduct training in Infection Prevention/HCWM to in-service personnel in seven zones	Number of in-service personnel trained
	Conduct supportive supervision on technical support and mentoring among HCWM implementers in 8 zones	Number of supervision visit on technical support implemented per zone
	To develop and run short course in HCWM	Number of short courses developed
Priority 4: Advocacy to solicit political and leadership commitment in HCWM		
Strategic Objectives	Specific Objectives	Indicators
To conduct advocacy to political leaders to obtain influence on their decisions on HCWM	Conduct a situational analysis on HCWM to indicate magnitude of the problem.	Situational analysis report
	Conduct advocacy to impart knowledge at managerial level on problems associated with improper HCWM (economic,	Advocacy report

	social and environmental problems)	
	Identify various options for solutions with cost implications	Technical and financial report on various options for solutions
	Propose/Suggest the appropriate option basing on enviro-care, economical and sustainability	Technical report on enviro-care, economical and sustainability for HCWM
Priority Area 5: Resources Mobilization for efficiency HCWM		
Strategic Objectives	Specific Objectives	Indicators
Adequate resources for efficiency HCWM available by 2021	Conduct stakeholders meetings at 7 zones	Number of stakeholders meeting conducted
	Proposal development (desk work)	Number of proposal developed
	Conduct advocacy meetings for HCWM agenda at national level (DPs, NSSC, TWG, THTWG-HCW; MoHCDGEC, MoEd, MOWI, Media, VPO-Environment, NEMC	Number of advocacy meeting; number of participants/stakeholders involved;
	Dissemination of HCWM Plan of Action	Number of dissemination meeting conducted
	Fund raising meeting	Report of fund raising reported and presented.
	Social marketing (for recyclable materials from HCF)	Number of stakeholders buy in from selling
Priority Area 6: Promotion of best practices in HCWM		
Strategic Objectives	Specific Objectives	Indicators
Best practices in HCWM practiced by 2021	To conduct orientation of best practices to HCF in 7 zones	Number of orientation made per zones; or Best practice areas identified and utilized
	To assess best practices performance on HCWM to public and private health facilities in 7 zones	Number of identified best practice for public and private HFs per zones
	To conduct best practice competition on HCWM to health facilities	Number HFs participated
	To conduct experience sharing and forums on HCWM performance among HCF in 7 zones	Number of experience meetings and forums conducted per zone
	Development of IEC materials	Number and type of IEC materials developed and distributed per zones
Priority Area7: Strengthening PPP in HCWM		
Strategic objectives	Specific objectives	Indicators

To encourage PPP in HCWM	Leverage PPP on technical and financial resources alongside improved HCWM.	Technical and financial report
	Promote, oversee and monitor PPP initiatives.	Monitoring report
	Undertake collaboration with the private HCFs and other private health service providers – such as contracting or out-sourcing, leases, concessions, social marketing, franchising mechanism and provision of incentives in HCWM (e.g health commodities, or technical support at no cost).	PPP report
	Encourage private sector to invest in HCWM in rural and under-served areas	PPP report
	Establish supportive supervision and monitoring visits involving public and private care providers with adequate feedback on HCWM.	Supportive supervision and monitoring report

Priority Area8: Strengthening Monitoring, Evaluation and Operation research for HCWM

Strategic Objectives	Specific Objectives	Indicators
To conduct baseline, mid - term and end term review of the HCWM Plan	Conduct assessment of the existing situation to ensure proper handling during: <ul style="list-style-type: none"> - segregation, - storage, - collection, - transportation, - treatment and - disposal procedures of waste are being followed 	Checklist and HCWM facility report
	Conduct review of key indicators for HCWM and disseminate findings	Review and dissemination report
	Evaluate the uptake of non-incineration technologies in HCFs	Evaluation report
	Carry-out monitoring of hand hygiene practices using WHO protocol	Monitoring report

	Carry-out monitoring of the availability and use of PPEs	Availability of PPEs, use of PPEs by staff and HCF report
	Carry out studies on incinerator emissions in HCFs.	Study report
To build and strengthen capacity for HCWM	Conduct training of healthcare workers on infection transmission and control	Training report and list of participants
	Provide personal protective equipment	PPEs delivery report
	Establish effective occupational health program that includes: <ul style="list-style-type: none"> - immunization, - Post-exposure prophylactic treatment, and - Medical surveillance 	HCF's Occupational health report
	Conduct training on M&E tools to the HCFs (tracking tools, facility audit, IPC checklist)	Training report
	Enhance collaboration between research institutions with other stakeholders	Collaboration report
	HCW incident and accident reporting	PEP report registered
	Identify Land use Plan for offsite HCW disposal	Landfill site available
	Plan for HCFs drainage and waste water management system	Functional drainage and waste water management system available
	Provide safe and adequate water	Availability of safe and adequate water
	Plan for the control of livestock and wildlife in HCF	Availability of fencing/barriers and control report
	Plan for food safety and security	Food safety and security report
	Plan for vector and vermin control	Vector and vermin control report

	Planned landscaping and beautification	HCF landscaped and beautified report
	Review and disseminate M&E plan and tools for HCWM	Dissemination report
	Integrate HCWM indicators into national HMIS	HCWM indicators incorporated in the National HMIS
	Carry out periodic inspections of HCW generation, segregation, collection, treatment and disposal in all functional units	Inspections report on HCW generation
To conduct operational research on HCWM	Identify operational problems and develop research agenda on HCWM	Availability of research agenda items
	Carry out operational research to address the identified problems in HCWM to ensure relevance, quality, timeliness, efficiency and accountability	Operational research report