FEDERAL MINISTRY OF HEALTH

THE NIGERIA CENTER FOR DISEASE CONTROL AND PREVENTION

Nigeria: Health Security Project (HeSP)

Environmental and Social Management Framework (ESMF)

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Abbreviations

AMR	Anti-Microbial Resistance
AU	African Union
DSNO	Disease Surveillance Notification Officer
EA	Environmental Assessment
EHSG	Environmental Health and Safety Guidelines
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EOC	Emergency Operation Centre
ESA	Environmental and Social Assessment
ESCP	Environmental and Social
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental Social Standards
FAO	Food and Agriculture Organization
FELTP	Field Epidemiology and Laboratory Training Program
FEPA	Federal Environmental Protection Agency
FMARD	Federal Ministry of Agriculture and Rural Development
FMEnv	Federal Ministry of Environment
FMOHSW	Federal Ministry of Health and Social Welfare
FMoLD	Federal Ministry of Livestock Development
HCF	Health Care Facility
HCW	Health Care Waste
HCWMP	Health Care Waste Management Plan
HeSP	Health Security Program
HFGC	Health Facility Grievance Committee

IAP	Incident Action Plan
ICWMP	Infection Control and Waste Management Plan
IDSR	Integrated Disease Surveillance and Reporting
INEHSS	Integrated Environmental Health Surveillance
System IPC	Infection Prevention and Control
IPMP	Integrated Pest Management Plan
LIMS	Laboratory Information Management Systems
NAFDAC	National Agency for Food and Drug Administration Control
NAPHS	National Action Plan for Health Security
NCDC	Nigeria Centre for Disease Control and Prevention
NESREA	National Environmental Standards and Regulations Enforcement Agency
NPC	National Program Coordinator
NPCU	National Project Coordinating Unit
NRL	NCDC Reference Laboratory
OHS	Occupational Health and Safety
OP	Operation Policy
PAD	Project Appraisal Document
PCU	Project Coordination Unit
PDO	Project Development Objective
PHC	Primary Health Care
PHCDA	National Primary Healthcare Development Agency
PHEOC	Public Health Emergency Operation Centre
PIU	Project Implementation Unit
PPE	Personal Protective Equipment
PVAC	Presidential Initiative Value Chain for Health
SAPHS	State Action Plan for Health Security
SEP	Stakeholders Engagement Plan
SEPA	State Environmental Protection Agency
SMP	Security Management Plan
SOP	Standard Operating Procedure
SPCU	State Project Coordinating Unit
SSO	State Surveillance Officer
WASH	Water, Sanitation, and Hygiene
WHO	World Health Organization

Executive Summary

The Federal Government is requesting the support of the World Bank to implement the Nigeria Health Security Program Phase IV of the Health Security Program in West and Central Africa (AFW), using the Multiphase Programmatic Approach (MPA) (HeSP). The HeSP Project will be implemented by the Nigeria Center for Disease Control and Prevention (NCDC), with collaboration from the Federal Ministry of Health and Social Welfare (FMoHSW), Federal Ministry of Livestock Development (FMoLD), and Federal Ministry of Environment (FMEnv) under a One Health Platform.

The proposed Phase IV (HeSP-4) is focused on Nigeria as the country **is** continually facing public health emergencies stemming from endemic infectious diseases, as well as vulnerabilities to infectious diseases from neighboring countries and global sources, significantly straining its already fragile health system**.** The country has thus been highly vulnerable to infectious disease outbreaks and increasing health emergency risks and increasing prevalence of public health threats. In recognition of the threats posed by Nigeria's pervasive disease outbreaks and the challenges in its core capacities, the Government of Nigeria (GoN) has sought to enhance its capacity to prepare for, rapidly detect, and respond to such events in recent years. The proposed HeSP Nigeria is aligned with and directly contributes to the objectives established in the Federal Republic of Nigeria's National Development Plan (NDP) 2021-2025**.**

The HeSP Nigeria Phase IV Project Development Objective (PDO) is to increase regional collaboration and health system capacities to prevent, detect and respond to health emergencies in the Federal Republic of Nigeria. The operation will have five components: (i) Prevention of Health Emergencies; (ii) Detection of Health emergencies; (iii) Response to Health Emergencies; (iv) Program Management and Capacity Building; and (v) Contingent Emergency Response Component (CERC).

Key activities in the program include: training activities, development of Plans from the One Health partners procurement of solar panels, installation of digital surveillance systems at Points of Entry, and provision of equipment and Infection Prevention and Control/Water Sanitation and Hygiene (WASH) upgrades across health facilities, use of digital devices (palm held devices for all communities for surveillance to be transmitted to a central server at the state and national, Upgrade of three (3) regional laboratories and construction of three (3) regional laboratories under the support to the Public Health Labs, Provision of Consumables and equipment, provision of Mobile laboratories, construction of a National reference laboratory under the Environmental Health sector, support to Zonal laboratories for veterinary teaching hospitals, Upgrade of NESREA laboratories, provision of Solar panels in labs and Primary Healthcare Centers (PHCs) to make them Epidemic ready PHCs, constructionof a national warehouse and cold chain infrastructure. The Project will also require transportation of commodities which will be done by a logistics firm – primary suppliers across the country. Additional work includes Renovation and equipping of isolation and treatment centers in selected states and point of entry (airports, land boarders). The 4 treatment centers will be assessed and gaps addressed. The treatment centers are already known and were supported under REDISSE and CoPREP.

The HeSP will be open to all 36 states in Nigeria and the Federal Capital Territory (FCT) and will be implemented in both urban and rural areas in Nigeria. Furthermore, the project will be implemented

within complex and varied fragility/conflict contexts. There is likelihood that the project during implementation may pose social and environmental risks in terms of the ability to comply with the requirements of the Nigerian Environmental Guidelines and the World Bank Environmental and Social Framework (ESF). Thus, this Environmental and Social Management Framework (ESMF) has been prepared as part of project preparatory activities to ensure compliance with the ESF, prior to Board appraisal, since the locations and site-specific activities for the specific interventions are unknown at this moment.

Objective of the ESMF. The overall objective is to prepare an ESMF for Nigeria HeSP. The framework will provide guidelines for assessing the environmental, social, and health impacts of the project, as well as recommending appropriate mitigation measure and monitoring plans in line with the applicable Environmental and Social Standards (ESSs) of the ESF. The ESMF has identified the environmental and social risks and impacts of the project, and developed guidelines for assessing, monitoring and mitigating such impacts using the mitigation hierarchy. The ESMF is intended to guide the Project implementation team and project component activity proponents on the required Environmental and Social screening and subsequent project component activity assessment during implementation. It also provides guidelines and procedures to be followed in undertaking site-specific Environmental and Social Management Plans (ESMPs) during project implementation phase

Policy, Legal and Institutional Framework. The program will be implemented in line with the Nigerian national environmental and social legislations and policies, recognizing the relevant institutional framework and policies. and the World Bank Environment and Social Standards that apply to this project. Other relevant legislation applicable to the project (some of which are not directly relevant to social and environmental impacts but are relevant to the project) includes: National Health Act (NHA) 2014, Animal Diseases (Control) Act, 2022. Details of the provisions within this legislation applicable to the HeSP Program are provided in chapter two.

The project environmental and social risk rating is substantial. The ESF applicable standards to this project include ESS 1: Assessment and Management of Environmental and Social Risks and Impacts, ESS 2: Labor and Working Conditions, ESS 3: Resource Efficiency and Pollution Prevention, ESS 4: Community Health and Safety, ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement, ESS 10: Information Disclosure and Stakeholder Engagement. Details of how these standards apply to the project and how they will be addressed are provided in section 3.6, Table 3.3.

Implementation Arrangement. The project will be coordinated by a National Project Coordinating Unit (NPCU) operating under the NCDC. This unit will feature technical leadership from relevant ministries that are part of the One Health Platform, which brings together sectors such as health, agriculture, and environmental management to address health issues in a holistic manner. State Project Coordinating Units (SPCUs) will be established at the state level with collaboration from the various state ministries under the One Health Platform, each contributing specific roles and expertise according to their mandates. This multi-sectoral approach is designed to enhance the project's effectiveness in addressing health challenges. Detailed information is provided in Chapter 3.

Potential Beneficial and Adverse Environmental and Social Risk and Impacts. The project is envisaged to have several positive social impacts. The implementation of the HeSP in Nigeria will reduce: the incidence and spread of diseases; improve access to quality medical and emergency facilities and services; and increase the productivity of the working population. The implementation of the HeSP

will improve Nigeria's participation in the regional health system in west and central Africa through collaborative surveillance for priority diseases. Furthermore, it will build Nigeria's capacity to prevent and control disease epidemics and deepen the overall resilience health system.

The proposed construction, rehabilitation, and upgrade of laboratories, PHCs, and WASH facilities pose several environmental and social risks. These include increased construction waste, air and water pollution from the use of machinery, hazardous waste management issues, and inadequate community health and safety measures. Social risks involve land use concerns, exclusion of marginalized populations, and insufficient stakeholder engagement. Occupational hazards for construction workers and health workers in laboratories may arise due to inadequate safety measures and exposure to biohazards and chemicals. Additionally, labor risks such as child labor and sexual exploitation, increased energy and water demand, and potential security issues due to the country's instability are key concerns.

This report includes mitigation measures and a detailed annex on how to manage various identified impacts. Environmental and Social Codes of Practice (ESCOP) have been developed, focusing on waste management procedures and small-scale operations, including upgrades, rehabilitation, and expansions. The ESCOP will be included in the bidding documents for contractors and service providers, who must comply with these practices. In addition, a standalone Labor Management Procedure (LMP) has been created, emphasizing compliance with labor standards. This includes an Occupational Health and Safety (OHS) plan and a Code of Conduct (CoC) for contractors and workers. Strict prohibition of child labor is a key policy in this procedure. Contractors are required to adhere to the Environmental and Social Codes of Practice. The construction of the FCT warehouse and regional laboratories will take place on the premises of existing government health institutions; however, there are uncertainties regarding potential land acquisition. If needed, Resettlement Action Plans (RAPs) will be developed, and sample Terms of Reference can be found in Annex 6. The project will follow the national healthcare waste management plan, and the Security Management Framework developed under the Nigeria COVID-19 Preparedness and Response Project (CoPREP). Furthermore, an Environmental and Social Commitment Plan (ESCP) and a Stakeholder Engagement Plan (SEP), which includes a Grievance Mechanism, will be established. A Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) Action Plan will also be developed prior to the project's effectiveness.

Management of E&S Risks of Program Activities or Subprojects

Table 1: E&S Management Procedures to be Followed for Each Subproject

Project Stage	E&S Stage	E&S Management Procedures
a. Assessment and Analysis: Subproject Identification	**Subproject Type**	1. If the subproject involves technical assistance, training, strategy development, or policy/legal reforms, no screening is needed. The ToRs for such activities must be reviewed by the NPCU's Environmental and Social Specialists and submitted to the World Bank for prior review and clearance. 2. If the subproject includes civil works, infrastructure upgrades, or equipment installation (e.g., lab construction, PHC upgrades, warehouse development), proceed to E&S screening.
	Screening	3. Confirm subproject eligibility using the Exclusion List 4. Complete the E&S Screening Form (Annex 2 of ESMF) for each subproject. 5. Based on screening results, apply relevant instruments and measures:

Project Stage	E&S Stage	E&S Management Procedures
		- Environmental and Social Codes of Practice (ESCOPs) – Annex 1 - Infection Control and Waste Management Plan (ICWMP) – Annex 13 - Chance Find Procedures – Annex 15 - SEA/SH Action Plan 6. Determine whether a subproject requires an ESMP or ESIA and identify corresponding Nigerian regulatory approvals (e.g., EIA registration with FMEnv).
b. Formulation and Planning: Preparation of E&S Instruments	**Planning**	1. Submit the screening form and draft safeguard instruments (e.g., ESMP, ICWMP) for World Bank no-objection before initiating bidding or implementation. 2. Conduct stakeholder consultations and disclose draft instruments in accordance with the Stakeholder Engagement Plan (SEP). 3. Train SPCU, PHC, and facility staff on roles and responsibilities in implementing the plans. 4. Integrate relevant E&S requirements into bidding documents and construction contracts. 5. For subprojects requiring environmental clearance under Nigerian law, submit relevant documentation to the FMEnv and secure permits.
c. Implementation and Monitoring: Execution and Oversight	**Implementation**	1. Ensure site-specific plans (e.g., ESMPs, ICWMPs) are implemented by contractors and facility managers. 2. Conduct regular site monitoring using the supervision checklist included in the ESMF annex. 3. Submit quarterly E&S monitoring reports to the World Bank and maintain a grievance log. 4. Organize refresher training for contractors, SPCU, and facility staff on E&S compliance and grievance management.
d. Review and Evaluation: Closure and Accountability	**Completion**	1. Assess implementation effectiveness and resolve any outstanding non-compliance issues. 2. Ensure all project sites are physically restored post-construction (e.g., waste cleared, facilities cleaned). 3. Prepare and submit a Completion Report documenting implementation of E&S measures, grievances resolved, and lessons learned for World Bank review.

Stakeholder Consultation. Consultations with various stakeholders was organized from May 5 -12, 2025, using a hybrid approach, Consultation were held at the Public Health Emergency Operations Center (PHEOC) in six states - Enugu, Delta, Nasarawa, Ondo, Borno and Sokoto. Participants include representatives from State Ministry of Health, Ministry of Agriculture and Natural Resources, Ministry of Women Affairs, Ministry of Works (Roads & Rural Infrastructure), Ministry of Works (Housing & Environment), Ministry of Education, Department of Monitoring and Evaluation (DMOE), NCDC.

Summary of Consultations

State	Concerns	Response
Ondo	Risk of Disruption to Community Livelihoods	The Project will employ early engagement with communities, participatory site mapping, and negotiated use or compensation where communal assets may be affected.

State	Concerns	Response
	Land Access and Disputes	Participatory land identification processes and early documentation of land agreements in collaboration with host communities.
	Land Use Conflicts and Future Reclassification	Formalizing land ownership or use rights before construction, documenting community consent, and aligning site selection with local land-use plans
	Environmental Degradation and Pollution Risks	The Project will address cumulative environmental impact associated with project activities
Nasarawa	Risk of Community Exclusion or Disruption	Inclusive planning processes involving local governments, traditional authorities, and affected communities, with compensation measures where applicable.
	Land Disputes and Siting Conflicts	Participatory site identification, transparent land documentation processes, and stakeholder engagement before site development.
	Environmental Degradation Risks	Address cumulative environmental impact if project activities expand over time.
Sokoto	Disruption to Grazing Routes and Farmland	Respect existing land-use patterns, consult district heads, integrate land use history.
	Land Ownership Ambiguity and Future Disputes	Involve traditional leaders, secure written agreements endorsed by traditional rulers and LGA officials.
	Environmental Vulnerability and Waste Disposal	The Project will employ environmentally sound waste disposal strategies.
	Weak Enforcement Capacity for Standards	The Project at the National and state levels will require Environmental and Social Officers (Environmental Health Officer for the states) to ensure project implementation follow the World Bank E&S requirements. The capacity of the Officers will be strengthened with trainings offered by the World Bank and also linkage of staff to the SPESSE Program offered in 6 Universities across the country
	Health Worker Safety and Exposure Risks	The Project will implement OHS protocols, provide PPE, and training in local languages.
Delta	Coastal and Riverine Vulnerability	Due to the diverse geomorphology of the state, it is essential to ensure that construction projects are not located within flood plains. These regions can pose significant risks to structures, including potential water damage and erosion. Therefore, thorough site assessments and careful planning are crucial to identifying suitable locations for construction, thereby safeguarding the safety and longevity of buildings and infrastructure.
	Biomedical Waste Management Challenges	The Project will employ approaches to manage biomedical waste that will be generated during implementation.
	Occupational Safety Considerations	Improved safety protocols, provision of protective equipment for workers
	Mobile Laboratory Deployment Risks	Address transportation hazards with mobile laboratory operations.

State	Concerns	Response
Enugu	Waste Management Deficiencies	Develop state-level waste management plans, enhance training, stricter monitoring.
	Occupational Safety Gaps	Context-adapted OHS protocols, provision of PPE, development of localized SOPs, mechanisms for managing psychosocial stress.
	Community Safety	Address spill hazards and road safety concerns related to mobile lab movements and emergency response deployments.
	Land Disputes and Siting Conflicts	The project will ensure that the construction of warehouses and laboratories takes place in locations that are free from conflict.

Disclosure. The NPCU will make copies of this ESMF and other Safeguard Instruments (such as ESMP/SEP/LMP available to the public and relevant MDAs through media advert (radio, television), community forums and the official government website in line with the National EIA procedures as stipulated by FMEnv. Specifically, the publication will be launched for 21 days:

- In 2 National Newspapers
- Local newspapers in the participating states
- Radio announcements
- Designated centers as stipulated by the FMEnv
- Websites of relevant Ministries Department Agencies (MDAs)
- World Bank external website

Grievance Mechanism will be implemented to ensure that all complaints from local communities are dealt with appropriately, with corrective actions being implemented, and the complainant being informed of the outcome. It will be applied to all complaints from affected parties. The SPCU will maintain a Complaints Database, which will contain all the information on complaints or grievances received from the communities or other stakeholders. This would include: the type of complaint, location, time, actions to address these complaints, and outcome. The mechanism for implementing the GRM will include:

- Setting up Grievance Redress Committees (GRCs) at the community /SPCU/NPCU level and court redress system as a final option
- Complaints boxes located within the community
- Grievance Log to document grievances received and how they were resolved
- Dedicated phone numbers for access to reporting grievances

The project shall ensure that all complaints are listened to in a fair and honest manner and the best course of action identified. Chapter 9 defines the GRM framework and procedures to be adopted by the project.

Estimated Budget for ESMF Implementation: The indicative budget for implementing the ESMF is $144,188 in the first year of project effectiveness. It includes the cost of mitigation and management, capacity building, strengthening for safeguards. The details are presented in the table below.

Activities	Planned Budget (US$)
Trainings and Capacity Building include screening of grant proposals for E&S risk; monitoring and reporting on environmental and social performance of subprojects; stakeholder mapping and engagement; occupational health and safety; labour working conditions and associated inspections; waste management, screenings of assets for land acquisition and/or resettlement impacts.	70,000
ESMP Mitigation Costs	43,080
Monitoring & Compliance for E&S	18,000
GRM Implementation cost –	Cost factored in the SEP
GBV Assessment and implementation of GBV Action Plan:	To be captured in the stand-alone GBV Action Plan
Sub-total	131,080
Contingency – 10% of sub-total	13,108
Grand total	144,188

Chapter One: Introduction

1.0 Background

The World Bank is supporting the Federal Government of Nigeria through the Ministry of Health to prepare the Health Security Program (HeSP). The HeSP will be implemented by through the Nigeria Center for Disease Control and Prevention (NCDC) from the Federal Ministry of Health and Social Welfare, Federal Ministry of Livestock Development (FMoLD), and the Federal Ministry of Environment (FMEnv) under a One Health Platform.

The Project Development Objective is to increase regional collaboration and health system capacities to prevent, detect and respond to health emergencies in the Federal Republic of Nigeria and in Western and Central Africa. HeSP is a regional engagement in West and Central Africa with the overall aim to help strengthen the preparedness of the healthcare system, improve the quality of care provided to patients with diseases, and minimize risks to healthcare personnel and patients. These goals will be achieved through the establishment of governance reforms including public health legislations, policies, and financing which will guide statutory public health and health security functions, support the procurement of essential medical supplies and countermeasures, the creation of necessary conditions in designated medical facilities and community health systems to prevent, detect, and respond to public health emergencies including climate events.

1.1 Project Components

The Nigeria phase of HeSP will implement the components' structure adopted under the regional program design. The components will specifically address the gaps identified as priorities in the health security blueprint developed by the Government of Nigeria (GoN).

Component 1: Prevention of health emergencies

Subcomponent 1.1: Health Security Governance, Planning, and Stewardship.
Subcomponent 1.2: Scaling-up One Health Agenda and combating AMR

Component 2. Detection of Health Emergencies

Subcomponent 2.1. Collaborative Surveillance
Subcomponent 2.2 - Laboratory Quality and Capacity
Subcomponent 2.3 - Multi-disciplinary human resources for health emergencies.

Component 3 Health Emergency Response

Subcomponent 3.1. Health Emergency Management
Subcomponent 3.2. **Health service delivery for health emergencies**

Component 4 Program Management and Institutional Capacity

Component 5 Contingency Emergency Response Component (CERC)

The HeSP Project focuses on interventions that will help the country prevent health emergencies by strengthening plans and managing health security resources. It aims to enhance coordination among various government agencies, such as the Ministry of Health and Social Welfare, Ministry of Environment and the Ministry of Livestock, within the One Health sector. Several assessments will be carried out, and plans will be developed at both the Federal and State levels. The project will also boost the country's capacity to combat public health threats by training healthcare providers, supplying infection prevention and control (IPC) materials, and strengthening capabilities at Points

of Entry (PoEs). This includes ensuring that surveillance of both human and agricultural crossings is timely and integrated into an interoperable system. In terms of civil works, the project anticipates funding for minor to moderate construction activities. This may include providing access to water, sanitation, and hygiene (WASH) facilities across the One Health sector, constructing a warehouse in the Federal Capital Territory (FCT), rehabilitating regional laboratories to enhance diagnostic coverage nationwide, and upgrading Public Health Emergency Operation Centers in all 36 states and the FCT. The project will also procure commodities, particularly information and communication technology (ICT) equipment. Additionally, support will be provided to improve the collection and logistics of medical sample transportation. The project will collaborate with Presidential Initiative for Unlocking the Healthcare Value Chain (PVAC), the National Agency for Food and Drug Administration and Control (NAFDAC), and the Pharmacy Council of Nigeria (PCN) to enhance the ecosystem for local manufacturing of essential commodities and medical and non-medical countermeasures for public health emergency responses. It will also focus on improving regulatory capacity in both the upstream and downstream sectors. Moreover, the project includes a Contingency Emergency Response Component (CERC). An addendum to guide the preparation of environmental and social measures is included as Annex14 in case CERC activities are triggered.

1.2 Rational for the Environmental and Social Management Framework

The exact locations where the HeSP Project activities would be carried out are not yet known. For such a situation, an Environmental and Social Management Framework (ESMF) is the required instrument to be prepared, which provides a framework for addressing potential risks and impacts of the proposed project, informs design and decision making, provides guidelines and procedures to be followed in undertaking site specific Environmental and Social Management Plans (ESMPs) during project implementation phase.

The ESMF ensures that the identified subprojects are correctly assessed from environmental and social perspective to meet the World Bank's environmental and social frameworks (ESF) and EHSGs requirements alongside with policies and legislations of the Government of Nigeria that control for environmental and social safeguards for adequate mitigation of residual and unavoidable impacts (if any). This ESMF provides guidelines for the development of appropriate mitigation and compensation measures for adverse impact that may arise as a result of implementation of the HeSP.

1.3 Objectives of the ESMF

Specific objectives of the ESMF include:

- To ensure the program is carried out in accordance and compliance to Nigerian laws, institutional and regulatory frameworks and the World Bank ESSs;
- To provide a structure/strategy for the integration of social and environmental consideration at all stages of the program planning, design, execution and operation of various sub-projects;
- Determine the training, capacity building and technical assistance scope needed to successfully implement the provisions of the ESMF;
- Assess the potential environmental and social impacts of envisaged sub-projects under the components and propose a management framework comprising of the measures to mitigate the negative environmental and social impacts and enhance the positive impacts of the project;
- Provide guidelines to appropriate roles and responsibilities and outline the necessary reporting procedures for managing and monitoring environmental and social concerns of the

project and its sub-projects;
- Estimate the costs for the implementation of the Environmental and Social Management Framework for the project;
- To establish clear directives and methodologies for site specific instruments that might be required prior to the implementation of specific sub-projects.

1.4 Scope of Works

The scope of work for preparing the ESMF includes:

- Baseline assessments and environmental and social risks associated with each component based on a detailed description of the project, its components and the design of specific activities
- Consider and apply the relevant World Bank ESSs proportionate to their risk level in the project
- Compile a summary of key legislative, regulatory and administrative frameworks within which the project will operate, provide an overview of the above legislation in relation to the World Bank ESS, and make recommendations to address the gaps with respect to the project.
- Develop a gap analysis for the update of the existing health care waste management plan/policy, as it relates to the implementation of this project
- Establish a clear understanding of the institutional requirements, roles and responsibilities for adopting and implementing the ESMF
- Develop a screening and assessment methodology for potential subprojects, that will include environmental and social performance criteria, allow environmental / social risk classification and the identification of appropriate safeguards instruments
- Identification of appropriate mitigation measures for the predicted impacts and compilation of a management plan for addressing environmental and social impacts during implementation, operation and maintenance of the project activities
- Development of specific Environmental and Social Code of Practices for undertaking sub - project activities
- Development of a template for risk assessment and controls for biohazardous activities of the health care facilities
- Identify the required resources and technical assistance to maintain the Client's capacity for the Program duration and beyond.
- Develop a process (including timeline, budget, organizational requirements, required trainer profiles and expertise) for building and enhancing the capacity of the institutions responsible for implementing the ESMF
- Develop framework for Occupational Health and Safety Plan incorporated into the ESMF
- Provide Environmental, Social, Health and Safety (ESHS) Guidelines in accordance with the WB requirements.
- Assess the risks associated with the use of security personnel[1] to accompany health officers during disease outbreaks, particularly in areas experiencing significant security challenges. This intervention aims to ensure the safety of health workers as they carry out their activities in security-prone areas. Adopt the existing Health Care Waste Management Plan used by other health projects.
- Include a chapter on CERC to guide the preparation of environmental and social measures should CERC activities be triggered

[1] The Project will utilize the Security Management Framework (SMF) that was developed under the CoPREP. No project funds will be used to buy firearms, and security personnel will be required to adhere to the guidelines in the Good Practice Note on "Assessing and Managing the Risks and Impact of the Use of Security Personnel,"

Chapter Two: Project Description

2.0 Introduction

This chapter provides an overview of the HeSP intervention and how it will support the health sector in Nigeria and the region. The Nigeria phase HeSP has a development objective to build and strengthen national capacity to prevent and ensure early detection of public health emergencies through early warning or prediction of possible outbreaks of disease and build and strengthen capacity to contain and respond. The Nigeria phase HeSP as part of the multi-programmatic approach (MPA) will also increase regional collaboration and health system capacities to prevent, detect and respond to health emergencies in west and central Africa.

2.1 Project Components

Component 1 - Prevention of Health Emergencies

This component aims to scale-up Nigeria's capacities to prevent health emergencies through strengthened planning and management of health security resources and preventing and minimizing the impacts of health threats such as zoonoses and AMR.

Subcomponent 1.1 - Health Security Governance, Planning, and Stewardship: This subcomponent will support Nigeria's prioritization, coordination, regulation, management, and monitoring of the health security agenda, at Federal and state-levels, including risk and hazard assessments, the development and management of the NAPHS and the State Action Plans for Health Security (SAPHS). In addition, sub-activities will support the development of Public Health Emergency funds at the state level; and the monitoring of IHR core capacities using tools such as the JEE and Performance of Veterinary Services (PVS). Activities under this sub-component aim to strengthen the governance structure and institutional frameworks to ensure coordination and oversight of the implementation of policies and core NAPHS activities. This sub-component will support joint assessments, planning, monitoring, and supervision of core prevention, detection, and response interventions.

Subcomponent 1.2 Scaling-up One Health Agenda and combating Antimicrobial Resistance (AMR): This subcomponent is dedicated to fostering multisectoral collaboration within the One Health approach. It emphasizes anti-microbial resistance (AMR) and climate-sensitive diseases such as malaria, dengue, and Lassa fever and other zoonotic diseases. The Project will finance activities that strengthen One Health coordination mechanisms at national and subnational levels involving stakeholders from human, animal and environment sectors, by (i) harmonizing guidelines, regulatory instruments, management systems, and data collection tools for monitoring and evaluation of One Health interventions; (ii) developing AMR costed work plans and frameworks for guiding the stewardship of the One Health Secretariat in the implementation of AMR-related interventions; and (iii) establishing an Animal Health Regulatory Body to combat counterfeit drugs and food. The supported activities will align with the objectives and priorities of the country's National Action Plan for Antimicrobial Resistance 2024-2028, which covers the following six objectives: (i) Governance; (ii) Awareness and Education; (iii) Surveillance; (iv) Infection Prevention & Control (IPC); (v) Stewardship; (vi) Research and Development.

Component 2 - Detection of Health Emergencies

This component aims to strengthen the capacities required to predict and detect possible health threats in a timely manner through multisectoral surveillance systems and mechanisms for data sharing within and across borders, strong national and subnational laboratory networks and the multisectoral and integrated workforce required to enable early detection of health emergencies.

Subcomponent 2.1. Collaborative Surveillance: This subcomponent will focus on strengthening

multisectoral and integrated surveillance capacities, including both indicator and event-based surveillance, particularly for epidemic-prone diseases, climate-sensitive diseases, and unusual events. Activities will build on the already established platforms - SORMAS (for human health), the National Animal Disease Information System (NADIS) (for animal health), and the Integrated Environmental Health Surveillance System (IEHSS) (for environmental health), supported under previous World Bank operations. Support to scale-up the deployment of these platforms include: (i) the development of a digitalization roadmap and interoperability framework for the three platforms; (ii) procurement of commodities, particularly information and communication technology (ICT) equipment, to ensure adequate technologies for deployment at Federal and State levels of the interoperable and digital platforms; and (iii) technical assistance and operational costs for capacity building at all levels and cadres of health workers in the use of these platforms. Additionally, special focus will be given to strengthening capacities at Points of Entry (PoEs) to ensure that surveillance of both human, and agricultural crossings is timely and feeds into the interoperable system. This will require investment in ICT equipment and capacity building at Federal and State levels. The strengthening of the surveillance system in the country will also incorporate private sector facilities to ensure that this sector also contributes to the integration of surveillance systems and data in the country. To further ensure accurate and reliable real time data at PoEs, the Project will facilitate partnerships and data sharing agreements with neighboring countries to the extent possible and regional organizations such as WAHO and Africa CDC.

To further strengthen the integration of public health functions within the broader service delivery platforms in the country and ensure a shift towards an epidemic-ready PHC system, the Project will support the operationalization of early warning systems at the last mile, engaging community health platforms (community health workers and community animal health workers), and fully deploying the Integrated Disease Surveillance (IDSR) platforms. For such purposes, the Project will support the development and validation of guidelines both at Federal and State levels, provision of necessary commodities and tools such as ICT and personal protective equipment (PPE) equipment, and training and capacity building to community-based and PHC health workers.

Subcomponent 2.3. Multi-disciplinary human resources for health emergencies: This subcomponent aims to strengthen workforce capacities – across the spectrum of human, animal, environmental, and public health. Proposed activities include support to the implementation of harmonized competency standards, education and training programs, including continuous support to the Field Epidemiology and Laboratory Training Program (FELTP) at national and subnational levels, IPC professionals and State and Local Government health emergency rapid response teams. Supported activities will also focus on strategic resource planning to support medium to longer term staffing, including multidisciplinary One Health workforce plan development and deployments during health emergencies.

Component 3 - Health Emergency Response

This component aims to build and sustain capacities that can prevent an outbreak from becoming an epidemic or pandemic, through a focus on disease control and effective health emergency response.

Subcomponent 3.1. Health Emergency Management: This subcomponent aims to further enhance national and subnational capacities for managing and responding to public health emergencies as required. Specifically, the project will support the updating, monitoring, and implementation of the country's multi-hazard, multi-sectoral public health emergency preparedness and response plans. It will strengthen collaboration through simulation exercises, the linkage between public health and security authorities for a rapid multisectoral response to suspected or confirmed biological, chemical or radiological event. Health emergency events are detected within 7 days, notified within 1 day, and responded to within 7 days. Additionally, the project will support the assessment and upgrading of Public Health Emergency Operation Centers to meet standards in all 36 states and the Federal Capital

Territory as well as establish command centers in each LGA. It will also implement Public Health Emergency Management Trainings up to an intermediate level for National and subnational officers to fully operationalized the revamped PHEOCs and Command Centres. Furthermore, it will expand capacity for warehousing, Logistics management, including a Logistics Management Information Systems (LMIS), and stockpiling for the rapid deployment of medical countermeasures nationwide. This includes collaboration with the Presidential Initiative for Unlocking the Healthcare Value Chain (PVAC) to potentially support the local manufacturing of essential commodities for public health emergency response. It will also support real-time monitoring and quality improvement activities for early detection and response, such as the 7-1-7 target, 12 and operationalize early warning surveillance systems across One Health sectors (animal, environment, and human health).

Subcomponent 3.2. Health Service Delivery for Health Emergencies: This subcomponent will focus on the health system's capacity to respond to public health emergencies, ensuring the continuity of essential health services during such crises. This subcomponent will facilitate the comprehensive rollout of the epidemic-ready health facilities initiative. Activities will include conducting assessments and implementing green upgrades for PHCs; investing in climate smart measures and IPC requirements; enhancing adaptability for surge capacity, including improvements to WASH facilities, isolation areas, ventilation, and electricity. The Program will also support the adoption of innovative solutions such as telemedicine and information systems, and promote community and private sector engagement in response efforts.

Component 4 - Program Management and Institutional Capacity

This component will support the critical aspects of program management and institutional capacity necessary for the successful implementation of HeSP in Nigeria. Specific institutional support will be provided to the NCDC, and other one health relevant MDAs as necessary to enable them to perform their role as the secretariat of the National Project Coordination Unit and the lead public health management MDAs in Nigeria. This component will also cover support for program coordination at both national and subnational levels, including steering committee and technical committee meetings, as well as supervision visits. It will also provide technical assistance for improved management in areas including financial management, procurement, social and environmental risk management, and monitoring and evaluation. Furthermore, it will support participation in regional and global exchanges for knowledge sharing and the promotion of cross-country learning in specific technical areas.

Component 5 - Contingency Emergency Response Component

Consistent with the provision of the overall MPA design, and Investment Project Financing (IPF) Policy, paragraphs 12 and 13, for Situations of Urgent Need for Assistance and Capacity Constraints, a CERC will be included to provide immediate resources should the country experience an epidemic or outbreak of public health importance or other disasters which causes adverse economic and/or social impact, resulting in a request to the World Bank to support mitigation, response, and recovery from such an emergency. This will allow for rapid reallocation of uncommitted funds in the event of an eligible emergency as defined in OP 8.00. For the CERC to be activated, and financing to be provided, the Government of Nigeria will need to: (i) submit a request letter for CERC activation and the evidence required to determine eligibility of the emergency, as defined in the CERC Annex to the Project Operations Manual; (ii) submit an Emergency Action Plan, including the emergency expenditures to be financed; and (iii) meet the environmental and social requirements as agreed in the Emergency Action Plan and Environmental and Social Commitment Plan (ESCP).

2.2 Scope of works

The HeSP Project will be implemented in the 36 states and the FCT across the respective project components. The activities will include assessment and training activities, development of Plans from

the One Health partners procurement of solar panels, installation of digital surveillance systems at Points of Entry, and provision of equipment and Infection Prevention and Control/Water Sanitation and Hygiene (WASH) upgrades across health facilities, use of digital devices (palm held devices for all communities for surveillance to be transmitted to a central server at the state and national, Upgrade of three (3) regional laboratories and construction of three (3) regional laboratories under the support to the Public Health Labs, Provision of Consumables and equipment, provision of Mobile labs, construction of a National reference lab under the Environmental Health sector, support to Zonal labs for veterinary teaching hospitals, Upgrade of NESREA laboratories, provision of Solar panels in labs and Primary Healthcare Centers (PHCs) to make them Epidemic ready PHCs, construction of a national warehouse and cold chain infrastructure. The Project will also require transportation of commodities which will be done by a logistics firm – primary suppliers across the country. Additional work includes Renovation and equipping of isolation and treatment centers in selected states and point of entry (airports, land boarders). The 4 treatment centers -EOCs will be assessed and gaps addressed. The treatment centers are already known and were supported under REDISSE and CoPREP.

Table 2.1 Summary of Activities for HeSP IV - Nigeria

Project Component	Federal	State	Remarks
1.1 **Health Security Governance, Planning, and Stewardship**	**Soft Activities** • Develop NAPHS • Conduct JEE (2028) • Conduct PVS Assessment (2025) • Facilitate review and enactment of relevant laws – NCDC Amendment Act, Public Health Emergency Act, etc. • TA support to updating state laws, conduct of State JEEs and development of SAPHS • Establish state EPR standards and assess states based on these standards (Supported through HOPE Health Program for Result – HOPE PHC) • Publish state Health Security status report (Supported through HOPE) **Physical Activities** None	**Soft Activities** • Develop SAPHS (Supported through HOPE PHC) • Update or establish state public health laws. • Establish a budget line for public health emergency funding (can be prioritized for support and target under the HOPE program as part of DLI 9) • Conduct of state JEE . • Produce State Health Security status report based on NCDC guidance (Supported through HOPE) **Physical Activities** None	NCDC to share reports of assessments conducted in states.
1.2 **Scaling-up One Health Agenda and Combatting Antimicrobial Resistance (AMR**	**Soft Activities** • Review or reconstitute national one-health platform • Expand Orange network for antimicrobial stewardship • TA support for state action plan for AMR • Conduct operational research to improve AMR response in the country	**Soft Activities** • Establish or reconstitute one-health platform in the state • Develop State Action plan for AMR to align with the national strategy • Operational support for AMR activities monitoring at the state level	HeSP will work with **Livestock Productivity & Resilience Project (**LPRES) (P160865) to leverage on complementarities and jointly support the one health platform

Project Component	Federal	State	Remarks
	Physical Activities • Expand laboratory coverage for AMR monitoring to include private labs	**Physical Activities** • Support the implementation of IPC programs, biosecurity measures, and vaccination uptake, including access to water, sanitation, and hygiene (WASH) across the One Health sectors	HeSP will also leverage on the infrastructural investments under the Immunization Plus and Malaria Progress by Accelerating Coverage and Transforming Services (IMPACT) Project and HOPE-PHC for the structural components of IPC and WASH programs at the PHC level
2.1 **Collaborative Surveillance**	**Soft Activities** • Create digital training platform on IDSR for frontline health workers. • Establish and implement information sharing agreement with neighboring countries. • Implement capacity building plan for points of entry based on assessment. • Provide TA to expand event-based surveillance program to all states **Physical Activities** • Upgrade or update SORMAS, NADIS and IHNESS, etc at the national level • Deploy the surveillance platforms in all states, integrating into the private sector. • Create integrated digital access to relevant information for all platforms including SORMAS, NADIS, IHNESS, AMRIS, NOHRSIS. •	**Soft Activities** • Support for capacity building for use of interoperable surveillance platforms across the one health sectors • Support event-based surveillance program in the state. • Supervise LGA surveillance activities through support to the LGA one-health command center. **Physical Activities** • Operationalize early warning surveillance systems across one health sector including community engagement, capacity building for data systems, etc.	
2.2 **Laboratory Quality and Capacity**	**Soft Activities** None **Physical Activities** • Build or upgrade one	**Soft Activities** • Capacity building to implement standards for lab quality management	

Project Component	Federal	State	Remarks
	laboratory with genomic sequencing capability in each of the 6 geo-political zones and attain accreditation. • Support laboratory infrastructure, consumables and supplies across the PHC lab network. • Adapt and implement regional standards for lab quality management and biosafety • Support laboratory sample transport across PH labs. • Assess and update lab information systems across the PH lab network and integrate private labs	and biosafety. • Establish a lab information management system, integrating private labs. **Physical Activities** Support lab sample transportation across LGAs within each state.	
2.3 **Multidisciplinary Human Resources for Health Emergencies**	**Soft Activities** • Review and update the national plan for health security workforce development. • Work with select health training institutions to integrate health security modules in the training curriculum for identified health workforce cadres. • Expand support for core training programs including FELTP, ITSON, ISAVET, PHEM etc. • Develop a multisectoral workforce surge strategic plan. • Establish a digital registry for the public health workforce. • Support specialized staff training in core areas of need eg modelling. • Support capacity development through learning exchanges with peer countries. **Physical Activities** None	**Soft Activities** • State recruitment/deployment of relevant personnel to EPR programs based on NCDC guidelines. (Supported through HOPE) • Recruitment of consultants to provide technical support in areas of need across the one-health sectors. • TA support to LGAs for supervision as well as specialized training during RRT deployment. **Physical Activities** None	
3.1 **Health Emergency Management**	**Soft Activities** • Assessment and upgrading of the National PHEOC as necessary.	**Soft Activities** • Upgrading of State PHEOCs in line with NCDC/WHO guideline.	HeSp will provide TA support for the implementation of the State plans

Project Component	Federal	State	Remarks
	• Establish standards for state PHEOCs (supported through HOPE PHC) • Assessment of State PHEOCs (supported through HOPE PHC) • Publishing reports on State PHEOCs (supported through HOPE PHC) • Support NAFDAC for regulatory capacity strengthening including digitization of regulatory processes. • Support PVAC to improve skills development, benchmarking and policy reforms to promote local manufacturing. • Support Pharmacy Council of Nigeria to digitize processes for licensing and registration of pharmacies and private medicine vendors. • Set up an electronic logistics management information system linking storage facilities. • Quantification and procurement of commodities for preparedness and response across one health sectors • Develop an e-platform for RRT training. • Implement inter/after action reviews response activities including 7-1-7 timeliness metrics to drive EPR performance improvement. • Conduct simulation exercises to test readiness for priority diseases. **Physical Activities** • Construct a warehouse for national strategic stockpiling. • Transport and logistics for commodities. • Renovate and equip isolation and treatment	• Conduct of Multi hazard and risk assessments and development of contingency plans that meet NCDC standards (supported through HOPE PHC), • Establish a one-health command center (mini-EOC) in each LGA.	developed through HOPE-PHC financing

Project Component	Federal	State	Remarks
	centers in selected states and points of entry.		
3.2 **Health service delivery for health emergencies**	**<u>Physical Activities</u>** • Develop infrastructural and operational standards to scale up epidemic-ready PHC interventions nationwide beginning with border states. • Support innovations including telemedicine for service delivery during emergencies • Support for operational vehicles, communication equipment, and other input required for emergency response operations	**<u>Soft Activities</u>** • Support PHCs to develop contingency and referral plans for services during emergencies. • Conduct assessment of BeMONC facilities to identify climate smart upgrades, and investments needed for epidemic readiness. **<u>Physical Activities</u>** • Implement facility upgrades to meet standards for epidemic readiness.	Interventions for epidemic readiness at the PHC level will leverage on investments by HOPE and IMPACT projects by focusing on facilities that already met BeMONC certification.
Component 4 Program Management and Institutional Capacity	• Institutional and operational support to NCDC as the NPCU secretariat. • Support to project coordination and monitoring and supervision at national & subnational levels, including visits, coordination meetings, etc. • TA support for implementation, including personnel support and consultants. • Support for regional exchanges for cross-country learning	Operational support for SPCU activities, including office equipment, vehicles, supervision visits, review meetings etc.	

Chapter Three: Policy, Legal, and Institutional Framework Applicable to the HeSP program

3.0 Introduction

This chapter provides an overview of Nigerian national environmental and social legislations and policies, linking these with other institutional framework and policies and the World Bank Environment and Social Standards that apply to this project. The chapter further assesses the adequacy of legal and institutional entities in the implementation of this ESMF. The policies, legal, and regulatory frameworks that applies in Nigeria are reviewed with the World Bank environmental and social safeguards framework to ensure compliance of the HeSP to national and global standards that apply to both the government of Nigeria and the World bank. Environmental and social legislations, treaties, and policies applicable in Nigeria are highlighted and reviewed to understand the overall context of implementation of the HeSP.

3.1 National Policies and Laws

The government of Nigeria has statutes and laws that guide environment management and social systems on ensuring responsible activities of persons, establishments, and public enterprises. These laws and policies ensure responsible interaction with the environment in a sustainable fashion and prevent exploitation of persons regardless of their social class and status. The relevant national policies and legislations as it pertains to the Nigeria HeSP are reviewed in table 3.1 below.

Table 3.1: National Legal and Regulatory Frameworks

Legal Document	Description/Relevance to Project	Implementation Agency
Environmental Policies and Regulations		
National Environmental (Sanitation and Wastes Control) Regulations, 2009. S. I. No. 28	The purpose of the Regulation is the adoption of sustainable and environmentally friendly practices in environmental sanitation and waste management to minimize pollution. The Instrument amongst others makes provisions for the control of solid wastes and hazardous wastes This instrument provides practices for managing waste including general cleanliness, use of chemicals for fumigation, solid waste control, effluent discharge control, hazardous waste control, health care waste control, sanctions, enforcement, and offences.	National Environmental Standards and Regulations Enforcement Agency (NESREA)
Environmental Impact Assessment Act CAP E12 LFN 2004 (FMEnv)	The Act also stipulates the minimum content of an EIA as well as a schedule of projects, which require mandatory EIAs. According to these guidelines: - Category I projects will require a full Environmental Impact Assessment (EIA) - Category II projects may require only a partial EIA, which will focus on mitigation and Environmental planning measures, unless the project is located near an environmentally sensitive area--in which case a full EIA is required. - Category III projects are considered to have "essentially beneficial impacts" on the environment, for which the Federal Ministry of the Environment (FMEnv) will prepare an Environmental Impact Statement. Table 3.2 shows the Applicable	Federal Ministry of Environment

Legal Document	Description/Relevance to Project	Implementation Agency
	Regulatory Approvals and Permits for the activities to be carried out under heSP	
National Policy on Environment (Revised 2016)	The policy identifies key sectors requiring integration of environmental concerns and sustainability with development and presents their specific guidelines. This includes regulations for various sectors including the construction sector, waste management, pollution amongst other measures. The National Policy on the Environment aims to achieve sustainable environmental development and sustainability in Nigeria	The Federal & States Ministry of Environment
National Healthcare Waste Management Policy, 2013	This policy establishes a framework for the safe and sustainable management, collection, transportation, treatment, and disposal of healthcare waste. The generation of such waste is expected during implementation of the Nigeria HeSP from the activities of hospitals and laboratories for human and animal health. This waste may also be generated during outreach services for mass vaccinations.	Federal Ministry of Health
The Management of Solid and Hazardous Wastes. Regulations 1991	Regulates the collections, treatment and disposal of solid and hazardous waste from municipal and industrial sources. It makes it an obligation for industries to identify solid hazardous wastes which are dangerous to public health and the environment and to research into the possibility of their recycling.	Federal Ministry of Environment
National Environmental (Surface and Groundwater Quality Control) Regulations, 2011. S. I. No. 22	This regulation aims to enhance, preserve, and restore the integrity of Nigeria's surface waters and ground water resources. It seeks to ensure sustainability of water resources for various uses – drinking water, agriculture, aquaculture, among others. It provides water quality standards, standards for monitoring and reporting, effluent discharge permits, standards for hazardous discharges, and penalties for non-compliance.	National Environmental Standards and Regulations Enforcement Agency (NESREA)
National Environmental (Construction Sector) Regulations, 2011. S. I. No. 19	The purpose of these regulations is to prevent and minimize pollution from construction, decommissioning and demolition activities in the Nigerian environment. It mandates that new projects minimize pollution to the barest minimum by applying efficient and available technology. It stipulates activities that facilities must undertake in executing their activities, setting minimum working standards for site workers including submitting an audit report on a three- year basis for an EIA, and submitting an EMP and a Site Waste Management Plan.	National Environmental Standards and Regulations Enforcement Agency (NESREA)
Factories Act, 1990 (2004)	Provides a legal framework for the regulation of safety standards for the operation of factories in Nigeria; and Sets out minimum standards for clean and conducive working environments.	Federal Ministry of Labour & Employment
The Harmful Waste (Special Criminal Provision Etc.) Act 1988	The act prohibits harmful waste activities including the purchase, sale, importation, transit, transportation, storage, and deposit of harmful wastes on any land, territorial waters, or inland waterways of Nigeria. For the HeSP, this act will guide the use of medical devices and equipment that generate excessive hazardous waste and guide the use of	National Environmental Standards and Regulations Enforcement Agency (NESREA)
National Environmental	This regulation highlights prohibitions, particularly of	National Environmental

Legal Document	Description/Relevance to Project	Implementation Agency
(Ozone Layer Protection) Regulations, 2009. S. I. No. 32:	activities and use of materials that can cause the depletion of the ozone layer. This includes prohibition of release, sale of such materials, packaging, among others.	Standards and Regulations Enforcement Agency (NESREA)
National Guidelines on Environmental Management Systems (1999	The guidelines establish procedures for organizations to monitor, identify, and manage environmental impacts. They integrate environmental considerations into operations of an organization to ensure that their activities are complaint with environmental regulations. The HeSP includes several sub-activities and stakeholder MDAs whose activities must be reviewed for environmental regulation compliance.	National Environmental Standards and Regulations Enforcement Agency (NESREA)
National Environmental (Noise Standards and Control) Regulations, 2009. S. I. No. 35	The purpose of this regulation is to regulate noise levels and elevate the standard of living by implementing maximum permissible noise levels that a person may be exposed to and to provide noise control and mitigation measures for the reduction of noise. This is to ensure a healthy environment for all people in Nigeria, their psychological well-being, and the peacefulness of their environment. This policy will serve as a guide to the permitted noise level during pre-construction, construction, operation, and decommissioning activities in the execution of sub- activities with civil works on the Nigeria HeSP.	National Environmental Standards and Regulations Enforcement Agency (NESREA)
National Health Act (NHA) 2014	This Act defines the responsibilities of federal, state, and local governments in providing healthcare services and establishes guidelines for both public and private healthcare facilities	Federal Ministry of Health
ANIMAL DISEASES (CONTROL) ACT, 2022	This Act repeals the Animal Diseases (Control) Act, Cap. A17, Laws of the Federation of Nigeria, 2004 and enacts the Animal Diseases (Control) Act for the purpose of prevention, detection, control and eradication of infectious and contagious transboundary and zoonotic animal diseases, prevention of antimicrobial resistance through the control and regulation of the use and administration of veterinary biologics, veterinary medicinal products and chemicals in animals, animal products, medicated animal feeds, sales and distribution of pet foods, veterinary medical devices, other veterinary products, and for the enhancement of animal welfare and food safety.	Federal Ministry of Agriculture
Social Policies and Regulations		
Nigerian Land Use Act of 1978	The law establishes the legal framework for government expropriation of land from individuals and communities, when it is required for "overriding public interest/good". It prescribes the circumstances under which the State can revoke rights of occupancy to the land and the compensation provisions that are required. For project sites where this is applicable, a Resettlement Policy Plan will be prepared to address such issues will be addressed.	Department of Land
Labour Act, Chapter 198, Laws of the Federation of Nigeria (LFN) 2004	The labour act in Nigeria defines the statutes for the use of labour and employment in Nigeria. The Act covers general provisions including:	Federal Ministry of Labour & Employment

Legal Document	Description/Relevance to Project	Implementation Agency
	• Protection of wages • Contracts of employment and terms and conditions of employment • Fair treatment and equal opportunities of project workers. • Hours of work and overtime • Employment of women • Labor health matters • Prohibition of forced labor	
Employee Compensation Act (2010)	The Act provides policies to provide compensation to workers for injuries, disease, mental stress, disabilities, or death caused by executing roles as employees. This act provides a fair system of compensation, rehabilitation of employees with work-related disabilities, an assessable and transparent appeal system, a comprehensive process for making claims, notification of injuries and assessments for employers.	Federal Ministry of Labour & Employment
National Policy on Occupational Safety and Health, revised 2020	This policy was approved by the Federal Executive Council (FEC) in September 2020. It provides a guide for voluntary compliance and serves as a basis for occupational health and safety (OHS) programs for workers	
Child Rights Act (2003)	The act safeguards the rights and welfare of children defined as under the age of 18. It mandates that the best interest of the child shall be taken as the primary consideration in all actions concerning children regardless of the entity undertaking the action. It outlines the rights and responsibilities of children and provides for their protection and welfare. For the HeSP, child labor on any activity is strongly prohibited and sanctions and legal action as in the provision of this act will apply.	Federal Ministry of Women Affairs
National Gender Policy (Revised)	The goal of this policy is to build a society free of discrimination where the needs and concerns of women and girls are infused equitably in all sectors of national development. For HeSP, the policy will ensure: • women's empowerment and equal treatment for women in the workplace for all HeSP activities • women participation in leadership and decision-making on HeSP activities • shared responsibility for the elimination of sexism and oppressive gender roles on all HeSP activities	Federal Ministry of Women Affairs
Nigeria Centre for Disease Control and Prevention (Establishment) Act, 2018 (No. 18 of 2018)	An Act to establish the Nigeria Centre for Disease Control and Prevention for the prevention, detection, investigation, monitoring and control of communicable diseases in Nigeria, and other related matters.	NCDC
Land Use Act Cap L5, Laws of the Federation of Nigeria 2004.	An Act to vest all land comprised in the territory of each State (except land vested in the Federal Government or its agencies) solely in the Governor of the State, who would hold such land in trust for the people and would henceforth be responsible for allocation of land in all urban areas to individuals resident in the State and to organisations for residential, agricultural, commercial and other purposes while	Federal Ministry of Lands

Legal Document	Description/Relevance to Project	Implementation Agency
	similar powers with respect to non-urban areas are conferred on Local Governments	
Federal Road Safety Commission Act, 2007 and other applicable national regulations	An Act that establishes the Federal Road Safety Commission, with the responsibility for traffic management, preventing and minimizing accidents on the highways, the supervision of users of such highways, the regulation of traffic thereon and clearing of obstructions on any part of the highways and for educating drivers motorists and other members of the public, generally on the proper us of highways and for related matters of safety on the highways	Federal Road Safety Commission
Nigeria Data Protection Act (NDPA), 2023	An Act to provide a legal framework for the protection of personal information and establish the Nigeria Data Protection Commission for the regulation of the processing of personal information; and for all matters.	Nigeria Data Protection Commission

3.1.1 Applicable Regulatory Approvals and Permits

The applicable regulatory approvals based on proposed project activities are indicated in the table below.

Table 3.2: Applicable regulatory approvals based on project activities

Activity Type	EIA Category (FMEnv)	Required Approval	Responsible Entity	Issuing Authority
Construction of new labs/warehouses	I or II	EIA Approval, Building Permit	SPCU/NPCU	FMEnv, State Ministry
Upgrade of PHCs	II or III	Environmental Screening Clearance	SPCU	State EPA
Medical waste management	II	Hazardous Waste Registration and Handling License	Health Facility	NESREA
Installation of digital surveillance systems at Points of Entry	II or III	Environmental Screening Clearance	SPCU	State EPA
Provision and upgrade of Water Sanitation and Hygiene (WASH)	II or III	Environmental Screening Clearance	SPCU	State EPA
Provision of Solar panels	II or III	Environmental Screening Clearance	SPCU	State EPA
Renovation and equipping of isolation and treatment centers	II or III	Environmental Screening Clearance	SPCU	State EPA

3.2 Administrative Structure for Health Security in Nigeria

Nigeria Centre for Disease Control (NCDC)

The Nigeria center for disease control and prevention (NCDC) is Nigeria's NPHI which provide leadership, expertise, and coordination for the country's national preparedness and response functions to prevent, detect, and respond to public health threats and emergencies. The NCDC leads national coordination and expertise towards long-term public health improvement, allocating resources, and playing a central role during public health emergencies. The agency serves interdisciplinary functions that help States and LGAs organize their public health services. The NCDC also engages in strategic regional and global partnerships to manage regional and global health threats.

Nigerian Agricultural Quarantine Service (NAQS)

The Nigerian Agricultural Quarantine Service (NAQS) is responsible for regulating the import and export of

animals and animal products. They ensure that all animals and animal products meet international health and safety standards.

Federal Department of Animal Production and Health (FDAPH)
The Federal Department of Animal Production and Health (FDAPH) focuses on livestock production and animal health management. They develop policies and implement programs to improve animal productivity and prevent the spread of diseases.

Federal Ministry of Livestock Development
The Federal Ministry of Livestock Development (FMLD) has a mandate to enhance livestock productivity, ensure food security, and drive economic growth. The Ministry is committed to addressing key challenges such as poor infrastructure and conflicts between farmers and herders. FMLD focuses on areas like livestock breeding, ranch development, pest control, and veterinary public health. Through strategic policies, research, and private-sector engagement, the Ministry aims to modernize livestock farming, create jobs, and boost Nigeria's economy

Federal Ministry of Health and Social Welfare
The Ministry's mission is to develop and implement policies and programmes as well as undertake other necessary actions that will strengthen the national health system to be able to deliver effective, efficient and affordable health services that foster improved health status of Nigerians, to serve as the engine for the pursuit of accelerated economic growth and sustained development.

National Agency for Food and Drug Administration and Control (NAFDAC)
The National Agency for Food and Drug Administration and Control in the Federal Ministry of Health (FMoH) in charge of food safety and registration and control of veterinary medicines and animal feed. It oversees the regulation of veterinary drugs and vaccines. They ensure the quality, safety, and efficacy of veterinary products available in the Nigerian market.

3.4 State Level Institutions

State Environmental Protection Agency or Authority
State Environmental Protection Agency or Authorities (SEPAs) are responsible for the assessment of all public or private projects activities within the states. The roles of SEPAs in this project include.

- Conducting public enlightenment on environmental sanitation and management.
- Co-operating with the Federal and Local Governments, Statutory bodies and Research Agencies on matters relating to the project.
- Pollution control and environmental health in the states.
- Collaborating with FMEnv and other agencies to achieve effective prevention of abatement of trans-boundary movement of waste

State Ministries of Health
Each state ministries of health play a crucial role in ensuring the health and well-being of their citizens by formulating and implementing state-level health policies, regulating health facilities and professionals, and overseeing the delivery of healthcare services within the state. They are responsible for the overall health of the population, including disease surveillance, public health emergencies, and promoting health education.

State Ministries of Agriculture
Each State Ministries of Agriculture and Food Security play a vital role in promoting agricultural development and ensuring food security within their respective states. They are responsible for formulating and implementing agricultural policies, increasing food production, improving livestock, and enhancing the overall agricultural sector to support local economies and communities.

Local Government Authorities,
The local authorities are the primary implementers of primary healthcare policies and programs, responsible for ensuring local public health infrastructure and preventing the spread of communicable disease. Without any specific laws on environmental management are charged with the following responsibilities*, inter alia:*

- Coordinating the activities of Local Government Council.
- Maintenance of Law and Order in collaboration with Law Enforcement Agencies.
- Collection of taxes and fees.
- Establishment and maintenance of cemeteries, burial grounds and homes for the destitute or infirm
- Establishment, maintenance and regulation of markets, motor parks and public conveniences.
- Construction and maintenance of roads, streets, drains and other public highways, parks, and open spaces.
- Naming of roads and streets, and numbering of houses.
- Provision and maintenance of public transportation and refuse disposal; and
- Registration of births, deaths and marriages.

3.5 Applicable International Legal and Administrative Instrument

Several international regulations, protocols, treaties and conventions have been signed by the World aimed at halting environmental degradation and thus protecting human health against possible adverse effects. Nigeria subscribes to a number of this International Regulations and Conventions relating to Environmental Protection. Some applicable guidelines/conventions/treaties applicable to which Nigeria is a signatory are below outlined:

- Basel convention on the prevention of trans-boundary movement of hazardous wastes and their disposal.

Convention on climate change3.6 The World Bank Environmental and Social Framework (ESF)

The World Bank 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 Environmental and Social Standards (ESSs) set out the requirements for Borrowers relating to the identification and assessment of environmental and social risks and impacts associated with projects supported by the Bank through IPF. The standards will: (a) support Borrowers in achieving Good Industry and International Practice (GIIP) 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. The relevant ESSs to the project are:

- ESS1 Assessment and Management of Environmental Social Risk and Impacts
- ESS2 Labour and Working Conditions
- ESS 3: Resource Efficiency and Pollution Prevention and Management
- ESS 4: Community Health and Safety
- ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement
- ESS10 Stakeholder Engagement and Information Disclosure

The relevance of the 6 standards to the project is discussed in table 3.3 below:

Table 3.3: Relevant ESS and justification

ESS	Relevance of Standard to the HeSP Project	Ways to Address
ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	ESS 1 sets out the Borrower's responsibilities for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project. The proposed project activities will include installation of WASH facilities, construction of warehouse and regional labs. Environmental concerns associated with such include waste generation, debris from activities, community health and safety, occupational health and safety of workers, noise, dust emissions etc. The project also poses some social risks associated with labour influx, grievances, GBV, social conflicts and exclusion of vulnerable groups from operationalizing the project.	Given that the exact project locations are not fully known at this stage, this ESMF, an Environmental and Social Commitment Plan (ESCP) outlining Government's commitment, and the Stakeholder Engagement Plan (SEP) were prepared prior to board appraisal. An Environmental and Social Management Plan (ESMP) will be prepared when project locations are known for the construction works. An Environmental and Social Code of Practice (ESCoP) (Annex 1) will be utilized to comply with E&S requirements for the installation of WASH facilities, upgrades, expansions and greening of the PHCs. Standard Operating Procedures for health workers and other specific plans such as OHS plans, e-waste management plans, Journey management plans, and Traffic Management plan shall be developed prior to implementation.
ESS 2: Labour and Working Conditions	The applicability of ESS 2 is established during the environmental and social assessment process (ESS 1). From the Bank's perspective, projects receiving IPF should promote safety and health at work, fair treatment, non-discrimination and equal opportunity of project workers; including the protection of vulnerable workers such as women, persons living with disabilities, migrant workers, contracted workers, community workers, primary supply workers and children (of working age, in accordance with this ESS and national Child Labour Laws), as appropriate etc. This project will make use of various categories of workers, direct and indirect workers who may face unfavourable terms and conditions of employment, discrimination, child labuor, forced labour, grievances and unsafe working conditions.	A standalone Labour Management Procedures (LMP) consistent with ESS2 and National Labour Laws for all categories of workers has been prepared.
ESS 3: Resource Efficiency and Pollution Prevention;	The ESS 3 aims to promote the sustainable use of resources, including energy, water and raw materials. Additionally, it aims to minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities. The Project activities could potentially	This ESMF identifies environmentally friendly options to project activities in the mitigation measures in chapter four. An ESMP will be prepared, and the healthcare waste management plan will be utilized to minimize and manage the risks and impacts associated with resource efficiency and pollution management. Applicable waste management plan shall be utilized to manage construction wastes.

ESS	Relevance of Standard to the HeSP Project	Ways to Address
	lead to an increase in generation of medical waste, hazardous materials, and resource consumption resulting from the Upgrading of healthcare facilities, laboratories, EOCs, and construction of the national warehouse and laboratories. The applicability of ESS 3 is established in the initial environmental and social screening.	Specimens, sharps, and other consumables will be managed in accordance with the provisions of the Healthcare Waste Management Plan. The WBG EHS guidelines on Hazardous material management, an E-waste management plan shall be developed. Increased energy and water demands will be managed through energy-efficient lighting and conservation strategies, such as promoting the use of energy-efficient bulbs for lighting and efficient water usage in all healthcare facilities.
ESS 4: Community Health and Safety	ESS4 is relevant due to the potential risks to health workers, patients, and nearby communities arising from civil works, laboratory operations, increased traffic, and the use of security personnel. These risks include risk of accidents and pollution from vehicle movements and civil works, exposure to infectious and hazardous material from laboratories and healthcare waste, and concerns related to sexual exploitation and abuse (SEA/SH). The Project may implement a strategy that involves deploying security personnel to accompany health officers during disease outbreaks, particularly in areas experiencing significant security challenges. This intervention aims to ensure the safety of health workers as they carry out their activities in security-prone areas. Thus, the requirement for the use of security under ESS 4 is relevant.	To address these risks, a community health and safety plan, standard operating procedure, and journey management plan shall be developed when the sites are known. A SEA/SH Action Plan will be developed during the Project implementation phase. The Project will implement the Security Management Framework prepared under the CoPREP Projects. Project funds will not be used to purchase firearms when engaging security personnel for sub-project activities. Furthermore, the security personnel will comply with the guidelines outlined in the Good Practice Note on "Assessing and Managing the Risks and Impact of the Use of Security Personnel." An Environmental, Health & Safety Guidelines (EHSG) applicable to the project is presented in annex in line with the World Bank guidelines.
ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	This standard is relevant as the project plans to build a national warehouse and six reference laboratories in the Federal Capital Territory (FCT). The exact locations are not confirmed but may be on existing government health institution premises. Delays in acquiring accurate information about land acquisition make this standard applicable.	Resettlement Action Plan (RAP) will be prepared and implemented once the locations are identified and before the civil works begin. The Terms of Reference for the RAP are included in Annex 6.
ESS 10: Information Disclosure and Stakeholder Engagement	ESS 10 applies to all projects funded by the Bank through IPF. At all levels of implementation of HeSP, a systematic approach to stakeholder engagement relevant to the project concept, PDOs, and expected results is mandatory. Open and transparent engagement, recording suggestions and concerns; including assessing the level of	A Stakeholder Engagement Plan (SEP) been prepared and will be disclosed. Additionally, E&S instruments to be prepared for subprojects/intervention works shall include a dedicated chapter to stakeholder engagement so as to guide stakeholder participation and relations throughout, and after subproject implementation

ESS	Relevance of Standard to the HeSP Project	Ways to Address
	stakeholder interest and support is essential for decision making at the institutional and administrative level of HeSP. This is critical throughout the program life cycle and is expected to extend. There are different categories of stakeholders associated with the project with varying degree of influence. These stakeholders will need to be identified, engaged effectively and periodically in order to improve environmental and social sustainability of the project, enhance acceptance, and make significant contribution to successful project design and implementation.	

3.7 Comparison between the Nigeria EIA Guidelines and the World Bank ESF

The Environmental Impact Assessment Act CAP E12 LFN 2004 requires that development projects be screened for their potential impact. Based on the screening, a full, partial, or no Environmental impact assessment may be required. The World Bank ESF though similar in certain aspects, still exists. Some of the gaps in the national EIA guideline include emerging issues on climate change, labour and working conditions, early consultation with stakeholders, Community Health and Safety etc.

Table 3.4 Gaps between the EIA Act and the ESF

Context	ESF	Environmental Impact Assessment (EIA) Act 86, 1992	GAPs
Risk Classification	High, Substantial, Moderate and Low	Categories I, II, III	The nomenclature differs, however, criteria for screening are similar as both require a screening/scoping process to identify the required mitigation instrument (ESIA/ESMP/RAP).
	ESS1 Assessment and Management of Environmental and Social Risks and Impacts	Environmental Impact Assessment Act CAP E12 LFN 2004	EIA regulatory framework aligns well with the basic ESF Principles. However, ESF has additional requirements on assessment of associated facilities, climate change issues, gender, more extensive consultation, more intensive assessment of health issues etc.
	ESS 2 Labor and Working Condition	Labor Act, Chapter 198, Laws of the Federation of Nigeria (LFN) 2004, on promoting fair treatment and equal opportunities of	Gaps include emerging issues regarding contractor's requirements in the bidding documents. separate requirements for

		project workers. Child Labor Act. 2019 prohibits child labor or their engagement under certain conditions.	direct workers, contracted workers, primary supply workers, and community workers. The ESF places responsibility on the proponent (borrower) to take responsibility for ensuring requirements for managing the 4 categories implemented. While the Labor Act. places responsibility only for direct workers (permanent or casual) employed within or outside the community. The child labor Act. 2019 essentially satisfy the requirements of ILO on child labor and is consistent with ESS 2.
	ESS3 Resource Efficiency and Pollution Prevention and Management	Environmental Impact Assessment to avoid or minimize waste generation and ensure effective management to avoid, minimize or mitigate adverse impacts on human health and the environment. National Environmental Regulations has requirements for pollution prevention, discharge permits, etc.	Requirements for pollution prevention and waste management are similar, but the ESF contain additional requirements for improving efficient consumption of energy, water and raw materials, as well as other resources
	ESS4 Community Health and Safety	The revised EIA procedural guideline on Social Impact Assessment 2017 by the FMEnv in ANNEX VII stipulates health & safety impacts and other community related risks.	Community health & safety risks are not adequately covered in the EIA Act and not robustly stated in the procedural guidelines
	ESS 5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	The revised EIA procedural guideline on Social Impact Assessment 2017 by the FMEnv stipulates the need for a RAP to address resettlement and compensation. It also talks about livelihood restoration plans where necessary.	Chapter 202 of Nigeria Land Use Act, 1990 is the legal basis for land acquisition and resettlement in Nigeria. However, the issues on Land Acquisition, Restrictions on Land Use and Involuntary Resettlement are not adequately covered in the EIA ACT
	ESS 6 Biodiversity Conservation and Sustainable Management of Living Natural	The provisions under the Nigerian EIA Act seek for the protection and development of the environment, biodiversity	Essentially, there is no difference between the main framework of both policies. To the extent of the compliance

	Resources	conservation and sustainable development of Nigeria's natural resources in general.	enforcement provisions, the Nigerian EIA Act and the World Bank ESS6 are similar.
	ESS8 Cultural Heritage	EIA Act is not specific on issues related to cultural heritage	The ESMF has provided a framework to guide chance find. Site specific plans will also be prepared as part of ESMPs
	ESS10 Stakeholder Engagement and Information Disclosure	EIA Act requires consultation of affected people, State or Local Government of the proposed activity, contains requirements for public disclosure of reports	Gaps include guidelines on the identification of stakeholders and focused groups including the preparation of stakeholders' engagement plans and Grievance Redress Mechanisms, and entrenches stakeholder engagement throughout the life cycle of the project

3.8 World Bank Group Environmental Health and Safety Guidelines

The World Bank Group has developed a set of Environmental, Health, and Safety (EHS) Guidelines. These guidelines serve as technical reference documents, offering general guidance as well as industry-specific examples of Good International Industry Practice (GIIP). The General EHS Guidelines are intended to be used alongside the relevant Industry Sector EHS Guidelines, which provide users with specific guidance on EHS issues within particular industries. For the implementation of the HeSP Project activities will include construction and hazardous waste management. This link <https://documents1.worldbank.org/curated/en/157871484635724258/pdf/112110-WP-Final-General-EHS-Guidelines.pdf> provides the general guidelines. Specific guidelines relevant to construction and hazardous waste management shall be utilized.

3.9 Institutional and Implementation Arrangement

HeSP Nigeria will be coordinated at the national level by a National Steering Committee (NSC). The NSC will oversee implementation and will be chaired by the Honorable Minister of Health and Social Welfare, with the Ministers of the Federal Ministry of Livestock Development (FMoLD) and the Federal Ministry of Environment (FMoE) serving as Co-Chairs. The NSC holds ultimate responsibility for providing overall strategic direction and guidance towards achieving the PDO for HeSP Nigeria. The NSC will designate Nigeria's representation in the HeSP Regional Steering Committee (RSC), which is convened by WAHO to support Program coordination at regional and national levels and ensure alignment with the overall regional agenda and global priorities. The RSC includes representatives of key Ministries across HeSP participating countries. See Figure 1 below for detailed implementation arrangements.

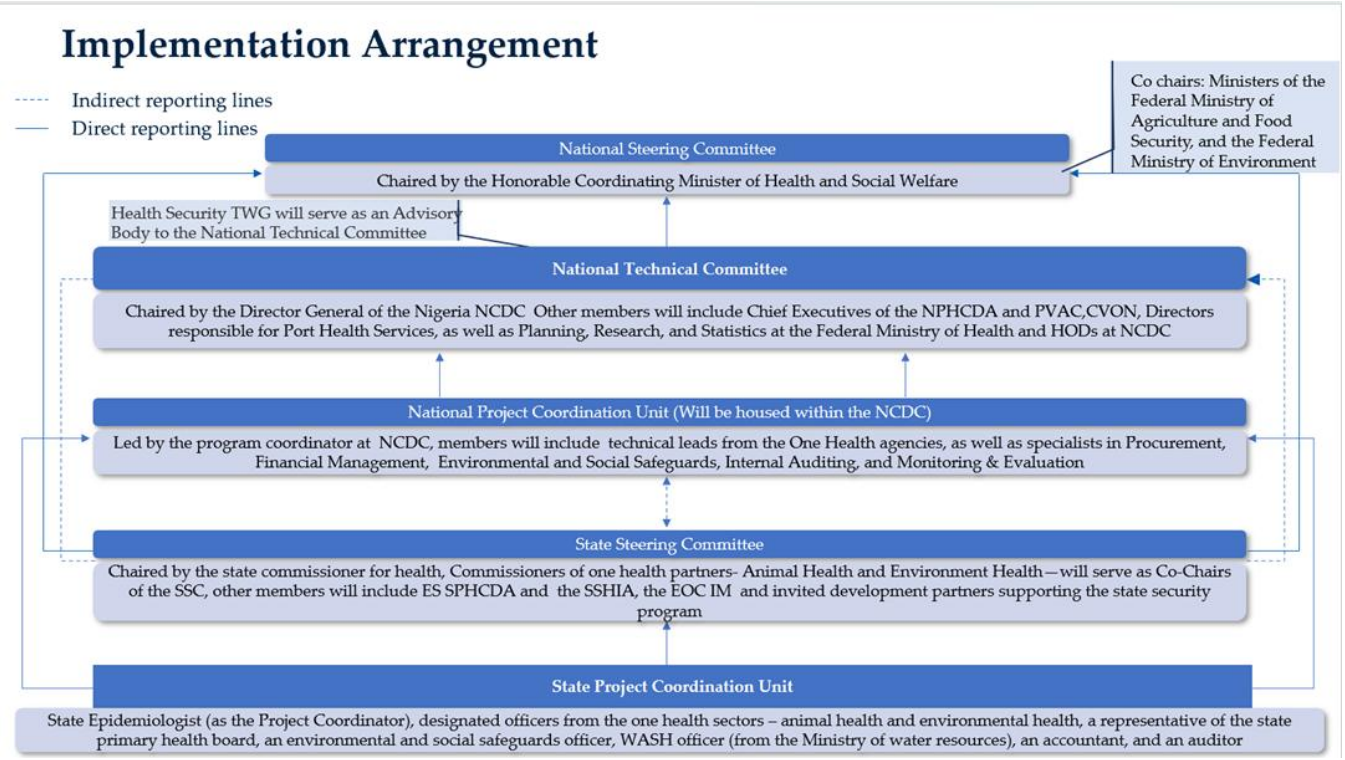

Figure 1: Implementation Arrangement

Chapter Four: Description of the Project Environment

4.0 Introduction

This chapter presents an overview of the country, the environment and socio-economic baseline conditions in addition to the prevailing conditions of the healthcare system in the country (infrastructure, delivery quality, its preparedness, and response plan to infectious diseases within its environment and the social interactions.

4.1 Country Overview

Nigeria is the most populous nation in Africa with a 2024 projected growing population of about 237,527,782 and accounts for about 50 percent of West Africa's population. The country lies between latitudes 40 00' N and 140 00' N, and longitudes 20 50' E and 140 45' E, bordered by Chad to the northeast, Cameroon to the east, Benin Republic to the west, Niger to the northwest and the Atlantic Ocean to the south. The country has a total land area is 910,770 km² is situated in the heart of Africa (West Africa) just above the equator with the Sahel of Africa to its north, and the Gulf of Guinea to its south. Nigeria is divided into thirty-six (36) states and one Federal Capital Territory. The 36 states are further sub-divided into 774 LGAs. Furthermore, the states are aggregated into six geopolitical zones namely: North-West, North-East, North-Central, South-East, South-South, and South-West. See Figure 2 below.

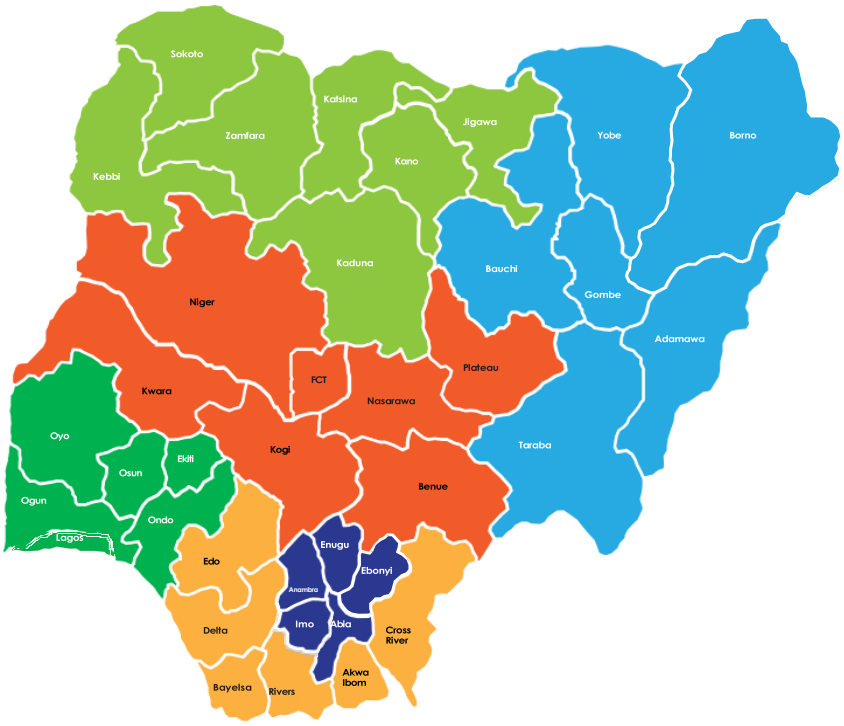

Figure 2 2: Map of Nigeria showing the 36 states

4.2 Physical Environment

4.2.1 Topography

Nigeria has five major geographic regions. A low coastal zone along the Gulf of Guinea hills and low plateaus north of the coastal zone, the Niger–Benue River valley; a broad stepped plateau stretching to the northern border with elevations exceeding 1,200 m and a mountainous zone along the eastern border, which includes the country's highest point, Chappal Waddi (2,419 meters) (Source: Geography of Nigeria, 2022).

4.2.2 Ground Water/ Hydrogeology

The major aquifers in Nigeria are Basement aquifers (North Central and few parts of the Northwest and Northeast Geopolitical Zones), Sedimentary basins (Southwest, Northwest and North East Geo-political Zones), Volcanic plateau (Southeast Zone), and River alluvium (North Central and South South Geopolitical Zones). There are eight major regional aquifer systems, 30 local and minor aquifers and 36 aquicludes, aquitards, and aquifuges in Nigeria. These eight mega regional aquifers have an effective average thickness of 360 m; with a range of 15–3,000m. The yields from the major aquifers range between 1.25 and 32 l/s[1] whereby the sedimentary basins generally form the most prolific aquifers (Nigeria Hydrological Services Agency 2018).

Generally, groundwater in most of the aquifers in Nigeria are fresh with low concentrations of total dissolved solids (<500 mg L^{-1}[2]). However, groundwater is exposed to active pollution in major cities and rural communities due to increased urbanization, indiscriminate waste disposals, industrial activities etc.

4.2.3 Surface Water

There are many rivers in Nigeria, but the two principal river systems are the Niger – Benue and the Chad. The Niger River, the largest in West Africa, flows 4,000 km from Guinea through Mali, Niger, Benin, and Nigeria before emptying into the Gulf of Guinea (the Niger River traverses Delta, Kogi, Kwara and Niger states). The Benue River and largest tributary flows 1,400 km^2 from Cameroon into Nigeria, where it empties into the Niger River (the Benue River traverses Adamawa, Benue, Nasarawa and Taraba states). The country's other river system involves various rivers that merge into the Yobe River, which then flows along the border with Niger and empties into Lake Chad (Nigeria Hydrological Services Agency 2018). Figure 3 below shows Nigeria's Hydrological Map

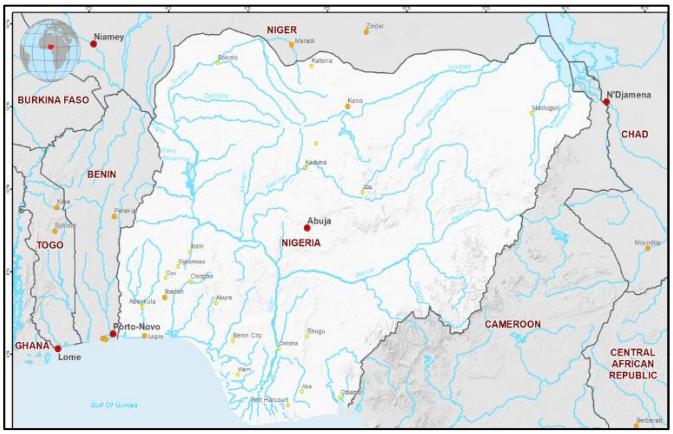

Figure 3: Nigeria Hydrological Map – Source: Nigeria Hydrological Services Agency (NIHSA)

4.2.4 Climate and Vulnerability

The project area of influence (which cuts across Nigeria) is divided into three main climatic regions: Tropical Rain Forest Region, Near Desert Region and Savannah Region (Spatial distribution and temporal variability of Harmattan dust haze in sub-Sahel West Africa, 2017. The country has annual rains of around 1,000 mm (40 inches). The climate in Nigeria is semi-arid in the north, and humid in the south (WB Climate Change Knowledge Portal). Due to its location, Nigeria has a tropical climate characterized by the hot and wet conditions linked with the movement of the Inter-Tropical Convergence Zone (ITCZ) north and south of the equator. The country experiences consistently high temperatures throughout the year (WB Climate Change Knowledge Portal).

Rainfall is experienced throughout the year in Nigeria, with most significant rainfall occurring from April to October and with minimal rainfall occurring November to March. Climate change impacts, such as erratic rainfall patterns

[2] Kilometeres - km

and rising temperatures, pose a significant threat to living conditions in Nigeria. Several diseases of public health significance have developed changing pathophysiology because of climate change. States within the same or similar ecological zone share broadly the same climate impacts. The coastal areas of Nigeria are vulnerable to rising sea levels and coastal erosion. This increases the incidence of flooding and diseases associated with the flooding in the coastal areas of Nigeria further worsening the disease burden in those places.

4.2.5 Water Quality & Availability

Poor access to improved water and sanitation in Nigeria remains a major contributing factor to high morbidity and mortality rates among children under 5 years (UNICEF). The use of contaminated drinking water and poor sanitary conditions result in increased vulnerability to water-borne diseases, including diarrhoea which leads to deaths of more than 70,000 children under 5 years annually (UNICEF). 73% of the diarrhoea and enteric disease burden is associated with poor access to adequate water, sanitation and hygiene, and is disproportionately borne by poorer children. Frequent episodes of WASH related ill-health in children, contribute to absenteeism in school, and malnutrition. The use of contaminated drinking water and poor sanitary conditions result in increased vulnerability to water-borne diseases

Pollution from industrial and agricultural sources, along with over-exploitation of oil and other mineral resources, threatens water resources. These activities have devastating impacts on ecosystems and human health, particularly in the Niger Delta and other mining cities where access to portable water in not guaranteed. This has increased the incidence of heavy metal poisoning and other diseases associated with toxic exposure to mining waste.

4.3 Biological Environment

4.3.1 Vegetation

Savannah and Forest are the predominant types of vegetation in Nigeria. The savannah vegetation stretches from the central parts of Nigeria to the extreme northern parts. It is divided into i) Sahel savannah: in the North-Eastern borders, ii) Short grass Sudan savannah: stretching from upper western borders to the North-Western borders and, iii) Woodland/Tall grass Guinea Savannah (lying below the short grass savannah and covering the central states and parts of the eastern region of the country). The tropical forest vegetation covers the remaining southern portion of the country and is divided into three types: i) Rain Forest with tall trees, ii) Fresh water swamp consisting of both fresh and saltwater swamps and iii) Mangrove Forest which is made up of mangrove vegetation.

4.3.2 Biodiversity and Nature Conservation

Nigeria ranks 36th in the world of countries with the highest biodiversity[3]. It is widely believed that the areas surrounding Calabar in Cross River State contain the world's largest diversity of butterflies. The drill monkey is only found in the wild in Southeast Nigeria. The total number of higher plant species in Nigeria is 4,715 (of which 119 are threatened). For mammals, the total number of species is 274, and for breeding birds the total known species is 286.

4.4 Public Health.

Some of the major health issues in Nigeria include malaria, tuberculosis infectious diseases including COVID 19, monkey pox, cholera etc. which poses public health threats responsible for significant morbidity and mortality in the country. In girl schools some prevalent health issues related to poor sanitation and hygiene include urinary tract infections, candidiasis, stomach pain etc., and in extreme cases cholera outbreaks, because of the poor

[3] Source: International Union for Conservation of Nature (IUCN)

sanitary conditions and inadequate WASH facilities. Floods have triggered a cholera outbreak in some of the northern states (specifically Borno, Adamawa and Yobe). Over 7,700 cases, including 324 deaths, were reported across these three states.

4.4.1 Communicable and Non-Communicable Diseases in Nigeria

Communicable Diseases

Malaria

The Federal Ministry of Health (FMoH) maintains that Malaria remains a significant public health problem in Nigeria with an estimated 65.4 million cases in 2021 (with an incidence rate of 298.6 cases per 1000 population), resulting in 193,512 deaths[4]. This equates to approximately 30% of the worldwide deaths from malaria. Despite the high burden, the country is off track to meet the targets set by the Global Technical Strategy for Malaria as the malaria incidence rate has increased since 2015 and the gap from the target has widened each year.

Tuberculosis and HIV/AIDs

With an estimated incidence rate of 229 TB cases per 100,000 in 2021 (World Health Organization (WHO)), the burden is still high, however the rate continues to fall since 2015.The mortality rate of TB cases (all forms, excluding HIV coinfection) has decreased from 62 to 53 per 100,000 population between 2015 and 2021. The TB mortality rate among HIV-positive people decreased from 23 to 6.2 in the same period. Nigeria has met two of the 95-95-95 goals:

- There is limited data on the number of people living with HIV knowing their status.
- 98% of the people living with HIV that know their status are on treatment.
- 95% of people living with HIV and on treatment are virally suppressed.

Approximately 1.7 million people were receiving antiretroviral treatment in 2021.

Neglected Tropical Diseases (NTDs)

Nigeria is endemic for four of the five NTDs amenable to preventive chemotherapy through mass drug administration (MDA), namely lymphatic filariasis, schistosomiasis, soil-transmitted helminthiasis, and trachoma (WHO). In 2020, 26.5 million of the 31.7 million people targeted (84%) were treated with MDA. Other notable NTDs that remain endemic are Human Africa trypanosomiasis (gambiense), leishmaniasis (cutaneous), Buruli ulcer, taeniasis and cysticercosis leprosy, and rabies.

Non-communicable diseases

NCDs are a significant health problem in Nigeria. The age-standardized mortality rate across four major NCDs (Cardiovascular Disease, Chronic Respiratory Disease, Cancer and Diabetes) was 565 per 100,000 in males and 546 in females in 2021. Nigeria has implemented efforts on the NCD progress indicators on areas including the NCD policy and plan, tobacco taxes, tobacco advertising bans, tobacco health warnings, and alcohol taxes, however there is limited progress against a subset of the indicators. These include tobacco smoke free/pollution, tobacco media campaigns, salt policies, trans fats policies, marketing to children and physical activity awareness.

4.5 Healthcare System in Nigeria

The Nigerian healthcare system is a three-tiered structure involving primary, secondary, and tertiary levels of care, managed by the federal, state, and local governments. While the system is intended to be comprehensive, it faces significant challenges in terms of infrastructure, staffing, and funding, particularly at the primary level with profound impact on Nigeria's poorest and most vulnerable. Some of the most notable challenges to the health system in Nigeria include the following

[4] Country Disease Outlook- Nigeria – World Health Organization (WHO)

1. Inadequate Infrastructure and Funding: Many health facilities lack basic equipment and are understaffed, leading to a strain on functional health facilities, often creating pressure and dependence of higher levels of care. In addition, government spending on healthcare is relatively low, representing under 5% of total government expenditure in recent years. The system is also hugely reliant on development assistance with priority of decided by donor/ funding agencies and often in misalignment with system priorities.
2. Inequitable Access: The system is not evenly distributed, with disparities between rural and urban areas, and between different socioeconomic groups
3. Financial Burden: Out-of-pocket expenses are a major burden for many, and limited access to health prepayments through social systems leave millions at risk of catastrophic health expenditure and poverty
4. Quality of Care: There are concerns about the quality of care including shortages of essential drugs, inadequate staffing, availability of diagnostic equipment, and overall client experience when using the health infrastructure in Nigeria.

Overall, the Nigerian healthcare system is struggling to provide equitable, accessible, and affordable care to its population. Addressing the challenges of funding, infrastructure, and staffing is crucial for improving the health outcomes of Nigerians. The government has made recent efforts to improve the health sector with the launch of the renewed hope health agenda and the implementation of a national health sector renewal investment initiative (NHSRII) which aims to improve healthcare coverage and quality for all Nigerians, reduce financial barriers to care and ensure strategic partnerships to improve the overall outlook of care and alignment of resources using a sector wide approach (SWAp). The program also has a large digital agenda which is focused on improving the use of technology to improve healthcare access and quality.

The responsibility for providing healthcare services and programs in Nigeria is shared among the three tiers of government. The Federal Government is largely responsible for planning, assistance, guidance, and coordination of state-level implementation of health policies. They establish information systems and are majorly responsible for disease surveillance, vaccine management, training of health professionals, and drug regulation. State Ministries of Health, State Hospital Management Boards, and Local Government Areas share the responsibility of managing public health facilities and programs that pertain to each state. The local government manages ward health committees, village health committees, and traditional or alternative healthcare providers. Nigeria operates a pluralistic healthcare system that has both public and private providers and modern and traditional providers.

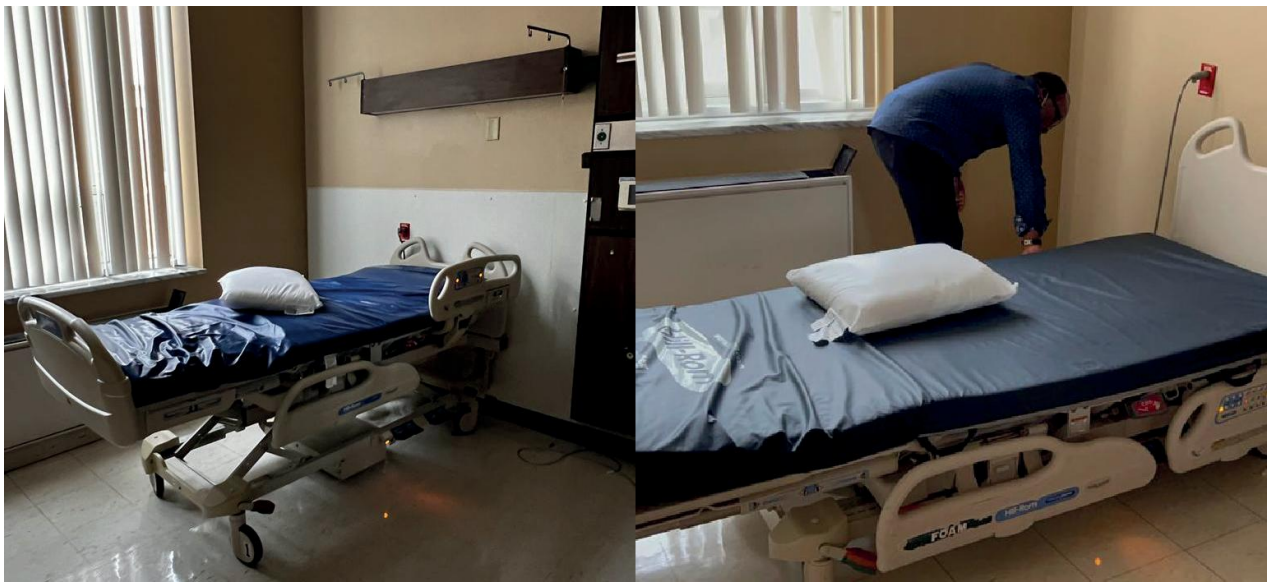

Figure 4: A Case treatment facility in Adamawa, Nigeria

4.5.1 Healthcare Waste Management

Healthcare waste (medical/biomedical waste) includes all forms of waste arising from activities within health care facilities, research centers, and laboratories related to medical procedures. Healthcare waste is a mix of both hazardous and nonhazardous waste streams. 75% to 90% of the waste generated in a typical healthcare facility is usually non-hazardous. The remaining 10% to 25% are hazardous and pose a significant risk to public health if not handled properly.

Nigeria, waste management has not received satisfactory attention due to the limited economic resources, poor policy regimes, inadequate public infrastructure, and the absence of other critical capacities. Healthcare waste management is key in healthcare service delivery. It should be carefully evaluated by healthcare service providers to ensure their safety and the safety of other workers who are involved in generating, collecting, and disposing of healthcare waste. Some healthcare wastes that are of significant hazard include sharp objects, discarded human tissues, blood tissues, chemicals and pharmaceutical materials.

Figure 5: A waste management facility

4.5.2 Current HCW Management

Healthcare Waste Segregation is the responsibility of the waste producer and must be done in proximity at the point of generation. Sorting waste into colour-coded plastic bags helps in identifying the categories of healthcare waste, ensuring appropriate disposal of waste according to risk level. It also aids in the efficient collection and treatment of waste.

Waste management facilities include incinerators, chemical disinfection, open burning that must be controlled, dumpsites, open ditches, landfills, chemical disinfection, pit latrines, and septic tanks. However, they differ from facility to facility. Policies exist - National Environment Standards and Regulations Enforcement Agency (NESREA)'s National Environment (Healthcare Waste Control) Regulations, 2021 - to guide the management of healthcare waste. Presently, Colour-coded bins are used to collect and segregate waste medical/biomedical waste in all facilities visited. The use of the "burn and bury method" for medical and other waste disposal is common at the Primary Health Care Centers. Sharps are transported to an accredited incinerator. Biomedical waste is handled by accredited waste collectors owned by the government.

Medical Waste Management Practices in Delta State

Medical waste management in Delta State follows a tiered approach aligned with the level of healthcare delivery. At the tertiary level, most facilities are equipped with functional incinerators that serve as the primary method for the disposal of hazardous medical waste, ensuring safe treatment and minimizing environmental risk. Some secondary health facilities also operate incinerators, although the availability and functionality vary across locations. Where incinerators are lacking, interim waste handling practices have been adopted, though these may require further support and standardization.

At the primary healthcare level, waste management practices are generally more basic. Medical waste is collected in color-coded or designated waste bins and is either buried in secure pits or dumped at designated sites away from public access. While this approach addresses immediate disposal needs, it lacks the technical safeguards needed for long-term environmental protection, especially in areas with high groundwater vulnerability. Strengthening infrastructure and training at the primary and secondary levels remains a priority to ensure uniform compliance with medical waste management standards across Delta State.

Findings from the field visits

The discussions on waste management during the consultations held from May 5 -13, 2025 in Borno, Enugu, Delta, Nasarawa, Ondo, Sokoto, highlighted several key issues and recommendations:

1. **Waste Management Deficiencies**: Stakeholders expressed concerns about the capacity to manage biomedical and chemical waste, especially in the absence of localized infrastructure. They recommended developing state-level waste management plans and enhancing training for waste handlers.

2. **Biomedical Waste Management Challenges**: In Delta State, there were concerns regarding the safe handling of biomedical waste, particularly in riverine areas where improper disposal could contaminate water sources.

3. **Solid and Construction Waste Management**: In Borno State, stakeholders discussed the need for effective waste management strategies during warehouse development.

4. **Environmental Degradation Risks**: In Ondo State, stakeholders highlighted the need for environmental impact assessments for infrastructure expansions to prevent environmental degradation.

5. **Waste Management Gaps**: There were discussions about the limited capacity for biomedical waste handling, particularly in underserved areas.

Overall, the consultations revealed a range of concerns regarding waste management, with stakeholders advocating for improved infrastructure, training, and environmental safeguards to mitigate potential risks.

4.6 WASH Facilities

Despite ongoing efforts and federal government investments, access to safe and reliable water, sanitation, and hygiene (WASH) services remains a significant challenge in Nigeria's healthcare sector. While some progress has been made, large segments of the population still lack adequate access to clean water and basic sanitation. Various challenges contribute to the unsuccessful implementation of WASH facilities including urbanization, poor maintenance, inadequate funding, climate risks, and poor service delivery. This proves that substantial efforts are still required to ensure universal and equitable access to safe water and sanitation in Nigeria. Addressing systemic inefficiencies, enhancing governance, and prioritizing vulnerable populations will be essential to achieving sustainable outcomes. In all the facilities visited, there is the provision of water and sanitation facilities. Water is primarily sourced from groundwater through motorized boreholes in all the facilities.

The findings from the stakeholder engagement highlighted a critical need for the warehouses and offices to be established within the Ministry's environment to be designed with inclusive features to ensure accessibility for all individuals, including those with disabilities. Furthermore, it is essential that gender-segregated Water, Sanitation, and Hygiene (WASH) facilities are incorporated, allowing for privacy and comfort for all users. These improvements will not only foster a more inclusive atmosphere but also support the overall well-being and productivity of all personnel working within these spaces.

4.7 Social Environment

This social baseline examines the prevailing socio-economic conditions and potential risks that are crucial for stakeholders. It gives a comprehensive overview of the contextual foundation of the social dynamics in the country, which assists in informing program design, policy formulation, and resource allocation

4.7.1 Population and Demographics

Nigeria is the most populous country in Africa and the 6th most populous country in the world[1]. Nigeria has the 16th highest percentage population under 18 Years of age in the world (50.4 % of the population). Nigeria's population is estimated to be 223,804,632[2]. makes up 2.89% of the total global population maintain status as the most populous country in Africa. The population density is 234.3 people per km^2. The country is viewed as a multinational state as it is inhabited by over 500 ethnic groups, of which the three largest are the Hausa, Igbo and Yoruba.

4.7.2 Vulnerable groups

In many interventions, there is a risk that marginalized groups may be unintentionally excluded from the benefits of programs and services. They usually include the elderly, youth, women, children, people living with disabilities, people in remote areas, migrant labourers, refugees, and internally displaced persons. This segment of the population is often left vulnerable when there are no strategies targeted at them to ensure their inclusion in project benefits. In 2018, about 29 million of Nigeria's population were living with a disability. That amounts to about 9.6% of the population. These groups face stigma and inaccessibility. The HeSP in Nigeria will ensure its policies and strategies are inclusive of the individuals or groups under this category.

4.7.3 Insecurity/Conflict

Across Nigeria, violence and insecurity remain major concerns. Numerous incidents of kidnapping, banditry, and terrorism have become the norm in some regions, disrupting lives and inhibiting development efforts. This insecurity is driven by a mix of underlying issues, including weak governance, unemployment, subpar security measures, and inequality. It has led to an increase in the number of internally displaced persons, as people are forced to flee their homes. These displaced persons often lack access to basic services. In addition, insecurity poses a risk to development activities by limiting access to targeted and vulnerable communities.

Insecurity has been identified as a significant risk to the successful implementation of the project, particularly due to the need to transport commodities and health supplies across the country. Some of the facilities designated for upgrades may be located in areas with high levels of insecurity, which could present additional challenges to our operations. To address these concerns, the NPCU/SPCU will enforce strict guidelines to ensure that project staff and primary suppliers are not unnecessarily exposed to high-risk zones where violence or instability may occur. Additionally, the NCDC has established a comprehensive Security Management Framework within the context of its CoPREP Project. This framework outlines protocols for risk assessment, emergency response, and safety measures. It will be adapted and utilized for the HeSP project to protect personnel and assets, ensuring that all activities are carried out in a secure and efficient manner.

4.7.4 Land Use

In Nigeria, land use for building warehouses, laboratories, and health facilities is governed by the Land Use Act of 1978, which vests all land in each state in the governor, who holds it in trust for the people. This Act provides the legal framework for land acquisition and administration, allowing state governors to grant statutory rights of occupancy for various purposes, including construction. The Act categorizes land into urban and rural, with urban land managed by the state governor and rural land by local government councils. Despite the legal framework, challenges persist, such as outdated provisions and gaps in the Act, which do not adequately address issues like land donation, livelihoods restoration, and compensation for undeveloped land. These challenges can impact the development of infrastructure like warehouses, laboratories, and health facilities, necessitating careful planning and community consultation to ensure fair land acquisition and minimize displacement.

Findings from the consultations

During the consultations, stakeholders discussed several issues related to landownership and site selection:

1. **Community Safety and Land Disputes**: Risks associated with mobile lab operations and potential land disputes were highlighted. Stakeholders stressed the importance of early engagement with traditional authorities in site selection.
2. **Land Disputes and Environmental Degradation**: In Nasarawa, stakeholders emphasized the importance of formal land documentation and environmental safeguards to prevent disputes and degradation.
3. **Ensuring Site Selection Does Not Disadvantage Vulnerable Groups**: In Borno State, stakeholders discussed the need to ensure that site selection does not disadvantage vulnerable or mobility-constrained groups. Warehouses and offices will be located within existing Ministry of Health compounds with ramp access and gender-segregated WASH blocks, avoiding displacement and improving accessibility.

4.7.5 Gender Based Violence (SEA/SH)

Nigeria ranks 118 out of 134 countries on the Gender Equality Index.[5] Women's disadvantaged position and lack of decision-making power in the social, economic and political spheres is reflected in policies, laws and resource allocation that thwart progress towards gender equality in the country. More than 70 percent of women live below the poverty line, and maternal mortality ratio is among the highest in the world at 576 per 100,000.[6] More than half of people living with HIV (3.2 million) are women (55 percent).[7] Girl enrollment in school lags behind boys, and represents one third to one quarter of classroom participants depending the state; and two-thirds of the 10.5 million out-of-school children, are girls.[8]

The wide diversity and distinct socio-economic, cultural and political contexts across Nigerian geopolitical regions and states results in different gender related vulnerabilities. While gender inequitable norms prevail throughout the country, these vary by region and interact with other structural, community and individual factors exposing women, girls and boys to some forms of GBV more than others. The socioeconomic status of women and girls in the northern zones lags behind those in the south: only 3 percent of girls in the North complete secondary school, over two-thirds aged 15-19 years are unable to read compared to less than 10 percent in the South, and 76 percent are married by age 18 in the northwest.7 Child marriage, acceptance of wife beating, restricted movement of women and girls are more pronounced in the North, and the prevalence of sexual violence, conflict related GBV and SEA is higher than in the South. In the South FGM, IPV, physical violence by any perpetrator, trafficking and

[5] British Council Nigeria. Gender in Nigeria report 2012; UNDP Human Development Report 2016. See: http://hdr.undp.org/en/content/gender-inequality-index-gii.
[6] The 2013 Nigeria Demographic and Health Survey (NDHS). See: https://dhsprogram.com/pubs/pdf/PR41/PR41.pdf.
[7] UNAIDS 2017 Data. See: http://www.unaids.org/sites/default/files/media_asset/20170720_Data_book_2017_en.pdf.
[8] NDHS 2013.

harmful widowhood practices are more prevalent.

The term ‘gender-based violence’ reflects the underlying and systemic gender inequality which is a key driver of violence. Gender inequality exists in Nigerian households and communities, as in every society in the world; it results in women and girls experiencing limited choices, as well as restricted access to resources and opportunities compared to men and boys. The unequal distribution of power between men and women, along with engrained norms and rigid expectations on gender roles are the core drivers of GBV. GBV cuts across culture, level of education and income, religion, ethnicity, and other demographic indicators. GBV is directed at an individual based on his or her biological sex or gender identity. It includes physical, sexual, verbal, emotional, and psychological abuse, threats, coercion, and economic or educational deprivation, whether occurring in public or private life. This form of violence restricts women and girls from accessing resources, opportunities, and benefits. This will be addressed across all policies in the project life cycle of Nigeria’s HeSP.

Chapter Five: Potential Environmental and Social Risk & Impacts and Mitigation

5.0 Introduction

The project has the potential to yield both positive and negative social and environmental impacts. The potential environmental and social risks and impacts of eligible activities, supported, and financed by this project are highlighted below.

5.1 Potential Positive Impact

The project is envisaged to have several positive social impacts. The implementation of the HeSP in Nigeria will:

- Reduce the incidence and spread of diseases; improve access to quality medical and emergency facilities and services; and increase the productivity of the working population.
- Specifically, the implementation of the project will enhance skills and capacities of the public health system in managing specific diseases in humans and animals through practical experience; strengthening the national surveillance systems for human, animal, and environmental health to prevent and minimize the spread of infectious diseases.
- contribute to increased life expectancy and guarantee food security for livestock produce.
- The project will also build capacities in advanced laboratory techniques including genomic sequencing and identification of strains of pathogens causing epidemic-prone diseases.
- The implementation of the HeSP will improve Nigeria's participation in the regional health system in west and central Africa through collaborative surveillance for priority diseases. Furthermore, it will build Nigeria's capacity to prevent and control disease epidemics and deepen the overall resilience health system.
- Increase regional collaboration and health system capacities to prevent, detect and respond to health emergencies in the Federal Republic of Nigeria and in Western and Central Africa.
- Strengthen the preparedness of the healthcare system
- Improve the quality of care provided to patients with diseases and minimize risks to healthcare personnel and patients.
- Support the establishment of governance reforms including public health legislations, policies, and financing which will guide statutory public health and health security functions,
- Support the procurement of essential medical supplies and countermeasures, the creation of necessary conditions in designated medical facilities and community health systems to prevent, detect, and respond to public health emergencies including climate events.
- The project will also support the expansion of public health emergencies and funds to strengthen laboratory and diagnostic capacities at the national and subnational (State and Local Government Area (LGA)) levels. This includes equipment, training, and infrastructure improvements and also clinical care/ case management capacity by funding equipment and supplies for case management centers (CMCs) in designated hospitals, along with the provision.
- It will also enhance infection prevention and control (IPC) measures through the provision of Personnel Protective Equipment (PPE), and infection control supplies and measures training in hospitals and primary health care (PHC) facilities.
- Support will also be provided to strengthen the collection and logistics transportation for medical samples as well as the disposal of medical waste, strengthening healthcare waste management systems.

5.2 Potential Environmental and Social Risks and Impacts

The environmental and social risks and impacts of the project have been assessed as substantial and, while some of these risks may be significant, particularly those associated with the proposed civil works, most of the risks are site-specific, predictable, medium in magnitude in terms of geographical areas, and can be attenuated through the application of mitigation measures. Table 5.1 shows the key E&S risks and mitigation measures expected during project implementation. However, detailed site-specific instruments will be prepared when the site and activities to be carried out are known.

Table 5.1: Key Environmental and Social Risks

Project Component	Activities	Potential Risks
Component 1.2 **Scaling-up One Health Agenda and Combatting Antimicrobial Resistance (AMR**	• Expand laboratory coverage for AMR monitoring to include private labs • Support to the states in the implementation of IPC programs, biosecurity measures, and vaccination uptake, including access to water, sanitation, and hygiene (WASH) across the One Health sectors - S	**Environmental** • **Biomedical Waste Management**: increase in the generation of biomedical waste. • **Construction and Operational Risks**: The establishment of new laboratories, especially Biosafety Level 3 (BSL3) labs, poses construction-related occupational health and safety hazards. • Laboratories use specialized equipment and chemical reagents, which can pose risks of chemical toxicity and injuries. • **Energy Consumption and Pollution**: The management of cold chain, storage, and transportation of vaccines can lead to increased energy consumption and environmental pollution if not properly managed. • **Spread of Zoonotic Diseases**: Risks of spreading zoonotic diseases due to improper waste disposal and management during operational phase. • **Construction Waste**: Generation of construction waste, noise, dust, and vibration during laboratory construction and renovation. • **Resource Efficiency**: Challenges related to resource efficiency and waste management in laboratories. • **Water Pollution**: Potential water pollution from improper disposal of wastewater and chemical wastes. • **Air Emissions**: Emissions from laboratory processes, which can be harmful to the environment and pose occupational health risks. • **Hazardous Waste**: Management challenges related to hazardous waste, including chemical, biological. • **Noise Pollution**: Noise pollution from laboratory operations and construction activities • risk of accidents from and pollution from vehicle movements and civil work

Project Component	Activities	Potential Risks
		Social • **Land use issues for citing the labs** • **Health and Safety Risks**: Potential risks to workers and beneficiaries from equipment operation failures. • **Community Health and Safety Risks**: Risks from handling and disposal of biological materials. • **Complaints and grievance from health facility users which may be interrupted during activities** • **Social Tensions**: Misunderstandings due to multi-sector project scope. • **Exclusion of Vulnerable Groups** • **Occupational Hazards**: Safety hazards during construction of facilities. • **Labor risks, including child labor and issues related to sexual exploitation and abuse/sexual harassment (SEA/SH), as well as poor labor practices** • Risks of communicable diseases among staff and communities. • **Social Exclusion**: Exclusion of marginalized groups from health services due to inability to pay. • Insecurity issues across the country may impact on the level of service delivery in hard-to-reach areas
2.1 **Collaborative Surveillance**	• Upgrade or update SORMAS, NADIS and IHNESS, etc at the national level • Deploy the surveillance platforms in all states, integrating into the private sector. • Create integrated digital access to relevant information for all platforms including SORMAS, NADIS, IHNESS, AMRIS, NOHRSIS. • Operationalize early warning surveillance systems across one health sector including community engagement, capacity building for data systems, etc.- S	**Environmental** • The upgrade and deployment of digital platforms will likely generate electronic waste (e-waste) from obsolete ICT equipment, which is classified as hazardous waste. • **Energy Consumption and Pollution**: Increased energy consumption due to the operation of digital platforms can lead to higher greenhouse gas emissions. • **Resource Efficiency**: The deployment of surveillance systems requires efficient use of resources to minimize environmental impacts. • **Data Security and Privacy**: Risks related to the security and confidentiality of data collected through digital platforms, which may require robust legal frameworks and management systems to mitigate **Social** • **Data Privacy and Security Risks**: Concerns about the protection of

Project Component	Activities	Potential Risks
		personal and sensitive data collected through digital platforms, which may lead to privacy violations or misuse. • **Exclusion of Vulnerable Groups**: Risks of excluding marginalized groups, such as those with low IT literacy or limited access to digital technologies, from benefiting from the upgraded systems. • **Community Health and Safety Risks**: Potential health risks to communities due to increased interaction with digital systems, including exposure to communicable diseases during training or engagement activities. • **Gender-Based Violence and Sexual Exploitation Risks**: Risks of sexual exploitation and abuse, particularly in areas with labor influx or during community engagement activities. • **Social Tensions and Conflicts**: Risks of social tensions arising from misinformation, elite capture, or inequitable access to benefits, which may lead to conflicts within communities. • Challenges in effectively managing and implementing the systems due to limited institutional capacity and governance issues, which may affect project sustainability
2.2 **Laboratory Quality and Capacity**	• Build or upgrade one laboratory with genomic sequencing capability in each of the 6 geo-political zones and attain accreditation. • Support laboratory infrastructure, consumables and supplies across the PHC lab network. • Adapt and implement regional standards for lab quality management and biosafety • Support laboratory sample transport across PH labs. • Assess and update lab information systems across the PH lab network and integrate private labs • Support lab sample transportation across LGAs within each state. -S	**<u>Environmental</u>** • Generation of biohazardous chemical waste. • Potential environmental pollution and health risks from mismanagement. • Exposure to infectious samples and hazardous chemicals for laboratory staff. • Construction and renovation activities pose OHS hazards like noise, dust, and chemical exposure. • Air, soil, and water pollution from construction and operation. • Biomedical waste can contaminate the environment if not properly managed. • Risk of spreading infectious diseases through sample transportation. • Health risks from inadequate waste management and hazardous material exposure. • Traffic risks, incidents and accidents due to transportation across LGAs **<u>Social</u>** • Construction and expansion of

Project Component	Activities	Potential Risks
		laboratories may need land from private owners/communities. • Land acquisition for construction may involve the displacement of people in proximity to the health facility with insufficient land, and loss of livelihoods • Inadequate resettlement practices for displacements, land acquisitions, livelihoods disturbance, acquisition of borrow pits/ staging areas/ workers campsite could lead to conflicts. • Risks related to labor influx, including potential for sexual exploitation and abuse (SEA), forced labor, and child labor • Risks of spreading infectious diseases due to poor waste management and sample transportation • Potential for social conflicts due to dissatisfaction with recruitment practices or the presence of laboratory facilities • Insecurity risk across the country may impact the level of services.
3.1 **Health Emergency Management**	• Construct a warehouse for national strategic stockpiling. • Transport and logistics for commodities. • Renovate and equip isolation and treatment centers in selected states and points of entry. • Operation of Mobile Laboratories •	**Environmental** • **Air Pollution**: Dust and emissions from construction machinery and vehicles can degrade air quality • **Soil and Water Contamination**: Potential contamination from fuel leaks and spills during construction • **Waste Management**: Generation of construction waste. • **Noise Pollution**: Increased noise levels from construction activities • Emissions from transportation vehicles can contribute to air pollution. • **Traffic and Safety Risks**: Increased traffic can lead to accidents and pose safety risks to nearby communities **Renovation and Equipping of Isolation and Treatment Centers**: • **Medical Waste Management**: Handling and disposal of medical waste, including infectious materials, pose significant environmental risks • **Water Pollution**: Risk of contaminated wastewater from medical and chemical disinfection processes • **Noise and Dust**: Renovation activities can lead to increased noise and dust levels **Social** • **Community Health and Safety**: Risks related to construction activities, such as

Project Component	Activities	Potential Risks
		accidents and exposure to hazardous materials. • **Labor Management**: Potential for labor influx and associated risks, including SEA/SH. • Increased traffic can pose safety risks to communities, including accidents and noise disturbances • **Social Conflicts**: Potential conflicts due to dissatisfaction with logistics operations or recruitment practices **Renovation and Equipping of Isolation and Treatment Centers**: • **Community Health Risks**: Risks of spreading infectious diseases due to improper waste management and sample transportation • **Social Exclusion**: Risk of excluding vulnerable groups from accessing renovated facilities
3.2 **Health service delivery for health emergencies**	• Develop infrastructural and operational standards to scale up epidemic-ready PHC interventions nationwide beginning with border states. • Support innovations including telemedicine for service delivery during emergencies • Support for operational vehicles, communication equipment, and other input required for emergency response operations • Implement facility upgrades to meet standards for epidemic readiness. S	**Environmental** • Activities may lead to noise pollution, dust, waste generation, and vibrations during construction and renovation of healthcare facilities. • Generation of electronic and hazardous waste from medical equipment and infrastructure upgrades. • **Water and Soil Contamination**: Risks from improper disposal of medical waste and potential contamination from construction materials **Supporting Telemedicine for Service Delivery During Emergencies**: • **Electronic Waste**: Disposal of outdated IT equipment can lead to electronic waste. • **Energy Consumption**: Increased energy use for telemedicine services may impact local energy resources. • Emissions from operational vehicles can contribute to air pollution • **Waste Management**: Disposal of communication equipment at the end of its lifecycle can lead to electronic waste • Solar panels and battery systems can generate electronic waste at the end of their lifecycle. **Social** • Risks related to construction activities, such as accidents and exposure to hazardous materials.

Project Component	Activities	Potential Risks
		• **Social Exclusion**: Risk of excluding vulnerable groups from accessing upgraded facilities • Increased traffic can pose safety risks to communities, including accidents • Potential conflicts due to dissatisfaction with logistics operations or recruitment practices **Supporting Telemedicine for Service Delivery During Emergencies**: • **Access and Equity**: Potential exclusion of communities without internet access or technological literacy • **Data Privacy**: Risks related to the protection of personal health information.

5.3 Negative Environmental and Social Impacts and Mitigation Measures

Table 5.2 below provides information of the potential environmental and social risks and impacts and mitigation measures.

Table 5.2: Negative Environmental and Social Impacts and Mitigation Measures

Key Activities	Potential E&s Risks and Impacts	Proposed Mitigation Measures
Planning and Design Phase		
Construction of a warehouse for national strategic stockpiling and 3 regional laboratories	• Construction and expansion of laboratories and warehouses may need land from private owners/communities. • Land acquisition for construction may involve the displacement of people in proximity of the health facility with insufficient land, and loss of livelihoods. Inadequate resettlement practices for displacements, land acquisitions, livelihoods disturbance, acquisition of borrow pits/ staging areas/ workers campsite could lead to conflicts.	• Screen each location using the template provided in Annex 3 • Activities that will involve major land acquisition will be guided by a Site-specific Resettlement Action Plan (RAPs) which will be prepared for sub-projects (ToR in Annex 6). • The project should comply with the provisions of the RAPs, associated grievances should be channeled and addressed through the project level grievance mechanism. • Transactional agreement for borrow pit/staging area/workers campsite acquisition/lease should be properly documented and adjudged as fair • Development and Implementation of an ESMP (Annex 5 for sample ToR)
Procurement of consumables and supplies	Shortage of good and supplies	• Procure according to recommended technical specifications as outlined in WHO guidelines, other good international industry practice (GIIP) and manufacturers requirements
Stockpiling of health commodities	• Expired or damaged commodities can become hazardous waste	• Develop and implement stockpile management SOPs

Key Activities	Potential E&s Risks and Impacts	Proposed Mitigation Measures
	• Equity and access risk • Inequitable distribution of vaccines • No proper identification of target populations	• Ensure smooth deployment, implementation, and monitoring of commodities
Construction Phase		
Construction of laboratories	The establishment of new laboratories, especially Biosafety Level 3 (BSL3) labs, poses construction-related occupational health and safety hazards.	• Applying World Bank Environmental Health and Safety Guidelines and Good International Industrial Practices for civil works can help manage construction-related risks
Construction, renovation, expansion of labs, warehouses, WASH facilities, epidemic ready PHCs, isolation centers	**OHS Risks**	• Contractor and workers to implement the provisions of the ESCoP.in Annex 1 • Provision and use of proper industry recommended Personal Protective Equipment (PPEs) by staff to protect them against infectious diseases, polluted air, and other hazards • Proper management/disposal of biomedical solid and liquid waste • Training and education of best practices in hazardous waste handling, storage, and disposal. • Training in proper equipment use methods • Good housekeeping practices to maintain sanitary conditions at the facilities • Provision should be made for designated rest areas and hydration stations to support occupational health and well-being of healthcare workers • Proper job scheduling to reduce burnout, stress and musculoskeletal injuries • Provision of right tools for workers for the right job • Provision of health resources and services on site and • referral mechanisms of ill/injured workers to health facilities
Construction, renovation, expansion of labs, warehouses, WASH facilities, epidemic ready PHCs, isolation and treatment centers	**Impact on Air quality**	• Implement dust suppression techniques, such as applying water or non-toxic chemicals. • Increase moisture content of storage piles and use enclosures and covers. • Maintain construction equipment and vehicles regularly. • Fit vehicles and machinery with appropriate exhaust systems and emission control devices. • Operate vehicles in a fuel-efficient manner and impose speed limits.
Construction, renovation, expansion of labs,	Potential contamination of soil and water from fuel leaks and spills during	• Designate specific areas for fuel storage and refueling, away from water bodies and

Key Activities	Potential E&s Risks and Impacts	Proposed Mitigation Measures
warehouses, WASH facilities, epidemic ready PHCs, isolation and treatment centers	construction	drainage paths. • Use impermeable surfaces for storage areas to prevent seepage into the ground. • Implement secondary containment systems, such as bunded areas, to contain spills. • Store fuels and hazardous materials in sealed containers with proper labeling. • Ensure storage areas are above floodplain levels to prevent contamination during floods. • Regularly inspect storage containers for leaks and maintain them in good condition •
Construction, renovation, expansion of labs, warehouses, WASH facilities, epidemic ready PHCs, isolation and treatment centers	**Hazardous Waste**: Management challenges related to hazardous waste, including chemical, biological.	Implement the provisions of the Health Care Waste Management Plan
Construction, renovation, expansion of labs, warehouses, WASH facilities, epidemic ready PHCs, isolation and treatment centers	Noise pollution from laboratory operations and construction activities	• Use equipment and machinery with built-in noise reduction systems, such as silencers and mufflers • Regularly maintain and lubricate machinery to minimize noise from friction and wear • Position noisy equipment away from sensitive receptors, such as residential areas, schools, and hospitals • Install noise barriers or acoustic enclosures around noisy equipment • Schedule noisy activities during daytime hours when they are less likely to disturb nearby residents • Avoid night-time construction activities, especially near residential areas • Provide workers with ear protection, such as earplugs or earmuffs, when operating noisy machinery • Inform nearby communities about potential noise disturbances and schedule activities to minimize impact
Construction, renovation, expansion of labs, warehouses, WASH facilities, epidemic ready PHCs, isolation and treatment centers	Risk of accidents from vehicle movements and civil works	• Develop and implement a Traffic Management Plan (TMP) to guide safe vehicle movements (sample provided in Annex 16) • Install safety signs, speed limit signs, and speed bumps along roads • Coordinate with local traffic police to enforce traffic regulations and manage traffic flow • Use barriers and flag persons to direct traffic safely • Driver and Vehicle Safety:

Key Activities	Potential E&s Risks and Impacts	Proposed Mitigation Measures
		○ Require primary suppliers that provide logistics services have their drivers trained in defensive driving techniques and ensure they are licensed
Upgrade of digital facilities, deployment of surveillance devices, Epidermic ready PHCs and Labs (with solar panels)	**E-waste generation** • The upgrade and deployment of digital platforms will likely generate electronic waste (e-waste) from obsolete ICT equipment, which is classified as hazardous waste. • Increased energy consumption due to the operation of digital platforms can lead to higher greenhouse gas emissions. • The deployment of surveillance systems requires efficient use of resources to minimize environmental impacts. • **Waste Management**: Disposal of communication equipment at the end of its lifecycle can lead to electronic waste • Solar panels and battery systems can generate electronic waste at the end of their lifecycle.	Implementing proper e-waste management protocols, including recycling and safe disposal
Transportation of commodities which will be done by a logistics firm	**Traffic risk** • Risk of spreading infectious diseases through sample transportation. • Traffic risks, incidents and accidents due to transportation across LGAs • **Traffic and Safety Risks**: Increased traffic can lead to accidents and pose safety risks to nearby communities	• Implement provisions of Annex 13 on Infection Control and Waste Management Plan and Annex 16 – Traffic Management Plan • Follow the provisions on the LMP
Construction, renovation, expansion of labs, warehouses, WASH facilities, epidemic ready PHCs, isolation and treatment centers	**Community Health and Safety Risks**: Risks from handling and disposal of biological materials.	• Implement protocols to manage community health and safety risks, including proper waste management and disease prevention measures
Construction, renovation, expansion of labs, warehouses, WASH facilities, epidemic ready PHCs, isolation and treatment centers	**Complaints and grievance from health facility users which may be interrupted during activities** **Social Tensions and Conflicts**: Risks of social tensions arising from misinformation, elite capture, or inequitable access to benefits, which may lead to conflicts within communities.	• **Implement the project level grievance mechanism collect, address complaints, and prevent social unrest and mismanagement** • Conduct stakeholder consultations and community engagement to address potential misinformation and ensure transparent communication • Implement grievance redress mechanisms to manage complaints and conflicts effectively
Construction, renovation, expansion of labs,	**Gender-Based Violence and Sexual Exploitation Risks**: Risks of sexual	• **Prepare and implement a GBV Action Plan**

Key Activities	Potential E&s Risks and Impacts	Proposed Mitigation Measures
warehouses, WASH facilities, epidemic ready PHCs, isolation and treatment centers	exploitation and abuse, particularly in areas with labor influx or during community engagement activities.	• Strong and sanction embedded clauses in contractors' agreements on child labor, sexual harassment etc. • Conduct background checks on workers before employment. • Demand code of conduct from contractors and supervising consultants • Sensitize contractors, supervising consultants and work on issues of GBV. • Contractors ESMP includes actions to prevent GBV. • Clear referral pathways to access service providers in place. • GBV sensitive GRM in place
Training activities and stakeholder engagements	**Community Health and Safety Risks**: Potential health risks to communities due to increased interaction with digital systems, including exposure to communicable diseases during training or engagement activities.	• Establish emergency-response plans and monitoring systems. • Conduct health awareness campaigns and promote individual protection measures. • Provide appropriate PPE and train workers in its use and maintenance. • Establish community feedback processes and involve local health authorities. • Inform community members about grievance mechanisms. • Conduct regular monitoring of health and safety measures.
Construction, renovation, expansion of labs, warehouses, WASH facilities, epidemic ready PHCs, isolation and treatment centers	• Risks related to labor influx, including potential for sexual exploitation and abuse (SEA), forced labor, and child labor • Risks of spreading infectious diseases due to poor waste management and sample transportation	• Implement the provisions of the LMP • Use of local labour should be encouraged in the project • All workers must sign the Code of Conduct (see Annex 9 for sample) and trained on the implications Workers campsite should be located away from social sensitivities • Sensitization in the workers on Code of Conduct, prevention of GBV/SEA risks • Stakeholders should be encouraged to report inadequate practices through GM, and these reports should be forwarded to the adequate referral service in line with the project GBV action plan • Workers' GM should be provided in the ESMPs, and all workers should be informed of the process.
All Project activities	Insecurity issues across the country may impact on the level of service delivery in hard-to-reach areas	• Implement the measures provided in the Security Management Framework developed under CoPREP • Implement guidelines in Annex 8
All Project activities	**Labor Management**: Potential for labor influx and associated risks, child labor, as well as poor labor practices	• Contractors must avoid hiring children for menial activities no matter the situation. • No one should be forced to work • All workers and their managers must sign a CoC which emphasizes zero tolerance to child labor.

Key Activities	Potential E&s Risks and Impacts	Proposed Mitigation Measures
		• Implementation of the Labour Management Procedure
Transportation of commodities which will be done by a logistics firm Mobile laboratories	Potential conflicts due to dissatisfaction with logistics operations or recruitment practices	• Reduce labor influx by recruiting locally to the extent possible, thereby minimizing potential conflicts with the local community • Prioritize hiring from project-impacted communities and nearby areas to foster local employment and reduce tensions • Implement fair and transparent employment procedures, ensuring equal opportunities for all, including disadvantaged groups • Establish a secure and accessible grievance mechanism for workers and community members to address concerns related to logistics and recruitment practices • Ensure that all stakeholders are aware of the grievance redress mechanism and have access to it • Require workers to sign a code of conduct to ensure appropriate behavior and reduce potential conflicts
Cold chain logistics	**Greenhouse Gas Emissions:** Diesel-powered refrigerated trucks and air freight contribute significantly to greenhouse gas emissions.	• The project shall adopt the use of refrigerants with lower global warming potential to help reduce the environmental impact. • The project should adopt the use of electric or hybrid vehicles for cold-chain logistics to significantly reduce emissions. • Streamlining processes and improving efficiency can minimize energy consumption and waste • The project shall encourage the utilization of renewable energy sources for cold storage facilities to reduce reliance on fossil fuels.
Operational Phase		
Utilization of the Laboratories, warehouse, isolation center, treatment centers, Epidemic ready PHCs	**Biomedical Waste Management** • Increase in the generation of biomedical waste. • Laboratories use specialized equipment and chemical reagents, which can pose risks of chemical toxicity and injuries. • **Spread of Zoonotic Diseases**: Risks of spreading zoonotic diseases due to improper waste disposal and management during operational phase. • Exposure to infectious samples and hazardous chemicals for laboratory staff. • Handling and disposal of medical waste, including infectious	• Implementing Laboratory Biosafety and Waste Management Plans consistent with international best practices and WHO standards can mitigate these risks • Provide comprehensive training on laboratory safety, infection control, and the proper handling of hazardous materials • Develop and enforce SOPs for all laboratory processes to ensure consistency and minimize errors • Implement a regular maintenance schedule for laboratory equipment and instruments to prevent breakdowns • Develop and follow strict protocols for sample collection, labeling, storage, and disposal • Implement infection control practices (see Annex 13) to protect laboratory staff and

Key Activities	Potential E&s Risks and Impacts	Proposed Mitigation Measures
	materials, pose significant environmental risks	prevent the spread of infections within the laboratory • Conduct regular internal and external audits and assessments to identify areas for improvement and address non-conformities
Utilization of the Laboratories, warehouse, isolation center, treatment centers, Epidemic ready PHCs	• **Energy Consumption and Pollution**: The management of cold chain, storage, and transportation of vaccines can lead to increased energy consumption and environmental pollution if not properly managed.	• Utilizing renewable energy sources and energy-efficient technologies can reduce the carbon footprint of these systems • The project shall adopt the use of refrigerants with lower global warming potential to help reduce Carbon emissions. • Streamlining processes and improving efficiency can minimize energy consumption and waste
Utilization of the Laboratories, warehouse, isolation center, treatment centers, Epidemic ready PHCs	**Resource Efficiency**: Challenges related to resource efficiency in laboratories.	Use energy-efficient technologies and renewable energy sources to minimize environmental impact
Utilization of the Laboratories, warehouse, isolation center, treatment centers, Epidemic ready PHCs	Water pollution from improper disposal of wastewater and chemical wastes.	• Dispose of wastewater at designated sites approved by local authorities. • Avoid discharging wastewater directly into water bodies. • Regularly monitor wastewater quality and ensure compliance with applicable discharge standards. • Implement a robust monitoring system to track and report wastewater disposal. • Store hazardous materials in sealed containers and bunded areas away from water courses. • Use non-toxic paints for repairs and ensure proper storage of hazardous materials. • Dispose of chemical waste to authorized disposal sites. • Avoid disposal of effluent into nearby water bodies to prevent soil or surface/groundwater contamination. • Collect solid waste, oils, chemicals, and wastewater from construction activities and transport them to approved disposal sites or recycling depots. • **Drainage and Erosion Control:** o Install temporary drainage works (channels and bunds) for sediment and erosion **control.** o Divert runoff from undisturbed areas around construction sites. • **Develop Waste Management Plans:** o Create site-specific waste management plans for various waste streams (e.g., reusable

Key Activities	Potential E&s Risks and Impacts	Proposed Mitigation Measures
		waste, flammable waste, construction debris, food waste). o Organize disposal of all waste generated during construction in designated disposal sites approved by the project. • **Minimize Waste Production:** o Implement the 3R approach: Reduce, Recycle, and Reuse waste materials. o Segregate and reuse or recycle all wastes wherever practical.
Utilization of the Laboratories, warehouse, isolation center, treatment centers, Epidemic ready PHCs	**Air Emissions**: Emissions from laboratory processes, which can be harmful to the environment and pose occupational health risks.	• Ensure proper ventilation in work areas. • Use dust collection equipment and filtration systems. • Establish procedures for safe handling, storage, mixing, and disposal of chemicals. • Equip workers with appropriate respirators. • Install and enforce the use of emission control technologies. • Implement a robust monitoring system to track and report emissions. • Ensure strict adherence to local environmental regulations and standards.
	E-wastes Management	• Segregation of Waste at source and avoid mixing with other wastes • Collection: Establish collection centers that can be individually or jointly or as a registered society. They could also be owned by a designated agency, a company or an association to undertake collection operations for E-waste. • Transportation: Once general waste is collected at designated places, the contracted service providers collect and take it to dumping sites and recycling facilities for processing • Recycling: identify both formal and informal recycling activities in the Nigeria market where the wastes can be recycled • Refurbishment: identify licensed entrepreneurs and organized groups which are refurbishing E-waste in the country with the intent of increasing product lifespan • Take back: identify manufactures who have introduced take-back programmes in the Nigeria and collaborate with them for uptake of the wastes.
Implementation **of collaborative surveillance activities**	**Exclusion of Vulnerable Groups**: Risks of excluding marginalized groups, such as those with low IT literacy or limited access to digital	• Develop strategies to ensure equitable access to digital platforms for marginalized groups, including those with low IT literacy

Key Activities	Potential E&s Risks and Impacts	Proposed Mitigation Measures
	technologies, from benefiting from the upgraded systems.	
Implementation **of collaborative surveillance activities**	**Data Privacy and Security Risks**: Concerns about the protection of personal and sensitive data collected through digital platforms, which may lead to privacy violations or misuse.	• Implement robust data protection protocols and cybersecurity measures to safeguard personal and sensitive information (sample protocol is provided in Annex 17) • Ensure compliance with relevant regulations such as the Nigeria Data Protection Regulation, General Data Protection Regulation, Health Insurance Portability and Accountability Acts and other local data protection laws. • Conduct regular audits and assessments to ensure compliance with data privacy regulations.
Utilization of the PHCs	**Social Exclusion**: Risk of excluding vulnerable groups from accessing upgraded facilities	• Implement the Stakeholder Engagement Plan to guide consultations and information disclosure • Ensure facilities are accessible to women and persons with disabilities through special design features • Conduct periodic field identification of exclusion issues through social inclusion analysis and impact assessment
Supporting Telemedicine for Service Delivery During Emergencies:	**Access and Equity**: Potential exclusion of communities without internet access or technological literacy	• Develop standards for telemedicine practices to ensure consistent quality of care • Conduct public awareness campaigns to raise awareness about telemedicine benefits and availability, targeting fewer familiar communities • Establish feedback mechanisms for patients and communities to provide input on telemedicine services • Incorporate accessibility features such as screen readers or voice commands to make telemedicine platforms more accessible • Offer services in multiple languages to accommodate diverse populations and overcome language barriers

Chapter Six: ESMF Implementation Arrangement

6.0 Introduction

This section describes the roles, responsibilities, institutional arrangements, and capacity building to implement the HeSP ESMF including institutional arrangements for the authorities, project proponents, consultants, contractors, and supervision engineers. For specific individual roles and responsibilities, refer to the Project Implementation Manual for HeSP.

6.1 ESMF Implementation

The project will be implemented by the NPCU set up at the NCDC at the Federal Level and State Project Coordinating Units (SPCUs) at the State level for the participating States and FCT, who are all government staff. The PCUs will ensure the implementation of the project follows national standards and the requirements of the WB environmental and social standards. The NPCU will maintain one Environmental and one Social Officer while each SPCU will maintain an Environmental Health Officer responsible for implementing E&S requirements on the Project.

Additional staff on short-term or long-term assignments as necessary will be mobilized to manage the E&S risks in accordance with the ESS and the ESMF institutional assessment/needs.

6.2 Institutional Responsibilities for Implementing ESMF

Table 6.1: Institutional Responsibilities for Implementing ESMF

Institution	Responsibilities
Federal Ministry of Health and Social Welfare	• Provide leadership and direction to relevant actors • Ensure collaboration among the critical actors by engaging all the relevant • stakeholders
NCDC Project Coordinating Unit (Safeguard Specialist)	• Draft concept notes of essential documents including Terms of Reference for ESMPs. • Ensure preparation of all ESMF instruments. • Conduct capacity assessment of SPCUs and PHEOC in the context of E&S issues. Review all safeguard documents. • Ensure adequate communication of essential instruments to all stakeholders. Organize training for staff and contractors involved in the implementation project. • Monitor site-specific E&S instruments to ensure its implementation. Ensure that all SPCUs implement their tasks in a timely manner. • Review progress reports of SPCUs to ensure they meet their targets in the appropriate timelines. • Ensure compliance with World Bank standards and other legal covenants. • Provide technical oversight over the project including the planning, management and monitoring of Project activities.
Federal Ministry of Environment	Ensure enforcement of mitigation measures recommended in all E&S instruments. They must also monitor these enforced recommendations.
Federal Ministry of Livestock Development	Ensure enforcement of all mitigation measures recommended in all E&S instruments for animal health activities
NAFDAC	Ensure enforcement of all mitigation measures recommended in all E&S instruments for prioritized HeSP sub-activities
National Steering Committee (NSC)	• Ensure cooperation and coordination among ministries who are relevant actors in this project. • Provide oversight into project activities which involve planning, management, and monitoring of project activities. • Ensuring implementation of project policy issues and recommendations.

Institution	Responsibilities
World Bank	• Recommend additional measures for strengthening environmental and social management. • Provide guidance with E&S compliance.
State Project Steering Committee	• Ensure harmony by fostering dialogue among sectors in the state and ensuring conformity of HeSP activities • Decision making based on recommendations from PCU. • Provide full support to the State PCU in terms of guidance, conformity and • operation of the ESMF.
State Ministry of Women	• Assist in implementing mechanisms for reporting gender-based violence. • They can also identify additional reference centers that assist in implementing risk assessment of GBV.
State Project Coordinating Unit	• Provide progress reports to the NPCU/NCDC as often as possible. • Oversee the daily implementation of the project, including monitoring of HeSP activities. • Ensure that the project design and specifications adequately reflect the recommendations of the ESMPs. • Disclosure of E&S instruments prepared for the project in coordination with the EA department of the Ministry of Environment/ NPCU.
CBOs, NGOs, Health Partners	• Objective and independent observance of compliance to environmental and social requirements. • Evaluation of project activities. • collaboration with project stakeholders for delivery of project objectives.
Local Government Authority (LGA)	• Objective and independent monitoring of project activities. • Provide support in implementing mechanisms that affect the community in the proper way. • Channel for GRM. • Link between community members, stakeholders, and project institutions. Assist in raising awareness about the project among relevant grassroots and • interested groups or individuals.

6.3 Environmental and Social Management Plan

The range of potential environmental and social impacts/risks associated with the project scope of activities is described in table 6.2 below. The ESMP matrix outlines the potential impacts associated with project activities with corresponding mitigation measures, impact rating, responsibility (mitigation/monitoring), and cost of mitigation/monitoring. It is expected that the majority of these impacts will occur during the implementation phase of the project, while fewer impacts are perceived during the planning and operation phases. The impacts identified at this stage are all generic. When the exact locations and rehabilitation requirements become known, the proponent will develop site-specific ESMPs, which will address specific impacts associated with the Project's activities. This ESMP also presents generic recommendations for mitigating and monitoring measures, and institutional responsibilities. The NPCU will be responsible for ensuring coordination and monitoring regarding the implementation of the ESMP throughout the Project's lifecycle.

Table 1.2 : Environmental and Social Management Matrix

Project Sub-Activities	Potential E&S Risks	Impact Rating	Mitigation Measures	Responsibility Mitigation/Monitoring	Cost (US$)
Rehabilitation of Healthcare Facilities, installation of WASH facilities, construction of warehouses and laboratories	Dust emission, noise and disruption to healthcare activities	**Moderate**	▪ Implementation of the requirements of the ESCoP (Annex 1) for the rehabilitation and installation activities ▪ Use personal protective equipment (PPEs) ▪ Work should be done during off-peak periods ▪ Contractors should obtain permission from necessary MDA prior to works ▪	Mitigation Contractor/ Supervising Consultant Monitoring: Environmental Health Officer (EHO), SMoH at the State Implementation Unit (SPCU) and E&S Officers at the NPCU/NCDC	Cost part of contractor's budget Cost for Monitoring: 1,000
	OHS-related risks	**Moderate**	▪ Use of PPE ▪ Train, supervise and regular PEP talks with personnel ▪ Ensure machinery and equipment are always in good working conditions and comply with the ESS-2 guidelines ▪ Remove any know hazards within the work environment and implement Job Hazard Analysis Plan ▪ Proper arrangement of tables to prevent trips during movement ▪ Provide adequate signage throughout the building		
	Accessibility	**High**	▪ The construction landscape shall take cognizant of physically challenge and other vulnerable people		
	Flood Vulnerability	**Moderate**	▪ The project will not be sited in a flood-prone and highly vulnerable location. ▪ Drainage facilities will be integrated into all infrastructures provided or upgraded, and stormwater will be properly discharged into a safe environment. ▪ The landscaping around facilities will be to promote natural infiltration and reduce runoff.		

Project Sub-Activities	Potential E&S Risks	Impact Rating	Mitigation Measures	Responsibility Mitigation/Monitoring	Cost (US$)
			▪ The project will encourage tree planting and grass landscaping to reduce stormwater runoff and flooding.		
Rehabilitation of Healthcare Facilities, installation of WASH facilities, construction of warehouses and laboratories	Labour influx in the communities could lead to Increase in potential spread of STIs/STDs and increase in GBV/SEA	**Moderate**	▪ Use of local labour should be encouraged in the project ▪ All workers must sign the Code of Conducts (see Annex 9) and trained on the implications ▪ Worker's campsite should be located away from social sensitivities ▪ Sensitization in the HCF and workers on Code of Conduct, prevention of STIs/STDs/GBV/SEA risks by health workers, Women Affairs, relevant NGOs ▪ Stakeholders should be encouraged to report inadequate practices through the GRM, and these reports should be forwarded to the adequate referral service in line with the project GBV action plan	Mitigation Contractor/ Supervising Consultant Monitoring: Environmental Health Officer (EHO), SMoH at the State Implementation Unit (SPCU) and E&S Officers at the NPCU/NCDC	Cost part of contractor's budget Cost for Monitoring: 1,000
	Child labour/forced labour	**Moderate**	▪ Contractors must avoid hiring children for menial activities no matter the situation. ▪ No one should be forced to work ▪ All workers and their managers must sign a CoC (Annex 9) which emphasizes zero tolerance to child labour. ▪ Implementation of the Labour Management Procedure		
	Increment in waste generation	**Substantial**	▪ Implement site specific waste management plan ▪ Reduce material usage when feasible		
Construction of laboratories and warehouse	Land use issues	**Moderate**	▪ Conduct screening of potential land using template provided in Annex 3. ▪ Where ESS 5 becomes relevant, develop and implement provision of a RAP (Annex 6 for RAP template)	Mitigation: NPCU/NCDC Monitoring: Department of Lands	Based on RAP provision

Project Sub-Activities	Potential E&S Risks	Impact Rating	Mitigation Measures	Responsibility Mitigation/Monitoring	Cost (US$)
Operation of Rehabilitated and Equipped Healthcare Facilities	▪ Potential injuries resulting from handling sharps, improper use of PPEs, and poor handling of waste. and General Occupational Health and Safety issues ▪ Potential for marginalizing vulnerable groups and persons with disabilities from accessing health services, isolation and quarantine services. ▪ Rise in social tensions due to the establishment of mandatory isolation and quarantine centers proximity to a residential area, school, public spaces, and park. ▪ Community health and safety issues due to improper handling and disposal of medical waste, including syringes and other medical waste used in the vaccination program	**Substantial**	▪ Classify and quantify the HCW (infectious waste, pathological waste, sharps, liquid, and general waste) following WBG EHS Guidelines for Healthcare Facilities. Placing of notifications for wet floors during cleaning of facilities. ▪ Provide adequate signages throughout the building. ▪ Proper use of PPEs in Laboratories and ▪ Organization of periodic Health and safety training to create awareness ▪ Review onsite waste management and disposal regularly and provide weekly training on protocols contained in the National Health Waste Management Plan. ▪ Describe applicable performance levels and/or standards and monitor the compliance of the existing management system. ▪ The project will take all measures to ensure proper disposal of medical waste that will be generated during the operation of health facilities to avoid community health and safety issues. ▪ HCF will apply the National Health Care Waste Management, Standards and Operating Procedures in disposing of used vials, syringes, and other vaccine related waste. ▪ Conducting monitoring of waste handling, storage and disposal to ensure	EHOs at PHCSs, Laboratories Monitoring: State Epidemiologist and all pillar heads	Mitigation 25,450 Monitoring: 4,000

Project Sub-Activities	Potential E&S Risks	Impact Rating	Mitigation Measures	Responsibility Mitigation/Monitoring	Cost (US$)
			proper implementation of waste management system. ▪ Implementation of the Waste Management Plan ▪ Take necessary measures to ensure the safety of health workers as prescribed by WHO and several directives issued by the government such as Pandemic Health Services and Use of PPE. ▪ Implement GRM services to collect, address complaints, and prevent social unrest and mismanagement		
Operation of laboratories	Biomedical waste management	**Moderate**	▪ Capacity building for medical and biomedical waste handlers ▪ Use colour-coded bins to collect and segregate medical waste ▪ The project will use skilled personnel to handle biomedical waste ▪ All medical waste, including sharps, will be transported to an accredited incinerator for proper processing.	Public Health department of the FMoHSW, NCDC, State Ministry of Health.	Monitoring cost: 5,000
Use of security persons during mobilization of personnel and commodities	Potential for excess or arbitrary use of force by security personnel, and other risks associated with using security personnel such as sexual exploitation and abuse (SEA) and sexual harassment (SH)	**Substantial**	▪ Implement the requirements from the Security Management Framework of CoPREP. ▪ Sensitize security personnel on World Bank's Technical Note on use of Military personnel ▪ Ensure standards, protocols and codes of conduct are followed for the selection and use of security personnel, and ensure that such personnel have not engaged in past unlawful or abusive behavior, including sexual exploitation and abuse (SEA), sexual harassment (SH) or excessive use of force.	FMoHSW, NCDC, State Ministry of Health Monitoring: State Epidemiologist and all pillar heads, National Project Coordinator	Mitigation 17,630 Monitoring cost: 5,000

Project Sub-Activities	Potential E&S Risks	Impact Rating	Mitigation Measures	Responsibility Mitigation/Monitoring	Cost (US$)
			▪ Ensure that Security Personnel is adequately instructed and trained, prior to deployment and on a regular basis, on the use of force and appropriate conduct (including civilian-military engagement, SEA and SH, and other relevant areas); ▪ Ensure that any concerns or grievances regarding the conduct of Security Personnel are received, monitored, documented, and resolved through the Project's GRM for security personnel		
Cold-chain logistics	Energy Consumption, Greenhouse Gas Emissions, Packaging Waste and Food and Product Loss	**Substantial**	▪ The project shall adopt the use of refrigerants with lower global warming potential to help reduce Carbon emissions. ▪ Streamlining processes and improving efficiency can minimize energy consumption and waste ▪ The project should adopt the use of refrigerants with lower global warming potential to help reduce the environmental impact. ▪ The project should adopt the use of electric or hybrid vehicles for cold-chain logistics to significantly reduce emissions. ▪ Streamlining processes and improving efficiency can minimize energy consumption and waste ▪ The project shall encourage the utilization of renewable energy sources for cold storage facilities to reduce reliance on fossil fuels. ▪ The project shall utilize eco-friendly and reusable packaging materials to minimize waste	FMoHSW, NCDC, State Ministry of Health	Part of Project cost

Project Sub-Activities	Potential E&S Risks	Impact Rating	Mitigation Measures	Responsibility Mitigation/Monitoring	Cost (US$)
			▪ The project shall ensure that only trained and capable human resources are involved in the cold-chain logistics		
Digital systems	E-wastes Management	**Low**	▪ Segregation of Waste at source and avoid mixing with other wastes ▪ Collection: Establish collection centers that can be individually or jointly or as a registered society. They could also be owned by a designated agency, a company or an association to undertake collection operations of E-waste. ▪ Transportation: Once general waste is collected at designated places, the contracted service providers collect and take it to dumping sites and recycling facilities for processing ▪ Recycling: identify both formal and informal recycling activities in the Nigeria market where the wastes can be recycled ▪ Refurbishment: identify licensed entrepreneurs and organized groups which are refurbishing E-waste in the country with the intent of increasing product lifespan ▪ Take back: identify manufactures who have introduced take-back programmes in the Nigeria and collaborate with them for uptake of the wastes.	FMoHSW, NCDC, State Ministry of Health	Cost for Monitoring: 2,000
Accessibility	Equity in Accessibility	**High**	The facilities shall be opened to all irrespective of the social, economic, political and demographic background.	FMoHSW, NCDC, State Ministry of Health	
Estimated Total Cost					Mitigation: US$ 43,080:00

Project Sub-Activities	Potential E&S Risks	Impact Rating	Mitigation Measures	Responsibility Mitigation/Monitoring	Cost (US$)
					Monitoring: US 18,000:00

6.4 Capacity Building

Training and capacity building will be required for key stakeholders to ensure effective implementation of the ESMF, SEP, and other environmental and social safeguards instruments. An initial approach to training is presented in the table below. Wherever possible, training in environmental and social risk management will be integrated into the HeSP implementation cycle and operational procedures. Given the need to raise awareness among project workers and stakeholders at different levels, a cascade model is proposed whereby information is transmitted from the national level to the States and onto the project field environment.

Table 6.3 Capacity Building Framework

Topic	Participants	Timeline	Conducted By	Cost ($ USD)
Environmental and Social Accountability				
• ESMP Training and Implementation • Code of Conduct for Contractors	SPCUs, Contractors, Supervision Consultants	During Project implementation	Safeguard Consultant	70,000
• Occupational Health and Safety • Labour Management Plan • Operationalization of Grievance Redress Mechanism • GBV Training	Environmental & Social Officers (SPCU) Compliance Officers	During Project implementation	Relevant Consultant	
• Environmental and Social Due Diligence - types of due diligence, screening projects for liabilities, scoping due diligence investigations and reviewing due diligence reports • RAP Implementation process	NPCU, Compliance officers at NCDC PCU, FMEnV, and FMLD, NAFDAC, State E&S Officers, Grievance Officer	During Project implementation	Safeguard Consultant	
• Environmental Impact Assessment Procedures • Environmental and Social Safeguards • ESMF Implementation • Social Clauses in Contractors' contract	Compliance officers at NCDC NPCU, FMEnv, and FMLD, NAFDAC, State E&S Officers, Grievance Officer	Project Preparation	World Bank	
• Waste Management procedures	Waste Collectors, Environmental Units of HCFs,	During Project Implementation	Relevant Consultant	
Monitoring & Reporting				
• Importance of M&E in project lifecycle • M&E requirements for environmental and social sustainability	SPCUs, Contractors, Supervision Consultants, WASH Officer, Vaccine Officer, M&E Officers	Prior & During Project Implementation	Relevant Consultant	

6.5 ESMF Budget

The budget necessary for the HeSP ESMF implementation including screening sub-projects, ESIAs/ESMPs preparation, implementation, monitoring and other relevant activities are the responsibility of the NPCU/NCDC. At the same time, to ensure successful implementation of the HeSP ESMF, a series of capacity building activities, some of which described in the table above are necessary for which the project has to provide funding. An estimated budget for the HeSP ESMF implementation including the proposed capacity building activities and training is around $144,188. The budget presented in table 6.4 below is indicative and estimated that all training will cost around $70,000 and the actual implementation of the ESMF will cost around $61,080.

Table 6.4: Budget for ESMF Implementation

Activities	Planned Budget (US$)
Trainings and Capacity Building include screening of grant proposals for E&S risk; monitoring and reporting on environmental and social performance of subprojects; stakeholder mapping and engagement; occupational health and safety; labour working conditions and associated inspections; waste management, screenings of assets for land acquisition and/or resettlement impacts.	70,000
ESMP Mitigation Costs	43,080
Monitoring & Compliance for E&S	18,000
GRM Implementation cost –	Cost factored in the SEP
GBV Assessment and implementation of GBV Action Plan:	To be captured in stand-alone GBV assessment
Sub-total	131,080
Contingency – 10% of sub-total	13,108
Grand total	144,188

*This planned budget does not include the SEP implementation. Budget for stakeholder engagement activities will be provided in the HeSP SEP.

Chapter Seven: Procedure to Address Environmental and Social Issues

7.1 Introduction

This section details the procedures to be followed in identifying, preparing and implementing the sub-project activities under the HeSP project. A number of activities will be undertaken to ensure that the environmental and social impacts/risks of sub-projects are duly identified, assessed and managed; and reporting requirements of ESS1 and national laws are complied with. These are discussed in the following sub sections.

7.2 E&S Management Procedures

Prior to identifying risks and impacts, the first step is to map out potential activities likely to trigger environmental and social risks. In consistence with the requirements of ESS 1, The Environment and Social Safeguards Teams under the HeSP SPCU will carry out environmental and social assessments of project sub-components or activities to assess the environmental and social risks and impacts. The assessment to be carried should be proportionate to the potential risks and impacts of the sub-project, and will assess, in an integrated way, all relevant direct, indirect and cumulative environmental and social risks and impacts throughout the project life cycle, including those specifically identified in ESSs 2–10. The procedures for mapping out potential activities likely to trigger environmental and social risks are itemized below.

Step 1: Subproject Identification

SPCU/Implementing Unit defines activity, location, scale, and timing: The SPCU defines the activity to be carried out. The activity must fall under any of the five components of HeSP. The geographical location including the bio geophysical environment of the location must be established. The scale of the activity in terms of massiveness, area cover, and sensitivity of the location to fragile environment (wetlands, schools, health centers, etc.) must be established. The timing of the activity with respect to the weather and climate seasonality and other socio-political and economic timing must be established.

Ensure that the activity is not included in the Exclusion List if any. The SPCU should ensure that the activities to be financed under the HeSP project fall under the activities agreed upon.

Step 2: Screening

All activities undertaken under the project will be screened using the Screening Form (Annex 4). Screening will be conducted by Environmental/Social Specialist at SPCU. This will involve visiting the sub-project site and it immediate environs to observe and record environmental and social baseline conditions, undertake initial consultations with stakeholders and identify anticipated project impacts/risks and broad mitigation measures together with providing other relevant information on the subproject to facilitate project categorization by the NPCU E&S Officers.

The objectives of screening are to:

- ✓ Screen the environmental and social risks and impacts of a subproject
- ✓ Determine the type/s of mitigation measures, assessment, specific plan(s) or safeguard instrument(s) to be prepared based on the outcomes of the screening.
- ✓ The screening process could also be used to identify ineligible project activities that will not be supported by the project. This is done by analysing the proposed activities in relation to their environmental & social context (area of influence) using a checklist approach.

The Project may lead to land acquisition or involuntary resettlement for the construction of a national warehouse and the regional laboratories. The NPCU E&S team will be required to screen the locations first to verify if a Resettlement Action Plan (RAP) will be required.

Step 3: Risk Categorization

This is the third stage in the assessment procedure involves the evaluation of project-based concerns, issues and impacts. Based on its applicability to the project, the Risk Assessment Matrix (RAM) should be used. The RAM approach involves an analysis of the risks of the impacts by determination of the consequences and or severity alongside the probability of occurrence based on Activity type and scale, and Proximity to sensitive areas (wetlands, schools, health centers, etc.). The severity of the impact should be ascertained by using the Consequence Severity while the Likelihood Ranking should be used to estimate the probability of an impact. This will determine the risk level and be Classify as **Low**, **Moderate**, or **Substantial** risk based on the related significance of the impact.

The outcome of the screening exercise will determine the type of Environmental and Social Assessment[1] (ESA) (E&S instrument(s)) that will be prepared. If the screening process concludes that a sub-project is likely to have significant and or irreversible negative environmental and or social impacts, an Environmental and Social Impact Assessment (ESIA) will be prepared before initiating the sub project. On the other hand, if the screening process concludes that a sub-project is likely to generate impacts/risks that are moderately significant, largely reversible and limited to site and its immediate environs, then a sub-project/site specific Environmental and Social Management Plan (ESMP) shall be prepared prior to initiating the sub project. Minor works and procurements with low to insignificant environmental and/or social impacts/risks will go through only screening. An ESCoP is also included as Annex 1 provides guidelines to follow for the Procurement, installation, and maintenance to avoid environmental and social problems whenever possible or to mitigate those problems if they cannot be avoided. This ESCoP will serve as the framework for managing environmental and/or social issues during installation of the WASH facilities and will be implemented by the Service Provider to mitigate potential environment & social risks and impacts of the installations. The ESCoP will also form part of the Bidding requirements.

Table 7.1 shows the activities, risk levels and likely E&S Instrument for HeSP projects.

Table 7.1: Activities, Risk Levels and E&S Instrument for HeSP

Typical Activities	Risk Level	Instrument
Minor facility refurbishment, ICT system installation	Low	ESCOP, standard supervision
Major PHC upgrades, Cold chain equipment	Moderate	Site-specific **ESMP**, simplified ICWMP
Laboratory construction, Warehouse construction	Substantial	Full **ESMP**, **ICWMP**, and possibly **ESIA**

For land-related impacts, apply **ESS5 screening** to determine if **RAP** is required.

Step 5: Instrument Preparation

E&S Specialist would recommend the type of assessment based on the screening and Scoping reports. The SPCU would review and approve the recommendation of the E&S Specialist and submit the screening and scoping report to the Bank for Bank review and clearance to undertake Environment and Social Assessment commensurate to the potential risks and impacts of the project. The Bank shall advise the SPCU whether to use an in-house specialist or hire a consultant (for ESIA/ESMP) to prepare the instrument. The SPCU shall thereafter engage the services of a consultants to prepare the detailed assessment.

Environmental and Social Impact Assessment (ESIA) / Environmental and Social Management Plan (ESMP) – Based on screening and scoping outcomes, the ESIA or ESMP will be prepared as a stand-alone document when the scoping report suggests that impacts will be site specific and manageable (the activities will involve limited adverse social or environmental impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures). For site-specific projects and likewise, site-specific environmental and social risks and impacts, the most suitable instrument may be an ESMP. The ESMP will identify the environmental and social impacts of the proposed activities, state mitigation and monitoring measures matrix and define the roles and responsibilities of all critical stakeholders throughout the life cycle of project activities, conduct public consultation and integrate the concerns of the stakeholders in project implementation to ensure that mitigation measures, including cost/budget estimates, are implemented and overall sustainability is assured.

Step 6: Review and Clearance

The draft instrument will be reviewed by SPCU and all comments addressed before moving to the NPCU for review and submitted to the World Bank (for Moderate or Substantial risk). The respective Ministry of Environment of the state in which the project will be implemented will review and clear the sub-projects from an environmental and social standpoint only (or as best guided by the FMEnv). This is to ensure that activities in their state(s) meet environmental and social requirements of the state and national and federal level, and that they are consistent with the Bank's ESS 1 requirement and other ESSs; including guidelines provided in this ESMF Report. Any proposed sub-project(s) that does not comply with the federal, state and local requirements of the Environmental Laws of Nigeria and Social requirement guidelines of this project, and the requirements of the World Bank ESF and ESSs specifically, may/will not be cleared.

This process is designed to ensure that the environmental and social assessment process is part of and conducted during the project activities' design process thereby ensuring that activities are environmentally and socially acceptable and sustainable. The process will be guided by the generic potential adverse environmental and social impacts often associated with HeSP Project.

Step 7: Public Consultation and Disclosure

In carrying out the ESIA or ESMP and RAPs, supporting evidence of comprehensive public consultation shall be required, such as signed minutes of consultation meetings, attendance lists and filled questionnaires. Public consultations shall take place during the environmental and social screening process and during the validation of the ESIA and RAP report. The results of public consultation shall be incorporated and or influence the design of mitigation and monitoring measures. ESIA study reports or ESMPs for the subproject shall be disclosed in-country by the client (Federal Ministry of Health and Social Welfare (FMH&SW) in formats that are accessible to all project stakeholders and on the World Bank external website. Public consultations should be conducted in a manner accessible to all project stakeholders, and taking into account the guidance set out in the project Stakeholder Engagement Plan and any other relevant guidance.

ESMF Disclosures

After the ESMF review and clearance by the World Bank, the following describes the process of disclosure as shown in Table 7.2.

Table 7.2: ESMF Disclosure Procedure

S/N	Action	Remarks
1	Disclosure in 2 National newspapers	The HeSP NPCU will disclose the ESMF as required by the Nigeria EIA public notice and review procedures
2	Disclosure in 2 state newspapers	The HeSP SPCU will disclose the ESMF as required by the Nigeria EIA public notice and review procedures
3	Disclosure in 2 local newspapers	The HESP SPCU will disclose the ESMF as required by the Nigeria EIA public notice and review procedures
4	Disclosure at the FMEnv office and the SMEnvs	The HeSP NPCU will disclose the ESMP as required by the Nigeria EIA public notice and review procedures
5	Disclosure at the NCDC office	The NPCU will disclose the ESMP as required by the Nigeria EIA public notice and review procedures
6	Disclosure at the Local Government Office where Business Units are Located	The purpose will be to inform stakeholders about the program's activities; environmental and social impacts anticipated and proposed environmental and social mitigation measures.
7	Disclosure on the World Bank external website	The ESMF will be disclosed on the World Bank external website

Step 7: Integration into Bidding Documents (Environmental and Social Provisions in the Tender Documents)

Importantly, the mitigation measures for which the Contractor is responsible must be included in the bidding documents. Also, relevant ESIA/ESMP clauses, codes of conduct, and OHS plan must be included in the contractor ToRs and contract agreements. The tender documents on the construction of infrastructure under the General and Specification Section will provide a clause for the bidder that before commencement of works that they should submit a Project Specific Construction Environmental and Social Management Plan (C-ESMP) and Health and Safety Plan for review and approval by the SPCU.

The C-ESMPs will inform the actions expected from the respective contractors and others and monitoring of their performance through the implementing schools. The ESHS topics identified during the Environmental and Social Impact Assessment of the project will be included in specifications of tenders for construction of infrastructure as presented in **Table 7.3** below,

Table 7.3: Inclusion of Environment and Social Provisions in Tender Documents

Environment and Social Provisions in Tender Documents	*Yes/no*
ESHS resources and facilities and ESHS monitoring organization	*[select:]* YES / NO
Project Areas management (base camps and borrow pits, water sources, storage areas)	*[select:]* YES / NO
Health & Safety on work-sites	*[select:]* YES / NO
Management of SEA-SH, GBV, VAC and Child Labor, inclusion of Persons with Disabilities	*[select:]* YES / NO
Local recruitment and ESHS trainings of local staff (capacity building), ESHS trainings of sub-contractors and local partners (transfer of knowledge)	*[select:]* YES / NO
Relations with stakeholders, information and consultation of local communities and authorities	*[select:]* YES / NO
Traffic management	*[select:]* YES / NO
Hazardous materials and oil products management	*[select:]* YES / NO
Waste-water (effluents) Management	*[select:]* YES / NO

Environment and Social Provisions in Tender Documents	*Yes/no*
Protection of water resources	*[select:]* YES / NO
Atmospheric emissions, noise and vibrations	*[select:]* YES / NO
Solid Waste management including e-wastes	*[select:]* YES / NO
Biodiversity: protection of fauna and flora	*[select:]* YES / NO
Site rehabilitation and re-vegetation	*[select:]* YES / NO
Erosion and sedimentation	*[select:]* YES / NO
Control of infectious and communicable diseases (COVID 19, HIV/AIDS, malaria, etc.)	*[select:]* YES / NO
Grievance Management	*[select:]* YES / NO

Construction Stage

The SPCU will recruit a qualified consultant firm/Owner's Engineer will support in supervisory work. The SPCU will also have a dedicated Environment, Social, Health, and Safety officer to monitor C-ESMP implementation, labour management and occupational health and safety risks. The SPCU will ensure the C-ESMP are prepared with minimum provisions listed below.

Table 7.4: Contractors Environmental and Social Management Plan (C-ESMP)

• *Project Background Information* • *General Information* • *Contractors Environment, Social, Health and safety Policies* • *Licenses and permits to be acquired* • *Personal Protective Equipment/welfare requirements* • *Scope of ESMP and HSMP* • *Objectives of the ESMP and HSMP* • *Project Description and Baseline Information* • *Site and Work Activities* • *Analysis of Legal Provisions* • *Resource Roles and Responsibilities of Workforce on site* • *Competence and awareness training* • *Standard Operating Procedures* • *Stakeholder engagement and Grievance Management* • *Environment, Social Health and Safety Management Plan for Specific site activities* • *Environment Social Health and Safety Monitoring Plan*	• *Noise and Vibration Management Plan* • *Hazardous Prevention and Control Plan* • *Solid and liquid Waste Management Plan* • *Health and Safety Management Plan* • *Gender Based Violence, Sexual Exploitation Prevention and Response Plan* • *Program Induced Labor Influx* • *Workers' Accommodation Plan* • *HIV/AIDS and Drug Abuse Prevention* • *Security Plans* • *Employees and Employers Code of Conduct* • *Logistic Risks Management Plan* • *Grievance Redress Mechanism* • *Traffic Management Plan* • *Emergency Preparedness and Response Plan* • *Material Borrow pits/Quarry Management Plan* • *Biodiversity Management Plan* • *Erosion and Sediment Control Plan*

Labour Management

The ESIA/ESMP prepared for the sub projects will provide that at project implementation stage the contractor will implement the provisions of the LMP that includes mandatory requirement to procure all unskilled (and as much as possible, semi-skilled) labor as well as locally available materials from the local community while ensuring equal

pay for equal work for men, women and people with disability. Measures listed below will be implemented:

- The contractors will reduce labor influx by tapping into the local workforce. Depending on the size and the skill level of the local workforce, a share of the workers required for the project may be recruited locally. This may be easier for unskilled workmen. Specialized workmen may be hired from elsewhere. Local workers may also be trained especially if they are required for the operation of the project. The contractor will ensure effective community engagement and strong grievance mechanisms on matters related to labor with a discrete mechanism for safely and confidentially reporting issues of SEA and GBV at the community level triggered by the Sub Project Effective contractual obligations for the contractor to adhere to the mitigation of risks against labor influx, the contractor should engage a local community liaison person The contractor will ensure proper records of labor force on site while avoiding child and forced labor
- The works contractor should be required, under its contract, to prepare and enforce a No Sexual Harassment and Non-Discrimination Policy, in accordance with national law as well as to the World Bank Code of Conduct guidelines where applicable.
- The contractor will develop and implement a children's Protection Strategy; this strategy will ensure that no child under the legal age of 18years is employed to the Project.
- The contractor will ensure SEA is addressed in all employment contracts and a COC is signed by all workers.
- The contractors will develop training and sensitization of workers on SEA and ensure specific signage on SEA zero tolerance in all work sites.

Implementation Monitoring and Supervision

All the activities to be financed under the project will follow the ESF, environment and social standards and the provisions described and agreed in ESCP prepared to ensure proper management of environment, social, safety and health requirements. PIU will make sure that all bid documents and contracts include ESIA/ESMP and require compliance with it. Environmental and social monitoring seeks to check the effectiveness and relevance of mitigation measures through the implementation/operation phase. The SPCUs Environment and Social focal points shall monitor project activities.

The SPCUs Safeguards Specialist's duties include backstopping the sub-projects implementing teams to comply with the relevant National Environmental and Social requirements and the World Bank's ESF requirements. This includes reviewing, screening, approving, monitoring and reporting on the progress of the sub-projects. The Technical persons hired by the ministries (Environment and Social Consultancy Firm) should guide the formulation and development of the sub-project-specific ESMPs for the project, and periodically (quarterly) review and improve capacity to manage safeguards compliance amongst local stakeholders. Table 7.5 shows E&S Management Procedures to be Followed for Each Subproject

Table 7.5: E&S Management Procedures to be Followed for Each Subproject

Project Stage	E&S Stage	E&S Management Procedures
a. Assessment and Analysis: Subproject Identification	**Subproject Type**	1. If the subproject involves technical assistance, training, strategy development, or policy/legal reforms, no screening is needed. The ToRs for such activities must be reviewed by the NPCU's Environmental and Social Specialists and submitted to the World Bank for prior review and clearance. 2. If the subproject includes civil works, infrastructure upgrades, or equipment installation (e.g., lab construction, PHC upgrades, warehouse development), proceed to E&S screening.
	Screening	3. Confirm subproject eligibility using the Exclusion List 4. Complete the E&S Screening Form (Annex 2 of ESMF) for each subproject. 5. Based on screening results, apply relevant instruments and measures: - Environmental and Social Codes of Practice (ESCOPs) – Annex 1 - Infection Control and Waste Management Plan (ICWMP) – Annex 13 - Chance Find Procedures – Annex 15 6. Determine whether a subproject requires an ESMP or ESIA and identify corresponding Nigerian regulatory approvals (e.g., EIA registration with FMEnv or State EPA).
b. Formulation and Planning: Preparation of E&S Instruments	**Planning**	1. Submit the screening form and draft safeguard instruments (e.g., ESMP, ICWMP) for World Bank no-objection before initiating bidding or implementation. 2. Conduct stakeholder consultations and disclose draft instruments in accordance with the Stakeholder Engagement Plan (SEP). 3. Train SPCU, PHC, and facility staff on roles and responsibilities in implementing the plans. 4. Integrate relevant E&S requirements into bidding documents and construction contracts. 5. For subprojects requiring environmental clearance under Nigerian law, submit relevant documentation to the FMEnv/State EPA and secure permits.
c. Implementation and Monitoring: Execution and Oversight	**Implementation**	1. Ensure site-specific plans (e.g., ESMPs, ICWMPs) are implemented by contractors and facility managers. 2. Conduct regular site monitoring using the supervision checklist included in the ESMF annex. 3. Submit quarterly E&S monitoring reports to the World Bank and maintain a grievance log. 4. Organize refresher training for contractors, SPCU, and facility staff on E&S compliance and grievance management.
d. Review and Evaluation: Closure and Accountability	**Completion**	1. Assess implementation effectiveness and resolve any outstanding non-compliance issues. 2. Ensure all project sites are physically restored post-construction (e.g., waste cleared, facilities cleaned). 3. Prepare and submit a Completion Report documenting implementation of E&S measures, grievances resolved, and lessons learned for World Bank review.

More details for each stage is provided below.

a. ***Subproject Assessment and Analysis – E&S Screening***

As a first step, all proposed activities will be screened to ensure that they are within the boundaries of the Project's eligible activities, and they are not considered as activities listed on the E&S Exclusion List in the table below.

Table 7.6: Exclusion List

- Weapons, including but not limited to mines, guns, ammunition, and explosives
- Support of production of any hazardous goods, including alcohol, tobacco, and controlled substances
- Any construction in protected areas or priority areas for biodiversity conservation, as defined in national law
- Activities that have the potential to cause any significant loss or degradation of critical natural habitats, whether directly or indirectly, or which would lead to adverse impacts on natural habitats
- Activities that involve extensive harvest and sale/trade of forest resources (post, timber, bamboo, charcoal, wildlife, etc.) for large-scale commercial purposes
- Activities involving changing forestland into agricultural land or logging activities in primary forest
- Purchase or use of banned/restricted pesticides, insecticides, herbicides, and other dangerous chemicals (banned under national law and World Health Organization (WHO) category 1A and 1B pesticides)
- Construction of any new dams or rehabilitation of existing dams including structural and or operational changes; or irrigation or water supply subprojects that will depend on the storage and operation of an existing dam, or a dam under construction for the supply of water
- Activities that involve the use of international waterways
- Any activity affecting physical cultural heritage such as graves, temples, churches, historical relics, archeological sites, or other cultural structures
- Activities that may cause or lead to forced labor or child abuse, child labor exploitation or human trafficking, or subprojects that employ or engage children, over the minimum age of 14 and under the age of 18, in connection with the project in a manner that is likely to be hazardous or interfere with the child's education or be harmful to the child's health or physical, mental, spiritual, moral, or social development
- Any activity on land that has disputed ownership or tenure rights
- Any activity that will cause physical relocation of households or will require the use of eminent domain
- Any activity with significant environmental and social risks and impacts that require an Environmental and Social Impact Assessment (ESIA)
- Any activity that requires Free, Prior and Informed Consent (FPIC) as defined in ESS7.]

As a second step, the NPCU NCDC will use the ***E&S Screening Form in Annex 2*** to identify and assess relevant environmental and social risks specific to the activities and identify the appropriate mitigation measures. The *Screening Form* lists the various mitigation measures and plans that may be relevant for the specific activities (such as the Environmental and Social Codes of Practice, the Environmental and Social Management Plan, the Labor Management Procedures, Chance Find Procedures, etc.)

The NPCU NCDC will also identify the documentation, permits, and clearances required under the government's Environmental Regulation.

b. *Subproject Formulation and Planning – E&S Planning*

Based on the process above and the Screening Form, the NPCU NCDC will adopt the necessary environmental and social management measures already included in the Annexes of this ESMF (such as the ESCOPs) or develop relevant site-specific environmental and social management plans.

If site-specific ESMPs are necessary, the NPCU NCDC will prepare these ESMPs, and other applicable documents as needed. The NPCU NCDC will provide approval and compile ESMPs and other applicable forms. The contents of the ESMPs will be shared with relevant stakeholders in an accessible manner, and consultations will be held with the affected communities on the environmental and social risks and mitigation measures. If certain subprojects or contracts are being initiated at the same time or within a certain location, an overall ESMP covering multiple subprojects or contracts can be prepared. Some moderate risk subprojects may also benefit from the preparation of a site-specific environmental and social assessment prior to the preparation of an ESMP.
The first 2 ESMPs will also be submitted to the World Bank for prior review and no objection. After this first 2, the World Bank and the NPCU NCDC will reassess whether prior review is needed for further ESMPs or a certain category of ESMPs (for example, for activities exceeding a certain budget, for certain types of activities).

The NPCU NCDC will also complete the documentation, permits and clearances required under the government's Environmental Regulation before any project activities begin.

At this stage, staff who will be working on the various subproject activities should be trained in the environmental and social management plans relevant to the activities they work on. The NPCU NCDC should provide such training to field staff.

The NPCU NCDC will ensure that all selected contractors, subcontractors, and vendors understand and incorporate environmental and social mitigation measures relevant to them as standard operating procedures for civil works. The NPCU NCDC will provide training to selected contractors to ensure that they understand and incorporate environmental and social mitigation measures; and plan for cascading training to be delivered by contractors to subcontractors and vendors. The NPCU NCDC will further ensure that the entities or communities responsible for ongoing operation and maintenance of the investment have received training on operations stage environmental and social management measures as applicable.

c. ***Implementation and Monitoring – E&S Implementation***

During the project implementation phase, oversight of environmental and social aspects will involve various parties, including project management teams, technical experts, environmental and social officers, and external stakeholders such as government authorities and local communities.

Specialized supervisory teams, consisting of project management, environmental, social, and technical experts, will be tasked with monitoring the execution of the project's environmental and social management procedures. These teams will conduct field inspections, assess performance, and identify potential issues.

Regular site visits will be conducted to oversee activities, ensure compliance with environmental and social standards, and promptly address any problems that arise. The supervisory teams may request regular monitoring reports from those responsible for each subproject site. These reports should include information on progress, encountered challenges, and implemented mitigation measures.

Frequent coordination meetings will be held among the supervisory parties, including government representatives and local communities. These meetings serve as a platform to discuss progress, address issues, and find solutions. The NPCU and SPCUs involved in project execution will ensure that monitoring practices consider the environmental and social risks identified in the Environmental and Social Management Framework (ESMF). Monitoring will encompass the implementation of risk mitigation plans as part of routine project oversight activities.

At a minimum, the reporting will include (i) the overall implementation of E&S risk management instruments and measures, (ii) any environmental or social issues arising as a result of project activities and how these issues will be remedied or mitigated, including timelines, (iii) Occupational Health and Safety performance (including incidents and accidents), (iv) community health and safety, (v) stakeholder engagement updates, in line with the SEP, (vi) public notification and communications, (vii) progress on the implementation and completion of project works, and (viii) summary of grievances/beneficiary feedback received, actions taken, and complaints closed out, in line with the SEP. Reports from the local levels SPCUs will be submitted to the NPCU, where they will be aggregated and submitted to the World Bank on a biannual basis.

Throughout the Project implementation stage, the NPCU will continue to provide training and awareness raising to relevant stakeholders, such as staff, selected contractors, and communities, to support the implementation of the environmental and social risk management mitigation measures.

The SPCUs and NPCU will also track grievances/beneficiary feedback (in line with the SEP) during project implementation to use as a monitoring tool for implementation of project activities and environmental and social mitigation measures.

Last, if the SPCUs and NPCU becomes aware of a serious incident in connection with the project, which may have

significant adverse effects on the environment, the affected communities, the public, or workers, it should notify the World Bank within 48 hours of becoming aware of such incident. Fatality is automatically classified as a serious incident, as are incidents of forced or child labor, abuses of community members by project workers (including gender-based violence incidents), violent community protests, or kidnappings.

d. ***Review and Evaluation – E&S Completion***

Following the conclusion of project activities, the NPCU will conduct a comprehensive review and assessment of the progress and completion of all project activities, along with any required environmental and social risk mitigation measures. A mid-term assessment of the implementation of E&S activities will be undertaken prior to the mid-term implementation mission. This will be included in the ESCP during an update of the document and re-disclosed. For civil work, in particular, the SPCU will closely monitor to ensure they adhere to appropriate and acceptable standards before closing contracts. These activities will align with the measures specified in ESMPs and other relevant plans. At a minimum, sites must be restored to the same condition and standard as they were before work commenced. Any outstanding issues must be addressed before considering a sub-project as complete. The NPCU will compile an implementation completion report, encompassing the final evaluation of compliance with environmental and social risk management measures. This report will be submitted to the World Bank for review and documentation.

7.3 Contingency Emergency Response Component

The Contingency Emergency Response Components (CERC) Manual to be prepared for the Project will include a description of the environmental and social risk assessment and management arrangements if the CERC component becomes activated. This may include a CERC ESMF or an Addendum to this ESMF based on the subproject activities that will be funded under the CERC component.

The ESMF-CERC Addendum found in Chapter 9 will serve as a reference when developing the CERC Manual. If additional or revised documents are deemed necessary, such as an Emergency Implementation Plan outlining the actions to be taken following an emergency situation assessment, the NPCU will be responsible for their preparation. These documents will undergo consultation, followed by adoption and publication in accordance with the guidelines specified in the CERC Manual, and the requisite measures and actions will be implemented accordingly.

7.4 Roles and Responsibilities of Implementation Entities

The table below summarizes the roles and responsibilities for implementing environmental and social management measures.

Table 7.7 Project Implementation Roles and Responsibilities

Responsible Party	Roles & Responsibilities
Federal Ministry of Health	• Provide support to field staff engaged in environmental and social risk management and ensure supervision and quality control of their services • Gather and review screening forms, ESMPs, and others safeguards instruments, assess their quality, and grant approval when appropriate. Maintain records at all stages of the process • Supervise the comprehensive implementation and monitoring of environmental and social risk mitigation and management activities. Compile progress reports received from local entities or sub-projects and submit quarterly (or semi-annual) reports to the NPCU/NCDC

Responsible Party	Roles & Responsibilities
Federal Ministry of Livestock Development	• Provide support to field staff engaged in environmental and social risk management and ensure supervision and quality control of their services • Gather and review screening forms, ESMPs and others safeguards instruments, assess their quality, and grant approval when appropriate. Maintain records at all stages of the process • Supervise the comprehensive implementation and monitoring of environmental and social risk mitigation and management activities. Compile progress reports received from local entities or sub-projects and submit quarterly (or semi-annual) reports to the NPCU/NCDC
Federal Ministry of Environment	• Provide support to field staff engaged in environmental and social risk management and ensure supervision and quality control of their services • Gather and review screening forms, ESMPs and others safeguards instruments, assess their quality, and grant approval when appropriate. Maintain records at all stages of the process • Supervise the comprehensive implementation and monitoring of environmental and social risk mitigation and management activities. Compile progress reports received from local entities or sub-projects and submit quarterly (or semi-annual) reports to the NPCU/NCDC
NCDC	• Provide support to field staff engaged in environmental and social risk management and ensure supervision and quality control of their services • Gather and review screening forms, ESMPs and others safeguards instruments, assess their quality, and grant approval when appropriate. Maintain records at all stages of the process • Supervise the comprehensive implementation and monitoring of environmental and social risk mitigation and management activities. Compile progress reports received from local entities or • sub-projects and submit quarterly (or semi-annual) reports to the World Bank • Conduct training sessions for staff from central and field services, as well as service providers and suppliers responsible for executing the Conditional Grant for ESMF • If procurement is managed centrally, ensure that all procurement documents and contracts encompass the relevant environmental and social management provisions outlined in the screening forms, ESMPs, and Environmental and Social Codes of Practice (ESCOPs)
World Bank	• Review, acceptance and disclose ESMF, SEP, ESCP on WB's official website • Review the site-specific ESMPs for all subprojects • Review labor management procedures • Conduct implementation support and supervision missions to ensure that the Project is following WB ESS requirements
State program units/field staff	• Ensure that project activities do not fall within the negative list • Complete screening forms for the pertinent sub-project activities and transmit them to the national level • When deemed necessary, develop site-specific ESMPs for sub-project activities and forward the completed forms • to the national level.

Responsible Party	Roles & Responsibilities
SPCUs/E&S Unit	• Supervise the day-to-day implementation and monitoring of environmental and social risk mitigation measures and provide monthly progress and performance reports at the national level • Conduct training sessions for contractors, suppliers, and local community members regarding pertinent environmental and social risk mitigation measures. Educate them on their roles and responsibilities in this regard • Conduct training sessions for contractors, suppliers, and local community members regarding pertinent environmental and social risk mitigation measures. Educate them on their roles and responsibilities in this regard • If contracts are awarded at the State level, ensure that all procurement documents and contracts incorporate the relevant environmental and social management provisions outlined in the screening forms, ESMPs, and ESCOPs
Local service providers and suppliers	• Adhere to the environmental and social risk mitigation and management measures outlined in the project's ESMPs, ESCOPs, and contractual documents, as well as in accordance with national and local regulations. • Implement all required actions to safeguard the health and safety of workers and the broader public. Take steps to prevent, reduce, or mitigate any environmental harm stemming from project operations.

Chapter Eight: Stakeholders Consultation

8.0 Introduction

In line with the requirements of ESS10, stakeholder consultations will form an integral part of this project, from project preparatory implementation through operations. Accordingly, a stand-alone Stakeholders Engagement Plan (SEP) has been developed for the project. The ESMF study included consultations with identified stakeholders including government agencies, project affected areas and social groups. Consultations with various stakeholders was organized from May 5 -12, 2025, using a hybrid approach. Consultations were held at the Public Health Emergency Operations Center (PHEOC) in six states - Enugu, Delta, Nasarawa, Ondo, Borno and Sokoto. Participants include representatives from:

- Ministry of Health
- Ministry of Agriculture and Natural Resources
- Ministry of Women Affairs
- Ministry of Works (Roads & Rural Infrastructure)
- Ministry of Works (Housing & Environment)
- Ministry of Education
- Department of Monitoring and Evaluation (DMOE)
- NCDC.

8. 1 Summary of Consultations

The following table provides a summary of consultants in terms of key concerns and responses.

Table 8.1: Summary of Consultations

State	Concerns	Response
Ondo	Risk of Disruption to Community Livelihoods	The Project will employ early engagement with communities, participatory site mapping, and negotiated use or compensation where communal assets may be affected.
	Land Access and Disputes	Participatory land identification processes and early documentation of land agreements in collaboration with host communities.
	Land Use Conflicts and Future Reclassification	Formalizing land ownership or use rights before construction, documenting community consent, and aligning site selection with local land-use plans
	Environmental Degradation and Pollution Risks	The Project will address cumulative environmental impact associated with project activities
Nasarawa	Risk of Community Exclusion or Disruption	Inclusive planning processes involving local governments, traditional authorities, and affected communities, with compensation measures where applicable.
	Land Disputes and Siting Conflicts	Participatory site identification, transparent land documentation processes, and stakeholder engagement before site development.
	Environmental Degradation Risks	Address cumulative environmental impact if project activities expand over time.
Sokoto	Disruption to Grazing Routes and Farmland	Respect existing land-use patterns, consult district heads, integrate land use history.
	Land Ownership Ambiguity and Future Disputes	Involve traditional leaders, secure written agreements endorsed by traditional rulers and LGA officials.
	Environmental Vulnerability and Waste Disposal	The Project will employ environmentally sound waste disposal strategies.

	Weak Enforcement Capacity for Standards	The Project at the National and state levels will require Environmental and Social Officers (Environmental Health Officer for the states) to ensure project implementation follow the World Bank E&S requirements. The capacity of the Officers will be strengthened with trainings offered by the World Bank and also linkage of staff to the SPESSE Program offered in 6 Universities across the country
	Health Worker Safety and Exposure Risks	The Project will implement OHS protocols, provide PPE, and training in local languages.
Delta	Coastal and Riverine Vulnerability	Due to the diverse geomorphology of the state, it is essential to ensure that construction projects are not located within flood plains. These regions can pose significant risks to structures, including potential water damage and erosion. Therefore, thorough site assessments and careful planning are crucial to identifying suitable locations for construction, thereby safeguarding the safety and longevity of buildings and infrastructure.
	Biomedical Waste Management Challenges	The Project will employ approaches to manage biomedical waste that will be generated during implementation.
	Occupational Safety Considerations	Improved safety protocols, provision of protective equipment for workers
	Mobile Laboratory Deployment Risks	Address transportation hazards with mobile laboratory operations.
Enugu	Waste Management Deficiencies	Develop state-level waste management plans, enhance training, stricter monitoring.
	Occupational Safety Gaps	Context-adapted OHS protocols, provision of PPE, development of localized SOPs, mechanisms for managing psychosocial stress.
	Community Safety	Address spill hazards and road safety concerns related to mobile lab movements and emergency response deployments.
	Land Disputes and Siting Conflicts	The project will ensure that the construction of warehouses and laboratories takes place in locations that are free from conflict.

Table 8.2 Summary of Consultations with stakeholders in Enugu

Date: Wednesday, May 7th, 2025 Venue: PHEOC, Enugu state (Hybrid) *Participants both joined physically at the State's Public Health Emergency Operations Centre and virtually via an online platform.*		
Participants: Representatives from the State Ministry of Health, Ministry of Environment and Climate Change, Ministry of Agriculture and Veterinary Services, Enugu State Primary Healthcare Development Agency, Enugu State Waste Management Authority, Women's and youth groups, Traditional and community leaders, Academia (College of Medicine, UNN) and Civil society organizations		
Purpose: To inform stakeholders of the proposed project, obtain their perception and seek likely environmental and social risks that may be associated with the project		
Discussion/enquires by the Consultants	Information/Response from stakeholders	Remark
• Waste Management Deficiencies: Concerns were raised about the state's capacity to manage	• **Waste Management Deficiencies:** Stakeholders in Enugu identified gaps in biomedical and hazardous waste	• The World Bank supported the Ministry of Health in developing a comprehensive Health Care

biomedical and chemical waste from laboratories, veterinary services, and mobile teams. • Occupational Safety Gaps: Health and laboratory workers reported exposure to psychosocial stress and lack of tailored occupational health and safety (OHS) protocols. • Community Safety: Risks related to mobile lab movements and emergency response deployments were noted, including spill hazards and road safety concerns. • Land Disputes and Siting Conflicts: Potential for disputes in siting new infrastructure on customary lands was flagged, emphasizing the need for proper stakeholder consent. • Equity and Access: Stakeholders voiced that rural and vulnerable populations (women, youth, PWDs) risk being left behind if HeSP assets are not equitably distributed. • Grievance Redress Gaps: Many institutions lack functional grievance redress mechanisms (GRMs) to handle complaints or community feedback.	handling, particularly in the absence of localized infrastructure and standardized operating procedures for incineration and disposal. They recommended the development of state-level waste management plans, enhanced training for waste handlers, and stricter monitoring of emissions and ash disposal processes at mobile and veterinary points of use. • **Occupational Safety Gaps:** Stakeholders emphasized the need for context adapted OHS protocols including provision of PPE, development of localized SOPs, and mechanisms for managing psychosocial stress, particularly for health workers involved in mobile deployments and emergency response. They proposed that OHS frameworks be broadened to include mental health support, as well as inclusive safety briefings for both staff and subcontractors. • **Community Safety:** Stakeholders flagged specific road safety concerns, especially in poorly maintained rural corridors. There was consensus that spill-response kits and emergency protocols should accompany each mobile deployment. Furthermore, stakeholders stressed the importance of community sensitization ahead of mobile lab operations to preempt fear, stigma, or misinterpretation of public health interventions. • **Land Disputes and Siting Conflicts:** stakeholders have underscored that sitting health infrastructure without early engagement of traditional authorities and local governments may trigger customary land disputes. Recommended actions include participatory site-selection processes, legal documentation of land transfers, and where relevant, compensation packages. • **Equity and Access:** Stakeholders requested that mobile lab deployments and reagent allocation be	Waste Management Plan (HCWMP) under the Nigeria State Health Investment (NSHIP) Program. This plan is utilized by all interventions supported by the World Bank. A state-specific waste management plan is not necessary, as the HCWMP adequately addresses all concerns related to health care waste in Nigeria. • Detailed measures on managing psychosocial stress will be provided in the Project Implemented Manual.

• Climate Risks: Concerns over flood exposure for laboratories and emergency infrastructure were also discussed, especially given Enugu's rainy-season vulnerability.	guided by transparent equity criteria. They advocated for active outreach to rural and underserved communities, as well as inclusive communication channels that consider language diversity and disability access. They also called for equity audits and real-time dashboards to monitor service coverage. • **Grievance Redress Mechanism:** Stakeholders noted that existing grievance redress mechanisms are either unknown or ineffective at the operational level. They recommended hybrid GRM models that combine digital platforms (e.g., SMS, WhatsApp) with community-level reporting channels, such as ward development committees or health facility boards. Regular grievance audits and transparent reporting were suggested to reinforce accountability.	

Table 8.3 Summary of Consultations with stakeholders in Asaba

Date: Monday, May 12th, 2025 Venue: PHEOC, Asaba, Delta state Participants both joined physically at the State's Public Health Emergency Operations Centre and virtually via an online platform.		
Participants: Representatives from State Ministry of Health, Ministry of Agriculture and Natural Resources, Ministry of Women Affairs, Ministry of Works (Roads & Rural Infrastructure), Ministry of Works (Housing & Environment), Ministry of Education, Department of Monitoring and Evaluation (DMOE), NCDC.		
Purpose: To inform stakeholders of the proposed project, obtain their perception and seek likely environmental and social risks that may be associated with the project		
Discussion/enquires by the Consultants	Information/Response from stakeholders	Remark
• Coastal and Riverine Vulnerability: Participants highlighted Delta's unique geographical position and the increased vulnerability of health infrastructure to flooding, particularly in riverine communities where access becomes severely limited during rainy seasons. • Biomedical Waste Management Challenges: Concerns were expressed regarding the state's current capacity to safely handle and dispose of biomedical and hazardous waste from laboratories and healthcare facilities, with particular emphasis on riverine areas where improper disposal could contaminate	• **Coastal and Riverine Vulnerability:** Stakeholders acknowledged the unique coastal and riverine terrain of Delta State as a key implementation risk. Project siting will consider flood mapping and climate vulnerability assessments. Community input during design phases will help identify safe, accessible locations. Elevated platform construction and all-season access routes were suggested as adaptive solutions. Integrating local knowledge about seasonal patterns will improve the resilience and functionality of health facilities in affected areas.	• Due to the diverse geomorphology of the state, it is essential to ensure that construction projects are not located within flood plains. These regions can pose significant risks to structures, including potential water damage and erosion. Therefore, thorough site assessments and careful planning are crucial to identifying suitable locations for construction, thereby safeguarding the safety and

water sources. • Occupational Safety Considerations: Health workers and laboratory personnel reported inadequate protective equipment and insufficient training on safety protocols, especially for handling potentially infectious materials during disease outbreaks. • Mobile Laboratory Deployment Risks: Stakeholders identified potential hazards associated with mobile laboratory operations, including transportation accidents in difficult terrain and community exposure during field activities. • Land Acquisition Sensitivities: The potential for conflicts arising from the siting of new health infrastructure was discussed, with emphasis on the need for transparent community engagement and proper compensation mechanisms. • Equity in Resource Distribution: Participants stressed the importance of ensuring that rural and underserved communities, particularly those in hard-to-reach riverine areas, receive equitable access to HeSP resources and benefits. • Grievance Management Systems: The absence of effective channels for community feedback and complaint resolution was identified as a significant gap in existing institutional frameworks.	• **Biomedical Waste Management Challenges:** Delta state stakeholders flagged solid waste generation (e.g., from warehouses and labs) as a concern, and noted the need for structured biomedical waste handling protocols. Delta State currently lacks effective, centralized system for the disposal of infectious and hazardous materials. To mitigate this, stakeholders proposed the integration of incinerators, training of facility staff, and establishing designated collection and disposal points. Waste segregation at source and adherence to national standards for biomedical waste disposal were also emphasized. • **Mobile Laboratory Deployment Risks:** Delta's stakeholders affirm the presence of road safety and operational risks linked to mobile labs. Stakeholders proposed route pre-assessments, driver and team safety orientation, and vehicle maintenance protocols to prevent transportation accidents. Mobile lab staff will be trained in biohazard containment, and communities will be engaged to reduce fear or misinformation. Coordinating with local security and health authorities will ensure safer, informed deployments. • **Occupational Safety Considerations:** Stakeholders acknowledged OHS risks during lab upgrades, incinerator operations, and mobile lab deployment. They confirmed gaps in current training and PPE availability. In response, they recommended mandatory and recurring safety training, provision of standard PPE kits, and the adoption of updated occupational safety protocols. Integrating safety officers in all facility-level operations and including local labor inspectorates in monitoring OHS compliance were also suggested.	longevity of buildings and infrastructure. • The Project will not finance the purchase of incinerators. The Project will continue to comply with the required provisions in HCWMP.

	• **Land Acquisition Sensitivities:** Risks of land contestation were flagged, based on stakeholder experience. To prevent conflict, stakeholders emphasized early and inclusive engagement of traditional rulers and local governments in land identification. Legal documentation, compensation for affected parties, and continuous dialogue were recommended to ensure transparency and legitimacy in land use decisions. • **Equity in Resource Distribution:** Stakeholders expressed caution about actual execution. To ensure equity, they recommended targeted planning for remote LGAs, mobile outreach strategies, and disaggregated tracking of service access. Resources must be geographically balanced, and local leaders should help tailor interventions to specific needs. Proactive measures should include prioritizing high-vulnerability areas in allocation models. **Grievance Management Systems:** In Delta State, stakeholders indicate the absence of a robust grievance redress mechanism (GRM) for some interventions, particularly under Activity 1 (construction of public health labs). Stakeholders in Asaba also voiced concern over the need for reliable systems for communities to raise concerns, especially in remote areas where engagement is often limited. To address this, stakeholders recommended establishing multi-tiered GRMs that incorporate local government structures, community health committees, and traditional leaders. These systems should be accessible, culturally sensitive, and capable of receiving and resolving grievances in a timely manner. For wider acceptance, stakeholders proposed sensitization campaigns to raise awareness about available channels for complaints and feedback.	

Table 8.4 Summary of Consultations with stakeholders in Nasarawa

Date: 9th May, 2025 **Venue:** Nasarawa State PHEOC + Virtual **Facilitator:** Dr. Charles Umar **Host:** Nigeria Centre for Disease Control (NCDC) *Participants joined both physically at the State's Public Health Emergency Operations Centre and virtually via an online platform*	
Purpose: To inform stakeholders about the proposed Health Security Program (HeSP), obtain their perceptions, and identify potential environmental and social risks that may arise during implementation.	
Participants: Representatives from State Ministry of Health, Ministry of Environment, Ministry of Agriculture and Veterinary Services, State Primary Healthcare Development Agency, Community leaders, Civil Society Organizations, and relevant technical departments.	
Discussion/enquires by the Consultants	**Information/Responses from Stakeholders**
a. Risk of Community Exclusion or Disruption Stakeholders noted that construction and siting of facilities without proper community engagement may exacerbate vulnerability or restrict access to essential resources. Checklist remarks confirmed that marginalized groups may be impacted if land access is not secured inclusively. In response, stakeholders emphasized the importance of inclusive planning processes involving local governments, traditional authorities, and affected communities, with compensation measures where applicable.	**Risk of Community Exclusion or Disruption** Stakeholders acknowledged that without inclusive consultation, facility sitting could lead to unequal access and displace vulnerable groups. The checklist remarks emphasized that communities must be involved in site selection, especially traditional rulers and local councils, to avoid marginalization. They also noted the risk of community tension if the infrastructure benefits are not perceived as equitably distributed. Stakeholders recommended community mapping, equitable service distribution, and early sensitization to ensure inclusion.
b. Land Disputes and Siting Conflicts Concerns were raised about potential future land claims or rezoning challenges. According to the checklist, stakeholders highlighted that such risks may arise in the absence of formalized land documentation or consultation. To address this, stakeholders recommended participatory site identification processes and proper legal documentation to pre-empt disputes.	**Land Disputes and Siting Conflicts** Stakeholders confirmed the potential for future land contestation if traditional leaders and local governments are not involved early. Stakeholders raised concerns about projects being implemented on land without formal acquisition or compensation, risking disputes. They advised participatory site identification, transparent land documentation processes, and stakeholder engagement before site development.
c. Environmental Degradation Risks There were questions around cumulative environmental impact if project activities are expanded over time. Stakeholders acknowledged this risk, particularly for laboratory upgrades and waste disposal, and agreed on the necessity of integrating environmental safeguards early in the project lifecycle, including proper waste management systems.	**Environmental Degradation Risks** Participants highlighted the potential for pollution from biomedical waste, especially with mobile labs and veterinary services. They identified gaps in the waste disposal infrastructure and called for early environmental assessments. Stakeholders recommended strengthening waste segregation systems, providing incinerators, and training handlers on hazardous waste protocols.
d. Institutional Capacity Gaps The checklist showed that local agencies may struggle to enforce environmental and social safeguards without ongoing capacity support. Stakeholders confirmed this, recommending structured capacity-building efforts, budgeted E&S training programs, and sustained technical support for front-line staff.	**Institutional Capacity Gaps** Stakeholders indicated that MDAs lacked dedicated personnel and budget lines to enforce environmental and social safeguards. They noted weak internal systems for monitoring E&S compliance. Stakeholders advocated for appointing focal persons, building technical capacity through training, and integrating safeguard responsibilities into routine supervision frameworks.
e. Occupational Health and Safety (OHS) Stakeholders noted risks associated with introducing new technologies or services in health and veterinary sectors. The checklist confirmed that	**Occupational Health and Safety (OHS)** Stakeholders cited the risk of exposure to biological and chemical hazards among lab workers, response teams, and veterinary staff. According to the checklist, many facilities lack PPE, standard

existing OHS systems may be insufficient. Stakeholders advised early OHS risk assessments, updates to safety protocols, and provision of PPE and training tailored to emerging risks.	operating procedures, or refresher training. In response, stakeholders recommended that the project incorporate regular safety training, OHS assessments, and provision of PPE tailored to task-specific risks.
f. Community Engagement and Trust-Building It was noted that insufficient engagement could trigger community resistance, especially in areas with weak prior contact with public health authorities. The checklist emphasized the importance of prior community entry and transparent communication. Stakeholders agreed to incorporate participatory planning and ongoing community dialogue throughout the implementation process.	**Community Engagement and Trust-Building** Concerns were raised over inadequate communication strategies. They highlighted risks of misinformation and resistance, especially in rural areas. Stakeholders emphasized the importance of engaging traditional institutions, using local languages in communication, and co-designing implementation with community-based organizations to build trust and ensure ownership.
g. Grievance Redress Mechanism (GRM) The meeting observed that while GRM systems are planned, their accessibility and responsiveness to future community needs remain untested. The checklist highlighted the need for clear grievance pathways and sensitization. Stakeholders recommended a localized and multilingual GRM system with feedback loops, aligned with community structures and supported by designated focal persons.	**Grievance Redress Mechanism (GRM)** Stakeholders noted that most communities are unaware of any formal complaint channels. They pointed out that available mechanisms are not responsive or accessible to vulnerable populations. They proposed the creation of locally adapted grievance systems, utilizing community health committees and SMS-based platforms for anonymous reporting, with a structured follow-up mechanism.

Table 8.5 Summary of Consultations with stakeholders in Ondo

Date: 12th May, 2025 **Venue:** Ondo State PHEOC + Virtual Akure **Facilitator:** Dr. Charles Umar **Host:** Nigeria Centre for Disease Control (NCDC) *Participants joined both physically at the State's Public Health Emergency Operations Centre and virtually via an online platform*	
Purpose: To inform stakeholders about the proposed Health Security Program (HeSP), obtain their perceptions, and identify potential environmental and social risks that may arise during implementation.	
Participants: Representatives from State Ministry of Health, Ministry of Environment, Ministry of Agriculture and Veterinary Services, State Primary Healthcare Development Agency, Community leaders, Civil Society Organizations, and relevant technical departments.	
Issue raised	**Information/responses from Stakeholder**
1. Risk of Disruption to Community Livelihoods **Issue Raised:** Concerns that construction of new health infrastructure may displace traditional land uses, affect farming or grazing, and disrupt local livelihoods.	Stakeholders confirmed that construction of new facilities, especially laboratories and warehouses, could limit community access to shared land and impact traditional livelihoods such as farming or grazing. They warned that projects implemented without community input may cause resistance or displacement. Stakeholders emphasized early engagement with affected communities, participatory site mapping, and negotiated use or compensation where communal assets may be affected.
2. Land Access and Disputes Issue Raised: Potential for conflicts with landowners and traditional rulers due to lack of early engagement in land allocation decisions.	Stakeholders acknowledged that the siting of new health facilities or mobile infrastructure could spark contestation if landowners, traditional rulers, or local governments are not engaged early. They raised concerns that projects implemented on unallocated land could lead to future claims. Participants called for participatory land identification processes and early documentation of land agreements in collaboration with host communities.

3. Land Use Conflicts and Future Reclassification **Issue Raised:** Fears of future land disputes or reclassification due to absence of formal land-use planning and community consultation.	Stakeholders identified risks of re-zoning and land disputes if proper legal processes and traditional consultations are not followed. They advised formalizing land ownership or use rights before construction, documenting community consent, and aligning site selection with local land-use plans to prevent future reclassification challenges.
4. Environmental Degradation and Pollution Risks **Issue Raised:** Concern over cumulative environmental impacts from laboratory chemicals, incineration, and unmanaged waste.	Stakeholders flagged the risk of cumulative environmental impact, especially from incinerator fumes, laboratory chemicals, and unmanaged waste. They noted gaps in environmental monitoring and infrastructure. Stakeholders recommended that all infrastructure expansions undergo environmental impact assessments, with strict adherence to waste treatment protocols and use of clean technologies.
5. Waste Management and Environmental Safety **Issue Raised:** Gaps in biomedical waste handling capacity, especially in underserved areas, raising concerns about public health and environmental safety.	Stakeholders highlighted that biomedical waste management infrastructure in Ondo State is limited, especially in rural and peri-urban locations. Mobile laboratories and veterinary activities risk generating waste that may not be safely handled under existing systems. They emphasized the absence of centralized incineration and poor segregation practices. Stakeholders recommended expanding the state's waste disposal infrastructure, enforcing SOPs for waste segregation, and training frontline staff in environmentally safe practices.
6. Occupational Health and Safety (OHS) **Issue Raised:** Risks to health workers and contractors due to inadequate safety protocols, poor equipment, and limited training.	Stakeholders identified safety risks in health facilities, laboratories, and veterinary settings, including lack of personal protective equipment (PPE), poor ventilation, and limited OHS training. They emphasized the need to update standard safety protocols, ensure timely provision of PPE, and institutionalize periodic training for healthcare and veterinary staff. Integration of OHS guidelines into the HeSP rollout plan was strongly recommended.
7. Institutional Capacity and Coordination Gaps **Issue Raised:** Insufficient staffing, technical capacity, and funding within MDAs to monitor and enforce safeguard standards.	Several MDAs reported gaps in trained personnel and resources to implement environmental and social safeguards effectively. Stakeholders emphasized the absence of dedicated E&S focal persons and budget provisions. They recommended building capacity through formal training, including E&S management in job descriptions, and establishing a multisectoral monitoring team for the HeSP.
8. Community Engagement and Trust Building **Issue Raised:** Public skepticism and possible resistance to unfamiliar health interventions without sustained engagement	Stakeholders emphasized the need for proactive and continuous community engagement. They observed that unfamiliar public health interventions might face resistance unless communities are sensitized in advance. Participants recommended engaging traditional leaders, religious groups, and civil society actors using local languages and media platforms. Joint planning with community-based organizations was proposed to strengthen ownership and prevent misinformation.
9. Grievance Redress Mechanism (GRM) **Issue Raised:** Lack of accessible, inclusive, and trusted grievance channels in local communities.	Stakeholders noted that existing grievance mechanisms are often inaccessible or unfamiliar to rural populations. They proposed the design of GRMs that include local focal points, anonymous reporting options (e.g., SMS or WhatsApp), and visible complaint desks at service delivery points. Coordination with ward development committees and local influences was also recommended to ensure responsiveness and credibility.
10. Stakeholder Participation and Social Inclusion **Issue Raised:** Risk of excluding marginalized groups from	Stakeholders emphasized that inclusive participation should not end at planning. They recommended continuous

implementation and oversight processes.	community dialogue, integration of vulnerable groups in implementation teams, and regular feedback sessions. Engagement with women's groups, youth leaders, and disability advocates was proposed to ensure the HeSP reflects community diversity and fosters ownership.
11. Inclusion and Equity **Issue Raised:** Concern that vulnerable populations such as women, youth, and persons with disabilities may be underserved or excluded.	Stakeholders expressed concern that the most vulnerable—especially women, youth, and people with disabilities—may be overlooked without deliberate targeting. They flagged the need for gender-sensitive planning. Recommendations included disaggregating service data by gender and vulnerability, engaging women's groups and disability networks, and tailoring communication channels to marginalized populations.

Table 8.6 Summary of Consultations with stakeholders in Borno

Date: 12th May, 2025 **Venue:** Borno State PHEOC + Virtual Maiduguri **Facilitator:** Dr. Charles Umar **Host:** Nigeria Centre for Disease Control (NCDC) *Participants joined both physically at the State's Public Health Emergency Operations Centre and virtually via an online platform*	
Purpose: To inform stakeholders about the proposed Health Security Program (HeSP), obtain their perceptions, and identify potential environmental and social risks that may arise during implementation.	
Participants Representatives from Borno State Ministry of Health, State Ministry of Environment and its agencies (e.g., BOSEPA), Ministry of Agriculture & Veterinary Services, State Primary Health-Care Development Board, Rural Water Supply & Sanitation Agency (RUWASSA), Federal Ministry of Health / Port Health Services, the Public Health Emergency Operations Centre (PHEOC), the Teaching Hospital Board, the World Health Organization, community leaders, civil-society organizations, and other relevant technical departments.	
Issue raised	**Information/responses from Stakeholder**
1. Possible rise in solid- and construction-waste volumes during warehouse development and routine operations.	BOSEPA-licensed waste contractors will be engaged; segregation bays will be built on-site and quarterly waste-audit reports shared with SMEnv.
Potential escalating demand for electricity and water as facilities expand or become multi-use.	A utility-needs assessment should be completed before construction; RUWASSA and the distribution company will secure additional supply while the project installs solar back-up and rain-water-harvesting systems.
Sufficiency of occupational-health-and-safety (OHS) protocols for new equipment and changing job roles.	OHS SOPs will be updated, six-monthly refresher training delivered, and PPE budgets ring-fenced; the State Occupational Health Unit will monitor compliance.
Need for transparent dialogue and an effective grievance-redress mechanism.	A bilingual (Kanuri/Hausa) hotline and quarterly town-hall meetings—facilitated by LGA Health Promotion Officers—will handle complaints and feedback.
Ensuring that site selection does not disadvantage vulnerable or mobility-constrained groups.	Warehouses/offices will sit within existing MoH compounds with ramp access and gender-segregated WASH blocks—avoiding displacement and improving accessibility.
Local capacity to enforce environmental & social safeguards as warehousing responsibilities grow.	SMEnv and BOSEPA will sit on the project steering committee, issue permits, and conduct bi-annual compliance inspections.
Potential toxic emissions or ash discharge from	Dual-chamber, high-temperature units with stack-emission

incinerator operation.	monitors will be procured; ash will be sent to the state's hazardous-waste cell.
1. Anticipated rise in solid- and construction-waste volumes during warehouse development and routine operations.	BOSEPA-licensed waste contractors will be engaged; segregation bays will be built on-site and quarterly waste-audit reports shared with SMEnv.
Potential escalating demand for electricity and water as facilities expand or become multi-use.	A utility-needs assessment will be completed before construction; RUWASSA and the distribution company will secure additional supply while the project installs solar back-up and rain-water-harvesting systems.
Sufficiency of occupational-health-and-safety (OHS) protocols for new equipment and changing job roles.	OHS SOPs will be updated, six-monthly refresher training delivered, and PPE budgets ring-fenced; the State Occupational Health Unit will monitor compliance.
Need for transparent dialogue and an effective grievance-redress mechanism.	A bilingual (Kanuri/Hausa) hotline and quarterly town-hall meetings—facilitated by LGA Health Promotion Officers—will handle complaints and feedback.
Ensuring that site selection does not disadvantage vulnerable or mobility-constrained groups.	Warehouses/offices will sit within existing MoH compounds with ramp access and gender-segregated WASH blocks—avoiding displacement and improving accessibility.
Local capacity to enforce environmental & social safeguards as warehousing responsibilities grow.	SMEnv and BOSEPA will sit on the project steering committee, issue permits, and conduct bi-annual compliance inspections.
Potential toxic emissions or ash discharge from incinerator operation.	Dual-chamber, high-temperature units with stack-emission monitors will be procured; ash will be sent to the state's hazardous-waste cell.

Table 8.7 Summary of Consultations with stakeholders in Sokoto

Date: 5th May 2025 Venue: Virtual Facilitator: Dr. Charles Umar Host: Nigeria Centre for Disease Control (NCDC)		
Purpose of the Meeting: To engage state and community level stakeholders on the proposed Health Security Program (HeSP), assess the potential social and environmental concerns associated with its rollout, and receive context specific recommendations to guide implementation.		
Participants: Representatives from Sokoto State Ministry of Health, Ministry of Environment, Ministry of Animal Health and Fisheries, State Primary Healthcare Development Agency, Traditional Council representatives, Civil Society Organizations, women and youth groups, and technical personnel from various departments.		
S/No	**Issue Raised**	**Information/Stakeholders' Responses**
1	Disruption to Grazing Routes and Farmland Concerns were raised that locating health infrastructure in communal lands may obstruct seasonal grazing routes or displace smallholder farms—both essential to local livelihoods in Sokoto's agrarian and pastoralist economy.	Stakeholders emphasized the importance of respecting existing land-use patterns, especially in rural areas were grazing and farming support household economies. They advised mapping Fulani migration corridors, consulting district heads, and integrating land use history into site assessments to avoid land-related conflicts or economic dislocation.
2	Land Ownership Ambiguity and Potential for Future Disputes In many rural communities, land is communally held and governed by traditional systems, which are not	Participants recommended involving ward heads and emirs in land negotiations from the outset. They stressed that written agreements, endorsed by traditional rulers and LGA officials, be secured before

	always documented formally.	construction.
3	Environmental Vulnerability and Waste Disposal Challenges There were worries that biomedical and construction waste might pollute water sources or degrade fragile ecosystems.	Stakeholders noted that Sokoto's semi-arid terrain is particularly susceptible to land degradation. They advocated for environmentally sound waste disposal strategies, such as centralized incineration, deep burial for sharps, and avoidance of open burning.
4	Weak Enforcement Capacity for Environmental and Social Standards State and LGA institutions may lack the manpower and technical expertise to monitor and enforce safeguards.	Dedicated focal persons for E&S management were recommended within MDAs. Stakeholders proposed collaboration with universities and NGOs to support monitoring, and creation of a State E&S Steering Committee.
5	Health Worker Safety and Exposure Risks Concerns about exposure to infectious agents in veterinary and lab settings where zoonotic threats are prevalent.	Stakeholders recommended updating OHS protocols, providing PPE, offering training in Hausa and English, and involving the State Directorate of Occupational Health in ongoing supervision.
6	Community Sensitization and Misperceptions about Disease Surveillance New health interventions may raise suspicion among rural dwellers, especially mobile surveillance teams.	Stakeholders advised engaging religious scholars, using Friday sermons and Hausa-language radio to build trust and dispel misinformation. Early community entry through traditional leaders was emphasized.
7	Absence of Accessible Grievance Channels in Rural Areas Community members often lack knowledge or access to complaint mechanisms.	Suggestions included toll-free Hausa-language phone lines, mobile complaint units, and quarterly town hall meetings with community representation.
8	Equity Gaps in Access and Representation Disadvantaged groups like nomadic populations, women in purdah, and persons with disabilities may be excluded.	Stakeholders recommended inclusive planning, services tailored for nomads, engagement with female religious leaders, and physically accessible health facilities.

Chapter Nine: Contingent Emergency Response Component (CERC) ESMF

9.0 Introduction

The Nigeria HeSP contains a zero value Contingent Emergency Response Component (CERC) which is designed to provide swift response in the event of an Eligible Crisis or Emergency [Defined as "an event that has caused or is likely to imminently cause a major adverse economic and/or social impact associated with natural or man-made crises or disasters" OP/BP 8.00, Rapid Response to Crisis and Emergencies] by enabling government of Nigeria through the NCDC to request the World Bank to rapidly reallocate project funds to support emergency response to the eligible crisis. Consistent with the objectives of the Nigeria HeSP, the CERC will finance emergency response and critical goods and services to quickly restore normalcy in the event of a crisis threatening health security in Nigeria. The CERC can also finance emergency procurements, reconstruction works, and associated consulting services. This chapter details (i) the process for triggering the CERC; (ii) the proposed emergency activities that can be financed under the CERC; and (iii) the environmental and social arrangements related to the execution of activities.

9.1 Triggering CERC under the Nigeria HeSP

The triggering mechanism requirements for the Nigeria HeSP CERC are:

a. The government of Nigeria through the NPCU/NCDC make a declaration that an eligible crisis or emergency has occurred, formally write the World Bank, and obtain the Association's written agreement with such determination
b. The government of Nigeria establish adequate implementation arrangements including staff and resources for implementation of CERC activities, and
c. The government of Nigeria prepare and disclose all safeguards instruments required under the Environmental and Social Management Framework (ESMF) for the CERC activities, if any, and implement any actions which are required to be taken under said instruments.

This CERC-ESMF forms part of the CERC OM which addresses the World Bank's Environmental and Social Framework (ESF) which will be triggered in the event. While subprojects are yet to be identified, it is expected that all CERC activities will fall between moderate to substantial risk and activities typically categorized high risk which require the management of significant hazardous or histologic waste, permanent land acquisition, or which significantly impact sensitive ecological habitats are unlikely to be approved under the Nigeria HeSP CERC.

9.2 Contingent Emergency Response Component (CERC)

The CERC may be used following the outbreak of a global or novel public health threat to humans and animals, natural disasters affecting the environment, or other crises and emergencies, allowing funds to be reallocated from other components of the HeSP project. In the event of an emergency event, it is not anticipated that the realization of project funds will cause serious disruption to project implementation. Disbursement of emergency financing under the CERC will be contingent upon

a. the recipient establishing a nexus between the disaster event and the need to access funds to support recovery and reconstruction activities (an "eligible event"), and
b. no objection granted by the World Bank for an Emergency Action Plan (EAP).

The EAP will include a list of activities, procurement methodology and ESF procedures. It will also require consideration of environmental and social standards (ESS) of the ESF implications for any proposed emergency supplies procurement or reconstruction activities. The World Bank, through the no objection process, will closely examine the nature of the proposed activities, particularly those involving civil works, to ensure that:

- they are not prohibited under the negative list, and

- that the recipient is aware of the required safeguard compliance documentation before initiating the process by which the proposed works will be prepared and implemented.

Emergency activities financed under the CERC will involve financing provision of critical goods or emergency recovery and reconstruction works, and it is likely these will fall into Substantial, Moderate, or Low Risk under the ESF classifications. Activities that are Low Risk could involve procurement of emergency supplies such as medicines and health consumables that do not require the application of ESF instruments, post-screening, or assessment. Other emergency supplies, such as specialized products including some vaccines and other histologic products, will require ESF instruments safeguard instruments (such as Environmental and Social Management Plans (ESMP)) to ensure procurement, storage, and dispensing procedures are adequate.

In order to ensure that CERC subproject activities comply with the requirements of the World Bank's ESF, a positive and negative list are described below to provide guidance on critical activities, emergency procurements goods and services including civil works which may be eligible for financing.

9.3 CERC Positive List

The activities that will be financed by the Nigeria HeSP CERC will try as much as possible to avoid activities or subprojects with complex environmental and social aspects (for example resettlement), because the CERC objective is to support immediate priority activities (less than 18 months) to address an eligible crisis. The CERC component can support the purchase of goods, services, and works including countermeasures and essential consumables including PPEs, reagents, novel medicines, and vaccines to respond to an eligible crisis, payments for relevant consultancies and SURGE staff to respond to an eligible crisis, equipment and other devices required to respond to the eligible emergency, repair, restoration, or reconstruction of laboratories, hospitals, transport infrastructure, telecommunication and digital surveillance infrastructures, and the construction/ set-up of critical infrastructure like isolation centers, ICUs/high dependency facilities, among others, and the disposal of waste associated with eligible activities.

9.4 CERC Negative List

Activities with the following potential impacts will not be eligible for financing under the CERC and the Nigeria HeSP in general:

- activities of any type; classifiable as High Risk pursuant to the WB Environmental and Social Framework
- activities that would lead to conversion or degradation of critical forest areas, critical natural habitats, and clearing of forests or forest ecosystems
- activities that will negatively affect rare or endangered species
- activities affecting protected areas (or buffer zones thereof), other than to rehabilitate areas damaged by previous natural disasters
- activities that will cause, or have the potential to result in, permanent and/or significant damage to non-replicable cultural property, irreplaceable cultural relics, historical buildings and/or archaeological sites
- river training (i.e., realignment, contraction or deepening of an existing river channel, or excavation of a new river channel)
- purchase and use of goods and equipment for military or paramilitary purposes
- will result in involuntary land acquisition or resettlement
- do not meet minimum design standards with poor design or construction quality, particularly if located in vulnerable areas, and

Also, activities that require or involve the following will not be allowed under CERC:

- the purchase, application or storage of pesticides or hazardous materials
- purchase of land that has disputed ownership, tenure, or user rights

- activities that will disrupt breeding sites of protected species
- use of asbestos-based construction materials for reconstruction works
- sand mining or land reclamation (i.e., drainage of wetlands or filling of water bodies to create land)

9.5 CERC ESF Compliance

All activities financed through the CERC are subject to the World Bank ESF requirements, keeping in mind paragraph 12 of the IPF Policy [Paragraph 12: Projects in Situations of Urgent Need of Assistance or Capacity Constraints. In cases where the Borrower/beneficiary or, as appropriate, the member country is deemed by the World Bank to: (i) be in urgent need of assistance because of a natural or man-made disaster or conflict; …The fiduciary and environmental and social requirements set out in the Environmental and Social Framework, the IPF Directive, and the Procurement Policy/Directive, that are applicable during the Project preparation stage may be deferred to the Project Implementation Stage…"] applies once CERC is triggered. The HeSP safeguards team will identify, based on the activities, and works proposed in the EAP, the potential environmental and social negative impacts, and the studies or plans required for environmental and social management. In the case of procurement of works that require the mobilization of civil works contractors, under the emergency recovery event, the bidding documents will include any ESMPs, standard codes of conduct for workers (including direct workers, contracted workers and community workers) and supervisors, specifying appropriate conduct and sanctions related to community relations, environmental, health, and safety (EHS), gender-based violence (GBV), violence against children (VAC), human trafficking, and sexual exploitation and abuse.

Contractors and their sub-contractors who may be associated, are required to inform their staff and workers of the codes of conduct to prevent and address possible GBV, VAC, and human trafficking. All staff and workers shall sign and comply with these codes of conduct. The HeSP National Safeguards Specialist (NSS) with support from its consultants will monitor compliance to codes of conduct by the contractors.

9.6 Environmental and Social Management Plan

Should the CERC be triggered, then an CERC ESMF-ESS Screening Form (Annex 14) will be filled in to determine if the ESMF is sufficient or an ESMP is the appropriate instrument for a proposed activity under the CERC. This will be prepared by the HeSP safeguards team in close collaboration with the implementing entity (if different from the PMU within the NCDC) and the NPCU/NCDC once the subproject has been confirmed. Where required, subproject specific ESMPs will be prepared to identify potential impacts during pre-construction, construction, and post- construction operations. The environmental assessment, design, and preparation of an ESMP for each sub-project must be conducted in close connection with the design of the sub-project. The assessment should concentrate on environmental and social issues associated with direct, indirect, and cumulative impacts within the subproject sites.

The ESMP will become part of the establishment of the environmental and social standards and compliance mechanisms and serve as the contractual basis for supervision and enforcement of good environmental and social practice. The ESMP will be developed in compliance with national and World Bank requirements and will be based around the impact mitigation hierarchy described in table 9.1 below.

Table 9.1 Safety Hierarchy for Developing Sub activities for CERC project

ESS Strategy	Description
1. Avoidance	Project teams must take measures to avoid activities that create negative environmental and social impacts from the outset, such as activities that cause spatial displacement of people or disturbances to settlements or natural habitats. Avoidance is the easiest, cheapest, and most effective way of reducing potential negative impacts.
2. Minimization	For negative impacts that cannot be avoided as a result of project activity, measures must be taken to reduce the duration, intensity and/or extent of such impacts that cannot be completely avoided. Effective minimization will reduce negative impacts to the barest minimum. Examples include measures to reduce the generation of hazardous waste or active waste management to reduce the adverse effect caused by waste generation.
3. Rehabilitation/ Restoration	For activities that cause a disruption to the natural ecosystem or the environmental baseline of the project area, measures must be taken to improve degraded or removed ecosystems following exposure to impacts that cannot be completely avoided or minimized. Restoration tries to return an area to the original ecosystem that occurred before impacts, whereas rehabilitation only aims to restore basic ecological functions and/or ecosystem services (e.g., through planting trees to stabilize bare soil).

9.7 Eligible list of Goods, Services and Works for CERC

Goods

Goods and equipment Construction materials, equipment and industrial machinery necessary for activities to be implemented; Equipment and supplies for temporary housing/living and schools and kindergartens (gas stoves, utensils, tents, beds, sleeping bags, mattresses, blankets, kit of personal and family hygiene, etc.); Equipment, tools, materials and supplies for search and rescue (including light motorboats and engines for transport and rescue); Tools and construction supplies (roofing, cement, iron, stone, blocks, etc.); Water pumps and tanks for water storage; Non-perishable food, bottled water and containers; Groundwater boreholes, equipment to allow access to site; Equipment, materials and supplies for disinfection of drinking water and repair/rehabilitate of drain water collection systems; Warehouses; Temporary sanitary dispensers (temporary/portable toilets).
Transportation of Gasoline and diesel (for air, land and sea transport) and engine lubricants.
Spare parts, equipment and supplies for engines, transport, and construction vehicles.
Lease of vehicles (Vans, trucks and SUVs).

Medical

- Medical equipment and consumables;
- Tents for advanced medical posts.

Other

- Equipment and supplies for communication and broadcasting (radios, antennas, batteries);
- Any other items agreed between the World Bank and the Borrower at the time of the emergency.

Works

Goods

Repair of damaged infrastructure including, but not limited to water supply and sanitation systems, dams, reservoirs, canals, roads, HeSPs and transportation systems, energy and power supply, telecommunication, and other infrastructure damaged by the event; Re-establishment of the urban and rural solid waste system, water

supply and sanitation (including urban drainage); Temporary solutions to eliminate the consequences caused by the event (temporary retaining walls, roads, HeSPs, removal and disposal of garbage associated with any eligible activity, etc.); Repair, rehabilitation and restoration of damaged public buildings, including schools, kindergartens, hospitals and administrative buildings; Any other infrastructure work required during an emergency.

Services

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

Non-consulting services on temporary resettlement described in the Goods section of this table (temporary housing/housing, classrooms and kindergartens).

Training

Emergency response training.

Training in rapid needs assessment and other related assessments.

Other training related to/required during an emergency.

Emergency Operating Costs

Incremental expenses by the Government for a defined period related to early recovery efforts arising as a result of the impact of an eligible emergency. This includes but is not limited to costs of staff attending emergency response, operational costs and rental of equipment.

9.8 Potential Environmental and Social Impacts and Mitigation

Environmental and social risks and impacts of CERC activities will be outlined briefly.

CERC E&S Management Procedures: The implementation of the CERC activities will draw on the more comprehensive assessment, procedures and mitigation measures included in the ESMF of the Project for construction activities. They will be considered during E&S screening and preparation of the Environmental and Social Management Plan (ESMP). The World Bank's Environmental, Health and Safety (EHS) Guidelines[1] will be followed as relevant. The E&S procedures to follow are outlined in the ESMF and summarized below:

Step 1: Application of the exclusion list. CERC subproject will be screened against the exclusion lists outlined above.

Step 2: application of the ESS5 impacts (resettlement screening form): CERC subprojects will be screened against the ESS5 screening form outlined in Annex 3. If ESS5 are identified, a Resettlement Plan as per the ESS will be prepared and implemented and compensation to project affected persons paid in full prior to the start of any civil works on the site. 2: E&S Screening Form. The ESMF includes a template to screen the subprojects from the E&S point of view. The form to be used to screen subprojects is in Annex 2.

Step 3: Identification of E&S issues and preparation of mitigation plans. Based on the results from Step 1, an ESMP/ESMP checklist for the CERC subprojects will be prepared to describe the works/activities and mitigation

measures to be conducted during detailed design, bidding/ contract, repair/restoration, and closure plans, taking into account the magnitude, scope, and nature of the emergency. Consultations with local authorities and communities will be made during this stage.

Step 4: World Bank clearance. Checklist of ESMP and /or concise RAP and report on RAP implementation (if required) prior to use should be approved by the World Bank.

Step 5: Implementation and M&E. The approved ESMP/ESMP checklist is included in the tender documents and is mandatory for execution by contractors who must sign the contractor's certificate of commitment to comply with the ESMP requirements for a specific subproject. The implementing agency will monitor the implementation of the ESMP in the field.

Step 6: Completion and Evaluation. Once the CERC subproject has been completed, the implementing agency will evaluate the results before closing the contract. Any pending issues and/or grievance must be solved before the subproject is considered fully completed.

Stakeholder Engagement: All stakeholders, including vulnerable groups, will be adequately informed about the subproject activities in accordance with the Project's Stakeholder Engagement Plan (SEP). All Project activities will be widely promoted through social networks, social protection communication channels, regional administrations, district administrations, and NGOs, including those supporting women and youth entrepreneurs. The feedback received from communities regarding the Project activities will be appropriately addressed during implementation.

Labor Management Procedures: The subprojects under CERC will be implemented by local contractors and most of the contract workers are likely to be locally hired. All contractors will be required to make a written contract with their employees that comply with ESS 2 and the Project's Labor Management Procedures (LMP).

Sexual Exploitation and Abuse/ Sexual Harassment Prevention Provisions: Provisions related to prevention of SEA/SH in accordance with the requirements of the World Bank, must be observed in activities funded under the CERC and take action to raise awareness on the prevention and mitigation of SEA/SH. At all stages of the CERC implementation, all Project staff and contractors will be informed about the principles of prevention and mitigation of risks of SEA/SH as outlined in the ESMF.

Grievance and Redress Mechanism (GRM) under CERC: The same grievance process as the one outline in this ESMF will be used for grievances related to CERC activities.

[1] https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines

Chapter Ten: Grievance Mechanism

10.0 Introduction

The Grievance Mechanism (GM) is an alternative dispute resolution arrangement, outside the judicial system by aggrieved parties for redress. GM is a much faster approach to dispute resolution when compared to the judicial system which may take longer periods and many times, are accompanied with injunctions which adversely affect project implementation. The HeSP will develop a functional GM system, guided by an approved GM manual. The project GM will be operationalized in each participating State to handle all project related disputes arising within the boundaries of the project activities. The establishment of the project BFGRM in each participating State is a proactive measure for addressing and resolving complaints out of court.

The HeSP GM will be developed on an IT based system (Project Management Information Systems (PMIS) to manage the entire GM system. Monthly/quarterly reports in the form of a summary of complaints, types, actions taken, and progress made in terms of resolving pending issues will be submitted for review to all focal points at different levels.

Once all possible avenues of redress have been proposed and if the complainant is still not satisfied then s/he will be advised of their right to escalate to the next level or take legal recourse. Complaints under the HeSP are grouped into seven categories which will apply under the HeSP These include:

- Category 1- Wrongful Inclusion and Exclusion
- Category 2- Service delivery
- Category 3- Fraud and Corruption issues
- Category 4 – Inquires/information requests
- Category 5 – Gender Based Violence
- Category 6 – Others

The HeSP will establish a procedure to receive and resolve any queries as well as address complaints and grievances about any irregularities through the GM. The GM will also handle complaints and grievances related to resettlement and other social and environmental issues if necessary. Grievance redress committees (GRC) will be formed at each Project level to receive and resolve complaints as well as grievances from aggrieved persons from the local stakeholders, including the project-affected persons. Based on consensus, the procedure will help to resolve issues/ conflicts amicably and quickly, saving the aggrieved persons from having to resort to expensive, time-consuming legal actions. The procedure will, however, not pre-empt a person's right to go to the courts of law.

10.1 Objectives of BFGRM

The fundamental objectives of the G M, implemented through the GRC serving as a para-legal body, are to resolve any grievances locally in consultation with the aggrieved party to facilitate smooth implementation of the social and environmental action plans. Another important objective is to democratize the development process at the local level and to establish accountability to the affected people.

In other words, the grievance mechanisms:

a. Provide a way to reduce risk for projects.
b. Provide an effective avenue for expressing concerns and achieving remedies for communities and promote a mutually constructive relationship.
c. Prevent and address community concerns and assist larger processes that create positive social change.

10.2 Importance of HeSP BFGRM

The establishment of a GM is beneficial for organizational and project strengthening. Grievances should be seen as a gift and not a threat to the project. Grievances or feedback submitted are a source of valuable information that can help to strengthen the implementation of the project and provide support and protection to project beneficiaries. The project's ability to resolve grievances demonstrates transparency and accountability to beneficiaries and non-beneficiaries. GBV complaints will confidentially referred to trained professionals, separate from regular GRM flow.

Who can raise grievances?

Anyone can raise a grievance about the HeSP or its supported activities. Beneficiaries and non- beneficiaries are all welcome to submit complaints on any aspect of HeSP via any of the available grievance channels (e.g., in-person to staff or volunteers or by phone, letter, email, or social media).

Structure for managing grievances and staff responsible

The following can receive grievances from complainants under the HeSP GM:

1. Grievance volunteers and community health/environment officials (at the community level)
2. Disease Surveillance and Notification Officers (DSNO), Animal, and Environmental health field supervisors (at the LGA level)
3. SPCU GRM Focal Points/GRC Members - specifically the Social Safeguards and Environmental Safeguards Specialists and Advisers (at State the level)
4. NPCU GRM Focal Points – specifically the Social Safeguards and Environmental Safeguards Anchors and Advisers (at Federal the level)

10.3 GM Procedure

Grievances can be made at the Community, LGA, State, and Federal levels:

1. Grievance volunteers and Community Health/Environment Officials: Members of the communities can channel their complaints to grievance volunteers or community health/ environment officials closest to them. The volunteers or officials will liaise with the next level officials at the LGA level to address complaints.
2. Disease Surveillance and Notification Officers, Animal, and Environmental Health Field Supervisors: Complaints can be made through the DSNOs or Animal/Environmental Health Supervisors in person or in writing. They are also responsible for reviewing any complaints

   relating to their LGA received via any channel. They are effectively trained in project activities to collate and address grievances, channeling them as necessary to the SPCU GRM FPs.
3. SPCU GRM FP/ State GRC Members: Grievances can be made at the state offices either in person, via telephone, in writing, or through any other accessible channel as there are SPCU GRM FPs that have been trained on effectively handling and managing grievances. Telephone numbers for State hotlines will be displayed at various state and local government offices and in project communities.
4. NPCU GRM FPs: At the NPCU level, there are GRM FPs who have been trained on handling and managing grievances and they can receive and register grievances from beneficiaries and non-beneficiaries using any channel convenient for them. Grievances may come in via hotline, in writing, in person, or via social media.

Table 10.1 Categories of Grievances Under HeSP and timeline for response

CATEGORIES	CATEGORIES OF GRIEVANCES UNDER HeSP PROJECTS	RESPONSIBILITIES	RESPONSE TIME FOR FURTHER ACTION
CATEGORY 1	WRONGFUL INCLUSION/ EXCLUSION • Wrongful inclusion • Wrongful exclusion	NPCU/SPCU/MOH/ MOE/MOLD	1- 14 days
CATEGORY 2	SERVICE DELIVERY ISSUES Service delivery • Mistreatment • Rudeness by staff • Complaints not responded to • Wrong information/poor communication • Other Service Delivery Issues	State- or Federal-level GRM FPs, SPCU, NPCU Coordinators	Within 7 days
CATEGORY 3	FRAUD AND CORRUPTION ISSUES • Bribe and Extortion • Misappropriation/Theft	SPCU/FPCU GRM FPs, SPCU Coordinator, NPC	21 days or more
CATEGORY 4	INQUIRIES AND INFORMATION REQUESTS	All GRM FPs	Within 7 days
CATEGORY 6	GENDER-BASED VIOLENCE Sexual exploitation and abuse (SEA) or sexual harassment (SH) (e.g., staff or contractor inflicting SEA/SH on a beneficiary, community member, or other staff members)	LGA/SPCU GRM FPs, Gender/GBV Anchors and Advisers are responsible for ensuring GBV-related complaints are treated according to the HeSP GBV Accountability Response Framework The survivor/complainant maintains the right to choose whether further action should be taken on their complaint. They also have the right to change their mind and stop seeking resolutions of their complaint.	As soon as the incident becomes known refer using the referral directory. If the perpetrator is associated with the project and the survivor wants to proceed with the case the GRM FP should notify the SPCU GRM FP/ SPCU Coordinator/NPCU Coordinator
CATEGORY 7	OTHERS		

Figure 6: GRM Procedure

10.4 Addressing complaints related to GBV and SEA/SH

The HeSP GM takes complaints related to GBV and sexual exploitation or abuse/sexual harassment seriously. However, regarding any complaint that is reported to the GM (including complaints involving other forms of GBV that are not related to the project), the GM will also have procedures in place to refer the individual to GBV service providers. If not satisfied, grievances can be submitted to: www.worldbank.org/grievances

10.4.1 Basic Process in grievance handling

The following are basic processes to be followed in handling grievances:

A. Service Standards for HeSP GM

- HeSP will ensure that all grievances are handled and resolved within the specified time frame depending on the category of complaint. The maximum time frame for resolving categories of issues that are within the remit of HeSP will be 3 months (90 days).
- HeSP will ensure that feedback is provided to complainants on the status of their grievances within 28 working days from the time the complaint was first received.
- Where investigations are likely to take more than 7 days, HeSP will provide complainants with a progress update.
- HeSP will guarantee that all complainants are treated with respect and fairness.
- HeSP will ensure that persons with disabilities and other vulnerable groups can easily access the BFGRM using available channels for registering complaints.
- HeSP will ensure that GBV and SEA/SH complaints are treated appropriately following a survivor-centered approach

B. Guiding Principles

To effectively manage grievances, there are basic principles that must be followed to ensure that the grievance redress mechanism is effective and valuable to beneficiaries and non-beneficiaries. The key principles include the following:

I. Communicated and Visible

A good grievance mechanism should be clearly communicated to all relevant stakeholders (beneficiaries, the public, and others). Information on how to channel grievances should be clear and widely publicized. Beneficiaries and non-beneficiaries should be informed on the timelines and

the necessary steps that will be taken to handle their grievances. Information on what type of grievances can be made should also be clearly communicated to the beneficiaries, staff, and any other interested party. In the case of HeSP the community health workers, DSNOs, Environment, and Animal health officers are the frontline staff who engage directly with citizens hence should be well knowledgeable of how the GM operates

II. Accessible

An effective BFGRM should be easily accessible by all. It should offer multiple channels for receiving and responding to grievances (e.g., in person, by phone, in writing, etc.). The conditions of the beneficiaries and other interested citizens should be considered when establishing a GM. For example, if the GM has a hotline element and there are beneficiaries with no phones, the grievance handling process should offer other alternatives such as face-to-face interaction or writing letters as alternatives for channeling grievances. Also, a good BFGRM should enable and encourage the use of different local languages in channeling grievances, which makes it more accessible for those who may not understand the official language.

III. Responsive

It is essential that a BFGRM should be responsive to the needs of its beneficiaries and non-beneficiaries. It should ensure that grievances are acknowledged, and issues resolved promptly. Staff handling the complaints must follow the agreed targeted timelines for resolving grievances. A responsive BFGRM will ensure that complainants are regularly informed on the progress or status of their grievances. A good GM should be responsive to the needs of different people, including vulnerable persons such as the elderly or disabled, and those who cannot speak or write in English. It should also take a survivor-centered approach to gender-based violence (GBV) and sexual exploitation and abuse/sexual harassment (SEA/SH) complaints.

IV. Fair and Objective

Grievance handling staff should be fair and objective when handling and managing grievances. Grievances should be handled with all sense of fairness and without any bias. Staff receiving grievances should be objective and empathetic towards the complainant and should not be defensive, unfair, or seen to be taking sides. Complainants should feel that they were treated fairly and with respect.

10.4.2 Expectation When Grievances Arise

When local people present a grievance, they generally expect to receive one or more of the following: acknowledgement of their problem, an honest response to questions/issues brought forward, an apology, adequate compensation, modification of the conduct that caused the grievance and some other fair remedies

In voicing their concerns, they also expect to be heard and taken seriously. Therefore, the company, contractors, or government officials must convince people that they can voice grievances and work to resolve them without retaliation. To address these challenges, companies are being called upon to lead and work with their host communities to fund non-judicial, dialogue-based approaches for preventing and addressing community grievances.

10.5 Grievance Redress Process

The grievance procedure will be simple and administered as far as possible at the local levels to facilitate access, flexibility and ensure transparency. All the grievances will be channeled via the GM Committee for each sub project at the sub-project level. There is no ideal model or one-size-fits-all approach to

grievance resolution. The best solutions to conflicts are generally achieved through localized mechanisms that take account of the specific issues, cultural context, local customs and project conditions and scale. Annex 4 contains grievance redress forms that could be used for grievance mechanism. In its simplest form, grievance mechanisms can be broken down into the following primary components:

a. Registration

The first step is the presentation of grievance at the uptake point at any level. The secretary of the committee will receive grievance from the complainant, register and acknowledge receipt of grievance to the grievant within 2 days. The registration form will capture the following data: 1) Case number, 2) Name of the complainant, 3) Date of the grievance,

4) Gender, 5) Complete address, 6) Category of grievance, 7) persons involved, and impacts on complainant life, 8) Proofs and witnesses, and 9) Previous records of similar grievances.

b. Verification

The verification determines among other things whether the matter has a relationship with the project activities, and whether the matter can be handled/resolved at the level where it is presented. This will determine if the matter should be referred to the next level or not. Part of the investigations may also be to assess the cost of lost or risk involved in the grievance.

c. Processing

The processing step is when options for the approach to resolving the case are weighed and determined. Parties involved in the case are brought together for the first attempt at resolution with suggestions from the parties on practical steps to be taken which may also involve site visit for physical inspection and determination of the claim.

d. Feedback

All responses to the complainant in a grievance redress process that moves beyond a unit level must be communicated in writing and/or by verbal presentation to the complainant. This will include a follow-up on the corresponding authority where cases are referred, to ascertain the status of reported cases. Feedback on the outcome of each case should be given to the complainant through the secretary of committee or social contact/safeguard person. It is expected that reported complaints at each level will be resolved and determined within 21 days from the date of receipt of the complaint. Grievance resolution will be a continuous process in subproject level activities and implementation.

The NPCU and SPCU will keep records of all resolved and unresolved complaints and grievances (one file for each case record) and make them available for review as and when asked for by the Bank and any other interested persons/entities. The SPCU will also prepare periodic reports on the grievance resolution process and publish these on the HeSP website. The HeSP intends to strengthen the GM through information and communication technology to ensure that all complaints including those of sexual exploitation and abuse are immediately reported to the Government.

HeSP will integrate the GM on a web-based dashboard, to adequately and promptly address any potential grievance related to Gender Based Violence and SEA. The complaints registered in this system will be managed by a dedicated administrator that will liaise immediately with any GBV and SEA complaints with the contractors, consultants and SPCU for immediate measures. If the BFGRM receives a case on sexual exploitation and abuse related to the project, it will be recorded, and the complainant will be referred to the relevant assistance, if needed, for referral to any other service providers. The supervision consultant will keep the information confidential to protect the privacy of GBV and SEA complainants. In cases, where the perpetrator(s) is linked to project activities then the contractor will take appropriate actions as per the Code of Conduct signed by the person and under the effective law in Nigeria. HeSP will report the activities and outcomes of GBV and SEA

surveillance and management to the World Bank on a regular basis.

10.6 Financing of the Grievance Redress Mechanism and Cost of Remediation

The proponent shall be responsible for the funding of logistics for the GRC as well as the eventual compensation that the aggrieved party may be entitled to. It is advised that the NPCU set aside 10% of its operational budget for Environmental and Social Safeguards for GM and GBV/SEA funding. The proponent will also be responsible for the cost of the judicial process for cases that result in court for adjudication. Table 10.2 below shows the implementation plan for the GM.

Table 10.2: Implementation Plan for Grievance Mechanism

Steps	Process	Description	Completion Time frame	Responsible Agency/ Person
1	Receipt of complaint	Document date of receipt, name of complainant, village, nature of complaint, including the medium of receipt (online, SMS, hotline, complaint box) inform the SPCU	1 day	Secretary to GRC at project level
2	Acknowledgement of grievance	By letter, email, phone	1-5 days	Social safeguard officer at SPCU
3	Screen and Establish the Merit of the Grievance	Visit the site; listen to the complainant /community; and assess the merit	7-14 days	GRC including the social safeguard officer & the aggrieved PAP or his/her representative
4	Implement and monitor a redress action	Where complaint is justified, carry out resettlement redress in line with the entitlement matrix/ESS5	21 days or at a time specified in writing to the aggrieved PAP	PC-NPCU and Social Safeguard Officer
5	Extra intervention for a dissatisfied scenario	Review the redress steps and conclusions, provide intervention solution	2-3 weeks of receiving status report	PC-NPCU
6	Judicial adjudication	Take complaint to court of law	No fixed time	Complainant
7	Funding of grievance process and GBV/ SEA (10 percent of ES budget)	GRC logistics and training, redress compensation, court process	No fixed time	The proponent

Annex 1: Environmental & Social Codes of Practice for sub-project activities

Environmental and Social Code of Practice for Solar Power Installation in the Selected Public Health Facilities in Nigeria

1. General

1.1. Purpose of the Environmental and Social Code of Practice

This Environmental and Social Code of Practice (ESCoP) provides guidelines to follow for the Procurement, installation, and maintenance of solar power systems in select primary healthcare facilities, laboratories, Isolation and treatment centres, Public Health Emergency Operation Centres, etc., as part of the HeSP Project activites. These guidelines are intended to avoid environmental and social problems whenever possible or to mitigate those problems if they cannot be avoided. This ESCoP will serve as the framework for managing environmental and/or social issues during installation, operation, and decommissioning of the solar panel. The Service Provider who will install the solar panel will be required to follow the measures providers in this ESCoP to mitigate potential environment & social risks and impacts of the installations. This should form part of the Bidding requirements.

1.2. Legal Requirements

The guidelines provided in this ESCoP are in line with the relevant national laws and regulations on waste management, occupational health and safety management, in addition to all applicable World Bank environmental and social standards of the Environmental and Social Framework (ESF) and international standards. The service provider shall be required to comply with all applicable national laws and World Bank Environmental and Social Standards (ESSs).

1.3. Consultation and Disclosure

The Service Provider shall consult with and provide adequate and timely information to the benefiting Primary Health Centres; and other people affected by the installation activities throughout its planning, preparation and the solar panel installation, and its operation.

1.4. Ethical Clause of the Service Provider

1.4.1. The Service Provider must not either directly or indirectly exploit the benefiting Primary Health Centres, stakeholders' (including vulnerable populations – women, girls) in any other way to prevent unnecessary social issues.

1.5. Language

1.5.1. Communication with affected people should be in a language they understand clearly and easily;

1.5.2. If the company or its agents cannot communicate in any of those languages, translators must be engaged to provide the oral or written information as needed.

1.6. Consultation with Primary Health Hospitals and Other Affected People

1.6.1. Consultation on project plans

1.6.1.1. The Service Provider shall consult with the Officer In-charge or the Chair or the Ward Development Committee (WDC) of the Primary Healthcare Centre (PHC) before the installation commences to ensure they are aware of their presence and establish any ground rules before the installation process commences.

1.6.2.Consultation on compliance with Environmental and Social requirements
1.6.2.1.The Service Provider shall also consult with the PHC and other affected people, both men and women, on the procedures as documented in this ESCoP which they will comply to.

1.7. Workers' Storage Spaces, and Other Temporary Facilities

1.7.1. The Service Provider shall consult with the Officer In-charge of the PHC workers on the storage spaces, and other temporary facilities.

1.7.2.The storage facilities, and other temporary facilities should be located on sites free of any form of risk.

1.7.3.The proposed location shall be provided by the Officer In-charge PHC officials as a temporary provision and at no cost.

2. Installation of the solar panels

2.1. Storage and Other facilities

2.1.1.If temporary storage area provided, must be adequate in terms of space and safe, and protection from rain and storms.
2.1.2.The storage area should be on sites free from flooding and other natural hazards.
2.1.3.The storage area should be kept free from rubbish and other refuse.
2.1.4.The site should have First aid kits; and adequate training provided in administering first aid.

2.2. Waste Management (During Installation)

2.2.1.The Service Provider shall identify activities that have the potential to generate waste and propose measures to manage and dispose of these wastes, including management of materials that can be recycled and management of hazardous waste.

2.2.2.The measures must abide by the laws and regulations concerning waste management of the Ministry of Environment and its state regulatory agencies.

2.2.3. At the end of every task each workman is required to carry out good Housekeeping and a strategy of "Cleans as you go" should be adopted to prevent the risk of slip, trip and fall during work.

2.2.4.The waste management measures adopted by the Service Provider will be reviewed by the CoPREP project Safeguard.

2.2.5. E-waste generated as a result of decommissioning of the Solar power project should be managed through Re-use and Recycle strategy; or disposal of e-wastes in a responsible manner through the distributors of the technology or appropriate government agency.

2.3. Prohibitions when working on the PHCs

2.3.1 All workers involved in the installation process must ensure that they:

2.3.1.1.comply with the waste disposal and hygiene measures as established in the ESCoP.

2.3.1.2.refrain from using illegal drugs

2.3.1.3.do not engage in theft of personal or community property

2.3.1.4.do not drink or gamble with members of the community.

2.3.1.5.do not make any unwanted verbal or sexual advances towards those in the PHC and the community.

2.3.1.6.do not engage in theft and vandalism.

2.3.1.7. Workers are aware of need to respect Gender Based concerns in the workplace.

2.3.1.8. are aware of religious practices or social customs of the community if different from that of the workers.

2.3.1.9. do not interact with minors in the local communities, glorify violence, incite hate against minority groups such as ethnic, national or religious minorities, or any other vulnerable groups.

2.3.1.10.do not use child labour for the installation process or any other form of work.

2.4. Occupational Health and Safety

2.4.1. The Service Provider MUST submit Certificate of Competence of the technicians to be used for project before the commencement of Installation works.

2.4.2. Work area (Site)

2.4.2.1. Site MUST be cordoned off with a Caution tape (Red) to prevent presence of unwanted persons in the work area;

2.4.2.2 People not involved with installation should be kept safely away from the worksites.

2.4.3.Personal Protective Equipment (PPE)

2.4.4. Mandatory PPE include, Pair of Hand gloves, Safety Shoes, protective clothing, Eye goggles.

2.4.5.Working at height

2.4.5.1.If working at heights is required, sufficient protection against falls must be in place.

2.4.5.2.Equipment used to work at heights including ladders, platforms, scaffolds and fall prevention equipment like safety belts and straps must be tested for integrity before use.

2.4.5.3.Fall Protection: Service Providers/technicians must comply with all applicable fall prevention requirements including, as relevant, fall prevention safety plans, training, monitoring, mitigation activities, corrective action plans as well as any additional activities to eliminate fall risk.

2.4.5.4.Worker exposure to potential safety hazards (e.g., electrical and other energy sources, fire, and fall hazards) are to be controlled through proper design, engineering and administrative controls, preventative maintenance and safe work procedures (including lockout/tag out), and ongoing safety training. Where hazards cannot be adequately controlled by these means, workers are to be provided with appropriate, well-maintained, personal protective equipment. Workers shall not be disciplined for raising safety concerns.

2.4.5.5.The use of motorized tools on site and other machinery is to be evaluated for safety hazards. Physical guards, interlocks and barriers are to be provided and properly maintained where machinery presents an injury hazard to workers.

2.4.5.6.Workers exposure to the hazards of Manual Handling tasks, including manual material handling and heavy or repetitive lifting, prolonged standing and highly repetitive or forceful assembly tasks is to be identified, evaluated and controlled.

2.4.5.7. Every Task MUST be supervised by a competent OHS/Environmental safeguard officer.

2.5. Community Health and Safety

2.5.1.The Service Provider will install proper safety and warning signs to inform the public of potential hazards during the installation process.

2.5.2.The concerned stakeholders' will be informed through posters, consultations, engagements, and other means, of the risks and dangers of tampering with any part of the system.

2.5.3.The Service Provider will install proper safety and warning signs to inform the public of potential hazards.

2.6. Solar Panels and Related Infrastructure

2.6.1.The solar panels and any related infrastructure should be adequately protected from theft or other interference during construction.

2.6.2.If Lithium-ion batteries are used, to avoid improper use and thermal runaway, the battery cells and charge controller should be encased in one common housing that cannot be opened with commonly available tools such as screwdrivers. The housing should clearly indicate the type of battery enclosed.

2.6.3.The location of the Battery Rack should be well ventilated, safe from moisture well-lit and safe from intrusion and vandalism.

2.6.4. Limit access to the battery room to people trained in maintenance and shut-down procedures.

2.6.5.Warning signs must be visible on the housing, in English and the local language(s), to prevent any tampering or attempts to alter the system, clearly stating the risks of electric shock, fire, and explosion.

2.6.6 Battery Management (Pre-cycling Step)

All used batteries must be collected, transported and stored with proper care at Collection Infrastructure before recycling.

Collection

- Only registered Vendor/Collector/Importer with PRO is authorized to collect used batteries. This is to ensure that only trained technicians handle the different components of batteries used to avoid leakage of acid and lead content into water bodies and soil.
- Batteries should not be drained at collection points with the exception of dry batteries. The drainage of this liquid may pose several threats to human health and to the environment due to its high lead levels and high acidity.
- If there is a need for drainage, it should be handled by trained personnel with the required tools and equipment

Storage

- Batteries must be stored inside an acid-resistant container that may simply be sealed and used as the transport container as well minimizing the risk of an accidental spillage.
- Storage places must be sheltered from rain, other water and heat sources. A water collection system should be present
- The storage place must have a ground cover, preferably acid-resistant concrete or any other acid-resistant material, that may retain any leakage and direct it to a collecting container from where it can be removed afterwards
- Collectors must not sell any used batteries to unlicensed lead smelters

Transportation

- Used batteries must be transported inside sealed containers no matter which mode of transport is being used, i.e. boat, train, etc.
- Transport Vehicle should be identified with international convention symbols and color.

Recycling

Procedures usually differ as these infrastructures are well-equipped to drain electrolytes and undergo neutralization through the effluent treatment plant. Other components of the batteries are separated and recycled as specified.- (see Annex 1 for Battery Management Plan)

2.7. Installation in PHCs

2.7.1. The Service Provider/technicians involved in the installation works must comply with electrical design and installation standards (e.g. the IEC/NEC or equivalent) to ensure electrical safety, including when systems are installed in ground-mount (free-field) or rooftop environments.

2.7.2. All electrical installations Must ensure proper Log/out practice to avoid electrocution and possible explosion.

2.8. Installation of Public Lighting Within the PHCs

2.8.1.The decision for location of light points (bulbs) should be decided by the Service Provider only after detailed discussion with the Officer In-charge of the PHC, but the Service Provider has to evaluate the safety of the suggested positions.

2.8.2.All wiring must be done by the Service Provider only, to assure the wiring is adequately safe. Wiring by a third party is not permitted.

2.8.3.If the site already has wiring, the Service Provider should replace it with the appropriate wiring and materials.

2.9. Waste Management

2.9.1.The Service Provider should develop a site-specific Waste management plan for this Installation works.
2.9.2.The PHCs shall educate the workforce on the proper disposal of waste, the location of disposal sites, and other requirements and measure in waste disposal.
2.9.3.During the installations, the Service Provider workers shall handle and dispose of waste according to the provision in section 3.3 of this ESCoP including arrangements for recyclable materials and toxic waste, so that waste do not accumulate.
2.9.4.After installation, the, Service Provider shall clear all work areas and storage sites of all debris and waste.

2.10. Reporting

2.10.1.The State CoPREP safeguards shall include sections in its monthly reports on the Service Provider's compliance status with respect to the application of the ESCoP.

3. Operations

3.1. Protection and Safety of Infrastructure and Equipment During Operation

3.1.1.Proper protection of vulnerable points in the system will be put in place (such as cages, locks, etc.), regularly inspected by the PHCs officials and the contactor, and maintained.

3.1.2.If replacement batteries are stored on site, they should be in aa area free from any form of risk or potential threats, to avoid damage to the batteries and risk of toxic pollution.

3.2. Repairs and Maintenance

3.2.1.The Officer In-charge shall follow all relevant environmental and social measures above when carrying out any maintenance or repair work.
3.2.2.The faulty components should be complied for repair and maintenance work; thereafter, tested after repairs for confirmation.

3.3. Disposal of Used/Damaged Equipment **and Waste Management**

(a) Disposal of Used /Damaged Batteries

The Extended ***Producer Responsibility*** is adopted here: this concept is directed to the treatment or disposal of products post consumption. It is the use of financial incentives to encourages manufacturers to design environmentally friendly products by making producers accountable for the management of their product during end-stage consumption.

3.3.1 **Collection**: Only registered Vendor/Collector/Importer with Producer Responsibility Organizations (PRO) is authorized to collect used batteries, (e-waste). This is to ensure that only trained technicians handle the different components of used batteries to avoid leakage of acid and lead (heavy metal) content into water bodies and soil.

3.3.2 Batteries are collected through the Alliance for Responsibility Battery Recyclers. They ensure that Batteries are not drained at collection points with the exception of dry batteries. The drainage of this liquid may pose several threats to human health and to the environment due to its high lead levels and high acidity.

3.3.3 If there is a need for drainage, it should be handled by trained personnel with the required tools and equipment.

3.3.4 **Storage** Batteries must be stored inside an acid-resistant container that may simply be sealed and used as the transport container as well as minimizing the risk of accidental spillage.

3.3.5 Storage places must be sheltered from rain, other water, and heat sources. A water collection system should be present.

3.3.6 The storage place must have a ground cover, preferably acid-resistant concrete or any other acid-resistant material, that may retain any leakage and direct it to a collecting container from where it can be removed afterwards.

3.3.7 Collectors must not sell any used batteries to unlicensed lead smelters.

3.3.8 **Transportations:** Used batteries must be transported inside sealed containers no matter which mode of transport is being used, i.e. boat, train, etc.

3.3.9 Transport Vehicle should be identified with international convention symbols and color.

3.3.10 R**ecycling**: Procedures usually differ as these infrastructures are well-equipped to drain electrolytes and undergo.

3.3.11 neutralization through the effluent treatment plant. Other components of the batteries are separated and recycled as specified.

(b) **Disposal of used Solar Panels and Equipment**

3.3.12 **Collection:** Only registered Vendor/Collector/Importer with PRO is authorized to collect used batteries, (e-waste). Recycling solar panels can be done through various means, such as recycling depots, waste disposal centers, solar panel manufacturers, etc. These places collect discarded solar panels and send them to specialize recycling centers for processing

3.3.13 The **solar panel recycling** center will sort and inspect the collected solar panels. First, they will classify solar panels according to materials, such as silicon, copper, aluminum, etc. They then inspect each solar panel to determine whether it can be reused. If the damage to the solar panel is minor, it can be repaired and reused. If the damage to the solar panel is serious, it will need to be dismantled and recycled

3.3.14 **Disassembly** of solar panels is a very complex process. First, the solar panel's glass panel and aluminum frame need to be separated. The solar panels then need to be removed from the glass panels and separated into individual cells. Finally, the copper and aluminum wires on the battery board need to be separated and sent to the recycling station for processing.

3.3.15 The final step in solar panel recycling is reuse. Recycling centers will send the recovered materials to solar panel manufacturers for reuse. These materials can be used to create new solar panels, thereby reducing resource waste and environmental pollution.

3.3.16 The solar panel recycling process is a very important step. Through recycling and reuse, resource waste and environmental pollution can be reduced, while raw materials can be provided to solar panel manufacturers.

Annex 1: Battery Management Plan with the required information

Battery Management Plan	
Name of Installer:	
Contact Address of Installer	
Type of Battery:	○ LAB ○ Ni-Cad ○ Li-ion ○ Ni-Metal Hydride
Classification of Battery	○ General ○ Special
Date of Battery Manufacture	
Duration of Useful Life:	
Proposed Date of Battery Collection	
Name of Collector/Vendor Infrastructure	
Address of Collector/Vendor Infrastructure	
Name of Recycler	
Address of Recycler	
Remarks	

Environmental and Social Code of Practice for Waste Management Procedures

Target: Health Care Workers/Health Care Facilities/Laboratories General

Instructions

- All health care waste produced in healthcare facilities, (including isolation/quarantine centers, case management facilities, laboratories etc.) during an outbreak of a priority disease must be considered as infectious waste and should be segregated and collected safely in designated containers and bags, treated, and then safely disposed (WHO)
- Train the staff who are assigned in handling, treatment, and disposal of waste management
- Train staff on how to put on and remove PPE
- Ensure necessary PPE (Gown, gloves, face mask, goggles or face shield, gumboots) is provided to all staff, as required
- Ensure staff wear PPE when handling and disposing waste according to HCW guideline
- Undertake proper segregation at source including:
  - Ensure all staff are provided with training in color coding and handling of infectious and hazardous waste
  - All departments, laboratories, and service delivery areas should be provided with appropriate equipment (needle cutters; sharps boxes) and color-coded bins.

General Waste – Food waste, paper, disposable cups, plates, spoons etc.

- Collect in black bag
- Close and tie when 2/3rd full
- Transfer the waste to a temporary storage point for general waste along a specified route at a fixed time point and store the waste separately at a fixed location
- Transport to landfill away from facility

Infectious Waste – Gown, gloves, apron, shoe cover, disposable items, mask etc.

- Collect in small biohazard red bags
- Close, seal the bag with cable ties and tie lose when 2/3 full
- Transfer the waste to a temporary storage point for medical waste along a specified route at a fixed time point and store the waste separately at a fixed location
- Securely transfer to approved and professionally managed MOH incinerators
- Transport other infectious waste according to general medical waste protocols

Sharp Waste and needles

- Put in puncture proof plastic container
- Close the lid and seal the container when 2/3 full
- Put in the red bag and tie lose
- Transfer the waste to a temporary storage point for medical waste along a specified route at a fixed time point and store the waste separately at a fixed location
- Securely transfer out for incinerating or appropriate disposal

REFERENCES

WHO guidance on Infection prevention and control
WHO technical brief water, sanitation, hygiene, and waste management

Environmental and Social Codes of Practice for Small Scale Construction, Upgrades, Rehabilitation, Expansion

Target: Construction Workers OHS/Project Supervisor/Facility Manager

The Environmental and Social Codes of Practice (ESCOP) for small-scale construction, upgrades, rehabilitation, and expansion projects are designed to ensure that such activities are conducted in a manner that minimizes negative impacts on the environment and local communities. These codes are part of broader Environmental and Social Management Frameworks (ESMF) used in various projects, such as those funded by the World Bank. Here are some key elements typically included in these codes of practice:

Worker Safety

- **Notification**: Local construction and environment inspectorates, as well as communities, must be informed of upcoming activities.
- **Public Notification**: The public should be notified of the works through media and/or publicly accessible sites.
- **Permits**: All legally required permits must be acquired for construction and/or rehabilitation.
- **Contractor Agreement**: Contractors must formally agree to carry out work safely and minimize impacts on neighboring residents and the environment.
- **Personal Protective Equipment (PPE)**: Workers' PPE should comply with international good practices, including hardhats, masks, safety glasses, harnesses, and safety boots.
- **Signposting**: Sites should have appropriate signposting to inform workers of key rules and regulations.
- **Incident Reporting**: All incidents and accidents must be logged and reported.
- **Qualified Personnel**: Only qualified individuals should operate equipment, machinery, and vehicles.

General Rehabilitation and Construction

- **Debris Management**: During interior demolition, debris chutes should be used above the first floor, and debris should be kept in controlled areas and sprayed with water mist to reduce dust.
- **Dust Control**: Dust from pneumatic drilling or wall destruction should be suppressed by ongoing water spraying and/or installing dust screen enclosures at the site.
- **Site Cleanliness**: The surrounding environment, such as sidewalks and roads, should be kept free of debris to minimize dust.
- **Waste Management**: There should be no open burning of construction or waste material at the site, and no excessive idling of construction vehicles.
- **Noise Control**: Construction noise should be limited to restricted times agreed upon in the permit.
- **Erosion Control**: The site should establish appropriate erosion and sediment control measures, such as hay bales or silt fences, to prevent sediment from moving off-site and causing excessive turbidity in nearby streams and rivers.

Waste Management

- **Waste Pathways**: Waste collection and disposal pathways and sites should be identified for all major waste types expected from demolition and construction activities.
- **Waste Separation**: Mineral construction and demolition wastes should be separated from general refuse, organic, liquid, and chemical wastes by on-site sorting and stored in appropriate containers.
- **Licensed Disposal**: Construction waste should be collected and disposed of properly by licensed collectors.
- **Record Keeping**: Records of waste disposal should be maintained as proof of proper management.
- **Recycling**: Whenever feasible, contractors should reuse and recycle appropriate and viable materials, except for hazardous materials.

Traffic Management

- Avoid obstructing or blocking public roads
- Permanently maintain the flow of traffic during the construction
- Use proper signal measures for trucks entering and exiting work site

Emergency Disaster and Preparedness Plan

- Fire safety measures will be designed including available firefighting equipment
- Hazardous response and containment plan must be prepared and operational
- Emergency response plans related to natural or man-made disasters must be fully functional
- Regular training for staff, drills, and evacuation tests, etc.

Environmental and Social Code of Practice (ESCOP) For Small Construction, Upgrades, Rehabilitation and Expansion Activities in the Health Sector

This ESCOP applies to activities related to the construction, rehabilitation, and expansion of healthcare infrastructure (e.g., clinics, health posts, laboratories) under a World Bank-supported project in the health sector.

1. Objectives

- Prevent or minimize adverse environmental and social (E&S) impacts.
- Ensure worker safety and community health.
- Promote compliance with World Bank ESF, national E&S laws, and good international industry practice (GIIP).
- Guide contractors and sub-contractors on acceptable environmental and social behavior.

2. General Environmental and Social Requirements

Aspect	Code of Practice
Legal Compliance	Ensure compliance with relevant national E&S laws and World Bank ESF. Obtain all required environmental permits or clearances.
Site Selection and Preparation	Avoid sensitive areas (wetlands, sacred sites, residences). Minimize vegetation clearing. Apply dust and erosion control measures.
Worker Safety (OHS)	Provide PPE, safety signage, and training. Ensure site fencing, first aid availability, and fall protection. Comply with ILO core labor standards.
Labor and Working Conditions	Prohibit child or forced labor. Provide contracts, fair wages, and grievance mechanisms for workers. Respect labor rights and dignity.
Community Health and Safety	Limit noise, dust, and pollution. Provide safe access routes. Notify nearby residents before high-risk activities. Control traffic.
Waste Management	Segregate and properly dispose of construction debris, medical, and hazardous waste. Avoid open burning or illegal dumping.
Water and Sanitation	Prevent water contamination. Provide sanitation facilities for workers. Do not discharge untreated effluent into water bodies.
Air Quality and Dust Control	Water construction areas to suppress dust. Maintain machinery to reduce emissions. Prohibit waste burning.
Noise Control	Operate machinery only during designated hours. Use silencers/mufflers. Notify communities of loud activities.
Material Sourcing	Use legal and sustainable sources. Avoid illegal timber or gravel. Avoid sourcing from sensitive ecosystems.
Cultural Heritage	Stop work if artifacts or cultural objects are discovered; notify authorities. Do not disturb graveyards or cultural sites.
Stakeholder Engagement	Engage local communities during planning. Address complaints promptly. Keep public informed of construction timelines.

3. Specific Provisions for Health Sector Construction

Activity	Code of Practice
Medical Waste Management	Ensure construction plans include designated areas for safe medical waste storage. Equip facilities with incinerators or appropriate disposal mechanisms. Train health staff on waste segregation.
Infection Prevention and Control	Follow WHO IPC guidelines. Install handwashing stations, isolation

(IPC)	areas if needed, and adequate ventilation.
Accessibility	Ensure disability-friendly designs (ramps, signage, toilets) per universal design standards.
Gender-Sensitive Infrastructure	Provide separate toilets for men and women. Ensure lighting and privacy for safety.

4. Environmental and Social Monitoring

Monitoring Item	Responsible Party	Frequency
E&S compliance on-site	Contractor / Supervising Engineer	Weekly
Grievance log and resolution	Project Grievance Officer	Ongoing
Waste management	Contractor / Site Supervisor	Weekly
Worker safety compliance	Health & Safety Officer	Weekly
Community complaints	SPCU	Monthly

5. Grievance Redress Mechanism (GRM)

- Establish a GRM at the community level.
- Ensure confidentiality and timely resolution.
- Report all serious grievances to the PIU and World Bank Task Team Leader.

6. Responsibilities and Training

- Contractors and Sub-contractors: Comply with this ESCOP; train staff on E&S issues.
- Supervising Engineer: Monitor compliance; enforce corrective actions.
- NPCU/SPCU: Oversee implementation; compile reports; support capacity building.

7. Reporting and Documentation

- Weekly site reports should include E&S compliance checklists.
- Immediate reporting of any serious incidents or accidents (within 48 hours).
- Submit monthly E&S summary to the SPCU.

8. Penalties and Enforcement

Non-compliance with the ESCOP can result in:

- Withholding of payment
- Suspension of work
- Contract termination

Environmental and Social Codes of Practice – Sexual Exploitation, Abuse, and Harassment (SEAH) Prevention and Response

Target: Staff/Administrators/Contractors

Policies And Professional Conduct Standards

- Foster improved organizational culture and norms through effective value-based leadership and guidance on goals, values, behaviors, and expectations related to SEAH prevention and response, including the promotion of inclusive, non-discriminatory, gender-balanced work environments and opportunities,
- Ensure sustained senior-level engagement and leadership commitments to shift or sustain positive organizational culture and norms in relation to SEAH prevention and response
- Develop a Code of Conduct that provides explicit standards on professional conduct, lists prohibited behaviors and provisions for addressing SEAH, and includes disciplinary sanctions, ensuring they are publicly available and conveyed to staff and senior management consistently throughout key employment cycle moments
- Develop a SEAH Prevention and Response Action Plan, which includes an Accountability and Response Framework with a committed budget
- Establish specific ESCOPs for construction contractors and subcontractors

Response And Support Mechanisms

- Disseminate specific procedures for SEAH including confidential reporting with safe and ethical documenting of GBV cases as part of an effective mechanism (GM) with multiple gender-sensitive and age-appropriate channels to initiate a complaint.
- Carry out and disseminate to communities and project personnel a mapping of the GBV services that are available and accessible in the project area, including an assessment of their quality in line with international GBV standards and national protocols
- Ensure through a national organization or civil society actor the timely and quality provision of care to GBV survivors in a coordinated way with gender-based violence and child protection services

Training, Awareness Raising, and Communication

- Raise community awareness on SEAH through the development of culturally sensitive IEC material and campaigns, with a focus on the provision of information on: SEAH core concepts and code of conduct contents, reporting mechanisms and channels, as well as GBV available in the area
- Develop and facilitate regular training and capacity building for management and staff at different levels on standards, codes of conduct, mechanisms to file complaints and report misconduct included in the GM, and the implications of breaching standards, to ensure effective cultural change and promote a safe, confident, and mutually respectful work environment.

Monitoring, Evaluation, and Reporting

- Establish mechanisms for monitoring and reviewing SEAH implemented activities Page
- Carry out regular consultations with community members, with a special focus on vulnerable groups, women, and girls on the GBV risks present in the areas
- Provide summary information on a quarterly and annual basis around all these provisions and processes and the project GM
- Develop information sharing protocols to notify the WB safely and ethically on SEAH cases.

REFERENCES

- World Bank Addressing Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) in Investment Project Financing involving Major Civil Works, Good Practice Note, 2020 http:// pubdocs.worldbank.org/en/741681582580194727/ESF-Good-Practice-Note-on-GBV-in- MajorCivil-Works-v2.pdf
- UNICEF Strategy to Prevent and Respond to Sexual Exploitation and Abuse and Sexual Harassment, 2019 https://www.unicef.org/sites/default/files/2019-05/UNICEF-Strategy- Prevent-Respond-Sexual Exploitation-Abuse-Sexual-Harassment-January-2019.pdf
- DAC Recommendation on Ending Sexual Exploitation, Abuse, and Harassment in Development Co-operation and Humanitarian Assistance: Key Pillars of Prevention and Response 2021 http://www.oecd.org/dac/gender-development/dac-recommendation- on-ending-sexual-exploitation abuse-and-harassment.htm
- IFAD policy to preventing and responding to sexual harassment, sexual exploitation and abuse 2018 https://www.ifad.org/en/document-detail/asset/40738506
- Interagency Steering Committee (IASC) Interim Guidance Checklist To Protect From Sexual Exploitation And Abuse During Covid-19
- https://worldbankgroup.sharepoint.com/sites/gsg/SPS/Documents/2.%20Focus%20 Areas%20Resources%20(KSB%20Resources)/GenderBased%20Violence/GBV%20 Guidance%20Tools/GBV%20COVID19%20Resource%20Hub/IASC%20Checklist%20 PSEA%20during%20COVID%2019.pdf
- UNFPA: The Inter-Agency Minimum Standards for Gender-based Violence in Emergencies Programming, 2019 https://gbvaor.net/sites/default/files/2019-11/19200%20 Minimun%20Standards%20Report%20ENGLISH-Nov%201.FINAL_.pdf
- Interagency Steering Committee (IASC) Identifying & Mitigating Gender-based Violence Risks within the COVID-19 Response, 2020 https://gbvguidelines.org/wp/wp-content/ uploads/2020/04/Interagency GBV-risk-mitigation-and-Covid-tipsheet.pdf

Annex 2: Screening Form

The objective of the screening form is to guide the Borrower in

1. assessing the various environmental and social risks and impacts that different sub-project activities will pose, and
2. selecting the right environmental and social management plans that will be applicable to those sub-project activities.

One of the key considerations is whether the sub-project activities can use pre-prepared management measures already included in the ESMF, such as ESCOPs, the LMP, OR whether sub-project activities require the preparation of site- specific management instruments. The E&S Screening procedure comprises of two stages-process:

1. Initial screening by using the Exclusion List of the ESMF; and
2. Screening the proposed activities to identify the approach for E&S risk management

Generic Environmental and Social Screening Form				
No	Item	Details		
INTRODUCTION				
1	Name of Project			
2				
3	Local Government			
4	Brief description of the project			
5	Does the site /project require any			
		Yes	No	If yes give the extent (in ha)
	Reclamation of land, wetlands			
	Clearing of forest			
	Felling of trees			
6	Minimum land area required for the proposed development (ha)			
7	Available total land area within the identified location (ha)			
8	Expected construction period			
9	Responsible contact person with contact Information			
10	Present Land Ownership	State	Private	Others including / (specify)
11	Source of Funding			
12	Total Cost of the Project			
13	Anticipated Date of Completion			
DESCRIPTION OF THE ENVIRONMENT				
PHYSICAL				
14	Topography & Landforms (map)	Attach an extract from relevant 1: 50,000 topographic sheet/ if detailed maps are available provide them		

15	Relief (difference in elevation)	Low <20m	Medium 20-40m	High 40-60	>60m

16	Slope	Low <30%	Medium 30-40 %	High 40-60 %	Very High > 60%	
17	Position on Slope	Bottom	Mid-slope	Upper-slope		
18	Soil					
19	Soil Depth	Shallow < 20cm	Moderate 20 – 100 cm	Deep >100cm		
20	Soil Erosion	Low	Medium	High		
21	Climate / Wet Zone		Intermediate Zone	Dry Zone/ Semi-Arid Zone		
22	Annual dry period					
23	Source of fresh Surface Water	Spring/canal	Tank/ Reservoir	Perennial Stream	Seasonal Stream	None
24	Surface Water Use	Domestic	Washing/ Bathing	Irrigation	Animal use	
25	Surface Water Quality	Poor	Moderate	Good		
26	Ground Water Availability	Dug Well	Tube Well	Other (specify)		
27	Ground Water Use	Domestic	Washing/ Bathing	Irrigation	Animal use	
28	Ground Water Quality	Poor	Moderate	Good		
29	Incidence of Natural Disasters	Floods	Prolonged droughts	Cyclones/ tidal waves	Other	
30	Geological Hazards	Landslides	Rock falls	Subsidence	Other	
ECOLOGICAL						
31	Habitat Types in the Project Site (Indicate the % of each habitat type)	Natural forest (%), degraded forest(%), natural scrubland (%), degraded scrubland (%), riverine forest, grassland(%), abandoned agricultural land(%), marsh(%), salt marsh(%), home-gardens(%), barren land (%), Land occupied by people (%), Buildings(%), Roads or other development (%), Other (%) (List)				
32	Habitat types within 250m radius from the site periphery (Indicate the % of each habitat type)	Natural forest (%), degraded forest(%), natural scrubland (%), degraded scrubland (%), riverine forest, grassland(%), abandoned agricultural land(%), marsh(%), salt marsh(%), home-gardens(%), barren land (%), Land occupied by people (%), Buildings(%), Roads or other development (%), Other (%) (List)				
33	Habitat types within 500m radius from the site periphery (Indicate the % of each habitat type)	Natural forest (%), degraded forest(%), natural scrubland(%), degraded scrubland(%), riverine forest, grassland(%), abandoned agricultural land(%), marsh(%), salt marsh(%), home-gardens(%), barren land (%), Land occupied by people (%), Buildings(%), Roads or other development (%), Other (%) (List)				
34	Are there any environmentally and culturally sensitive areas within 250m?	Protected Areas	Migratory pathways of animals	Archeological sites	Wetlands	Savanna
35	Are there any plants of conservation importance within 250m (endemic and threatened species)? If yes, provide a list					

36	Are there any animals of conservation importance within 250m (endemic and threatened species)? If yes, provide a list Also, are there is habitat for animals of conservation importance? Will the project degrade or destroy such site?					
ENVIRONMENTAL SENSITIVITY						
37	Does the project wholly or partly fall within any of the following areas?					
	Area	Yes		No		
	Animal Habitation					
	Any erodible area					
	Any Flood Area					
	Any flood protection area					
	60 meters from the bank of a public stream					
	Any reservations beyond the full supply level of a reservoir					
	Any archaeological reserve, ancient or protected monument					
	Within one mile of the boundary of a forest or National Reserve					
ENVIRONMENTAL IMPACT AND MITIGATION / ENHANCEMENT DURING CONSTRUCTION PERIOD						
	IMPACTS	**MITIGATION/ ENHANCEMENT**				
		H	M	L	N/A	
38	Soil erosion					
39	Water pollution					
40	Noise pollution					
41	Solid waste generation					
42	Loss of vegetation cover					
43	Habitat loss or fragmentation					
44	General disturbance to animal behavior					
45	Interference with normal movement of animals					
46	Irreversible/irreparable environmental change					
ENVIRONMENTAL IMPACT AND MITIGATION / ENHANCEMENT DURING OPERATION PERIOD						
47	Sewerage Disposal	Cess Pool		Sewage Pond		
		Septic Tank		Other		
48	Solid Waste Disposal					

49	Drinking Water Supply	Common Dug Well	Yes / No	Individual dug well	Yes / No	
		Common Tube Well	Yes / No	Town supply – pipe/ borehole	Yes / No	
		Spring	Yes / No	Town supply – Stand post	Yes / No	
50	Alteration to storm water drainage pattern	No changes	No major Changes		Major changes	
51	What is the degree of community engagement or information dissemination to date?	Very good (), Good ( ), Fair ( ) and Poor ( )				
52	Provide information about the access road to the project site	Tare: Yes No	Distance to project site:	Size:		
CONTACT DETAILS OF OFFICIALS AND RECOMMENDATIONS						
53	Name of the officer who completed the form (From the Developer)					
54	Designation and contact Information					
55	List of team members					
56	Overall observation and recommendation					
57	Signature and date					
58	Name and Contact Information of the officer who checked this form (Environmental Officer)					
59	Remarks					
60	Signature and Date					

Additional Screening Questions to Determine the Need and Possible Extent of Further Environmental and Social Review and Management

1.0	Biodiversity and Natural Resources	(Yes/No/ Not Applicable)
1.1	Would the proposed project result in the conversion or degradation of modified habitat, natural habitat, or critical habitat?	
1.2	Are any development activities proposed within a legally protected area (e.g. natural reserve, national park) for the protection or conservation of biodiversity?	
1.3	Would the proposed project pose a risk of introducing invasive alien species?	
1.4	Does the project involve natural forest harvesting?	
1.5	Does the project involve significant extraction, diversion or containment of surface or ground water?	

	For example, construction of dams, reservoirs, river basin developments, groundwater extraction.	
1.6	Does the project pose a risk of degrading soils?	
2.0	Pollution	(Yes/No/ Not Applicable)
2.1	Would the proposed project result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for negative local and regional impacts?	
2.2	Would the proposed project result in the generation of waste that cannot be recovered, reused, or disposed of in an environmentally and socially sound manner?	
2.3	Will the proposed project involve the manufacture, trade, release, and/or use of chemicals and hazardous materials subject to international action bans or phase-outs? For example, DDT, PCBs, and other chemicals listed in international conventions such as the Stockholm Convention on Persistent Organic Pollutants, or the Montreal Protocol.	
2.4	Is there a potential for the release, in the environment, of hazardous materials resulting from their production, transportation, handling, storage and use for project activities?	
2.5	Will the proposed project involve the application of pesticides that have a known negative effect on the environment or human health?	
3.0	Climate Change	(Yes/No/ Not Applicable)
3.1	Will the proposed project result in significant green-house gas emissions? Annex E provides additional guidance for answering this question.	
3.2	Is the proposed project likely to increase environmental and social vulnerability directly or indirectly to climate change now or in the future directly or indirectly (also known as maladaptive practices)?	
4.	Social Equity and Equality	(Yes/No/ Not Applicable)
4.1	Would the proposed project have environmental and social impacts that could affect vulnerable groups such as women children and physically challenged?	
4.2	Is the project likely to significantly impact gender equality and women's empowerment?	
4.3	Is the proposed project likely to directly or indirectly increase social inequalities now or in the future?	
4.4	Will the proposed project have variable impacts on women and men, different ethnic groups, social classes?	
4.5	Have there been challenges in engaging women and other certain key groups of stakeholders in the project design process?	
4.6	Will the project have specific human rights implications for vulnerable groups?	
5.	Demographics	(Yes/No/ Not Applicable)
5.1	Is the project likely to result in a substantial influx of people into the affected community(ies)?	

5.2	Would the proposed project result in substantial voluntary or involuntary resettlement of populations? For example, projects with environmental and social benefits (e.g., protected areas, climate change adaptation) that impact human settlements, and certain disadvantaged groups within these settlements.	
5.3	Would the proposed project lead to significant population density increase which could affect the environmental and social sustainability of the project? For example, a project aiming at financing tourism infrastructure in a specific area (mountain) could lead to significant population density increase which could have serious environmental and social impacts (e.g., destruction of the area's ecology, noise pollution, waste management problems, greater work burden on women).	
	Culture	(Yes/No/ Not Applicable)
6.1	Is the project likely to significantly affect the cultural traditions of affected communities, including gender-based roles?	
6.2	Will the proposed project result in physical interventions (during construction or implementation) that would affect areas that have known physical or cultural significance to indigenous groups and other communities with settled recognized cultural claims?	
6.3	Would the proposed project produce a physical "splintering" of a community? For example, through the construction of a road, powerline, or dam that divides a community.	
	Health and Safety	(Yes/No/ Not Applicable)
7.1	Would the proposed project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions? For example, development projects located within a floodplain or landslide prone area.	
7.2	Will the project result in increased health risks as a result of a change in living and working conditions? In particular, will it have the potential to lead to an increase in HIV/AIDS infection?	
7.3	Will the proposed project require additional health services including testing?	
	Socioeconomics	(Yes/No/ Not Applicable)
8.1	Is the proposed project likely to have impacts that could affect women's and men's ability to use, develop and protect natural resources and other natural capital assets? For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their development, livelihoods, and well-being?	
8.2	Is the proposed project likely to significantly affect land tenure arrangements and/or traditional cultural ownership patterns?	
8.3	Is the proposed project likely to negatively affect the income levels or employment opportunities of vulnerable groups?	
9.	Cumulative and/or Secondary Impacts	(Yes/No/ Not Applicable)

9.1	Is the proposed project location subject to currently approved land use plans (e.g. roads, settlements) which could affect the environmental and social sustainability of the project?	
9.2	Would the proposed project result in secondary or consequential development which could lead to environmental and social effects, or would it have potential to generate cumulative impacts with other known existing or planned activities in the area?	

Is the proposed project likely to increase environmental and/or social vulnerability to climate change now or in the future?

	YES	NO
Does the project involve any of the following activities?		
Changes in land use		
Agricultural expansion or intensification		
Intensification of water use		
Development in areas that are under existential threat (e.g. low-lying areas), or the longer-term habitability which is in question (e.g. areas at risk of extreme desertification)		
Other economic/livelihood development based on climate-sensitive resources (e.g. exploitation of rangelands, forests, fisheries, rivers, natural resource-based tourism; etc.)		
Activities in areas with existing conflicts over natural resources		
Pricing of basic commodities (e.g., water)		
Privatization of, or formalization of rights over, natural resources		
Resettlement (e.g., facilitated or incentivized voluntary resettlement)		
Does the project have the potential to have negative impacts on any marginalized or already vulnerable groups, particularly those dependent on climate-sensitive resources, such as		
Pastoralists		
Hunter-gatherers		
Forest dwellers		
Subsistence s or fisher folk		
Women and minority groups		
Are project activities/outcomes predicated on assumptions (implicit or explicit) that future climatic and environmental conditions will resemble those of the present day? (e.g., require persistence of current rainfall regimes, surface runoff, extremes frequency/severity, natural resource abundance, ecological conditions, etc.)		

Conclusion

RISK CLASSIFICATION & DECISION

Low Risk (Minor repairs, no hazardous material, no displacement or major environmental risks	Proceed with mitigation measures indicated in the ESMF
Moderate Risk	Requires additional safeguards and site-specific measures such as ESMP
Substantial/High Risk	Requires ESMP (Activities involving major construction, land acquisition, hazardous materials—EXCLUDE from project scope.)

Annex 3: Screening Tool for impacts associated with land acquisition, involuntary resettlement and Restriction of Land Use – ESS 5

1. Subproject Description

1.1 Subproject name;

1.2 Location:

1.3 Subproject description

	Yes	No	Comments
1.3.1Technical specification of the planned infrastructure (footprint dimension, technical specifications to the extent these are known, etc…)			
1.3.2 Renovation			
1.3.3 Extension			
1.3.4 New construction			
1.3.4 dimension of the footprint required by the sub-project			
1.3.6 Start/end date of the work (please indicate in the comment box			

2. Observations from site visit (please include date)

2. Assets observed on the site	Yes	No	Comment and if known, users or owners of assets
2.1 Empty land			
2.2 Structure (house, ancillary structure, business)			
2.3 Crops/trees			
2.4 Restriction of access or use to natural resources			
2.5 Other assets			

3. Land Ownership and Uses

	Yes	No	Comments
3.1 Public Land[9]			
3.2 Private land			
3.3 Communal			
3.4 Ownership unknown			

[9] In the affirmative, please indicate the legal documentation observed and if possible include a copy in annex

Annex 4: Grievance Mechanism Forms

GRM Complaint Receiving Form

GRM 01; Complaint Receiving Form	
Date: …… (dd/mm/yyyy)	Location of complaint …….. ……
Complaint no.: ……	

Mode of lodging the complaints (Please tick as applicable):	Writing	Verbal	Phone	Email	Surface mail

Details of the Complainant:

Name (optional): ……
Address: ……..
Phone no.: …… Gender: ……
Email address: ……..

Location of complaint/concern:	Village/Town/City/Area: … …….. …….. State: ……
Category of Complainant (please tick as appropriate):	Health Facility operator [ ] Community member [ ] Mining worker [ ] Buyers [ ] Government [ ] Others……
Category of Grievances (Please tick as appropriate):	Project implementation related [ ] Social [ ] Environment [ ] Gender Based grievance [ ]

Brief Description of the Grievance:

……
……

……
……

……
……

……

(Attach letter/petition/documents detailing grievance information as submitted)

Received/prepared
by: ……

Signature: ……

Date: .....(dd/mm/yyyy)

GRM/002; Acknowledgement Receipt Form

Complaint no.: …….. Date of complaint: …… (dd/mm/yyyy)
Location of complaint:
Village/Town/City/Area: ……
State……

Details of the Complainant:
Name: ……
Address: …….. Email address: …… Age: ……
Gender: …….. Phone no.: ……

Attachment/Supporting documents submitted:

……
……
…… Summary of complaint:
……
……

Name of Officer receiving Complaint:

_____

Signature of Officer receiving Complaint:

_____

GRM 03; Meeting Record Structure Form GRM 03 (Grievance

Redress Committee & Other Meetings)

Date of Meeting: …… Complaint no.: ……Venue of Meeting: …… List of participants:

Complainant Side	Grievance Redress Committee Members
1)	1)
2)	2)
3)	3)

Summary of Grievance:

……

Key discussions:

1)
2)
3)
4)
5)

Decisions Made/Recommendations by the Grievance Redress Committee: 1)
2)
3)

Status of Grievance (tick where applicable):

Resolved	Unresolved

Chairperson's name: _____

Chairperson's signature: _____

Date (dd/mm/yyyy): _____

GRM 04; Standardized disclosure Form

Location

Village/Town/City/Area…… State……

Outcome of Grievance Redress

1. Complaint no.
2. Name of Complainant:
3. Date of Complaint:
4. Summary of the Complaint:

……

……

……

5. Summary of Resolution:

……

……

6. Level of Redress (please tick where applicable)

First/Local Second/State Third/National

7. Date of grievance redress (dd/mm/yyyy): _____

Name of complainant: _____

Signature of the Complainant, indicating acceptance of the solution to his/her grievance: _____

Name of Grievance Handling Officer: _____

Signature of Grievance Handling Officer: _____

Date (dd/mm/yyyy): _____

(Note: Copy to be sent to the complainant and the PCU/SPCU at COPREP Office)

GRM 05; Quarterly Report of Registered Complaints Form GRM 05

Location …… Date (dd/mm/yyyy) ……. Period (Quarter

ending) ……..

Details of Complaints Received:

Place of issuing complaint	Name & Address of complainant	Location of complaint/concern	Date of Receipt	Complaint no.

Details of Grievance Redress Meetings:

Date of meeting	Venue of meeting	Names of participants	Decisions/Recommendations Made

Details of Grievances addressed:

Date of issuing complaint	Category of complaint	Category of grievance	Brief description of grievance	Date of Complete resolution

Annex 5: ESMP Terms of Reference

An ESMP consists of a set of mitigation, monitoring, and institutional measures to be taken during implementation and operation of a project to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable levels. The ESMP also includes the measures and actions needed to implement these measures. The Borrower will (a) identify the set of responses to potentially adverse impacts; (b) determine requirements for ensuring that those responses are made effectively and in a timely manner; and (c) describe the means for meeting those requirements.

BACKGROUND

1.1 PROJECT DEVELOPMENT OBJECTIVE

1.2 PROGRAMME COMPONENTS

1.3 RATIONALE FOR THE ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

Prior to implementation of civil works, there is need for the assessment of the environmental and social impacts of the sub-project interventions involving construction works. The Environmental and Social Management Plan (ESMP) will provide technical guidance for identification and management of the social and environmental risks and impact that will be associated with the proposed construction activities. The envisaged negative impacts will be site specific, reversible, and manageable through appropriate mitigation measures.

The ESMP will be prepared in line with international good practice and the World Bank's Environmental and Social Framework requirements and take into consideration National Environmental legislation, as far as applicable.

1.4 OBJECTIVES OF THE ASSIGNMENT

The objective of this assignment is to prepare an Environmental and Social Management Plan which should consist of a well-documented set of mitigation measures, monitoring, and institutional actions to be taken before and during sub-project implementation to eliminate adverse environmental and social impacts, offset or reduce them to acceptable levels. It should also include the measures required to implement these actions, addressing the adequacy of the monitoring and institutional arrangements in the intervention site(s).

2. BACKGROUND OF THE PROJECT AREA

2.1 DESCRIPTION OF PROJECT ACTIVITIES

2.2 SCOPE OF WORKS

I. Review the existing Project Appraisal Document (PAD), Environmental and Social Management Framework (ESMF), Environmental and Social Commitment Plan (ESCP) and Resettlement Policy Framework (RPF) prepared for the AGILE project.
II. Review Environmental and Social Standards that are applicable to the AGILE Project.
III. Review of preliminary engineering designs and technical /feasibility studies for the proposed project.
IV. Describe the existing status of the schools include schematic diagrams, maps, figures, tables and pictures.
V. Describe the physical, biological, and social conditions in the study areas before project implementation. This analysis shall include the interrelations between environmental and social components and the importance that the society and local populations attach to these components, in order to identify the environmental and social components of high value or presenting a particular interest.
VI. Identify the policy, legal, administrative, institutional framework relevant to the sub-projects.
VII. identify and summarize all anticipated significant adverse environmental and social impacts from the proposed activities; including the impacts of the proposed civil works/labor influx and associated impacts such as Sexual exploitation and abuse/sexual harassment (SEA/SH); Occupational Health and Safety; Community Health and Safety; Displacement and conflict/fragility; other broader social issues such as risk of elite capture; social exclusion of the most marginalized/vulnerable (e.g. persons with disabilities, IDPs, survivors of sexual violence); etc.
VIII. Identify and summarize all occupational health and safety/ public health and safety issues at the sites
IX. Describe each mitigation measure to prevent, minimize, mitigate or compensate for adverse impacts or to enhance the project environmental and social benefits, including responsibilities and associated costs.
X. establish a method of monitoring and auditing environmental and social management practices during all phases of the activities, inform the contractor bidding documents for the implementation
XI. Select and measure appropriate baseline indicators
XII. Develop a plan for mitigating environmental and social risks associated with construction and operation of the sub-projects in consultation with the relevant public and government agencies.
XIII. Define details of feasible and cost-effective measures that may reduce potentially significant adverse environmental and social impacts to acceptable levels;

XIV. Develop a time-bound plan for mitigating environmental and social risks associated with the scope of works in consultation with the relevant public and government agencies;

XV. Identify monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed and the mitigation measures described above;

XVI. Provide a specific description of institutional arrangements: the agencies responsible for carrying out the mitigation and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and training) and the contractual arrangements for assuring the performance of each implementation agency;

XVII. Define technical assistance programs that could strengthen environmental management capacity in the agencies responsible for implementation;

XVIII. Provide an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and

XIX. Provide the expected capital and recurrent cost estimates and sources of funds for implementing the ESMP and inform accordingly the design consultants so that these costs are duly taken into consideration in the designs.

X Some socio-economic issues to be addressed in the ESMP:

- A summary of the impacted communities for the project: location, access, population (number, demographic and social characteristics); economy (employment rate, income distribution); services (types, capacity, and adequacy) and housing. Concern is the ability to provide work force, service new development and absorb and adjust to growth (worker/family).
- A summary of the views of the local communities.
- Cultural: Summarize the possible effects of the project on historical/archaeological sites, heritage/artefacts, native religious or harvest sites of the affected communities and identification or development of mechanisms for handling chance findings.

XXI Carry out consultations with primary and secondary stakeholders in order to obtain their views about the project. These consultations shall occur during the preparation of the ESMP to identify key environmental and social issues and impacts, and after completion of the draft ESMP to obtain comments from stakeholders on the proposed mitigation/enhancement measures

XXII As appropriate, prepare an environmental hazard plan including an analysis of the risk of accident, the identification of appropriate security measures and the development of a preliminary contingency plan.

XXIII Develop a Labor Influx, Sexual Exploitation and Abuse, and Occupational Health and Safety Response Plan

XXIV ESMPs to capture the socio-economic, cultural and risk

XXV. Prepare an Environmental and Social Management Plan (ESMP). The ESMP should capture:

- The potential environmental and social impacts resulting from project activities
- The proposed mitigation measures;
- The institutional responsibilities for implementation;
- The monitoring indicators;
- The institutional responsibilities for monitoring and implementation of mitigation measures;
- The costs of activities

3.0 DELIVERABLES AND TIMING

The following report shall be submitted through the SPIU for review and approval of the World Bank Team as detailed below

S/No	Report	Due Date (N= Commencement of Contract)
1.	**Inception Report** Inception Report shall be submitted presenting the Consultant's Work Plan, defines the Implementation Schedule by task, and methodology should be submitted. This will include the table of content of the final report. Five (4) hard copies and one electronic copy shall be submitted	N+ 1 week
2.	Draft Report Five Hard Copies and an electronic copy	N+4 weeks
3.	Draft Final Report	N+6 weeks
3	Final ESMP Report 10 Hard Copies and an electronic copy	N+8 weeks

OUTLINE AND SUBSTANCE OF THE ESMP REPORT

The ESMP Report shall be presented in a concise format containing all studies, processes, analyses, tests and recommendations for the proposed intervention. The report shall focus on the findings, conclusions and any recommended

actions, supported by summaries of the data collected and citations for any references used. The ESMP report will include the following topics, organized in a suggested outline that can be adjusted for local needs:

Coverage
Table of contents
List of acronyms and their definitions
Executive Summary

CHAPTER ONE: INTRODUCTION

- Description of the proposed intervention
- Scope of the assignment
- Rationale for ESMP
- Objectives of the ESMP

CHAPTER TWO: ADMINISTRATIVE & REGULATORY FRAMEWORK

- Discussion of the World Bank safeguard policies triggered by AGILE and the proposed activity
- Summary of relevant local and federal policy, legal, regulatory, and administrative frameworks

CHAPTER THREE: PROJECT DESCRIPTION

- Description of the Proposed Project, Project Component and Activities

CHAPTER FOUR: DESCRIPTION OF PROJECT ENVIRONMENT

- Description of the area of influence and environmental baseline conditions
- Analysis of existing livelihoods opportunities, income, gender characteristics, age profile, health, transport access, existing community structures - at community, household, and individual levels

CHAPTER FIVE: POTENTIAL IMPACTS AND MITIGATION

- Methods and techniques used in assessing and analyzing the environmental and social impacts of the proposed project
- Discussion of the potentially significant adverse environmental and social impacts of the proposed project
- Labor influx
- Description of the GBV risk (including a GBV Action Plan), and more broadly the ESHS expectations, and include appropriate mitigation measures. The basis of the GBV Action Plan should be provided as part of the ESMP.

CHAPTER SIX: GRIEVANCE REDRESS MECHANISM

CHAPTER SEVEN: ENVIRONMENTAL & SOCIAL MANAGEMENT PLAN

- Discussion of the proposed mitigation measures
- Institutional responsibilities and accountabilities
- Capacity building plan
- Public consultation plan
- Description of grievance redress mechanism (in alignment with the ESMP and Project Implementation Manual) to address situations of conflicts or disagreements about some of the project activities
- Monitoring and evaluation plan, including suitable indicators for the proposed project
- Costs of implementing the ESMP

CHAPTER EIGHT: PUBLIC CONSULTATION

- Presentation of consultations with relevant stakeholders and affected persons

CHAPTER NINE: CONCLUSION AND RECOMMENDATIONS
REFERENCES
APPENDIX 1: TERMS OF REFERENCE
APPENDIX 2: SOCIO-ECONOMIC ASSESSMENT INSTRUMENT
APPENDIX 3: ATTENDANCE AT COMMUNITY CONSULTATIONS
APPENDIX 4: GENERAL ENVIRONMENTAL MANAGEMENT CONDITIONS FOR CONSTRUCTION CONTRACTS
APPENDIX 5: WASTE MANAGEMENT PLAN
APPENDIX 6: PROJECT OCCUPATIONAL HEALTH AND SAFETY (OHS) PLAN
APPENDIX 7: TRAFFIC MANAGEMENT PLAN
APPENDIX 8: SAMPLE CODES OF CONDUCTAPPENDIX 9 Screening checklist
APPENDIX 10.. OHS/CHS management plan

Annex 6: ToR for Resettlement Plan

The scope of requirements and level of detail of the resettlement plan vary with the magnitude and complexity of resettlement. The plan is based on up-to-date and reliable information about
(a) the proposed project and its potential impacts on the displaced persons and other adversely affected groups, (b) appropriate and feasible mitigation measures, and (c) the legal and institutional arrangements required for effective implementation of resettlement measures.

Minimum Elements of a Resettlement Plan

- **Description of the project.** General description of the project and identification of the project area.

- **Potential impacts.** Identification of: (a) the project components or activities that give rise to displacement, explaining why the selected land must be acquired for use within the timeframe of the project; (b) the zone of impact of such components or activities; (c) the scope and scale of land acquisition and impacts on structures and other fixed assets; (d) any project- imposed restrictions on use of, or access to, land or natural resources; (e) alternatives considered to avoid or minimize displacement and why those were rejected; and (f) the mechanisms established to minimize displacement, to the extent possible, during project implementation.

- **Objectives**. The main objectives of the resettlement program.

- **Census survey and baseline socio-economic studies.** The findings of a household-level census identifying and enumerating affected persons, and, with the involvement of affected persons, surveying land, structures and other fixed assets to be affected by the project. The census survey also serves other essential functions: (a) identifying characteristics of displaced households, including a description of production systems, labor, and household organization; and baseline information on livelihoods (including, as relevant, production levels and income derived from both formal and informal economic activities) and standards of living (including health status) of the displaced population; (b) information on vulnerable groups or persons for whom special provisions may have to be made; (c) identifying public or community infrastructure, property or services that may be affected; (d) providing a basis for the design of, and budgeting for, the resettlement program; (e) in conjunction with establishment of a cut- off date, providing a basis for excluding ineligible people from compensation and resettlement assistance; and (f) establishing baseline conditions for monitoring and evaluation purposes. (g) As the Bank may deem relevant, additional studies on the following subjects may be required to supplement or inform the census survey: (h) land tenure and transfer systems, including an inventory of common property natural resources from which people derive their livelihoods and sustenance, non-title-based usufruct systems (including fishing, grazing, or use of forest areas) governed by local recognized land allocation mechanisms, and any issues raised by different tenure systems in the project area; (i) the patterns of social interaction in the affected communities, including social networks and social support systems, and how they will be affected by the project; and (j) social and cultural characteristics of displaced communities, including a description of formal and informal institutions (e.g., community organizations, ritual groups, nongovernmental organizations (NGOs)) that may be relevant to the consultation strategy and to designing and implementing the resettlement activities.

- **Legal framework.** The findings of an analysis of the legal framework, covering (a) the scope of the power of compulsory acquisition and imposition of land use restriction and the nature of compensation associated with it, in terms of both the valuation methodology and the timing of payment; (b) the applicable legal and administrative procedures, including a description of the remedies available to displaced persons in the judicial process and the normal timeframe for such procedures, and any available grievance redress mechanisms that may be relevant to the project; (c) laws and regulations relating to the agencies responsible for implementing resettlement activities;

and (d) gaps, if any, between local laws and practices covering compulsory acquisition, imposition of land use restrictions and provision of resettlement measures and ESS 5, and the mechanisms to bridge such gaps.

- **Institutional Framework**. The findings of an analysis of the institutional framework covering (a) the identification of agencies responsible for resettlement activities and NGOs/CSOs that may have a role in project implementation, including providing support for displaced persons; (b) an assessment of the institutional capacity of such agencies and NGOs/CSOs; and (c) any steps that are proposed to enhance the institutional capacity of agencies and NGOs/CSOs responsible for resettlement implementation.

- **Eligibility**. Definition of displaced persons and criteria for determining their eligibility for compensation and other resettlement assistance, including relevant cut-off dates.

- **Valuation of and compensation for losses.** The methodology to be used in valuing losses to determine their replacement cost; and a description of the proposed types and levels of compensation for land, natural resources and other assets under local law and such supplementary measures as are necessary to achieve replacement cost for them.

- **Community participation.** Involvement of displaced persons (including host communities, where relevant) (a) a description of the strategy for consultation with, and participation of, displaced persons in the design and implementation of the resettlement activities; (b) a summary of the views expressed and how these views were taken into account in preparing the resettlement plan; (c) a review of the resettlement alternatives presented and the choices made by displaced persons regarding options available to them; and (d) institutionalized arrangements by which displaced people can communicate their concerns to project authorities throughout planning and implementation, and measures to ensure that such vulnerable groups as indigenous people, ethnic minorities, the landless, and women are adequately represented.

- **Implementation schedule**. An implementation schedule providing anticipated dates for displacement, and estimated initiation and completion dates for all resettlement plan activities. The schedule should indicate how the resettlement activities are linked to the implementation of the overall project.

- **Costs and budget**. Tables showing categorized cost estimates for all resettlement activities, including allowances for inflation, population growth, and other contingencies; timetables for expenditures; sources of funds; and arrangements for timely flow of funds, and funding for resettlement, if any, in areas outside the jurisdiction of the implementing agencies.

- **Grievance redress mechanism**. The plan describes affordable and accessible procedures for third-party settlement of disputes arising from displacement or resettlement; such grievance mechanisms should take into account the availability of judicial recourse and community and traditional dispute settlement mechanisms.

- **Monitoring and evaluation.** Arrangements for monitoring of displacement and resettlement activities by the implementing agency, supplemented by third-party monitors as considered appropriate by the Bank, to ensure complete and objective information; performance monitoring indicators to measure inputs, outputs, and outcomes for resettlement activities; involvement of the displaced persons in the monitoring process; evaluation of results for a reasonable period after all resettlement activities have been completed; using the results of resettlement monitoring to guide subsequent implementation.

- **Arrangements for adaptive management**. The plan should include provisions for adapting resettlement implementation in response to unanticipated changes in project conditions, or unanticipated obstacles to achieving satisfactory resettlement outcomes.

Additional Planning Requirements where Resettlement involves Physical Displacement

- When project circumstances require the physical relocation of residents (such as internally displaced persons (IDP), resettlement plans require additional information and planning elements. Additional requirements include:

- **Transitional assistance.** The plan describes assistance to be provided for the relocation of household members and their possessions (or business equipment and inventory where applicable). The plan describes any additional assistance to be provided for households choosing cash compensation and securing their own replacement housing, including construction of new housing. If planned relocation sites (for residences or businesses) are not ready for occupancy at the time of physical displacement, the plan establishes a transitional allowance sufficient to meet temporary rental expenses and other costs until occupancy is available.

- **Site selection, site preparation, and relocation.** When planned relocation sites are to be prepared, the resettlement plan describes the alternative relocation sites considered and explains sites selected, covering (a) institutional and technical arrangements for identifying and preparing relocation sites, whether rural or urban, for which a combination of productive potential, locational advantages, and other factors is better or at least comparable to the advantages of the old sites, with an estimate of the time needed to acquire and transfer land and ancillary resources; (b) identification and consideration of opportunities to improve local living standards by supplemental investment (or through establishment of project benefit-sharing arrangements) in infrastructure, facilities or services; (c) any measures necessary to prevent land speculation or influx of ineligible persons at the selected sites; (d) procedures for physical relocation under the project, including timetables for site preparation and transfer; and (e) legal arrangements for regularizing tenure and transferring titles to those resettled, including provision of security of tenure for those previously lacking full legal rights to land or structures.

- **Housing, infrastructure, and social services.** Plans to provide (or to finance local community provision of) housing, infrastructure (e.g., water supply, feeder roads), and social services (e.g., schools, health services); plans to maintain or provide a comparable level of services to host populations; any necessary site development, engineering, and architectural designs for these facilities.

- **Environmental protection and management.** A description of the boundaries of the planned relocation sites; and an assessment of the environmental impacts of the proposed resettlement and measures to mitigate and manage these impacts (coordinated as appropriate with the environmental assessment of the main investment requiring the resettlement).

- **Consultation on relocation arrangements.** The plan describes methods of consultation with physically displaced persons on their preferences regarding relocation alternatives available to them, including, as relevant, choices related to forms of compensation and transitional assistance, to relocating as individual households families or with pre-existing communities or kinship groups, to sustaining existing patterns of group organization, and for relocation of, or retaining access to, cultural property (e.g. places of worship, pilgrimage centers, cemeteries).

- **Integration with host populations.** Measures to mitigate the impact of planned relocation sites on any host communities, including (a) consultations with host communities and local governments; (b) arrangements for prompt tendering of any payment due the hosts for land or other assets provided in support of planned relocation sites; (c) arrangements for identifying and addressing any conflict that may arise between those resettled and host communities; and (d) any measures necessary to augment services (e.g., education, water, health, and production services) in host communities to meet increased demands upon them, or to make them at least comparable to services available within planned relocation sites.

- If land acquisition or restrictions on use of, or access to, land or natural resources may cause significant economic displacement, arrangements to provide displaced persons with sufficient opportunity to improve, or at least restore, their livelihoods are also incorporated into the resettlement plan, or into a separate livelihood improvement plan. These include:

- **Direct land replacement**. For those with agricultural livelihoods, the resettlement plan provides for an option to receive replacement land of equivalent productive value or demonstrates that sufficient land of equivalent value is unavailable. Where replacement land is available, the plan describes methods and timing for its allocation to displaced persons.

- **Loss of access to land or resources**. For those whose livelihood is affected by loss of land or resource use or access, including common property resources, the resettlement plan describes means to obtain substitutes or alternative resources, or otherwise provides support for alternative livelihoods.

- **Support for alternative livelihoods**. For all other categories of economically displaced persons, the resettlement plan describes feasible arrangements for obtaining employment or for establishing a business, including provision of relevant supplemental assistance including skills training, credit, licenses or permits, or specialized equipment. As warranted, livelihood planning provides special assistance to women, minorities or vulnerable groups who may be disadvantaged in securing alternative livelihoods.

- **Consideration of economic development opportunities**. The resettlement plan identifies and assesses any feasible opportunities to promote improved livelihoods as a result of resettlement processes. This may include, for example, preferential project employment arrangements, support for development of specialized products or markets, preferential commercial zoning and trading arrangements, or other measures. Where relevant, the plan should also assess the feasibility of prospects for financial distributions to communities, or directly to displaced persons, through establishment of project-based benefit-sharing arrangements.

- **Transitional support.** The resettlement plan provides transitional support to those whose livelihoods will be disrupted. This may include payment for lost crops and lost natural resources, payment of lost profits for businesses, or payment of lost wages for employees affected by business relocation. The plan provides that the transitional support continues for the duration of the transition period.

Annex 7: Environmental and Social Monitoring Checklist

ACTIVITIES	INSTRUMENTS		
PREPARATORY PHASE			
E&S Framework	**ESMF**	**RPF**	**PMP**
Status of Preparation	**Yes/No**	**Yes/No**	**Yes/No**
Date of Disclosure (in-Country)			
Date of Disclosure (World Bank)			
Date of Consultations Carried out			
E&S Staffing	**Environmental Officer**	**Social Officer**	**GBV Officer**
	Yes/No	**Yes/No**	**Yes/No**
Training for PIU/MDAs	**ESMF Implementation**	**RPF Implementation**	
Date of Training			
Participants			
Site – Specific Instruments for Sub-Projects			
Title of Rehabilitation Project	**ESIA**	**RAP**	**ESMP**
Status of preparation	**Yes/No**	**Yes/No**	**Yes/No**
Review status	**FPMU/WB**	**FPMU/WB**	**FPMU/WB**
Cleared Status	**Yes/No**	**Yes/No**	**Yes/No**
Date of Disclosure (in-Country)			
Date of Disclosure (World Bank)			
Date of Consultations Carried out			
Training on ESIA/ESMP Implementation	**ESMP Implementation**	**RAP Implementation**	
Date of Training			
Participants			
	Developed	**Operationalized**	
Grievance Redress Mechanism	**Yes/No**	**Yes/No**	
Availability number of complaint boxes on all roads			
Total number of contractor staff on project			
	Locals	**Foreign**	
Total number of contractor staff trained on Code of Conduct (CoC)			
Total number of signed code of conduct by staff and contractor			
Host agreement received for contractors yard/Office			
Host agreement received for borrow pits			
Host agreement received for contractors residence			
IMPLEMENTATION PHASE			
Contractors C-ESMP	**Yes**	**No**	
Staffing			
Availability of Environmental /HSE on contractors team	**Yes**	**No**	
Availability of Environmental Officer/HSE on supervision consultants team	**Yes**	**No**	
Availability of Social Officer on contractors team			
Availability of Social Officer on supervision consultants team			
Training (Contractors, Supervision Consultants)	**C-ESMP Implementation/ HSE**	**GBV Training/ Code of Conduct**	**Grievance Redress Mechanism**
Date of Training			
Participants			
Site Monitoring			
Adequacy of site office and campsite (water, ventilation, furniture, toilets, security, first-aid)			
Conducive site office in line with OHS requirements			
Conducive camp site in line with OHS requirements			
Availability of well-stocked first aid box	Site office	Construction site	Mobile kit
Standard Toilet Facility meeting WHO standard	Male/female **Y/N**	Water **Y/N**	Adequate septic **Y/N**
Adequate waste management	**Y**	**N**	
Adequate Staging Area			
Fence	**Y**	**N**	
Caution Tape	**Y**	**N**	
Good housekeeping	**Y**	**N**	

Lightening	**Y**	**N**	
Occupational Health & Safety	**Available/ Adequate**	**Compliance**	
PPEs			
Cautionary Signs			
Flagmen			
Cordon off excavated areas			
Mobile First Aid box			
Accident/ Incident	**Fatal Y/N**	**Minor Y/N**	
Compliance with Traffic Management Plan and safety (Site Safety and Security, Road/caution Signs)			
Awareness and sensitization of communities on STIs/STDs			
Date of program/ Venue			
Participants			
Grievance Redress			**Comments**
No of Grievances received			
No of grievances resolved			
Environmental Parameters Limits	**Satisfactory**	**Not satisfactory**	**Comments**
Air pollution			
water pollution			
Land pollution			
Noise			
Fugitive dust			

Annex 8: Guidelines for Use of Security Forces in Projects

Use of Security Forces: Assessing and Managing Risks and Impacts

The HeSP project may deploy the use of security personnel to protect their workers while transporting commodities facilities, or even as contractors in high-risk areas. This could range from a single night watchman to a large contingent of private security guards, or even deployment of public security forces, the Project needs to consider the impacts their security arrangements might have on local communities. Additionally, the Project will implement the measures provided in the CoPREP Security Management Framework which is in custody of the NCDC.

Good practice regarding the use of security forces is based on the concept that providing security and respecting human rights can and should be consistent. This translates into implementation of policies and practices that ensure security provision is carried out responsibly, with any response being proportional to the threat. Proactive communication, community engagement, and grievance redress are central to this approach, often through collaboration between security and community relations departments. Gender considerations are also important, as women often have different experiences and interactions with security personnel. Companies have a responsibility to ensure proper hiring, training, rules of conduct, and supervision of private security personnel.
The objectives are: 1) to anticipate and avoid adverse impacts on the health and safety of affected communities during the project life from both routine and non-routine circumstances and 2) to ensure that the safeguarding of personnel and property is carried out in accordance with relevant human rights principles and in a manner that avoids or minimizes risks to the affected communities

The client will make reasonable inquiries to ensure that those providing security are not implicated in past abuses; will train them adequately in the use of force (and where applicable, firearms), and appropriate conduct toward workers and Affected Communities; and require them to act within the applicable law.

The client will provide a grievance mechanism for Affected Communities to express concerns about the security arrangements and acts of security personnel.
The client will consider and, where appropriate, investigate all allegations of unlawful or abusive acts of security personnel, take action (or urge appropriate parties to take action) to prevent recurrence, and report unlawful and abusive acts to public authorities.

The following resource should be consulted, reviewed and implemented
GOOD PRACTICE HANDBOOK: Use of Security Forces: Assessing and Managing Risks and Impacts
IFC

Annex 9: Sample of a Contractors' Code of Conduct

1.0. AIM OF THE CODE OF CONDUCT

The main aim of the Code of Conduct is to prevent and/or mitigate the social risks within the context of rehabilitation and expansion of schools. The Codes of Conduct are to be adopted by contractors. The social risks that may arise include but are not limited to Gender Based Violence (GBV), Violence Against Children (VAC), HIV and AIDS infection/spread, and occupational health and safety.

2.0 KEY DEFINITIONS

The following definitions apply:

Gender-Based Violence (GBV)

This is defined as any conduct, comment, gesture, or contact perpetrated by an individual (the perpetrator) on the work site or in its surroundings, or in any place that results in, or is likely to result in, physical, sexual, or psychological harm or suffering to another individual (the survivor) without his/her consent, including threats of such acts, coercion, or arbitrary deprivations of liberty.

Violence Against Children (VAC)

This may be defined as physical, sexual or psychological harm of minor children (i.e. under the age of 18), including using for profit, labor, sexual gratification, or some other personal or financial advantage. This also includes other activities such as using computers, mobile phones, or video and digital cameras appropriately, and never to exploit or harass children or to access child pornography through any mediums.

Child Labor

This involves employment of underage. Any person under the age of 18 should not be employed in the project sites.

Child Protection (CP)

An activity or initiative designed to protect children from any form of harm, particularly arising from VAC, and child labor.

Child

The word is used interchangeably with the term 'minor' and, in accordance with the United Nations Glossary on Sexual Exploitation and Abuse, refers to a person under the age of 18.

Grooming

This is defined as behaviors that make it easier for a perpetrator to procure a child for sexual activity. For example, an offender might build a relationship of trust with the child and then seek to sexualize that relationship (for instance by encouraging romantic feelings or exposing the child to sexual concepts through pornography).

Online Grooming

This is the act of sending an electronic message with indecent content to a recipient who the sender believes to be a minor, with the intention of procuring the recipient to engage in or submit to sexual activity with another person, including but not necessarily the sender.

Survivor/Survivors

This is defined as the person(s) adversely affected by GBV, VAC, and child labor. Women, men, and children can be survivors of GBV, VAC, and child labor.

Perpetrator

This is defined as the person(s) who commit(s) or threaten(s) to commit an act or acts of GBV, VAC, and child labor.

Work site
This is defined as the area in which infrastructure development works are being conducted, as part of interventions planned under the project, funded by the World Bank.

Work site surroundings
These are defined as the 'Project Area of Influence' which is any area, urban or rural, directly affected by the project, or located within the distance of three kilometers' radius from the work site and/or worker's camps, including all human settlements found on it.

Consent
This word is defined as the informed choice underlying an individual's free and voluntary intention, acceptance, or agreement to do something. No consent can be found when such acceptance or agreement is obtained using threats, force or other forms of coercion, abduction, fraud, deception, or misrepresentation. Any use of a threat to withhold a benefit, or of a promise to provide a benefit, or actual provision of that benefit (monetary and non-monetary), aimed at obtaining an individual's agreement to do something, constitutes an abuse of power; any agreement obtained in the presence of an abuse of power shall be considered non-consensual. In accordance with the United Nations, the World Bank considers that consent cannot be given by children under the age of 18, even if national legislation of the country into which the code of conduct is introduced has a lower age. Mistaken belief regarding the age of the child and consent from the child is not a defense.

Contractor
This is defined as any firm, company, organization or other institution that has been awarded a contract to conduct infrastructure development works in the context of the project and has hired managers and/or employees to conduct this work.

Manager
The word is used interchangeably with the term 'supervisor' and is defined as any individual offering labor to the contractor, on or off the work site, under a formal employment contract and in exchange for a salary, with responsibility to control or direct the activities of a contractor's team, unit, division or similar, and to supervise and manage a pre-defined number of employees.

Employee
This is defined as any individual offering labor to the contractor on or off the work site, under a formal or informal employment contract or arrangement, typically but not necessarily in exchange for a salary (e.g., including unpaid interns and volunteers), with no responsibility to manage or supervise other employees.

Workers Committee
A team established by the Contractor to address GBV, VAC, child labor and other relevant issues with the workforce.

3.0 CODES OF CONDUCT

This chapter presents three Codes of Conduct (CoC) for use:

1. Contractors Code of Conduct: Commits the contractor to addressing GBV and VAC issues
2. Manager's Code of Conduct: Commits managers to implementing the Company Code of Conduct, as well as those signed by individuals; and
3. Individual Code of Conduct: Code of Conduct for each individual working on project funded projects

3.1 Contractors Code of Conduct

Contractors are obliged to create and maintain an environment which prevents social risks. They have the responsibility to communicate clearly to all those engaged on the project the behaviors which guard against any form of abuse and exploitation. In order to prevent social risks, the following core principles and minimum standards of behavior will apply to all employees without exception:

1. GBV or VAC constitutes acts of gross misconduct and are therefore grounds for sanctions, penalties and/or termination of employment and/or contract. All forms of social risks including grooming are unacceptable be it on the work site, the work site surroundings, or at worker's camps of those who commit GBV or VAC will be pursued.
2. Treat women, children (persons under the age of 18) and people with disability with respect regardless of race, color, language, religion, political or other opinion, national, ethnic, cultural beliefs/practices, or other status.
3. Do not use language or behavior towards men, women or children that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
4. Sexual activity with children/learners under 18 (including through digital media) is prohibited. Mistaken belief regarding the age of a child and consent from the child is not a defense.
5. Exchange of money, employment, goods, or services for sex, including sexual favors or other forms of humiliating, degrading or exploitative behavior is prohibited.
6. Sexual interactions between contractor's employees and communities surrounding the workplace that are not agreed to with full consent by all parties involved in the sexual act are prohibited (see definition of consent above). This includes relationships involving the withholding, promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex.
7. Where an employee develops concerns or suspicions regarding acts of GBV or VAC by a fellow worker, whether in the same contracting firm or not, he or she must report such concerns in accordance with established Grievance Redress Mechanism (GRM) that protects the identities of victims and whistle-blowers.
8. All contractors are required to attend an induction prior to commencing work on site to ensure they are familiar with the social risks and Codes of Conduct.
9. All employees must attend mandatory training once a month for the duration of the contract starting from the first induction prior to commencement of work to reinforce the understanding of the institutional social risks and Code of Conduct.
10. The Contractor shall ensure provision of financial resources and support compliance to occupation health and safety requirements for all workers.

11. The Contractor shall ensure that workers dress appropriately i.e. dress in a way that:
    - Is unlikely to be viewed as offensive, revealing, or sexually provocative.
    - Does not distract, cause embarrassment or give rise to misunderstanding
    - Is absent of any political or otherwise contentious slogans
    - Is not considered to be discriminatory and is culturally sensitive

12. The Company shall ensure provision of financial resources and training to prevent spread of HIV and AIDS.
13. The company shall comply with all the applicable international and national legislation including giving terminal benefits to workers who have served for at least three months
14. All contractors must ensure that their employees sign an individual Code of Conduct confirming their agreement to support the prevention of social risks activities.
15. The contractor should ensure equitable access to limited natural resources (e.g., water points) to avoid conflicts with local communities
16. Where possible, the contractor should ensure employment of local workforces, especially where unskilled labor is required to mitigate social risks

I do hereby acknowledge that I have read the foregoing Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities. I understand that any action inconsistent with this Code of Conduct or failure to take action mandated by this Code of Conduct may result in termination of the contract.

FOR THE CONTRACTOR

Signed by: _____

Signature: _____

Title: _____

Date: _____

3.2 Code of Conduct for Construction Site Supervisor/Managers Code of Conduct

Site Supervisors at all levels play an important role in creating and maintaining an environment, which prevents workers' misconduct. They need to support and promote the implementation of the Contractors Codes of Conduct and enforce Workers Codes of Conduct. The construction site supervisor must adhere to this Code of Conduct. This commits them to develop and support systems which maintain a safe working environment. Construction Site Supervisor responsibilities include but are not limited to:

1. Where possible, ensure employment of local workforces, especially where unskilled labor is required to mitigate social risks
2. Ensure there is zero tolerance to child labor practices
3. Promote gender inclusion at all levels
4. Establish a workers' committee to oversee issues of workers' misconduct including GBV and VAC
5. Ensure compliance with occupation health and safety requirements for all workers
6. Ensure that the workers dress code is adhered to appropriately
7. Ensure that access to construction sites is restricted to authorized persons; hoarding is provided and that there is proper signage to construction site(s)
8. Facilitate workers' training and capacity building on social, environmental and health and safety
9. Ensure that all workers are sensitized on HIV and AIDS issues, provided with condoms and HTC services
10. Ensure that fundamental workers' rights (e.g., working hours, minimum wages, etc.) are protected
11. Ensure that possession of alcohol and illegal drugs and other controlled substances in the workplace and being under influence of these substances on the job and during workings hours should be strictly prohibited
12. Ensure compliance with all legal requirements
13. Supervisors failing to comply with such provision can in turn be subject to disciplinary measures including termination of employment; and
14. Ultimately, failure to effectively respond to some provisions of the code of conduct may provide grounds for legal actions by authorities
15. Ensure that every employee under his/her supervision has been oriented in the Code of Conduct and has signed

I do hereby acknowledge that I have read the foregoing Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to comply with all rules of this code of conduct. I understand that any action inconsistent with this Code of Conduct or failure to take action mandated by this Code of Conduct may result in disciplinary action.

Signed by: _____

Signature: _____

Date: _____

FOR THE EMPLOYER

Signed by: _____

Signature: _____

Date: _____

3.3 Workers Code of Conduct

I, _____, acknowledge that preventing any misconduct stipulated in this code of conduct, including gender-based violence (GBV), child abuse/exploitation (CAE) are important. Any activity which constitute acts of gross misconduct are therefore grounds for sanctions, penalties or even termination of employment. All forms of misconduct are unacceptable be it on the work site, the work site surroundings, or at worker's camps. Prosecution of those who commit any such misconduct will be pursued as appropriate.

I agree that while working on this project, I will:

1. Consent to security background check
2. Treat women, children (persons under the age of 18) and persons with disability with respect regardless of race, color, language, religion, political or other opinion, national, ethnic, or social origin, property, birth or other status
3. Not use language or behavior towards men, women or children/learners that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate
4. Not participate in sexual activity with children/learners—including grooming or through digital media. Mistaken belief regarding the age of a child and consent from the child is not a defense
5. Not exchange money, employment, goods, or services for sex, with community members including sexual favors or other forms of humiliating, degrading or exploitative behavior
6. Not having sexual interactions with members of the communities surrounding the workplace, worker's camps and fellow workers that are not agreed to with full consent by all parties involved in the sexual act (see definition of consent above). This includes relationships involving the withholding, promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex - such sexual activity is considered "non- consensual" within the scope of this code
7. Attend training related to HIV and AIDS, GBV, CAE, occupational health and any other relevant courses on safety as requested by my employer
8. Report to the relevant committee any situation where I may have concerns or suspicions regarding acts of misconduct by a fellow worker, whether in my company or not, or any breaches of this code of conduct provided it is done in good faith
9. Regarding children (under the age of 18): do not invite unaccompanied children into my home unless they are at immediate risk of injury or in physical danger.
    - Not sleep close to unsupervised children unless absolutely necessary, in which case I must obtain my supervisor's permission, and ensure that another adult is present if possible.
    - Refrain from physical punishment or discipline of children.
      Refrain from hiring children for domestic or other labor, which is inappropriate given their age, or developmental stage, which interferes with their time available for education and recreational activities, or which places them at significant risk of injury.
    - Comply with all relevant local legislation, including labor laws in relation to child labor.

10. Refrain from any form of theft for assets and facilities including from surrounding communities.
11. Remain in designated working area during working hours
12. Refrain from possession of alcohol and illegal drugs and other controlled substances in the workplace and being under influence of these substances on the job and during workings hours
13. Always wear mandatory PPE during work
14. Follow prescribed environmental occupation health and safety standards
15. Channel grievances through the established grievance redress mechanism.

I understand that the onus is on me to use common sense and avoid actions or behaviors that could be construed as misconduct or breach of this code of conduct.
I acknowledge that I have read and understand this Code of Conduct, and the implications have been explained with regard to sanctions on-going employment should I not comply.

Signed by: _____
Signature: _____
Date: _____

FOR THE EMPLOYER
Signed by: _____
Signature: _____
Date: _____

Annex 10: Occupational Health & Safety Assessment

OCCUPATIONAL HEALTH & SAFETY ASSESSMENT				
Hazards	**Effects**	**Identified Risk Levels**	**Control**	**Risk Assessment**
Increase in incidents and accidents program implementation	Injury and death	Medium	Develop and implement a Hazard Identification and Control Plan Update and train workers on OHS Management System	Low
Poor working conditions, inadequate provision of Personal Protective Equipment (PPE)	Ill heath, disease, blisters Absent from work	Medium	Implement and ensure workers understand the programme health and safety plan Provide and train workforce on usage of PPE	Low
Possibility of forced and child labour	Exposure to unsafe Conditions; Accidents, Injury, and death.	Medium	Develop worker engagement procedure	low
Grievances and social threats	Possible of quarrel, fighting, rape, suspension from work, loss of job and death.	Medium	Ensure the strict implementation of Labour Management Plan to minimize social unrest. Contractors should be hired through a systematic process.	Low

Annex 11: Sample Health Training and Environment Plan

S/N	Training Title	Description	Timing	Who to Deliver the Training
1	Sensitization on the HSE Manual	To train all workers on all the provisions in the HSE Manual and the company's HSE Policy (use local language as necessary) including the right use of PPEs	Upon mobilization of every worker to site	HSE Expert
			Refreshers on a monthly basis	Contractor HSE Officer
2	First Aid administration/ Use of First Aid Box	To train selected officers (Contractor HSE Officer, Site Manager, Yard Manager, Team leaders, Female workers representative) on the right first aid administration for different scenarios including demonstrations	Upon mobilization to site and after every 6 months	Public Health Expert/ First Aid Care Giver
3	Protocol for construction site, staging areas, borrow pits and campsite	To ensure all workers understand the protocol to adopt at the construction site, staging areas, borrow pits and campsite	Upon mobilization to site Refresher every 3 months	Site Manager
4	General Training on site work	Right procedures for: manual handling, electrical safety, emergency procedures, work at height, confined spaces, underground construction, cofferdams etc.	Upon mobilization to site Refresher every 2 months	Site Manager/ Project Manager/ Engineer/ HSE Officer
5	Daily HSE Pep Talks	To provide daily reminder on safety precautions and acceptable environmental and social protection including dos and don'ts for all workers	Daily	Contractor HSE Officer
6	Community Health and Safety Training	To train all workers and project management on: • Sexual Exploitation and Abuse/ Gender Base Violence Training • Code of Conduct Training • Sensitization on STDs/STIs • Grievance Redress Mechanism	Upon mobilization of every worker to site Refresher every 3 months	Social Safeguard Expert
7	Drivers Training	To train all project drivers on safety and acceptable conduct	Upon employment Daily Monitoring Monthly Refresher	FRSC Expert in conjunction with project manager

Annex 12: Workers Campsite Management Framework

Elements for managing risks associated with the Workers Campsite under the proposed project include:

- Location: The Contractor shall ensure to site workers camp at a designated location approved by the SPCU. The location was determined during the preliminary design preparation in conjunction with the local communities/authorities with the following criteria:
- Be located outside the protection zone of watercourses (100 m) and wetlands
- Be located within an acceptable distance from existing residential areas
- Not located in areas with intact vegetation
- The contractor must first obtain the necessary licenses and consents from the local authorities or from the owner of the needed area; Although it is the contractor's decision, it is recommended that whenever possible the camps should be handed over to the administrative or community authorities for future use
- The contractor must submit for the prior approval of the Resident Engineer, the implantation design and other project structures and specifications related to the camps and sites that are intended to be built
- The contractor shall take all necessary measures and precautions to ensure that the execution of the works is carried out in accordance with environmental, legal and regulatory requirements, including those set out in this document; The contractor shall take all measures and precautions to avoid any disturbance in the local communities and among the users of the road, as a result of the project execution
- The contractor shall, whenever possible, apply measures to reduce or eliminate any sources of disturbance. The contractor shall follow the provisions of this document, as well as the applicable legislation and standards, during the use, operation and maintenance of the camps and sites, in particular with regard to water supply and sanitation, solid waste management, handling and storage of dangerous substances, etc.
- The areas occupied by the camps and sites must be recovered at the end of the project, when the contractor is demobilized, through the replacement of previously existing conditions, unless other uses are intended
- Accommodation, Hygiene and Sanitation: The Contractor will ensure that all necessary sanitary facilities shall be provided for workers expected on site: separate rooms will be provided for male and female workers, all necessary sanitary facilities complying with World Health Organization (WHO) regulations will be provided for workers including:
- Separate toilets for male and female
- Portable water with well-placed overhead tanks
- Wash basins
- Concrete and covered septic tanks
- On-site Social and Health Care Facilities: Provision of basic on-site social and medical facilities such as first aid, basic health care center, recreational center, food service, etc. in order to reduce pressure on community facilities.
- Campsite Safety and Security: Provision of 24-hour security stationed at the Campsite to

ensure the security and safety of construction workforce and construction equipment.

- Campsite Waste Management: Adequate waste management of sewage and other forms of waste within the campsite. The Campsite shall be equipped with independent toilet facilities for male and female workers respectively, in order to discourage irregular waste disposal. Furthermore, standards must be instituted for personal and public hygiene among project workers. Additionally, project workers should be properly trained on personal hygiene.
- Establishment of and Training on Workers on the Code of Conduct: The Supervising Engineer and Safeguards Unit shall ensure that Contractors establish a workers' Code of Conduct (CoC). The CoC will help mitigate some of the social and environmental impacts of labor influx such as risk of social conflict, Increased risk of illicit behavior and crime, Increased burden on and competition for public service provision, Wastewater discharges, Increased demand on freshwater resources, and Inadequate waste disposal and illegal waste disposal sites etc., will help keep workers (local/foreign) in check on the rules and regulations binding their engagement. Contractors to ensure provision of training to workforce on code of conduct and ensure strict compliance. Measures provided for in the ESMP to deter illicit behavior and other social vices are adequately enforced.
- Training programs: Conduct and ensure key staff, including contractors, receive training regarding the likelihood, significance, and management of influx-related issues such as HIV/ AIDS, GBV, SEA, VAC etc.
- Carry out Regular Monitoring: The SPCU shall monitor for change throughout the project cycle to ensure compliance and on mitigation effectiveness from projects/contractors. Ensure a documented monitoring program that tracks key social outcomes, changes, and issues at regular intervals throughout the project lifecycle.

ANNEX 13: Infection Control and Waste Management Plan (ICWMP) Template

1. Introduction

1.1 Describe the project context and components.

1.2 Describe the targeted healthcare facility (HCF):

- Type: E.g., general hospital, clinics, inpatient/outpatient facility, medical laboratory.
- Special type of HCF in response to disease: E.g., existing assets may be acquired to hold yet-to confirm cases for medical observation or isolation.
- Functions and requirements for the level infection control, e.g., biosafety levels.
- Location and associated facilities, including access, water supply, power supply.
- Capacity: beds

1.3 Describe the design requirements of the HCF, which may include specifications for general design and safety, separation of wards, heating, ventilation, and air conditioning (HVAC), autoclave, and waste management facilities.

2. Infection Control and Waste Management

2.1 Overview of infection control and waste management in the HCF

- Type, source, and volume of healthcare waste (HCW) generated in the HCF, including solid, liquid and air emissions (if significant).
- Classify and quantify HCW (infectious waste, pathological waste, sharps, liquid and nonhazardous) following WGB EHS Guidelines for Healthcare Facilities and pertaining GIIP.
- Describe the healthcare waste management system in the HCF, including material delivery, waste generation, handling, disinfection and sterilization, collection, storage, transport, and disposal and treatment works.
- Provide a flow chart of waste streams in the HCF if available
- Describe applicable performance levels and/or standards
- Describe institutional arrangement, roles, and responsibilities in the HCF for infection control and waste management

2.2 Management Measures

- Waste minimization, reuse, and recycling: HCF should consider practices and procedures to minimize waste generation, without sacrificing patient hygiene and safety consideration.
- Delivery and storage of specimen, samples, reagents, pharmaceuticals, and medical supplies: HCF should adopt practice and procedures to minimize risks associated with delivering, receiving and storage of the hazardous medical goods.
- Waste segregation, packaging, color coding and labeling: HCF should strictly conduct waste segregation at the point of generation. Internationally adopted method for packaging, color coding and labeling the wastes should be followed.

- Onsite collection and transport: HCF should adopt practices and procedures to timely remove properly packaged and labelled waste using designated trolleys/carts and routes. Disinfection of pertaining tools and spaces should be routinely conducted. Hygiene and safety of supporting medical workers such as cleaners should be ensured.
- Waste storage: HCF should have multiple waste storage areas designed for different types of waste. Their functions and sizes are determined at design stage.
- Onsite waste treatment and disposal (e.g., an incinerator): Many HCFs have their own waste incineration facilities installed onsite. The due diligence of an existing incinerator should be conducted to examine its technical adequacy, process capacity, performance record, and operator's capacity. In case any gaps are discovered, corrective measures should be recommended. For new HCF financed by the project, waste disposal facilities should be integrated into the overall design and ESIA developed. Good design, operational practices and internationally adopted emission standards for healthcare waste incinerators can be found in pertaining EHS Guidelines and GIIP.
- Transportation and disposal at offsite waste management facilities: Not all HCF has adequate or Well-performed incinerator onsite. Not all healthcare wastes are suitable for incineration. An onsite incinerator produces residuals after incineration. Hence offsite waste disposal facilities provided by local government or private sector are probably needed. These offsite waste management facilities may include incinerators and hazardous wastes landfill. In the same vein, due diligence of such external waste management facilities should be conducted to examine its technical adequacy, process capacity, performance record, and operator's capacity. In case any gaps are discovered, corrective measures should be recommended and agreed with the government or the private sector operators.
- Wastewater treatment: HCF wastewater is related to hazardous waste management practices. Proper waste segregation and handling as discussed above should be conducted to minimize entry of solid waste into the wastewater stream. In case wastewater is discharged into municipal sewer sewerage system, the HCF should ensure that wastewater effluent complies with all applicable permits and standards, and the municipal wastewater treatment plant (WWTP) can handle the type of effluent discharged. In cases where municipal sewage systems are not in place, HCF should build and proper operate onsite primary and secondary wastewater treatment works, including disinfection. Residuals of the onsite wastewater treatment works, such as sludge, should be properly disposed of as well. There are also cases where HCF wastewater is transported by trucks to a municipal wastewater treatment plant for treatment. Requirements on safe transportation, due diligence of WWTP in terms of its capacity and performance should be conducted.

3. Emergency Preparedness and Response

Emergency incidents occurred in HCF may include spillage, occupational exposure to infectious materials or radiation, accidental releases of infectious or hazardous substances to the environment, medical equipment failure, failure of solid waste and wastewater treatment facilities, and fire. These emergency events are likely to seriously affect medical workers, community, HCF's operation and the environment. Thus, an Emergency Response Plan (ERP) that is commensurate

with the risk levels it is recommended to be developed. The key elements of an ERP are defined in ESS 4 Community Health and Safety (para. 21).

4. Institutional Arrangement and Capacity Building

A clearly defined institutional arrangement, roles and responsibilities should be included. A training plan with recurring training programs should be developed. The following aspects are recommended:

- Define roles and responsibilities along each link of the chain along the cradle-to-crave infection control and waste management process.
- Ensure adequate and qualified staff are in place, including those in charge of infection control and biosafety and waste management facility operation.
- Stress the chief of an HCF takes overall responsibility for infection control and waste management.
- Involve all relevant departments in a healthcare facility, and build an intra-departmental team to manage, coordinate and regularly review the issues and performance.
- Establish an information management system to track and record the waste streams in HCF; and
- Capacity building and training should involve medical workers, waste management workers and cleaners. Third-party waste management service providers should be provided with relevant training as well.

5. Monitoring and Reporting

Many HCFs in developing countries face the challenge of inadequate monitoring and records of healthcare waste streams. HCF should establish an information management system to track and record the waste streams from the point of generation, segregation, packaging, temporary storage, transport carts/vehicles, to treatment facilities. HCF is encouraged to develop an IT-based information management system should their technical and financial capacity allow. As discussed above, the HCF chief takes overall responsibility, leads an intra-departmental team, and regularly reviews issues and performance of the infection control and waste management practices in the HCF. Internal reporting and filing systems should be in place. Externally, reporting should be conducted per government and World Bank requirements.

ANNEX 14: HeSP CERC ESMF ESS Screening Form

This form is to be used by HeSP Safeguards Team to screen potential environmental and social issues in identified CERC activities or subprojects and determine which safeguard instrument/s is to be prepared prior to implementation

Screening Questions	Answer			ESF Relevance	Documents required if 'Yes'
	Yes	No	N/A		
Does the subproject involve civil work including new construction, expansion, upgrading or rehabilitation of healthcare facilities and/or associated waste management facilities?				ESS 1	ESMP, ICWMP, SEP
Does the subproject involve land acquisition and/or restrictions on land use?				ESS 5	If yes, this is an ineligible activity for project financing
Does the subproject involve activities that will result in the involuntary taking of land, relocation of households, loss of assets or access to assets that leads to loss of income sources or other means of livelihoods, and interference with households' use of land and livelihoods.				ESS5	The activity will be ineligible for project financing
Does the subproject involve uses of goods and equipment involving forced labor, child labor, or other harmful or exploitative forms of labor.				ESS2	The activity will be ineligible for project financing
Does the subproject involve recruitment of a workforce including direct, contracted, primary supply, and/or community workers?				ESS2	LMP, SEP
Is the subproject located within or in the vicinity of any ecologically sensitive areas?				ESS6	ESMP (only if there exists infrastructure), for any new facility, this would be ineligible activity for project financing, SEP
Does the subproject involve activities that have potential to cause any significant loss or degradation of critical natural habitats whether directly or indirectly, or activities that could adversely affect forest and forest health.				ESS6	The activity will be ineligible for project financing
Is the subproject located within or in the vicinity of any known cultural heritage sites?				ESS8	The activity will be ineligible for project financing
Are there any vulnerable groups present in the subproject area and are likely to be affected by the proposed subproject negatively or positively?				ESS7	Measures addressing issues on vulnerable groups, including IPs, will be part of ESMP/ ECOP
Will the project involve the discharge of pollutants into air, water, soil and/or storage of chemicals, hazardous materials, etc. that pose risks to environmental and public health?				ESS 5	ESMP

Annex 15: Chance Find Procedures

Chance find includes unearthing any physical and cultural resources (PCR) such as graves, tombstones, artefacts, archaeological sites, shrines, religious ornaments etc.

1. Impact Avoidance

The project should endeavor to avoid impacts on PCR. Where available land is not sufficient, the size of the structure should be reduced to fit into available land space, or a shift/change of location is recommended.

2. Probability Find

a) Grave site

In the event that a grave site is unearthed the following procedure should be adopted:

i. work should be suspended immediately, and the area protected and untouched. However, works can go on in other locations on site
ii. the contractor should immediately inform the supervision consultant
iii. the SPIU Environmental and Health Office or the NPCU E&S Officer should be informed within 24 hrs from the project site
iv. the first option is to avoid any further impacts to the grave site
v. the community leader will explain the procedures to be followed such as if there is a need to relocate, cultural requirements, and the costs of such activities will be borne by the Project
vi. construction works should only be resumed when all requirements have been met

b) other physical and cultural resources

In the event of any other chance find the following procedure should be adopted:

i. work should be suspended immediately, and the area protected and untouched. However, works can go on in other locations on site
ii. the contractor should immediately inform the supervision consultant
iii. the E&S Officers should be informed within 24 hrs from the project site
iv. the NPCU to call the attention of the state Ministry of Culture and Tourism or any other responsible ministry
v. Proper evaluation should be conducted by the Ministry to ascertain the best procedure to adopt to secure the artefact
vi. Upon conclusion, work can resume at that particular site
vii. The whole process should be well documented and stored in the project office for future reference

Annex 16: Traffic Management Plan (Sample)

1. Introduction

This Traffic Management Plan describes procedures and protocols for site access, traffic routing and management, and HeSP guidelines with respect to vehicle and employee transportation in delivering their obligations on this intervention project. Public, employee and safety is the primary goal of this plan. It is vital that the Project recognizes that the traffic within the project area will be dynamic throughout the course of execution of this works and the safety of other road users is absolutely essential during this time.

2. General Site Access

In the interest of site security and public safety, access to operational areas or locations where heavy duty machinery would be operated in related to the execution of this contract will be restricted to authorized site personnel through the usage of signs and gates where appropriate. Facilities that potentially present danger to persons or wildlife such as the electrical substation, equipment staging area and workers camp will be fenced or barricaded as appropriate to prevent general access.

3. Traffic Management

All traffic on routes to and from the site, caution signs and signage will be installed at appropriate locations in order to warn the public along these routes.

In the event that temporary closure occurs, access to the sites will be further restricted through the use of fences and gates as appropriate. Access to work areas such as temporary excavated places, or confined spaces where work is ongoing will be securely blocked by means of a temporary but robust barrier or barricade. Buildings and ancillary facilities will be locked and secure. A number of additional general measures related to site access, road management and public safety and rehabilitation/renovation events notification are presented here:

Private employee off-road vehicles or private transport buses will be prohibited from entry into the site.

Signage will be posted near all rehabilitation/renovation sites.

Speed limit maintained at 10 km/hr speed limit within or near the facilities.

Install reverse alarm fitted on all trucks, heavy duty equipment and off-road vehicles.

Employ or engage the use of a minimum of two flagmen around excavated areas, one for traffic approach and one to direct traffic away from the sites.

In accordance with Occupational Health and Safety Regulations for public roads, use of flashing devices on all vehicles/machinery and equipment that will cross, travel on or may otherwise pose a risk to users of public roads.

4. Employee Transportation

To the extent it is possible employees will use buses or other vehicles provided by the Project as transportation to and from the site, thereby reducing overall vehicle traffic. Project vehicles or will be utilized by staff, only when necessary.

5. Speed Limits

Speed limits will be enforced to and from the site and signage(s) shall be posted along the access and site roads (maximum 40 km/hr, reduced to 20 km/hr at blind corners and bridge crossings. Traffic along other access roads will be radio controlled for safety and speed control. Furthermore, employees will be educated on safety including traffic protocols and speed limits during mandatory orientation. Routine traffic inspections and/or speed indicator signs will be used to encourage safe and responsible driving.

6. Communication and Notification Protocols

It is anticipated that the intervention project will require only single-lane temporary closures.

Signage warnings of rehabilitation/renovation activities on the roads will be placed at appropriate distances from the rehabilitation/renovation site, in consultation with SPCU, Ministry of Transports, Department of Highways & Public Works. For significant work activity (those requiring more than one day to complete), written notification will be distributed to residents and the SPCU, Ministry of Transport department of Highways & Public Works will be notified. A public notice would be posted at multiple locations in the metropolis to communicate to residents any new activities that may be occurring or scheduled. Contact information for the SPCU will be included in this notice and any concerns regarding the intervention work/project or traffic management can be forwarded through this notification system.

7. Traffic Routing and Volumes

Alternative traffic routes should be mapped out and provided in the event that there will be complete closure of the road due to this intervention work activity. Traffic officers and appropriate road diversion signage(s) shall be deployed to ensure diversions routes are properly identified and traffic is directed along the mapped route. The flagmen shall be properly kitted in their Personal Protective Equipment (PPE), such as reflector vests and safety boots, to ensure that safety on the job is given due priority.

8. Reporting

Records on traffic management and implementation of this plan should be kept and updated by the SPCU as evidence of ongoing mitigation compliance, which will be submitted to SPIU as part of routine reports on progress of work.

Annex 17: Data protection and cybersecurity protocol for health Projects

This protocol outlines the data protection and cybersecurity measures to be implemented for the Health Emergency Project to ensure the security, privacy and confidentiality of a person and sensitive health data collected via digital platforms.

The objective is to safeguard persona data against unauthorized access, use, disclosure or destruction. This will also ensure compliance with local and internation data protection laws and ethical standards and prevent data breach and privacy violations.

The NPCU or other implementing entity is required to conduct the following during the implementation of the Project intervention that will require data, AI interface.

1. Risk Assessment and Management

- **Risk Identification:**
  - Conduct a thorough analysis of potential threats, including unauthorized access, data breaches, malware, and insider threats.
  - Use tools like SWOT analysis and threat modeling to identify vulnerabilities in the system.
- **Risk Mitigation Strategies:**
  - Develop a risk management plan that includes preventive measures such as firewalls, encryption, and access controls.
  - Implement a risk register to document identified risks and track mitigation efforts.

2. Data Protection Policies

- **Data Classification:**
  - Define categories for data sensitivity (e.g., public, internal, confidential, restricted) and establish handling procedures for each category.
  - Use data labeling tools to automate classification processes.
- **Access Control:**
  - Implement role-based access control (RBAC) to restrict data access based on user roles and responsibilities.
  - Use multi-factor authentication (MFA) to enhance security for accessing sensitive data.
- **Data Encryption:**
  - Encrypt sensitive data both at rest and in transit using industry-standard encryption protocols (e.g., AES-256).
  - Regularly update encryption keys and use secure key management practices.

3. Cybersecurity Measures

- **Network Security:**
  - Deploy firewalls, intrusion detection systems (IDS), and intrusion prevention systems (IPS) to protect against external threats.
  - Use virtual private networks (VPNs) for secure remote access.
- **Endpoint Security:**
  - Ensure all devices accessing the network are equipped with antivirus software and receive regular updates.
  - Implement device management policies to control the use of personal devices for accessing project data.
- **Regular Audits:**
  - Conduct regular security audits and vulnerability assessments using tools like penetration testing and security scans.
  - Document audit findings and implement corrective actions.

4. Compliance and Legal Considerations

- **Regulatory Compliance:**
  - Ensure compliance with relevant regulations such as the Nigeria Data Protetion

Regulation, General Data Protection Regulation, Health Insurance Portability and Accountability Acts and other local data protection laws.
    - Maintain records of data processing activities and obtain necessary consents from data subjects.
- **Data Breach Response:**
    - Develop a data breach response plan that includes notification procedures, investigation processes, and mitigation strategies.
    - Establish a communication plan for informing stakeholders and regulatory bodies in the event of a breach.

5. Training and Awareness

- **Employee Training:**
    - Provide regular training sessions for employees on data protection and cybersecurity with the best practices.
    - Use interactive training modules and simulations to enhance learning.
- **Awareness Programs:**
    - Implement awareness programs to educate staff about phishing attacks, social engineering, and other common threats.
    - Use newsletters, posters, and workshops to reinforce key messages.

6. Incident Response and Recovery

- **Incident Response Plan:**
    - Develop a comprehensive incident response plan that outlines procedures for detecting, responding to, and recovering from cybersecurity incidents.
    - Establish an incident response team with defined roles and responsibilities.
- **Backup and Recovery:**
    - Implement regular data backup procedures and ensure that recovery processes are tested and effective.
    - Use offsite and cloud-based backups to ensure data availability in case of a disaster.

7. Monitoring and Reporting

- **Continuous Monitoring:**
    - Use monitoring tools to continuously track network activity and detect suspicious behavior.
    - Implement real-time alerts for potential security incidents.
- **Reporting Mechanisms:**
    - Establish reporting mechanisms for employees to report security incidents or vulnerabilities.
    - Use anonymous reporting channels to encourage reporting without fear of reprisal.

8. Third-Party Management

- **Vendor Assessment:**
    - Assess third-party vendors for their data protection and cybersecurity practices.
    - Conduct regular audits and reviews of vendor compliance with security standards.
- **Contractual Agreements:**
    - Include data protection clauses in contracts with third-party vendors to ensure they adhere to security protocols.
    - Require vendors to provide evidence of compliance with security requirements.

9. Technology and Infrastructure

- **Secure Infrastructure:**
    - Design and maintain a secure IT infrastructure that supports data protection and cybersecurity measures.
    - Use network segmentation to isolate sensitive data and systems.
- **Technology Upgrades:**
    - Regularly update technology and software to protect against emerging threats.

- Implement patch management processes to ensure timely updates.

10. Evaluation and Improvement

- **Regular Reviews:**
  - Conduct regular reviews of the data protection and cybersecurity protocol to ensure its effectiveness.
  - Use metrics and KPIs to measure the success of security initiatives.
- **Continuous Improvement:**
  - Implement a continuous improvement process to adapt to new threats and technologies.
  - Encourage feedback from employees and stakeholders to identify areas for improvement.