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NPHCDA
National Primary Health Care Development Agency

THE WORLD BANK

IMMUNIZATION PLUS AND MALARIA PROGRESS BY ACCELERATING COVERAGE AND TRANSFORMING SERVICES (IMPACT) PROJECT

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR THE 14 PARTICIPATING STATES OF IMPACT PROJECT

MARCH, 2024

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ABBREVIATIONS

ACM	Asbestos Containing Material
ACT	Artemisinin Combination Therapy
BGRISP	Basic Guide for Routine Immunization Service Providers
BHCPF	Basic Healthcare Provision Fund
BMGF	Bill and Melinda Gates Foundation
CHIPS	Community Health Influencers, Promoters, and Services
CERC	Contingent Emergency Recovery Component
CHVA	Climate and Health Vulnerability Assessment
DA	Designated Account
DFDS	Department of Food and Drug Services
DFF	Decentralized Financing Facility
DHIS	District Health Information System
DHPRS	Department of Health Planning, Research and Statistics
DHS	Demographic and Health Survey
DPH	Department of Public Health
DQA	Data Quality Assessment
DRM	Domestic Resource Mobilization
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
FA	Financing Agreement
FGoN	Federal Government of Nigeria
FM	Financial Management
FMoH	Federal Ministry of Health
FPFMD	Federal Project Financial Management Department
FY	Fiscal Year
Gavi	Global Alliance for Vaccines and Immunization
GBV	Gender-based Violence
GDP	Gross Domestic Product
GFATM	Global Fund to Fight AIDS, Tuberculosis, and Malaria
GIS	Geographic Information System
GRM	Grievance Redress Mechanism
HCWMP	Healthcare Waste Management Plan
HNP	Health, Nutrition, and Population
HCF	Health-Care Facility
HCFM	Health-Care Facility Management Committee
HRH	Human Resources for Health
IFR	Interim Financial Report
IMPACT	Immunization plus and Malaria Progress by Accelerating Coverage and Transforming
IPF	Investment Project Financing
IPT	Intermittent Presumptive Therapy
ITN	Insecticide Treated Net
JRM	Joint Review Mission
LGA	Local Government Area
LGHA	Local Government Health Authority
LLIN	Long-lasting Insecticide Treated Net

LMIC	Lower-Middle-income Country
LQAS	Lot Quality Assurance Sampling
MaNCETs	Maternal Newborn and Child Emergency Transport Services
M&E	Monitoring and Evaluation
MICS	Multiple Indicator Cluster Survey
MoU	Memorandum of Understanding
MPA	Multiphase Programmatic Approach
NBS	National Bureau of Statistics
NCDC	Nigeria Centre for Disease Control
NDHS	National Demographic and Health Survey
NGO	Nongovernmental Organization
NGN	Nigerian Naira
NHAct	National Health Act
NHFS	National Health Facility Survey
NHIS	National Health Insurance Scheme
NIMR	Nigeria Institute of Medical Research
NIPRD	Nigeria Institute of Pharmaceutical Research and Development
NMEP	National Malaria Elimination Program
NNHS	National Nutrition and Health Survey (SMART and NNHS are the same surveys)
NPHCDA	National Primary Health Care Development Agency
NPMT	National Project Management Team
NSC	National Steering Committee
NSHDP	National Strategic Health Development Plan
NSHIP	Nigeria State Health Investment Project
OAGF	Office of Auditor General of Federation
PAPA	Program Assessment for Performance management and Actions
PBF	Performance-based Financing
PDO	Project Development Objective
Penta	Pentavalent Vaccine
PHC	Primary Health Care
PIU	Project Implementing Unit
PMI	President's Malaria Initiative
PPEs	Personal Protective Equipment
PPSD	Project Procurement Strategy for Development
PrDO	Program Development Objective
RDT	Rapid Diagnostic Test
RPE	Respiratory Protective Equipment
RMNCH	Reproductive, Maternal, Neonatal, and Child Health
RMNCAH+N	Reproductive, Maternal, Newborn, Child, and Adolescent Health and Nutrition
SBA	Skilled Birth Attendance
SBCC	Social Behavior Change Communication
SSC	State Steering Committee
SDG	Sustainable Development Goal
SMART	Standardized Monitoring and Assessment of Relief and Transition Methods
SMC	Seasonal Malaria Chemoprophylaxis
SMEP	State Malaria Elimination Program

SMoH	State Ministry of Health
SP	Sulfadoxine-Pyrimethamine
SPHCB	State Primary Healthcare Board (Same as SPHCDA—State Primary Healthcare Development Agency)
SPIU	State Project Management Team
SQUATS	Service Quality, Utilization and Accountability Tracking Systems
TA	Technical Assistance
U5MR	Under-Five Mortality Rate
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development
VBD	Vector-borne Disease
WASH	Water, Sanitation, and Hygiene
WB	World Bank
WHO	World Health Organization

EXECUTIVE SUMMARY

ES1: Introduction

The Federal Government of Nigeria (FGoN) in collaboration with the World Bank has prepared the Immunization Plus and Malaria Progress by Accelerating Coverage and Transforming Services (IMPACT) Project which is a multi-phased programmatic approach (MPA) with the intent of improving its human capital with the goal of reducing under-five mortality rate (U5MR) in Nigeria from 132 to 79 per 1,000 live births by 2030. This will cut U5MR by 40 percent in 10 years.

The IMPACT project also aims to catalyze overall improvements in health services both at the national participating states to improve access to quality vital services that benefit children and women directly while strengthening the National M&E systems and contributing to demand generation nationally, this shall enhance and improve the overall wellbeing of the population at the grass root (community level).

Major health challenges in the country range from inadequate funding (less than 5% of Nigeria's total annual budget or about $5 per person), to inaccessibility to HF by communities and poor health infrastructure, fake drugs, insufficient financial investment, and lack of sufficient health personnel. These factors have culminated in low immunization rates, a high rate of U5MR, which has necessitated the intervention of the MPA program.

ES2: Rational for the Assignment

The proposed health facilities improvements will involve renovation and minor repairs to doors, roofs, floors, windows and walls in the PHCs. These activities will involve some potential environmental and social impacts that may arise during the anticipated works: such as the generation of hazardous, non-hazardous waste and medical wastes, noise/air pollution, accident from the movement of equipment and materials within and away from the site, occupational health & safety risks, risks associated with labour influx, community health and safety issues, grievances and complaints. Before the commencement of such works, this Environmental and Social Management Plan (ESMP) is prepared to address all environmental and social concerns related to the renovation works. Since the proposed works are minor and impact easily mitigated, the ESMP will cover the 14 states supported by the IMPACT Project.

ES3: Description of Proposed Intervention

The National Primary Health Care Development Agency (NPHCDA) has selected Primary Healthcare Centre's (PHCs) where minor renovations will be carried out. These PHCs are located across fourteen participating satets namely Adamawa, Bauchi, Benue, Delta, Ebonyi, Kaduna, Kano, Kogi, Kwara, Nasarawa, Oyo, Plateau, Sokoto and Yobe States. The works will involve renovations which will focus on 5 main areas: doors, roofs, floor/tiles, walls and windows. Renovations works of E&S concerns per focus area will involve

1. Doors: Replacement/fixing of doors, renovation of doors
2. Floors: Plastering, tiling, replacement of tiles
3. Roof: Fixing of leaking sections of roofs, repairs of ceilings, fixing of roofs largely with zinc and wood
4. Walls: painting, plastering, covering of cracks
5. Windows: Replacements and repairs of windows, glasses and fixing of burglary proof

ES 4: Legal and Institutional Framework

The following Federal and State Ministries, institutions and agencies are responsible for regulating and monitoring environmental and social issues as well as waste management as indicated in Chapter 3

ES 4.1: Relevant MDAs

1. Federal Ministry of Health (FMoH)
2. National Primary Healthcare Development Agency (NPHCDA)
3. National Malaria Elimination Progam (NMEP)
4. National Health Insurance Scheme (NHIS)

a) State Ministries of Health (SMoH) of the participating project states
    i. State Primary Healthcare Development Agencies (SPHCDAs)

ii. State Malaria Elimination Progam (SMEPs)
iii. State Social Health Insurance Agency (SSHIAs)

b) Federal Ministry of Environment (FMEnv)
c) State Ministries of Environment (SMEnv) of the participating states

ES 4.2: Other Relevant State Agencies

These include State Environmental Protection Agencies (SEPAs) as well as various state waste management regulatory agencies from the participating states. .

ES 4.3: Relevant World Bank Policy

The World Bank has 10+1 policies relating to environmental and social management/protection. With regards to the MPA one Safeguard Policy, OP 4.01 on Environmental Assessment is triggered. OP4.01 addresses the potential adverse environmental and social impacts associated with Bank's lending operations early- on in the project cycle and is triggered if a project is likely to have potential adverse environmental and social risks and impacts in its area of influence.

ES5: Project Description

ES5.1: Project Development Objective

In supporting the Nigeria Human Capital Vision 2030, the Program, with other complementary child health investments, is expected to reduce under-five mortality from 132 to 79 per 1,000 births by 2030. Cutting U5MR by 40 percent in 10 years is a stretch goal but is achievable. Achieving a 40 percent decline in U5MR in 10 years would represent the achievement of the top 25 percent of LMCs over the last 25 years and would be much faster than the 16 percent decline observed in Nigeria during the last decade (2008–2018). Given global experience, it is not reasonable to expect Nigeria to achieve a faster rate of decline in U5MR. **The overall objective of the program is to reduce under-five mortality rate in program areas.**

Ultimately, the Program will contribute towards significantly decreasing U5MR, reducing the burden of malaria particularly among the poor and vulnerable populations, reaping the benefits of routine vaccination, and improving neonatal health.

This would be achieved through three phases of the program with each having a phase objective

ES5.2: PDO Statement

The PDO of the first phase (IMPACT) of the MPA is to improve the utilization and quality of immunization plus and malaria services in selected states. Immunization plus services refer to provision of immunization, maternal, child, and neonatal services in selected states.

The PDO builds on objectives in the National Strategy for Immunization and Primary Health Care System Strengthening, the National Malaria Strategic Plan, and the overarching RMNCAH-Malaria Integration Strategy currently being rolled out by the FMoH.

ES5.3: PDO Level Indicators

Ultimately, the project will contribute toward significantly decreasing U5MR, reducing the burden of malaria particularly among the poor and vulnerable populations, reaping the benefits of routine vaccination, and improving neonatal health.

Under-five mortality rate (number) (PDO Indicator to which the first project will contribute)

Percentage of children under five sleeping under Long-Lasting Insecticide Nets (LLINs) the night prior to the survey (disaggregated by gender)

ES6: Description of Project Environment

A description of the Project Environment covers the 14 participating States of Adamawa, Bauchi, Benue, Delta, Ebonyi, Kaduna, Kano, Kogi, Kwara, Nasarawa, Oyo, Plateau, Sokoto and Yobe. The detailed description covers all the vital information about the States as captured in Chapter 4.

ES7: Potential Impacts and Mitigation

The Primary Health Care facilities within the 14 States are targeted for maintenance are under the IMPACT Project will as part of the overall support.

The procurement and contracting process will be initiated upon clearance of this ESMP.

The subproject will be implemented by local contractor/s in which the contractors' capacity will be assessed, in terms of the technical as well as the environmental and social requirements implementation capacity, following the World Bank guidelines during the competitive bidding process.

The area of influence of the proposed rehabilitation will be described with respect to the following:

1. Physical Environmental Media Influence.
2. Geographical Area of influence.
3. Community influence and vulnerable persons in the institutions and
4. Institutional Influence

ES8: Grievance Mechanism

GRM is an important mechanism that encourages and promotes ownership of projects. It provides an avenue for communities to give feedback on services received and ultimately leads to a more sustainable and successful project with inputs from the various communities in the project states. It ultimately helps to manage the project risks including social, environmental risks. Experience has revealed that this type of open dialogue and collaborative grievance resolution represent the best practice. Having a GM also shows willingness for transparency in any project.

For a GM to be effective as an all-inclusive engagement tool, it must be structured to accommodate everyone from the PHC to the general public. In addition, clear procedures with timelines must be established for complaints/redress and made easily available to the public by way of public notices and signs posted in all participating HCFs. The grievance mechanisms will

Provide a way to reduce risk for projects;

Provide an effective avenue for expressing concerns and achieving remedies for the grievant; Promote a mutually constructive relationship; and

Prevent and address community concerns.

Key objectives of the grievance process are:

1. Provide affected people with avenues for making a complaint or resolving any dispute that may arise during project implementation;
2. Ensure that appropriate and mutually acceptable corrective actions are identified and implemented to address complaints;
3. Verify that complainants are satisfied with outcomes of corrective actions;
4. Avoid the need to resort to judicial (legal court) proceedings.

ES9: Environmental and Social Management Plan

ES9.1: Introduction

The overarching objective of the Environmental and Social Management Plan (ESMP) is to ensure that all impacts of the proposed rehabilitation works are contained and brought to an acceptable level to guarantee economic, environmental and social sustainability of the project. The ESMP Matrix has been developed to meet international and national standards on E&S performance. It details the mitigation measures the IMPACT Project will be deploying during the rehabilitation.

ES 9.2 Cost of Implementing the ESMP

The total estimated cost to effectively implement the mitigation and monitoring measures recommended in the ESMP Matrix including Capacity Building and others is Thirteen Million, Five Hundred and Ninety Thousand naira only. – N13,590,000 as seen in Table 30 below. The cost of mitigation is Five Million, Eighty Thousand naira only-N5,080,000 and should be included in the contract as part of the implementation cost to the Contractor by the SPIU. Four essential trainings were identified before and during the implementation of this ESMP and its cost implication is Five Million, Four Hundred Thousand Naira Only-N5,400,000.

The cost embedded in the ESMP is Health Care Facility specific and should be used to mitigate and monitor the activities of the contractor during the rehabilitation works per facility.

ES 9.3 Summary cost for the implementation of the ESMP

Table 1: Summary cost of implementing the ESMP

Item	Responsibility	Cost Estimate in Naira (N)	Cost Estimate in Dollars ($)
Mitigation	HCFM	5,080,000	3,060
Monitoring	E&S Team SPIU, Relevant MDAs	1,910,000	1,150
Capacity Building/Training	SPIU/ NPCU	5,400,000	3,253
GRM Operation	SPIU, HCFM	1,200,000	722
Total		13,590,000	8,186

CBN RATE 1$US=N1,660 as at February 24, 2024

ES10: Stakeholders Engagement

ES 10.1: Location of PHC Facility visited: There were several meetings with the relevant stakeholders within the 14 participating States. 105 community's stakeholders were reached via physical and virtual means. The summary of the meeting, observations and responses are itemized in the table below. The list of the communities and their coordinates is shown below and in Table 36

ES10.2: Summary of minutes of meeting with Stakeholders

Overview			
Date: September 2023 and February 2024Venue: PHC Facilities, Project Management Office Participants: Facility Management, Staff, Patients			
Consultations were held with the all the 14 participating States Primary Health Care Board, the Project Manager and the Staff of various stakeholders at the PHCs in the Communities within the States. The representative of the IMPACT Project and the E&S Consultants introduced the project and ESMP process and objectives to the stakeholders. The Consultant further highlighted potential environmental and social risks and impacts that may be caused by the rehabilitation activities and emphasized the role that each stakeholder had to play to ensure that the negative impacts are minimized and the positive impacts enhanced. The participants appreciated the team and expressed their concerns/questions which were addressed by the consultant. The summary of the key concerns/questions/issues raised during the consultations at the project sites are presented below, including the consultant's responses/remarks.			
No.	**Agenda**	**Concerns/Questions**	**Consultant's Response/Remark**
1	Perception of the project	• The 14 participating States' Primary Health Care Management Board (SPHCMB), staff and patients complained about deficient infrastructure especially within the rural areas which currently isn't quite suitable due to the dilapidated floors, walls and absence of furniture's, hence they were happy that IMPACT Project will help in bridging these gaps. • The 14 participating SPHCMB also appreciated for the extensive stakeholder consultations they have been holding with them. • They also enquired if PHC Facilities lacking furniture's and equipment will also be looked into	The team responded that the need for each facility was taken into consideration before now. Those facilities that have deficiency in areas of furniture and equipment will be taken care of.
2	Potential Adverse impacts	• The end-user inquired if there would be any risks such as OHS associated with the rehabilitation works? • They are also skeptical about having strangers/foreigners within the community.	• The consultant alleviated their fears of possible risks, as the ESMP Matrix is well detailed with mitigation measures, responsibilities and monitoring principles to reduce such risks to the barest minimum. • Rehabilitation activities will be implemented during off- patient hours or weekend

			• More so, the Facility or project sites would likely be vacated during rehabilitation period, thus there will be less interference. • There will be adequate sensitization through the SPHCMB on ways to avoid been exposed to SEA/SH. **RESPONSE OF SPIU** The SPIU also stated that the project will conduct such sensitization in the State and project communities; in addition, HCFM will sign Code of Conducts against GBV/SEA/SH. The SPHCMB also promised to coordinate the activities of the HCFMs.
3	Concerns raised by other stakeholders	• In some PHCs, availability of water is an issue for the patient and staff. • Some other PHCs complained of how dilapidated the PHC are, and how unfit it is for the patients as most of them sit on bare floor, due to insufficient furniture's. They are really hoping the project will commence soon and such issues would be priotized	• The PHCs Facility Management was advised to list their needs in terms of priority • The consultants assured them that all pressing issues will be efficiently documented and properly addressed through the appropriate channels

ES11: CONCLUSION AND RECOMMENDATION

ES11.1: Conclusion

The project is envisaged to have a largely positive impact on the benefitting Primary Health Care Facility, recipient communities, State Ministry of Health and the State at large. The potential negative environmental and social impacts which were identified can be mitigated with strict compliance to the mitigation measures stated in the ESMP Matrix. The ESMP and the mitigation costs will need to be embedded in the Bill of Quantity (BOQ) to ensure implementation costs are adequately budgeted for by the HCFM

CHAPTER ONE: INTRODUCTION

1.0 Background and Context

The Federal Government of Nigeria (FGoN) in collaboration with the World Bank has prepared the Immunization Plus and Malaria Progress by Accelerating Coverage and Transforming Services (IMPACT) Project which is a multi-phased programmatic approach (MPA) with the intent of improving its human capital with the goal of reducing under-five mortality rate (U5MR) in Nigeria from 132 to 79 per 1,000 live births by 2030. This will cut U5MR by 40 percent in 10 years.

The IMPACT project also aims to catalyze overall improvements in health services both at the national and participating states to improve access to quality vital services that benefit children and women directly. It is also expected that it will help in strengthening the National M&E systems of the health care system in Nigeria.

Major health challenges in the country range from inadequate funding (less than 5% of Nigeria's total annual budget or about $5 per person), to inaccessibility to HF by communities and poor health infrastructure, fake drugs, insufficient financial investment, and lack of sufficient health personnel. These factors have culminated in low immunization rates, a high rate of U5MR, which has necessitated the intervention of the MPA program.

In addition, slashing U5MR has important socio-economic benefits for Nigeria, including on its human capital formation and particularly in:

Cognitive Development: *Improved child health has an important influence on cognitive development*;

1. Nutritional Impact: Children who are frequently sick are also at high nutritional risk. Frequent illness and malnutrition combine in a vicious cycle;
2. Fertility reduction: There has never been a significant reduction in fertility that wasn't preceded by a steep reduction in U5MR;
3. Economic Growth: reductions in mortality account for about 11% of recent economic growth in low and middle-income countries based on national income accounts;
4. Reductions in Child Mortality have preceded economic take-off: Whether they are causal or not, improvements in child mortality preceded the economic take-off observed in East Asian "tiger" economies

The IMPACT Project is implemented by the National Primary Health Care Development Agency (NPHCDA) and the National Malaria Elimination Program (NMEP) with the Project Development Objective (PDO) of the first phase (IMPACT) of the Multiphase Programmatic Approach (MPA) which is to improve the utilization and quality of immunization plus and malaria services in selected states. Immunization plus services refer to provision of immunization, maternal, child, and neonatal services in selected states.

The PDO builds on objectives in the National Strategy for Immunization and Primary Health Care System Strengthening, the National Malaria Strategic Plan, and the overarching RMNCAH-Malaria Integration Strategy currently being rolled out by the FMoH.

The Project Development Objective of the IMPACT Project is to improve the delivery and uptake of immunization and malaria services in selected states. The total financial outlay of IMPACT is US$ 650m.

The IMPACT Project has the following three components

1. Component 1: Malaria Control (US$188.0 Million Equivalent IDA Credit):
2. Component 2: Immunization Plus: (US$409.3 Million Equivalent IDA Credit)
3. Component 3: Knowledge for Change (US$52.7 Million Equivalent IDA Credit)
4. Component 4: Contingent Emergency Response Component (CERC) (Us$0 Million Ida

However, this Consultancy focused on Component 2 which will support strengthening service delivery and health systems for immunization, maternal, child and neonatal services and will finance vaccines and cold chain strengthening. This component is under management/supervision of the NPHCDA. As part of the activities under Component 2, the Project will provide Decentralized funding with performance-based allocation for quality **improvement directly to primary healthcare (PHC) facilities.** The project will provide operating budgets directly to PHC facilities, an innovative approach known as Decentralized Financing Facility (DFF). DFF will strengthen provision of immunization services; curative care for under-five children; outreach activities in reproductive, maternal, and child health services; skilled delivery; postnatal care; and maintenance and minor repair of existing PHC infrastructure. Due to some potential environmental and social impacts associated with the rehabilitation of the facilities, the World Bank Operation Policy (OP) 4.01 on Environmental Assessment is triggered on the Project. The project has been assigned an Environmental Assessment (EA) Screening Category "B". This rating is based on

the scope of the project, which indicates limited adverse environmental and social impacts related to minor rehabilitations and healthcare waste generation and its subsequent management.

The justification for this ESMP is to assess the potential environmental and social impacts of the proposed rehabilitation works and develop appropriate mitigation measures to address the negative impacts associated with the renovations. The ESMP will also outline mitigation costs & responsibilities, and a monitoring plan which will include relevant monitoring parameters, frequency, responsibility and costs. The ESMP will advise any required updates to the proposed works based on impacts reduction strategies and mitigation hierarchy.

1.1 Rational for the Assignment

The proposed Primary Health Care Facilities improvements will involve renovation and minor repairs to doors, roofs, floors, and walls in the PHCs. These activities will involve some potential environmental and social impacts that may arise during the anticipated works: such as the generation of hazardous, non-hazardous waste and noise/air pollution, accident from the movement of equipment and materials within and away from the site, occupational health & safety risks, risks associated with labour influx, community health and safety issues, grievances and complaints. Before the commencement of such works, an Environmental and Social Management Plan (ESMP) is prepared to address all environmental and social concerns related to the renovation works. Since the proposed works are minor and impact easily mitigated, the ESMP will cover the 14 participating states supported by the IMPACT Project.

1.2 Description of Proposed Intervention

The National Primary Health Care Development Agency (NPHCDA) has selected Primary Healthcare Centre's (PHCs) where minor renovations will be carried out. These PHCs are located across 14 states namely Adamawa, , Bauchi, Benue, Delta, Ebonyi, Kaduna, Kano, Kogi, Kwara, Nasarawa, Oyo, Plateau, Sokoto and Yobe, States. The Primary Health Care Facilities with its coordinates is shown in Table 35. below. The works will involve renovations which will focus on 5 main areas: doors, roofs, floor/tiles, walls and windows. Renovations works of E&S concerns per focus area will involve;

1. Doors: Replacement/fixing of doors, renovation of doors
2. Floors: Plastering, tiling, replacement of tiles
3. Roof: Fixing of leaking sections of roofs, repairs of ceilings, fixing of roofs largely with zinc and wood
4. Walls: painting, plastering, covering of cracks
5. Windows: Replacements and repairs of windows, glasses and fixing of burglary proof

The material currently in use now includes;

- Wooden doors
- Wooden windows
- Glass windows
- Asbestos Ceilings
- Cemented walls

1.3 Objectives of the ESMP

The specific objective of the ESMP will be to assess the potential environmental and social impacts of the proposed works and prepare an Environmental and Social Management Plan (ESMP) that includes appropriate mitigation measures to address the negative impacts associated with the renovations. The ESMP will also outline mitigation costs & responsibilities, and a monitoring plan which will include relevant monitoring parameters, frequency, responsibility and costs. The ESMP will advise any required updates to the proposed works based on impacts reduction strategies and mitigation hierarchy.

1.4 Scope of Works

The assignment involves the preparation of an ESMP for renovation works to be carried out in all IMPACT implementing PHCs spread across 14 participating States. This consultancy involves working in close collaboration with the NPHCDA and the various State Project Implementation Unit's (SPIUs) safeguard team, and with other actors as directed by the SPIUs and the NPHCDA. The consultancy took into account the technical variants of the proposed renovations and also in return inform the NPHCDA of any major constraints that may arise due to the environmental and social situation on ground.

The specific task for the consultancy assignment shall include but not limited to the following:

1. Review the existing PAD, ESMF prepared for the project;
2. Review Environmental and Social Safeguards policy (OP 4.01 Environmental Assessment) of the
3. World Bank triggered on the project;
4. Identify the policy, legal and administrative framework relevant to the sub-projects.
5. Review of preliminary proposed renovation designs, including their adequacy in each location and make recommendations as required;
6. Describe the proposed project by providing a description of the project relevant components and presenting schematic diagrams, maps, figures and tables where feasible.
7. Capture biophysical, the socio-economic, cultural and risk context per state. It should also capture gender-specific statistics;
8. Define and justify the project study area for the assessment of environmental and social impacts.
9. Assess the potential environmental and social impacts related to project activities;
10. Define appropriate mitigation/enhancement measures to prevent, minimise, mitigate negative impacts or to enhance the project environmental and social benefits
11. Carry out consultations with relevant stakeholders in order to obtain their views about the project. These consultations shall occur during the preparation of the ESMPs to identify key environmental and social issues and impacts
12. Prepare an Environmental and Social Management Plan (ESMP). The ESMP should identify:

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

CHAPTER TWO: ADMINISTRATIVE AND REGULARTORY FRAMEWORK

2.0 Introduction

The Environmental and Social Management Framework (ESMF) prepared for the IMPACT Project already highlighted all specific relevant policies, legal and regulatory frameworks including the administrative structures for management and implementation of the Project in Nigeria. However, some specific policies and state level legal and administrative frameworks applicable to the project are highlighted in this Chapter.

This assessment will be conducted in accordance with the relevant Federal Government Policies and the participating States where rehabilitations will be carried out with its environmental policies, laws, regulations, guidelines including the applicable World Bank safeguard policy on environmental assessment OP4.01.

2.1 Relevant Nigeria's National Policies

Table 2: Nigeria Policies that are relevant to the Project

Policy	**Objectives**
National Policy on the Environment (Revised 2016)	**Overall Policy Objective**
	To define a new holistic framework for guidance and management of the environment as well as natural resources of the country. **Objectives** Ensuring and securing the quality of Nigeria's environment to support good health and well-being; Promoting efficient and sustainable use of Nigeria's natural resources and the restoration and maintenance of the biological diversity of ecosystems; Promoting understanding of essential linkages between the environment, social and economic developmental issues; Encouraging individual and community participation in environmental improvement initiatives; Raising public awareness and engendering a national culture of environmental preservation; and Building partnership among all stakeholders, including government at all levels, international institutions and governments, non-governmental agencies and communities on environmental matters.
National Health Policy (Revised 2016)	**Overall Policy Objective**
	To strengthen the country's national health system such that it provides effective, efficient, equitable, quality, accessible, acceptable, affordable and comprehensive health services to all Nigerians. Objectives Securing a quality environment adequate for good health and well-being; Sustainable use environmental natural resources for the benefit of the country; Restore, maintain and enhance the ecosystems and ecological processes essential for the functioning of the biosphere to preserve biological diversity and the principle of optimum sustainable yield in the use of living natural resources and ecosystems;

	Raise public awareness and promote understanding of the essential linkages between the environment, resources and development, and encourage individuals and communities' participation in environmental improvement efforts; and Co-operate with other countries, international organizations and agencies to achieve optimal use of trans-boundary natural resources and effective prevention or abatement of trans-boundary environmental degradation.
National Gender Policy (2006)	It brings a gender perspective into all aspects of planning policy, developing legislation and transformation activities in Nigeria. It prioritizes the empowerment of women as a way of achieving gender equality and is based on the premise that gender inequality is about power relations between men and women, and that, any policy, plan or practice that seeks gender equality must balance these power relations for the optimum benefit of both parties.

2.2 Relevant National Acts

Table 2 below shows the Acts relevant to the MPA as well as their objectives.

Table 3: Nigeria Act that are relevant to the Project

S/NO	ACT	Description/ Summary of Objectives
1	National Health Act, 2014	Promote improvement and maintenance of the health of the citizens of Nigeria; Encompass public and private providers of health services; Promote a spirit of cooperation and shared responsibility among all providers of health services in the Federation and any part thereof; Provide for persons living in Nigeria the best possible health services within the limits of available resources; Set out the rights and obligations of health care providers health workers health establishments and users; Protect, promote and fulfil the rights of the people of Nigeria to have access to health care services; and Define and provide a framework for standards and regulation of health services.
2	EIA Act - CAP. E12 L.F.N. 2004	To carry out an EIA on all projects likely to have significant impact on the environment; and Encourage information exchange and consultation between all stakeholders when proposed activities are likely to have significant impact on the environment.
3	National Environmental Standards and Regulations, Enforcement Agency Act, (NESREA) 2007	Enforce compliance with national (and international) laws, legislations, guidelines, policies and standards on environmental matters; Coordinate and liaise with, stakeholders, within and outside Nigeria on matters of environmental standards, regulations and enforcement; Ensure that environmental projects funded by donor organizations and external support agencies adhere to regulations in environmental safety and protection; Enforce environmental control measures through registration, licensing and permitting Systems other than in the oil and gas sector; and Conduct environmental audit and establish data bank on regulatory and enforcement mechanisms of environmental standards other than in the oil and gas sector. Some relevant sections include

		Section 7: Authority to ensure compliance with all of Nigeria's environmental laws and treaty obligations; and *Section 8 (1) K and Section 27:* Authority to make and review regulations on air and water quality, discharge of effluents and other harmful substances as well as control of other forms of environmental pollution.
4	Factories Act, Cap F1, LFN 2004	Provide a legal framework for the regulation of safety standards for the operation of factories in Nigeria; Set out minimum standards for clean and conducive working environments; Protect of workers exposed to occupational hazards; To provide for factory workers and a wider spectrum of workers and other professionals exposed to occupational hazards, but for whom no adequate provision had been formerly made; To make adequate provision regarding the safety of workers to which the Act implies; and To impose penalties for any breach of its provision.
5	Nigerian Urban and Regional Planning Act CAP. N138 L.F.N. 2004	Facilitates the preparation and implementation of development plans and planning schemes and creating a better environment for living, working and recreation **Relevant Sections are:** *Section 30*: Requirement for a building plan by a registered architect before commencement of any building project; *Section 39:* Making the acceptance of a land development plan contingent on proof it would not harm the environment or constitute nuisance to the community; and *Section 74*: Ensures effective control in special cases like wasteland
6	Harmful Waste (Special Criminal Provisions, etc.) Act 1988	Criminalizes all activities relating to the purchase, sale, importation, transit, transportation, deposit, storage of harmful wastes; and By this Act it is unlawful to dump harmful waste in the air, land or waters of Nigeria
7	Employee's Compensation Act 2010	Makes provision for compensation for any death, injury, disease or disability arising out of or in the course of employment; and for related matters
8	Child Rights Act (2003)	The Act was "the child shall be protected against all forms of neglect, cruelty and exploitation. He/she shall not be admitted to employment before an appropriate minimum age 18 in Nigeria); he/she shall in no case be caused or permitted to engage in any occupation or employment which would prejudice his/her health or education, or interfere with his/her physical, mental or moral development."

2.3 Relevant National Regulations

Table 3 below shows Regulations relevant to the MPA as well as their objectives/description.

Table 3.3: Environmental Regulations Relevant to the MPA

S/N	REGULATION	OBJECTIVE(S) AND RELEVANCE
1	National Environmental (Permitting and Licensing System) Regulations, 2009. S. I. No. 29.	The provisions of this Regulation enable consistent application of environmental laws, regulations and standards in all sectors of the economy and geographical regions.
2	National Environmental (Sanitation and Wastes Control) Regulations, 2009. S.I. No. 28	To provide the legal framework for the adoption of sustainable and environment friendly practices in environmental sanitation and waste management to minimize pollution. *Particularly relevant in the case of CWM and HCWM and all other waste.*
3	National Environmental (Noise Standards and Control) Regulations, 2009. S.I. No 35	To ensure tranquility of the human environment or surrounding and their psychological well-being by regulating noise levels. *Particularly relevant in the case of operation of generator sets and civil works*
4	National Environmental (Surface and Groundwater Quality Control) Regulations, 2010. S.I. No. 22	To restore, enhance and preserve the physical, chemical and biological integrity of the nation's surface waters, and to maintain existing water uses. *Particularly relevant in the case of CWM and HCWM*
5	National Environmental (Soil Erosion and Flood Control) Regulations, 2011. S. I. No. 12.	To check all earth-disturbing activities, practices or developments for nonagricultural, commercial, industrial and residential purposes. *Particularly relevant in the case of civil works and WM. Also, important particularly to south western south eastern states like Abia, Enugu, Imo, Anambra and Bayelsa states where erosion is an environmental issue*
6	National Environmental (Watershed, Mountainous, Hilly and Catchments Areas) Regulations, 2009. S. I. No. 27.	To protect of water catchment areas. All land users must observe and respect the carrying capacity of the land; carry out measures for soil conservation and for the protection of water catchment areas using the best available environmentally friendly technologies to minimize significant risks/damage to ecological and landscape aspects. *Particularly relevant in the case of civil works and WM*
7	National Environmental (Desertification Control and Drought Mitigation) Regulations, 2011. S. I. No. 13.	To provide an effective and pragmatic regulatory framework for the sustainable use of all areas already affected by desertification and the protection of vulnerable lands. S*pecifically relevant in Borno State where about 50% to 75% of land is lost due to desertification.*
8	National Environmental (Control of Bush/Forest Fire and Open Burning) Regulations, 2011, S.I. No. 15	To prevent and minimize the destruction of ecosystem through fire outbreak and burning of any material that may affect the health of the ecosystem through the emission of hazardous air pollutants. *Particularly relevant but not limited to burning of HCW and construction waste.*

9	National Environmental (Control of Vehicular Emissions from Petrol and Diesel Engines) Regulations, 2011. S. I. No. 20.	The purpose of these regulations is to restore, preserve and improve the quality of air. The standards contained in this regulation provide for the protection of the air from pollutants from vehicular emission and ensuring regular emission testing and maintenance of automobiles operating the road way. *Relevant considering possible transportation and distributions of vaccines, wastes and the operations of generating sets.*
10	National Environmental (Surface and Groundwater Quality Control) Regulations, 2011. S. I. No. 22.	To restore, enhance and preserve the physical, chemical and biological integrity of the nation's surface waters, and to maintain existing water uses. *Particularly relevant but not limited to HCW*
11	National Environmental (Construction Sector) Regulations, 2011. S. I. No. 19.	To prevent and minimize pollution from construction, decommissioning and demolition activities to the Nigerian environment. *Particularly relevant should there be civil works.*
12	National Environmental (Air Quality Control) Regulations, S. I. No 64, 2014.	To provide for improved control of the nation's air quality to such an extent that would enhance the protection of flora and fauna, human health and other resources affected by air quality deteriorations. *Particularly relevant in the case of civil works and HCW treatment*
13	National Environmental (Hazardous Chemicals and Pesticides) Regulations, S. I. No 65, 2014.	To protect human health and the environment from the harmful effects of hazardous chemicals and pesticides, and other agro-chemicals. It also contributes to the sustainable development. *Particularly relevant due to LLINs*
14	National Environmental (Construction Sector) Regulations, S. I. No. 19, 2011.	The purpose of these Regulations is to prevent and minimize pollution from Construction, Decommissioning and Demolition Activities to the Nigerian Environment. *Particularly relevant due to civil works.*

2.4 Institutional Framework

2.4.1 Relevant Ministries

Table 3.4 shows the relevant federal and state ministries and their functions

Table 3.4 Relevant Ministries and their functions

S/N	MINISTRY	RELEVANT FUNCTIONS AND RESPONSIBILITIES
1	Federal Ministry of Environment (FMEnv)	Advise the Federal Government on National Environmental Policies and priorities, the conservation of natural resources and sustainable development and scientific and technological activities affecting the environment and natural resources; Cooperate with Federal and State Ministries, Local Government, statutory bodies and research agencies on matters and facilities relating to the protection of the environment and the conservation of natural resources; Prescribe standards for and make regulations on water quality, effluent limitations, air quality, atmospheric protection, ozone protection, noise control as well as the removal and control of hazardous substances; Monitoring and enforcing environmental protection measures; ▪ Enforcing international laws, conventions, protocols and treaties on the environment; ▪ Prescribing standards for and making regulations on air quality, water quality, pollution and effluent limitations, atmosphere and ozone protection, control of toxic and hazardous substances; and

		Promoting cooperation with similar bodies in other countries and international agencies connected with environmental protection. Enforcing international laws, conventions, protocols and treaties on the environment; Prescribing standards for and making regulations on air quality, water quality, pollution and effluent limitations, atmosphere and ozone protection, control of toxic and hazardous substances; and Promoting cooperation with similar bodies in other countries and international agencies connected with environmental protection.
2	State Ministries of Environment (SMEnv)	Liaison with the FMEnv in securing a healthy environment adequate for good health and wellbeing; Liaison with government bodies, private and international organizations in the performance of environmental functions including environmental education/awareness to the citizenry; Ensuring and preserving bio-diversity, conservation and preservation of a sustainable ecosystem; Ensuring institutional reforms for effective environmental management; Initiating, formulation, execution and monitoring of all issues relating to climate change towards mitigating the negative impact of climate change; Conserving, protecting and enhancing the environment, the ecosystem and ecological processes; Reducing land degradation, and developing alternative and renewable energy; Raising of public awareness and promotion of understanding of linkages between environment and development; Co-ordination of environmental protection and natural resources conservation for sustainable development; Supervision of other relevant environmental agencies; Monitoring and evaluation of EIAs and other environmental studies for development projects within their various respective states; Supervising of projects on major channels being funded by World Bank; Initiation, formulation, execution and monitoring of all issues relating to climate change towards mitigating the negative impact of climate change; Supervision and management of donor agencies assisted projects; and Environmental monitoring related to flood, erosion control, pollution control and environmental health.
3	Federal Ministry of Health (FMoH)	Providing a people-oriented and sustainable health care delivery system in the State; ▪ Introducing community operational Research for Health; Providing a people-oriented and sustainable health care delivery system in the State; focus on preventive health service with emphasis on the major elements of primary Health Care System; Focusing on Primary the health care system in order to improve management and ensure community participation in planning and administration of health activities; Improving human resource for health; and Focusing on preventive health service with emphasis on the major elements of primary Health Care System and targeted interventions to convert the spread of communicable and non-communicable diseases.

4	14 participating States' Ministries of Health (SMoH)	Improving the health status and socio-economic advancement of individuals in their respective 14 states using preventive, promotive and curative approaches; Establishing health institutions in under-served areas and expand existing health centres across their respective states; Maintaining existing training Institutions for health workers in their respective states; Ensuring that satisfactory standards are maintained in both government and private health institutions throughout their respective states; Providing essential infrastructure in all public health institutions in the state for efficient, qualitative, affordable and effective health services; Ensuring adequate provision of essential drugs, equipment and other materials for health care delivery services in their respective states; Ensuring good working environment and reduce occupational hazards in both public and private sectors; and Assisting in strengthening the capacity of local governments to manage health programs and plans monitoring and evaluation of health institutions and the control of eradication of specific preventable diseases, improvement of access to reproductive/sexual health services.
	14 participating State's Ministry of women affairs and Social Development	The Federal Ministry of Women Affairs and The FMWASD was established by Decree No. 30 of 1989. The broad mandate of the Ministry is to advise the government on gender and children issues and issues affecting persons with disabilities and the elderlies. The Ministry also initiates policy guidelines and leads the process of ensuring gender equality and mainstreaming at both the national and international levels. The 14 states have a replica of the Federal Ministry in their States and they do the same functions in the States.
	14 participating States Environmental Protection Agencies.	Advising the State Government on all environmental management policies. Giving direction to the affairs of the Agency on all environmental matters. Preparing periodic Master plan to enhance capacity building of the agency and for the development and natural resources management. Carrying out public enlightenment and educating the general public on sound methods of environmental sanitation and management. Carrying out appropriate test on insecticides, herbicides and other agricutural chemicals Monitoring and controlling disposal of solids, gaseous and liquid wastes generated by both government operations. Setting, monitoring and enforcing standards and guidelines on vehicular emission. Surveying ad monitoring surface underground and potable water, air land and soil environments in the state to determine pollution level in them and collect baseline data. Promoting co- operation in environmental science and technologies with similar bodies in other countries international bodies connected with the protection of the environment; and Cooperating with the federal, state and local Governments, statutory Bodies and Research Agencies on matters and facilities relating to environmental protection

	14 participating State Primary Health Care Boards (SPHCBs)	1. Advising the State Government on all environmental management policies. 2. Giving direction to the affairs of the Agency on all environmental matters. 3. Preparing periodic Master plan to enhance capacity building of the agency and for the development and natural resources management. 4. Carrying out public enlightenment and educating the general public on sound methods of environmental sanitation and management. 5. Carrying out appropriate test on insecticides, herbicides and other agricutural chemicals 6. Monitoring and controlling disposal of solids, gaseous and liquid wastes generated by both government operations. 7. Setting, monitoring and enforcing standards and guidelines on vehicular emission. 8. Surveying ad monitoring surface underground and potable water, air land and soil environments in the state to determine pollution level in them and collect baseline data. 9. Promoting co- operation in environmental science and technologies with similar bodies in other countries international bodies connected with the protection of the environment; and 10. Cooperating with the federal, state and local Governments, statutory Bodies and Research Agencies on matters and facilities relating to environmental protection

2.5 Institutional Arrangement

The Federal Ministry of Health (FMOH) is responsible for the overall policy formulation and program coordination for the MPA as a whole. It will serve as the responsible line ministry for the program and provide policy direction for achievement of targets set by the MPA, monitor progress towards these results and use these to inform policy and programmatic adaptations as the MPA evolves, including requesting for potential restructuring of the Project if needed due to changing situation on the ground (as included the World Bank guidelines).

Under the guidance of the Honorable Minister of Health (HMH), the FMoH is responsible for overall program coordination and policy formulation. In recognition of the challenges of limited coordination between NMEP and NPHCDA at the Federal Level, the Federal Ministry of Health will facilitate coordination between the two implementing agencies as part of the overall coordination role of the Federal Ministry of Health through the Department of Health Planning Research and Statistics for the achievement of targets. It will also monitor progress towards programme results and use same to inform policy and programmatic adaptation of the MPA working through the National Steering Committee (NSC). The DHPRS will facilitate the implementation of the functions of the National Steering Committee. Overall program review and coordination meeting will hold at least quarterly.

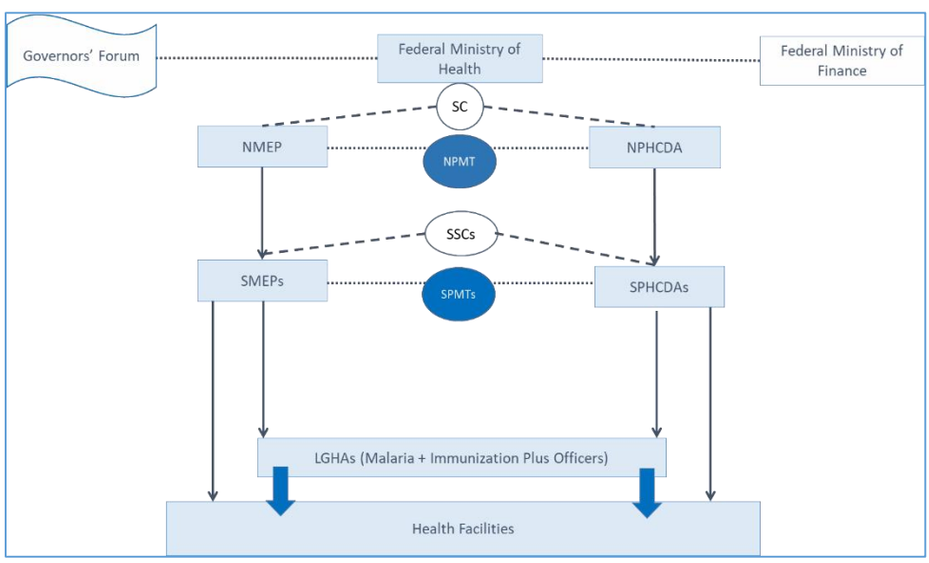


Figure 1:Institutional arrangement for Phase I of MPA-IMPACT

2.5.1 Federal Level

In Phase I, the MPA will strengthen existing institutional structures by anchoring the malaria component in NMEP within the FMoH while anchoring the immunization plus component within the NPHCDA, consistent with their existing respective mandates. The NMEP and its state counterparts (SMEPs) will be responsible for program implementation of malaria activities while the NPHCDA and its state counterparts (SPHCBs) will be responsible for implementing immunization plus activities.

The National Steering Committee (NSC)

A National Steering Committee shall be constituted for the project and will be responsible for the following:

1. Ensuring Inter-governmental coordination and policy alignment for the program
2. Playing an overall oversight role for project planning, and management
3. Ensuring adequate coordination and timely implementation of the project by the Managers at the various levels of government
4. Approving Project Work Plans and Procurement Plans
5. Proactively address critical issues that could hinder project implementation
6. Meeting at least twice per year to oversee coordination, knowledge sharing and achievement of the PDOs and related results.
7. Receive and review Interim Financial Report (IFR) and programmatic report from the implementing Agencies twice a year for onward transmission to the Federal Ministry of Finance.
8. Receive and review yearly financial statement for onward transmission to the FMoF.

The membership of the Committee comprises of the following:

1. Minister of Federal Ministry of Health (Chairman)
2. Minister of State, Federal Ministry of Health (Chairman; Alternate)
3. Permanent Secretary, Federal Ministry of Health
4. Executive Director, NPHCDA
5. National Coordinator, NMEP
6. Director-General, Nigeria Centre for Disease Control (NCDC),
7. Director-General, Nigeria Institute of Medical Research (NIMR)
8. Director-General, Nigeria Institute of Pharmaceutical Research and Development (NIPRD)
9. Director, Department of Health Planning, Research and Statistics (Member and Secretary of the committee)
10. Director, Department of Public Health (DPH)
11. Director, Department of Food & Drug Services (DFDS)
12. Director, Department of Family Health (DFH)
13. Director, International Economic Relations Department (IERD), Federal Ministry of Finance, Budget and Planning
14. Honorable Commissioners, Participating State Ministries of Health
15. Honorable Commissioners, Participating State Ministries of Finance
16. Executive Secretaries, Participating State Primary Health Care Boards (SPHCBs)
17. Representatives of Development partners
18. Representatives of Civil Society Organizations (CSOs)
19. Other agencies as invited by the Honorable Minister of Health.

The NSC will hold meetings at least twice a year but may hold extraordinary/emergency meetings as necessary if convened by the Chairman. The quorum required is a minimum of ten (10) members per meeting with representation from both malaria and immunization plus components. Notice of meetings to be provided at least 2 weeks before the scheduled date (except for extraordinary/emergency meetings).

Progress on achieving the PDO will be reported annually to the Governors' Forum (regularly scheduled meetings between 36 state governors for peer review and formation of development agenda for the states) to enhance ownership and accountability. The National Project Management Team (NPMT) will be responsible for securing a slot for the Honourable Minister of Health to present progress on the IMPACT project to the Governors' Forum once/twice per year (i.e., following NSC meetings).

Federal Ministry of Finance

The Federal Ministry of Finance (FMoF) will provide overall financial oversight to the project, including:

1. Streamlined and timely fund flow to project implementing agencies against approved annual work plans.
2. Facilitating approval of waivers and no objections on antimalarial commodities.

3. Sign Subsidiary Loan Agreements with benefiting States Ministries of Finance

NMEP Project Implementation Unit (PIU)

The Project Implementation Unit (PIU) housed in the NMEP will be in charge of the overall Project implementation. The NMEP will provide specifications for anti-malaria commodities to be procured by the program and be responsible for the procurement of Long-Lasting Insecticide Treated Nets. NMEP will also provide support to states on the recruitment of NGOs.

The NMEP, in collaboration with its partners, will conduct capacity assessments of states. The capacity assessment will inform the capacity development efforts of technical assistance. Along with the World Bank team, the NMEP will leverage its National Malaria Operations Research Agenda (NMORA) to inform the learning agenda for the malaria component.

The PIU will be headed by a full-time manager to serve as the full-time Project Manager for Malaria component of the IMPACT project. The Project Manager shall be appointed by the National Coordinator, National Malaria Elimination Program. The NMEP PIU will be made up of the following:

1. Program Manager
2. Malaria Case Manager
3. Integrated Vector Management Officer
4. Procurement and Supply Chain Management Specialist
5. Behavior Change Communication Specialist
6. Monitoring and Evaluation (M&E) Specialist
7. Environmental Safeguard Specialist
8. Social Safeguard Specialist
9. Financial Management Specialist
10. Internal Auditor
11. Contract management specialist (Where there is no contract officer at both national and state, NMEP will procure a short-term specialist/consultant who is vast in the area to provide support to the national and the state. The financing will be the responsibility of NMEP.)

Members of the PIU may be seconded from FMoH where available or recruited as consultants where such skills are lacking in the FMoH. The Project Accountant, Internal Auditor and the finance officer are deployed from the Federal Projects Financial Management Department (FPFMD).

The NMEP PIU will have the following roles and responsibilities:

1. Ensure that Project is implemented by all implementing agencies in accordance with the negotiated Financing Agreement for IMPACT-Component 1 (and joint responsibility with NPHCDA for Component 3) and the PIM.
2. Develop the PIU annual work plan and submit to the NSC for approval before submitting to the WB for no objections before November 30 of the preceding year
3. Provide TA to the SMoH PIU for the development and review of annual work plan
4. Oversee the implementation of all project components by efficiently liaising with FMoH/NPHCDA; State Ministries of Health/SPHCBs responsible for implementation at state level and FMoH for multi-sectoral accountability.
5. Coordinate day-to-day administration of IMPACT-Component 1, and joint administration of component 3 with NPHCDA.
6. Carry out routine monitoring and reporting on project activities and specifically, reporting on project performance one month prior to each bi-annual implementation support mission of the project.
7. Communicate to the FMoF and the World Bank on six-monthly non-governmental organizations (NGO) performance results for verification by IVA
8. Co-host and participate in the bi-annual implementation support missions of the project
9. Ensure malaria control states' compliance with the Health Care Waste Management Plan for the project and reporting on the same.
10. Ensure malaria control states' compliance with the Citizen Engagement and Grievance Redress Mechanisms established for the project and reporting on the same.
11. Ensure malaria control states' compliance with the mitigation plan for potential gender-based violence under the project.
12. Submit Interim Financial Report (IFR) and programmatic report twice a year through the NSC to the WB.
13. Submit yearly financial statement through the NSC to the FMoF.
14. Submit yearly audit report through the NSC to the WB.

NPHCDA Project Implementation Unit (PIU)

The NPHCDA will be responsible for implementing immunization plus activities. Like the Polio Eradication Project, the Government, through NPHCDA, will have agreements with UNICEF and WHO on TA and routine immunization operations support, as well as vaccine procurements under the Immunization Plus component.

The NPHCDA PIU will have the following personnel:

- A designated Program Manager supported by case managers
- RI Case Manager
- RMNCH+ Case Manager
- Behavior Change Specialist,
- Monitoring and Evaluation Specialist,
- Logistics and Supply Chain Specialist,
- Environmental safeguard specialist
- Social Safeguards Specialists,
- Financial Management Specialist,
- Internal Auditor, and
- Procurement Specialist.

The NPHCDA PIU will have the following roles and responsibilities:

- Ensure that Project is implemented by all implementing agencies in accordance with the negotiated Financing Agreement for IMPACT-Component 2 (Component 3 jointly with NMEP) and the PIM.
- Develop the PIU annual work plan and submit to the NSC for approval before submitting to the WB for no objections before November 30 of the preceding year.
- Provide TA to the SPHCB PIUs for the development and review of annual work plan.
- Oversee the implementation of all project components by efficiently liaising with FMoH/NPHCDA; State Ministries of Health/SPHCBs responsible for implementation at state level and FMoH for multi-sectoral accountability.
- Coordinate day-to-day administration of IMPACT-Component 2, and joint administration of Component 3 with NMEP.
- Carry out routine monitoring and reporting on project activities and specifically, reporting on project performance one month prior to each bi-annual implementation support mission of the project.
- Co-host and participate in the bi-annual implementation support missions of the project.
- Ensure the immunization plus states' compliance with the Health Care Waste Management Plan for the project and reporting on the same.
- Ensure the immunization plus states' compliance with the Citizen Engagement and Grievance Redress Mechanisms established for the project and reporting on the same.
- Ensure the immunization plus states' compliance with the mitigation plan for potential gender-based violence under the project.
- Submit Interim Financial Report (IFR) and programmatic report twice a year through the NSC to the WB.
- Submit yearly financial statement through the NSC to the FMoF.
- Submit yearly audit report through the NSC to the WB.

1. The National Project Management Team (NPMT)

A National Project Management team will be set up to be co-led by NMEP and NPHCDA. The NPMT will ensure close collaboration and partnership for the areas of synergy and activities that cut across both PIUs. These include Social and behavior change communication (SBCC), monitoring and evaluation (M&E), learning agenda, and community engagement. PMT will help mitigate implementation risks and inefficiencies by strengthening information flow and collaboration between NMEP and NPHCDA, particularly in contracting firms for M&E, TA and SBCC.

The following principles will guide the operations of the NPMT

1. All joint activities (under component 3) must receive a formal endorsement of the MPA PMT before a World Bank no objection can be issued.
2. For each joint activity, a lead-agency will be agreed and will be the primary focal point for the activity while ensuring adequate input from the secondary PIU for that activity.

The following are the roles and responsibilities of the NPMT

1. Secures a slot for the Honorable Minister of Health to present progress on the MPA to the Governors' Forum once/twice per year (i.e., following SC meetings).
2. Strengthen the implementation of the third component, Knowledge for Change, and other areas of synergy.

3. Mitigate implementation risk by strengthening information flow and collaboration between NMEP and NPHCDA, particularly in contracting firms for M&E, TA and SBCC.
4. Participates in the joint mission of the WB.

2.5.2 State Level

IMPACT Project governance structure at the state level mirrors the set up at the federal level. A state steering committee will maintain overall oversight while the Project Implementation units – SMEP and SPHCBs, will be responsible for the day-to-day implementation of the project.

State Steering Committee (SSC)

The lMPACT project will be under the supervision of a State Steering Committee (SSC) chaired by the Honorable Commissioner of Health and will include representation from state ministries of health and finance, SPHCDBs, relevant development partners and CSOs. The DHPRS of the State Ministry of Health will stand as the secretary of the committee. The composition of the SSC may change in subsequent phases to ensure all relevant ministries and agencies are represented.

The SSC will ensure inter-governmental coordination and policy alignment for the Program and will meet at least twice per year to oversee coordination, knowledge sharing and achievement of the PDOs and relate results.

Other responsibilities of the SSC include;

1. Ensure Intergovernmental coordination and policy alignment for the program
2. Provide overall monitoring of project implementation
3. Ensure adequate coordination and timely implementation of the project by the Managers at the various levels of government
4. Approve Project Work Plans
5. Proactively address critical issues that could hinder project implementation
6. Meet at least twice per year to oversee coordination, knowledge sharing and achievement of the PDOs and related results.

SMEP State Project Implementation Unit

SMEPs domiciled in the SMoHs will collaborate with SPHCBs within their existing mandates in the provision of primary healthcare treatment and diagnosis of malaria. This collaboration between the two state-level entities, will help strengthen management of malaria and other related communicable diseases, including primary healthcare-related preventive services. All other non-primary healthcare-related activities for malaria will be the responsibility of SMEPs with guidance and supervision from the NMEP. SMEPs will also be responsible for contracting NGOs related to the Malaria Control Component. The SMEPs will designate a PIU, led by the SMEP program manager, to oversee the malaria activities of the Project.

The SMEP PIU will be made up of the following:

- Program Manager
- Malaria Case Manager
- Integrated Vector Management Officer
- Procurement and Supply Chain Management Specialist
- Behavior Change Communication Specialist
- Monitoring and Evaluation (M&E) Specialist
- Environmental Safeguard Specialist
- Social Safeguard Specialist
- Financial Management Specialist
- Internal Auditor

The SMEP PIUs' will have the following responsibilities:

  - Ensures that the project is implemented in accordance with the negotiated Financing Agreement for IMPACT (Component 1 in particular) for its deliverables and the PIM.
  - Develops annual work plan and budget, with support from NMEP, and secures its approval from:
    - SSC in a timely manner
    - World Bank before November 30 of the preceding year

- Coordinates day-to-day administration of IMPACT Project implementation in the state.
- Routinely monitors and reporting on project activities to NMEP PIU and specifically, reporting on project performance one month prior to each bi-annual implementation support mission of the project.

- Competitively recruits and manages the implementing NGO(s) from the shortlist provided by the NMEP PIU.
- Ensures compliance of NGOs with the Health Care Waste Management Plan for the project.
- Ensures compliance of NGOs with the Citizen Engagement and Grievance Redress Mechanisms established for the project.
- Ensures compliance with the mitigation plan for potential gender-based violence under the project.
- Communicate NMEP PIU and the World Bank on:
    - Six monthly NGO performance results for verification by IVA
    - Compliance with Health Care Waste Management Plan, citizen engagement and grievance redress mechanism and mitigation plan for potential risks associated with gender-based violence
- Co-hosts and participates in the bi-annual joint implementation support missions of the project.
- convene and fund monthly review meeting with the NGO for discussing reports of their activities.
- Participates and ensures NGOs participate in the state monthly coordination meeting
- Submits Interim Financial Report (IFR) and programmatic report twice a year to the WB through NMEP PIU.
- Submits yearly financial statement to the State Ministry of Health (SMoF).
- Submits yearly audit report to the WB through NMEP PIU.

SPHCB State Project Implementation Unit

The SPHCB PIUs will lead the implementation of immunization plus activities in each of the states. Like the federal PIU, the state PIU will be led by the SPHCB program manager, to oversee the immunization plus component of the Project. Team members will comprise

- Program Manager
- Case Manager, RMNCAH+N
- Case Manager, RI
- Behavior Change Specialist,
- Monitoring and Evaluation Specialist,
- Environmental Safeguard Specialist
- Social Safeguards Specialists,
- Financial management specialist, and
- Procurement specialist.
- Internal Auditor
- Logistics and Supply Chain Specialist

The PIU will be responsible for the day to day oversight of all the project activities in their states and will collaborate with the SMEPs and other development partners involved in delivering health services in the state.

The SPHCDB PIUs' will have the following responsibilities:

Ensures that the project is implemented in accordance with the negotiated Financing Agreement for IMPACT (Component 2 in particular) for its deliverables and the PIM.

- Develops annual work plan and budget, with support from NPHCDA, and secures its approval from:
    - SSC in a timely manner
    - World Bank before November 30 of the preceding year
- Coordinates day-to-day administration of IMPACT Project implementation in the state.
- Routinely monitors and reporting on project activities to NPHCDA PIU and specifically, reporting on project performance one month prior to each bi-annual implementation support mission of the project.
- Ensures compliance of project facilities with the Health Care Waste Management Plan for the project.
- Ensures compliance of project facilities with the Citizen Engagement and Grievance Redress Mechanisms established for the project.
- Ensures compliance with the mitigation plan for potential gender-based violence under the project.
- Communicate NPHCDA PIU and the World Bank on:
    - Compliance of LGHAs and Project facilities with DFF implementation and supportive supervision activities
    - Compliance with Health Care Waste Management Plan, citizen engagement and grievance redress mechanism and mitigation plan for potential risks associated with gender-based violence

- Co-hosts and participates in the bi-annual joint implementation support missions of the project.
- Submits Interim Financial Report (IFR) and programmatic report twice a year to the WB through NPHCDA PIU.
- Submits yearly financial statement to the State Ministry of Health (SMoF).
- Submits yearly audit report to the WB through NPHCDA PIU.
- Ensure timely disbursement of investment credit and quarterly funds to Health facilities
- Other roles and responsibilities as outlined in the DFF user manual.

2.5.3 Local Government Area Level

Local Government Health Authority (LGHA)

At the LGA level, the PHC Coordinator working together with the malaria officers, Routine immunization, and Maternal and child health officers as the case may be, will be responsible for the day-to-day management of the project activities.

The LGHA will be responsible for:

- Conducting supportive supervision to PHCs
- Conducting microplanning of malaria, and immunization plus activities at the LGA level
- Conducting monthly data validation
- Using the results of LQAS to improve service delivery
- General oversight on the implementation of the project in the LGA
- Publicize methods of providing beneficiary feedback through a grievance redress process
- Oversee the overall procurement, financial management, environmental and social safeguard activities within the LGA health system
- Conduct monthly meetings with heads of health facilities
- Develop an annual workplan for the LGHA
- For DFF LGAs, develop a quarterly business plan for the LGHA
- Support DFF health facilities in development of quarterly business plans
- Conduct quality assessment of all health facilities participating in the DFF every six months
- Review monthly financial statements and conduct periodic financial management review of health facilities

Health facility Management committee

<u>DFF Management</u>

- Develop quarterly business plans that outline activities to increase the coverage and the quality of services as well as estimated revenue and cost
- Complete the patient data register in legible way, adhering to the norms for Primary and Secondary Register Column Headers as described in the NHMIS
- Ensure availability of all data recording registers and other management tools at the HF, and ensure that such documents are accessible to the SPHCB/B, LGHA and research companies
- Ensure complete transparency and access to information relating to the use of funds generated through DFF and all other sources
- Allocate all the revenues generated through DFF and revenues from other sources to operational expenditure based on the business plan
- Display a service charter stating services provided in the health facility and service commitment
- Accurate bookkeeping and submission of monthly financial statements to the LGHA for review
- Compliance to project guidelines and protocols

NB: Funds gotten from DFF MUST NOT be used for staff performance bonus.

<u>Procurement and Prescription of Drugs and Medical Consumables in DFF Health Facilities</u>

- Procure all drugs and medical consumables from Certified Distributors, using the list of the Certified Distributors in the State issued by the Pharmacists Council of Nigeria (PCN) and the SMOH
- Only procure essential drugs (as listed in the approved essential drug list) and medical consumables in generic form
- Keep records of drugs and consumables procured accessible at the pharmacy, and an in-depth audit will need to show a match of stock-in and stock-out

- Ensure that all drugs and medical consumables prescribed in the HF are prescribed through a prescription sheet, which shall be maintained and accessible at all times for control at the pharmacy
- Make sure that the prescriptions follow protocols (types of generics and recommended quantities) in the treatment guidelines, and indicate (a) the name and age of the patient; (b) the date; (c) clearly legible listed generic drugs with quantities; (d) name and signature of the prescriber
- List all drugs and medical consumables available at the health facility and make the list accessible at the public notice board and at the pharmacy. It should: (a) list the unit price; (b) list the number of items for a typical course; and (c) the unit price (the 'retail price') should not exceed the wholesale price + a reasonable mark-up agreed within the Facility RBF Committee.

Other Responsibilities

- Avoid any activities in contradiction with national health policies and/or accepted medical and professional ethics, including main staff professional licensing/permits
- Inform the LGHA or HMB at the LGA of any change in HF personnel and equipment at the facility that could hamper its capability to render the Services
- Report in writing any case of fraud or attempted fraud committed by HF staff members to the SPHCB, and the LGHA or HMB

Ward Area committee on Health

The Ward area committee on health is conceived as strategy for encouraging community participation in health programs and facilitating access to primary health care services. Operating at the grassroot, the committee will ensure ownership by members of the community of all primary health issues such as health promotion and community mobilization, maternal and newborn child health services, nutrition, control of communicable and non-communicable diseases and sexual and reproductive health. They will work with health facilities, CHIPS and other stakeholders to facilitate community participation.

CHAPTER THREE: PROJECT DESCRIPTION

3.0 Project Development Objective

In supporting the Nigeria Human Capital Vision 2030, the Program, with other complementary child health investments, is expected to reduce under-five mortality from 132 to 79 per 1,000 births by 2030. Cutting U5MR by 40 percent in 10 years is a stretch goal but is achievable. Achieving a 40 percent decline in U5MR in 10 years would represent the achievement of the top 25 percent of LMCs over the last 25 years and would be much faster than the 16 percent decline observed in Nigeria during the last decade (2008–2018). Given global experience, it is not reasonable to expect Nigeria to achieve a faster rate of decline in U5MR. **The overall objective of the program is to reduce under-five mortality rate in program areas.**

Ultimately, the Program will contribute towards significantly decreasing U5MR, reducing the burden of malaria particularly among the poor and vulnerable populations, reaping the benefits of routine vaccination, and improving neonatal health.

This would be achieved through three phases of the program with each having a phase objective

3.1 PDO Statement

The PDO of the first phase (IMPACT) of the MPA is to improve the utilization and quality of immunization plus and malaria services in selected states. Immunization plus services refer to provision of immunization, maternal, child, and neonatal services in selected states.

The PDO builds on objectives in the National Strategy for Immunization and Primary Health Care System Strengthening, the National Malaria Strategic Plan, and the overarching RMNCAH-Malaria Integration Strategy currently being rolled out by the FMoH.

3.2 PDO Level Indicators

Ultimately, the project will contribute toward significantly decreasing U5MR, reducing the burden of malaria particularly among the poor and vulnerable populations, reaping the benefits of routine vaccination, and improving neonatal health.

1. Under-five mortality rate (number) (PrDO Indicator to which the first project will contribute)
2. Percentage of children under five sleeping under Long-Lasting Insecticide Nets (LLINs) the night prior to the survey (disaggregated by gender)

3.3 Components of the Program

Table 4: Project Components

PROJECT COMPONENTS	SUB COMPONENT DESCRIPTION
COMPONENT 1: Malaria Control (US$188.0 million equivalent IDA credit): This component seeks to improve utilization and quality of malaria prevention and treatment activities in Abia, Borno, Ekiti, Imo, Lagos, and Rivers states in addition to support at the federal level.	*Subcomponent 1.1: Strengthening Service Delivery* This subcomponent will finance performance-based contracts with NGOs in participating states and the interventions under this component would Strengthen the capacity of public and private sectors in management of sick children, including those with malaria; Provide LLINs to households and ensure nets are hung and used; Distribute SP to pregnant women (known as intermittent presumptive therapy [IPT]) during antenatal care through both the public and private providers; Provide SMC to under-five children in Borno (Sahelian State); Conduct interpersonal behavior change communication to improve behavior and knowledge in malaria prevention, care seeking, and treatment in communities; and

	Finance the procurement of commodities starting in the third year of the projects and manage the supply chain in collaborations with the State Ministry of Health (SMoH). Finance procurement of preventative and curative medicines and commodities for malaria including LLINs, ACTs, RDTs, SP, SPAQ- SMC for Borno (Sahelian state). Develop a policy for the Low Carbon Public Procurement of vehicles, bed nets, malaria chemoprophylaxis, and vaccines. *Subcomponent 1.2: Health Systems Strengthening and Technical Assistance* The Program will support the health system and provide TA at federal and state levels through: Training and technical support to SMEPs on NGO contract management and supervision; (ii) data analysis and performance evaluation of the NGOs; organizing of annual or semiannual results conferences that bring together all states to learn from their implementation experience; and (iv) goods and operating costs to support day-to-day project management. Training and technical support to the NMEP on Contract management and supervision for national-level contracts (see Component 3); Large-scale procurement of LLINs and other antimalarial commodities; TA for private sector engagement to support local manufacturers toward attaining pre-qualification for malaria commodities; TA to support policy engagement and advocacy efforts to address identified policy constraints for local manufacturing, and goods and operating costs to support day-to-day project management. Performance frameworks to foster accountability of SMEPs and the NMEP for results and critical project activities with a view to improve project management practices within state and federal entities. Performance frameworks will be administered biannually and will provide performance bonuses to key members of the NMEP and SMEPs for completion of critical management processes such as proper FM, conducting of supportive supervision, mobilizing of domestic resources, data analysis and utilization, and effective contract management
COMPONENT 2: IMMUNIZTION PLUS: (US$409.3 million equivalent IDA credit) This component will support strengthening service delivery and health systems for immunization, maternal, child and neonatal services and will also finance vaccines and cold chain strengthening.	*Subcomponent 2.1: Strengthening Service Delivery* This subcomponent will finance interventions that will strengthen routine immunization, maternal, child, and neonatal service delivery in the context of strengthening PHC in 12 states (Adamawa, Benue, Ebonyi, Kogi, Kwara, Nasarawa, Oyo, Plateau, Bauchi, Kaduna, Kano, and Sokoto). This component will finance Initial investments to improve the facility quality standards and provide TA to the states to ensure that facilities, LGAs, and states themselves are trained in DFF implementation. Training on standard operating procedures for referral services to improve the link between primary health facilities and secondary hospitals.

	Subcomponent 2.2: Health Systems Strengthening and Technical Assistance This subcomponent will be implemented at the national and state levels and will support the following activities: Provision of TA to national- and state-level PIUs and to LGA PHC Departments in the areas of management, supervision, and data analysis. Finance performance frameworks for key national, state, and LGA-level officials engaged in immunization plus activities. *Subcomponent 2.3: Vaccines, Cold Chain and Logistics* Through this subcomponent, the project will support financing of the procurement of vaccines with an emphasis on new or recently introduced vaccines and strengthening of the cold chain and logistics. support the Government in financing vaccine procurement through United Nations Children's Fund (UNICEF) with an emphasis on PCV, rotavirus vaccine, and meningococcal vaccine. This Component will also finance the construction and expansion of the NPHCDA Cold and Dry Stores in Lagos State
COMPONENT 3: KNOWLEDGE FOR CHANGE (US$52.7 MILLION EQUIVALENT IDA CREDIT)	*Subcomponent 3.1: Strengthening Monitoring and Evaluation Systems* This sub-component will strengthen the M&E systems through Conducting of LQAS surveys to help assess performance at LGA and state levels for four years and also fund an external assessment of the LQAS methodology to draw lessons for implementation in other countries, especially in low coverage settings. Supporting the annual Household and Health Facility Surveys (SMART and NHFS) for the years that there is a funding gap. strengthening routine data used for planning and monitoring by supporting (a) DQA[2] on a sampling basis to improve routine District Health Information System-2 (DHIS-2) reporting accuracy and reliability of supervision scores, (b) resource mapping at the state level, and (c) microplanning activities to derive householdlevel population estimates of under-five children using GIS data and satellite imagery Financing a CHVA to identify the specific health threats faced by the Nigerian population and to ensure most efficient targeting of resources to deal with the risks faced now and into the future. *Subcomponent 3.2: Integrating Social Behavior Change Communications (SBCC) Activities* The goal of this subcomponent is to improve social acceptability of preventive behaviors such as LLIN use and vaccination and of curative behaviors such as seeking care for sick children and seeking skilled providers for delivery and postnatal care. It will finance: Comprehensive SBCC Campaigns: The contracting of a firm to carry out formative research, development, and implementation of a comprehensive SBCC strategy for under-five health using mass media and social media. Another firm will be recruited to support SBCC provision through religious and traditional leaders.

	Beneficiary Feedback and GRM: Regular workshops and focus groups with beneficiaries to understand community perceptions about services. It will also strengthen the Government's GRM ('Servicom') Climate and Health Behavior: Develop and disseminate climate and healthrelated health promotion information. *Subcomponent 3.3: Learning Agenda* This subcomponent will finance/provide, Operations research including process and IEs using both qualitative and quantitative methodologies to understand the impact of these innovations, and how they can be tailored to the country context and implemented in subsequent phases. It will also finance warehouses and cold-store capacity assessment at the state level, and based on findings from this assessment, Phase II may include provisions for any rehabilitation and construction of these buildings
COMPONENT 4: CONTINGENT EMERGENCY RESPONSE COMPONENT (CERC) (US$0 MILLION IDA)	Provide TA to support the design and learning for the Emergency Medical Services (EMS) as part of the implementation of the emergency gateway of the BHCPF finance testing of innovations in poorly performing LGAs as defined by both low Routine Immunization coverage and low levels of SBA.

3.4 Description of Proposed Rehabilitation

The National Primary Health Care Development Agency (NPHCDA) has selected Primary Healthcare Centres (PHCs) where minor renovations will be carried out. These PHCs are located across 14 states namely Adamawa, Bauchi, Benue, Delta, Ebonyi, Kaduna, Kano, Kogi, Kwara, Nasarawa, Oyo, Plateau, Sokoto and Yobe States. The works will involve renovations which will focus on 5 main areas: doors, roofs, floor/tiles, walls and windows. Renovations works of E&S concerns per focus area will involve

1. Doors: The worn our doors will be replaced or fixed during this rehabilitation.
2. Floors: Cracked or worn out floors will be repaired through plastering, tiling or replacement of the worn-off tiles
3. Roof: Leaking roofs or blown out roofs will be fixed together with damaged ceilings will be repaired with zinc and wood where applicable.
4. Walls: Cracks on walls will be repaired and patched with cements before application of paints to cover and make the walls pleasant to look at.
5. Windows: Replacements and repairs of windows, glasses and fixing of burglary proof

CHAPTER FOUR: DESCRIPTION OF THE PROJECT ENVIRONMENT AND ITS SOCIO ECONOMICS

4.0 Introduction

This chapter highlights on the literature, climatic description of the 14 participating States. It also discusses the socio-economic status of some selected host PHCs communities. The Description of the 14 participating States was gotten from literature review and some real time information from Nigeria Metrological Agency, National Population Commission, Nigeria Bureau of Statistics and other government agencies in charge of those data. It also presents an overview of the social and economic attributes of the people living within the catchment area of the communities hosting the participating PHCs in the 14 IMPACT Project participating States. The outcome is based on data collected during the field work exercise. The information covers aspects ranging from gender and age distribution, marital status and literacy levels of the respondent. The chapter also gives a brief glance into the household water and sanitation behavior.

4.1 Description of Adamawa State

Adamawa State, in the North-East geopolitical zone of Nigeria is bordered by Borno state to the northwest, Gombe state to the west, and Taraba state to the southwest, while its eastern border forms part of the national border with Cameroon. It takes its name from the historic emirate of Adamawa, with the emirate's old capital of Yola, serving as the present day capital city. (See figure 2 below for geographical representation).

Figure 2: Map of Adamawa State

The profile of Adamawa State is summarized in the table below;

Table 5: Profile of Adamawa State

State Capital	Yola	www.adspc.ad.gov.ng/adamawa-state/
Slogan	Land of Beauty	www.adspc.ad.gov.ng/adamawa-state/
Location on Nigeria Coordinates	9°20′N 12°30′E	www.en.wikipedia.org/wiki/adamawa_State
Current Governor	Ahmadu Umaru Fintiri	www.adspc.ad.gov.ng/adamawa-state/
Estimated Population	3,178,950 (2006)	www.adspc.ad.gov.ng/adamawa-state/
Main Economic Activities	Agriculture and Mining	www.adspc.ad.gov.ng/adamawa-state/
Weather condition	Average temperature range 15.2-43 oC.	www.adspc.ad.gov.ng/adamawa-state/
Rainfall	Average annual rainfall is 79mm	www.adspc.ad.gov.ng/adamawa-state/
Number of LGA	21	www./adspc.ad.gov.ng/adamawa-state/

4,2 Description of Bauchi State

The state was created on the 3rd February 1976 when the former North-Eastern State was broken up. It originally included the area that is now known as Gombe State, which became a distinct state in 1996. The State occupies an area of 49,596 km^2 and it lies between the coordinates of Latitude 10°30′N 10°′E and 5^0; 10^0 10^0). The state is bounded by Gombe State to the east, Plateau State to the south Kaduna State to the West and Jigawa State to the North. (See figure 3 below for geographical representation).

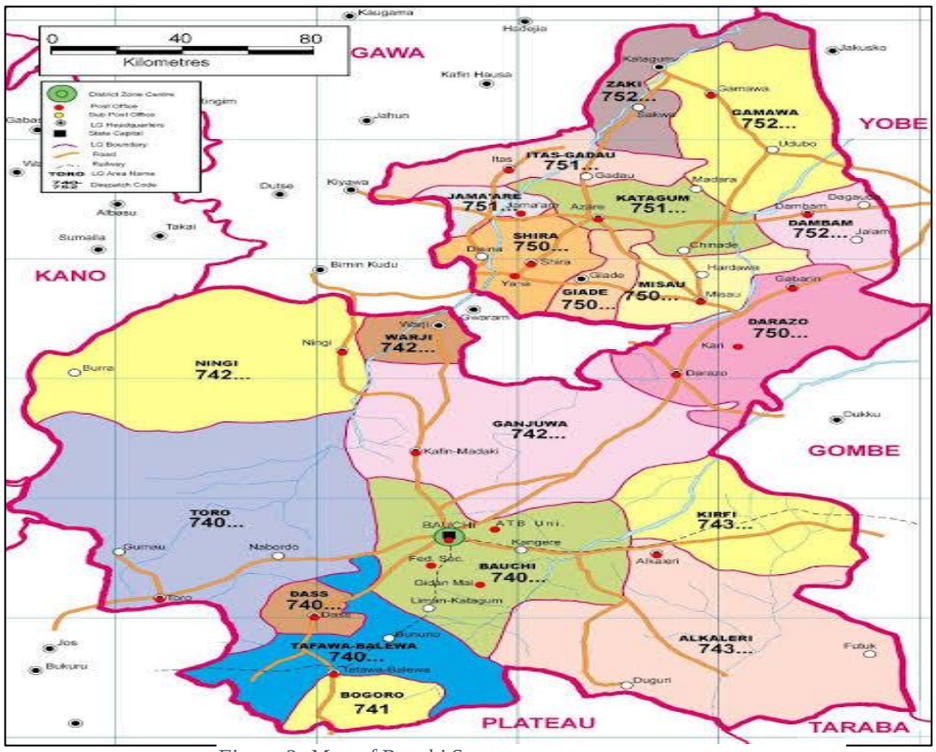


Figure 3: Map of Bauchi State

The profile of the state is as summarised in the table below;

Table 6: Profile of Bauchi State

State Capital	Bauchi	www.bauchistate.gov.ng/about-us/
Slogan	Pearl of Tourism	www.bauchistate.gov.ng/about-us/
Location on Nigeria Coordinates	10°30′N 10°00′E	www.en.wikipedia.org/wiki/Bauchi_State
Current Governor	Bala Mohammed	www.bauchistate.gov.ng/about-us/
Weather condition	Humidly hot in South (rainy season) and hot, dry and dusty (North)	www.bauchistate.gov.ng/about-us/
Rainfall	Average of 1300mm (April) and 700mm (June/July).	www.bauchistate.gov.ng/about-us/
GDP	$17.01 billion (2021)	www.en.wikipedia.org/wiki/Bauchi_State
Number of LGA	20	www.bauchistate.gov.ng/about-us/

4.3 Description of Benue State

The State was created from the former Benue Plateau State on February 3, 1976 when the country was further splitted from 12 to 19 States (Ajaero, 2007). It lies at the Middle-belt Region of Nigeria.The three Zones are as follows: - North Eastern zone **(Zone A)**: - Katsina-Ala, Kwande, Konshisha, Logo, Ukum, Ushongo and Vandeikya LGAs, North Western Zone **(Zone B)**: - Buruku, Gboko, Guma, Gwer East, Gwer West, Makurdi and Tarka LGAs, Southern Zone **(Zone C)**: Ado, Agatu, Apa, Obi, Ogbadibo, Ohimini, Oju, Otukpo, Okpokwu LGA.

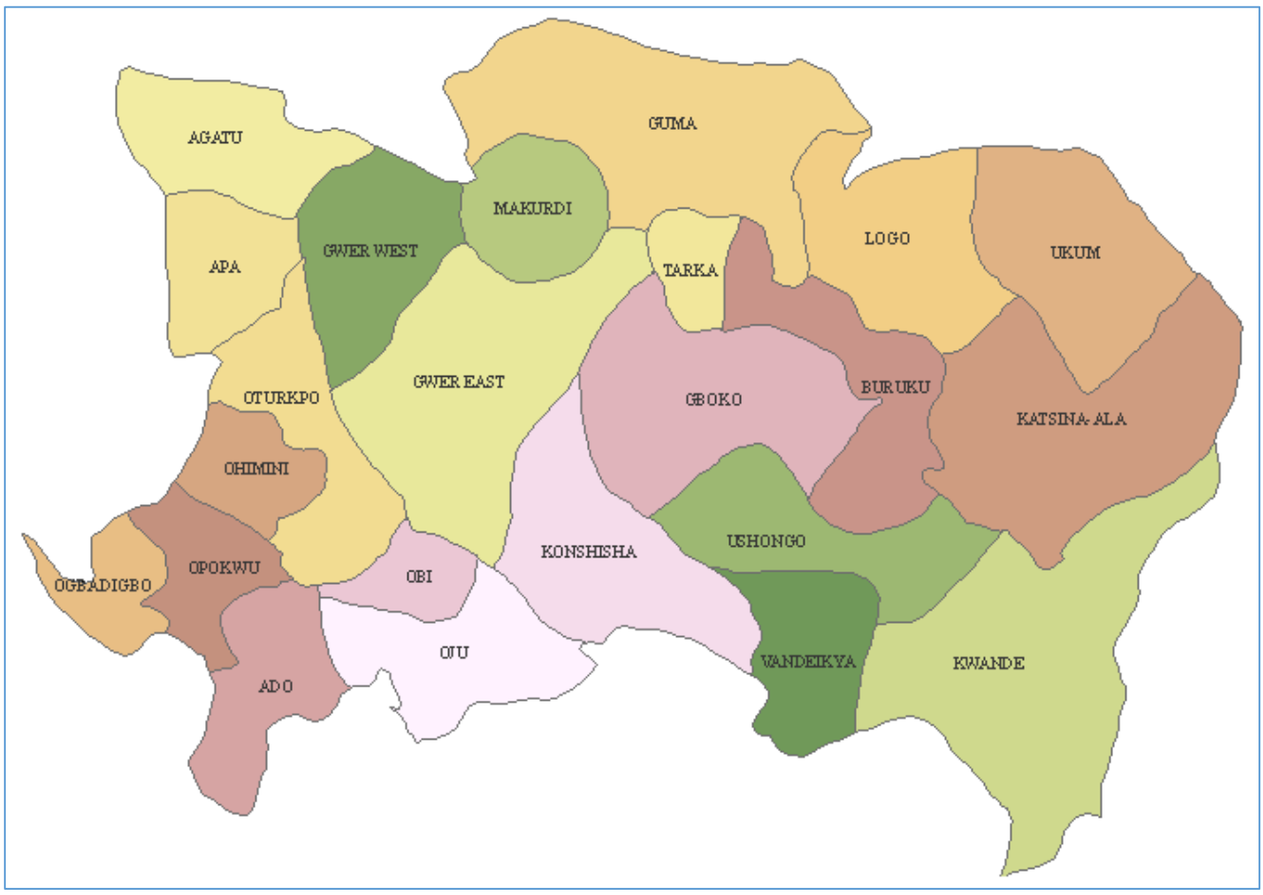


Figure 4: Map of Benue

The profile of Benue State is summarized in the table below;

Table 7: Profile of Benue State:

State Capital	Makurdi	www.benuestate.gov.ng/
Slogan	Food Basket of the Nation	www.benuestate.gov.ng/
Location on Nigeria Coordinates	6°, 25 and 80% North of the equator, and Longitudes 7 and 10' East	www.northcentral.ng/the-region/benue-state/
Current Governor	Rev. Fr. Hyacinth Alia	www.benuestate.gov.ng/
Landmass	30,955 sq. Km	www.nbs.gov.ng
Estimated Population	6,141,300 (people)	www.nationalpopulation.gov.ng
Main Economic Activities	Agriculture and solid minerals	www.north central.ng/the-region/benue-state/
Weather condition	Temperature23°C to 30°C	www.weatherspark.com
Rainfall	Average of 150-1800mm annually	www.northcentral.ng/the-region/benue-state/
GDP	$27.64 billion (2021)	www.en.wikipedia.org/wiki/Benue_State
Number of LGA	23	www.benuestate.gov.ng/

4.4 Description of Delta State

Delta state is located in the southern geopolitical zone of Nigeria, bordered by Edo state to the north, Anambra state to the east, Rivers state to the south east, Bayelsa state to the south, the Bight of Benin of the Atlantic Ocean to the west, and Ondo state to the northwest. On the east and south, the state is bounded by the lower course and delta of the Niger River. Named after the Niger Delta, a large part of which is in the state. The State was formed from the former Bendel State on August 27, 1991 and has its capital as Asaba.(see figure 2 below for state map).

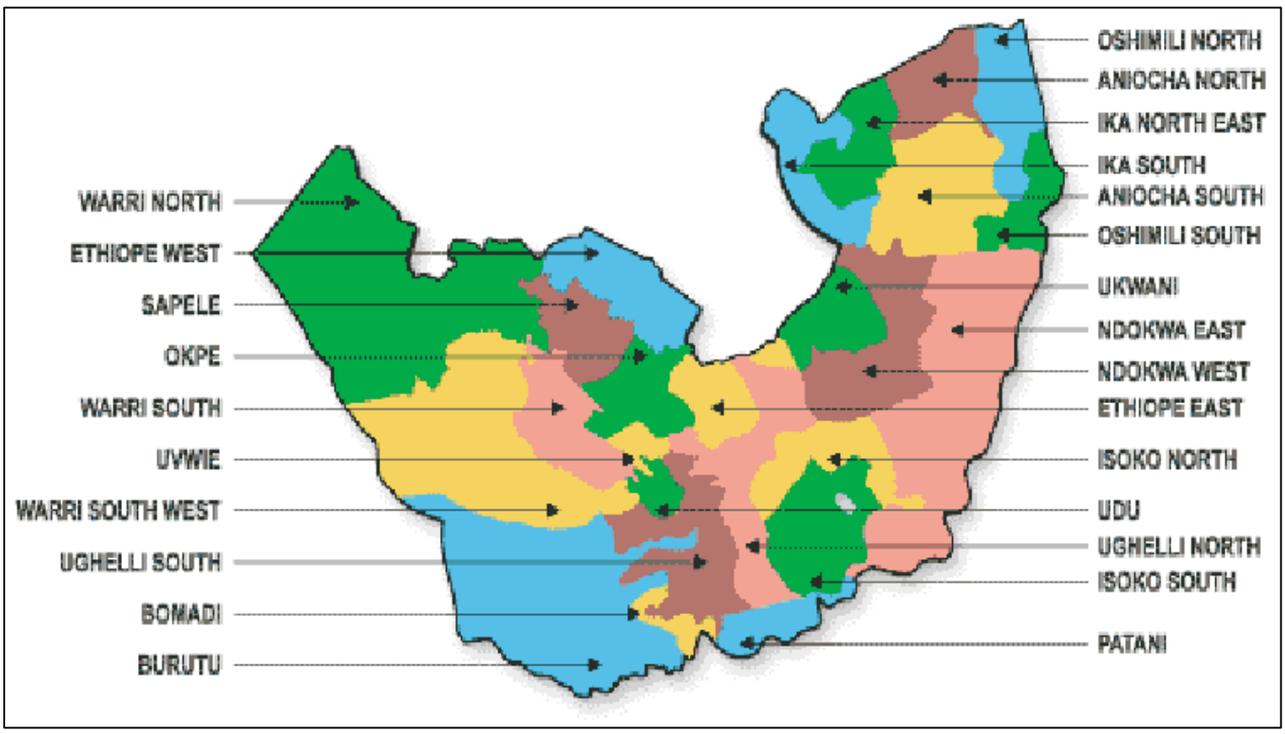


Figure 5: Map of Delta State

The profile of Delta State is summarized in the table below:

State Capital	Asaba	www.deltastate.gov.ng/about/
Slogan	The Big Heart	www.deltastate.gov.ng/about/
Location on Nigeria Coordinates	5°00' and 6°45' E and 5°00' and 6°30' N	www.en.wikipedia.org/wiki/Delta_State
Current Governor	Rt. Hon. Sheriff. F.O. Oborevwori	www.deltastate.gov.ng/about/
Landmass	16,986 km²	www.deltastate.gov.ng/about/
Estimated Population	5,636,100 (2022)	www.deltastate.gov.ng/about/
Main Economic Activities	Oil and Gas exploration and Agriculture	www.deltastate.gov.ng/about/
Weather condition	Average temperature of 25.8 °C	www.en.climate data.org/africa/nigeria/delta-319/

Figure 6: Profile of Delta State

4.5 Description of Ebonyi State

Ebonyi State is located in southeastern Nigeria, bounded to the north by Benue State, west by Enugu, to the south by Imo and Abia State and to the east by Cross River State. Ebonyi State was created from parts of Abia and Enugu State in 1 October, 1996 with the capital Abakaliki which is the largest city followed by other major towns such as Afikpo, Edda, Onueke, Uburu, Onitcha, Nkalagu, Ishiagu, Amasiri, Ngbo and Okposi. Ebonyi is covering an area of about 5,533 square kilometers and lies between latitude 5° 40'to 6° 45'N and longitude 7° 30' to 8° 28'E. It is made up of thirteen Local Government Areas with population estimate of 2,176,947 in 2006 by the National Population Commission and projected population of 3,490,383 in 2016. Their major occupation is agriculture which is concentrated in the rural areas. Ebonyi is populated primarily by Igbo ethnic group with major dialects such as Izzi, Ezza, Mgbo, Ikwo, Edda, Ehugbo, Okposi, Onicha, Oshiri, Ishiagu, Ntezi-Okpoto and Effium. They are well known for the production of rice due to the swampy and relatively flat and undulating nature of the landscape. Other food crops produced in Ebonyi are Yam, cassava, potatoes, cocoyam, palm oil, maize, beans, and vegetables. Other livelihood practiced in Ebonyi are trading, administrative works, mining and local crafts. Ebonyi is also highly endowed with mineral resources such as lead-zinc, limestone, barite, rock aggregate, sand and salt deposits. Ebonyi is known as the ''salt of the nation'' due to abundant salt deposit at Okposi and Uburu Salt lakes located at the southern part of the State.

Ebonyi state is characterized by humid tropical climate which consists of 8 months of rainy season and 4 months of dry season in a year. It has annual rainfall of about 2500mm. The temperature ranges from 16 to 38°C with average of 28°C. the map of Ebonyi State is shown in figure 2 below.

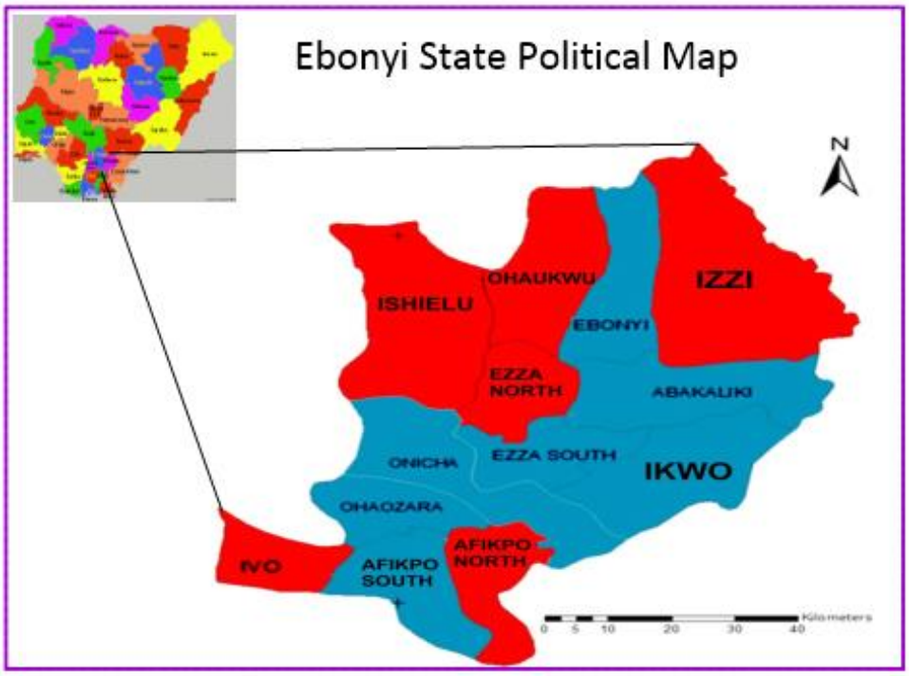


Figure 7: Map of Ebonyi State

The profile of Nasarawa State is summarised in the table below;

Table 8: Profile of Ebonyi State

State Capital	Abakaliki	https://www.ebonyistate.gov.ng/
Slogan	the salt of the nation	https://www.ebonyistate.gov.ng/
Location on Nigeria Coordinates	Latitude 6.2649° N, Longitude 8.0137° E	https://latitude.to/map/ng/nigeria/regions/ebonyi-state
Current Governor	Francis Nwifuru	https://www.ebonyistate.gov.ng/
Landmass	5,935 sq. km,	https://www.ebonyistate.gov.ng/
Main Economic Activities	Agriculture and Mining	https://www.ebonyistate.gov.ng/
Rainfall	2500mm	
Gross Domestic Product	$12.2 billion (2023)	http://tellusant.com/repo/23/tellusantfactsheetnigeria.pdf
Number of LGA	13	https://www.ebonyistate.gov.ng/

4.6 Description of Kaduna State

Kaduna State, created on 27 May 1967, is one of the 19 states in the Northwest geopolitical zone of Nigeria. It shares boundaries with Niger State to the west, Zamfara, Katsina and Kano states to the north, Bauchi and Plateau States to the east and FCT Abuja and Nasarawa state to the south. The map of Kaduna State showing its 23 Local Government Areas is shown in Figure below

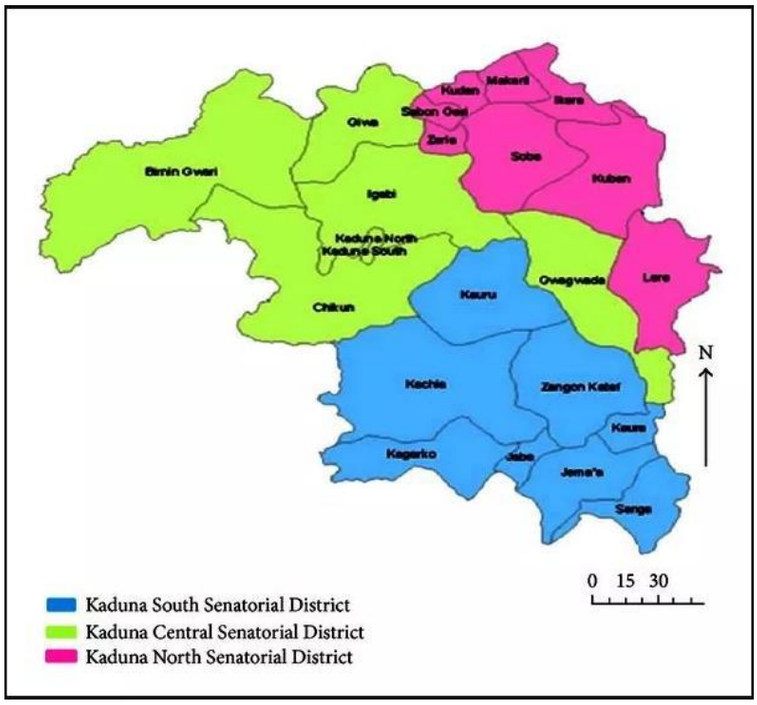


Figure 8: Map of Kaduna State

The profile of the state is as summarised in Table 2 below;

Table 9: Profile of Kaduna State

State Capital	Kaduna	www.kdsg.gov.ng/about-kaduna/
Slogan	Centre of Learning	www.kdsg.gov.ng/about-kaduna/
Location on Nigeria Coordinates	10°20′N 7°45′E	www.en.wikipedia.org/wiki/jigawa _State
Current Governor	Uba Sani	www.kdsg.gov.ng/about-kaduna/
Landmass	46,053 km2 (17,781 sq mi)	www.kdsg.gov.ng/about-kaduna/
Estimated Population	9.48M (2020 est.)	www.kdsg.gov.ng/about-kaduna/
Main Economic Activities	Agriculture	www.kdsg.gov.ng/about-kaduna/
Number of LGA	23	www.kdsg.gov.ng/about-kaduna/

4.7 Description of Kano State

Kano State which is situated in the Sudan Savannah agro-ecological zone of Nigeria. The state lies between latitude 13^0N in the North and 11^0N in the South and longitude 8^0E in the West and 100E in the East. The State is also known as the Center of Commerce and is made up of forty-four (44) Local Government Areas. The total land area of the state is 20,760 square kilometres and has a population of 13,076,892 according to the 2018 official estimates of the National Bureau of Statistics (NBS), making it the largest state by population in Nigeria. Kano State borders Katsina State and Jigawa State to the North West and North East respectively while on the South and South West, it shares borders with Bauchi and Kaduna respectively.

Figure 9: Map of Kano State

The profile of Kano State is as summarized in the table below;

Table 10: Profile of Kano State

State Capital	Kano	www.kanostate.gov.ng/kano-state
Slogan	Centre of Commerce	www.kanostate.gov.ng/kano-state
Location on Nigeria Coordinates	11°30′N 8°30′E	www.en.wikipedia.org/wiki/Kano_State
Current Governor	Abba Kabir Yusuf	www.kanostate.gov.ng/kano-state
Landmass	20,131 km2 (7,773 sq mi)	www.en.wikipedia.org/wiki/Kano_State
Estimated Population	20,000,000 (2020)	www.en.wikipedia.org/wiki/Kano_State
Main Economic Activities	Agriculture, Commerce and Industries	www.en.wikipedia.org/wiki/Kano_State
Weather condition	The annual temperature of the state is between 26^0C to 30^0C	www.en.wikipedia.org/wiki/Kano_State
Rainfall	Average of 897.7mm annually.	www.en.wikipedia.org/wiki/Kano_State
GDP	$27.17 billion (2021)	www.en.wikipedia.org/wiki/Kano_State
Number of LGA	44	www.en.wikipedia.org/wiki/Kano_State

4.8 Description of Kogi State

Kogi state was created on 27th of August, 1991 under the administration of General Ibrahim Babangida. The state is situated in the North Central geo-political zones of Nigeria, bordered to the west by the states of Ekiti and Kwara, to the north by the Federal Capital Territory, to the northeast by Nasarawa State, to the northwest by Niger State, to the southwest by Edo and Ondo states, to the southeast by the states of Anambra and Enugu, and to the east by Benue State (see figure 2 below for geographical location).

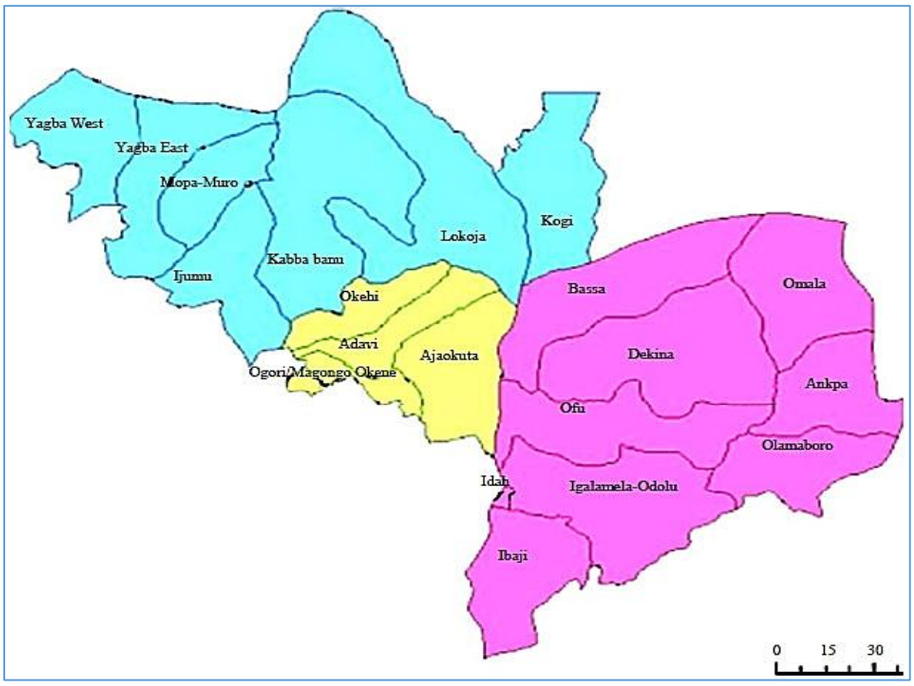


Figure 10: Map of Kogi State

The profile of Kogi State is summarised in the table below;

Table 11: Profile of Kogi State

State Capital	Lokoja	https://kogistate.gov.ng/
Slogan	The Confluence State	https://kogistate.gov.ng/
Location on Nigeria Coordinates	7°30′N 6°42′E	https://kogistate.gov.ng/
Current Governor	Yahaya Bello	https://kogistate.gov.ng/
Landmass	29,833 km2	https://kogistate.gov.ng/
Estimated Population	4,466,800 (2006)	https://kogistate.gov.ng/
Main Economic Activities	Agriculture	https://en.wikipedia.org/wiki/Kogi_State
Weather condition	The rainy season lasts from April to October each year while the dry season last from November to March.	https://en.wikipedia.org/wiki/Kogi_State
Rainfall	Annual rainfall of 1,100mm	https://en.wikipedia.org/wiki/Kogi_State
Gross Domestic Product	$23.88 billion (2021)	https://kogistate.gov.ng/
Number of LGA	21	https://en.wikipedia.org/wiki/Kogi_State

4.9 Description of Kwara State

Kwara State is a state in the North Central geopolitical zone of Nigeria, created on 27th of May, 1967 the military administration of General Yakubu Gowon. The State is bordered to the north by Niger State, to the northeast by Kogi State, to the east by Ekiti and Osun State, to the west by Oyo State and to the south by Gulf of Guinea (see figure below for Kwara State Map).

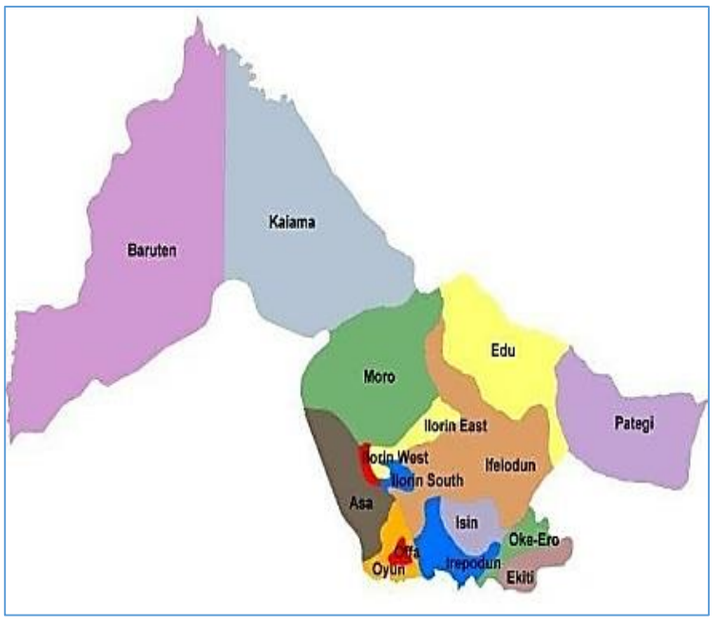


Figure 11: Map of Kwara State

The profile of Kwara State is summarised in the table below;

Table 12: Profile of Kwara State

State Capital	Ilorin	www.kwarastate.gov.ng/discover-kwara/
Slogan	State of Harmony	www.kwarastate.gov.ng/discover-kwara/
Location on Nigeria Coordinates	8°30′N 5°00′E	www.en.wikipedia.org/wiki/Kwara_State
Current Governor	Abdulrazaq Abdulrahman	www.kwarastate.gov.ng/discover-kwara/
Landmass	36,825 km2 (14,218 sq mi)	www.kwarastate.gov.ng/discover-kwara/
Estimated Population	2,365,353 (2006)	www.en.wikipedia.org/wiki/Kwara_State
Main Economic Activities	Agriculture	www.en.wikipedia.org/wiki/Kwara_State
Weather condition	Average yearly temperature of 29.54ºC (85.17ºF) and it is 0.08%	www.cktcktck.org/nigeria/kwara
Rainfall	Kwara typically receives about Average rainfall of 101.45mm annually	www.tcktcktck.org/nigeria/kwara
Gross Domestic Product	$8.91 billion (2021)	www.en.wikipedia.org/wiki/Kwara_State
Number of LGA	16	www.en.wikipedia.org/wiki/Kwara_State

4.10 Description of Nassarawa State

Nasarawa State is a state in the North Central region of Nigeria, bordered to the east by the states of Taraba and Plateau, to the north by Kaduna State, to the south by the states of Kogi and Benue, and to the west by the Federal Capital Territory. Named for the historic Nasarawa Emirate, the state was formed from the west of Plateau State on 1 October 1996 on a land mass of about 26,256 km². The state has thirteen local government areas and its capital is Lafia, located in the east of the state, while a key economic centre of the state is the Karu Urban Area—suburbs of Abuja—along the western border with the FCT.

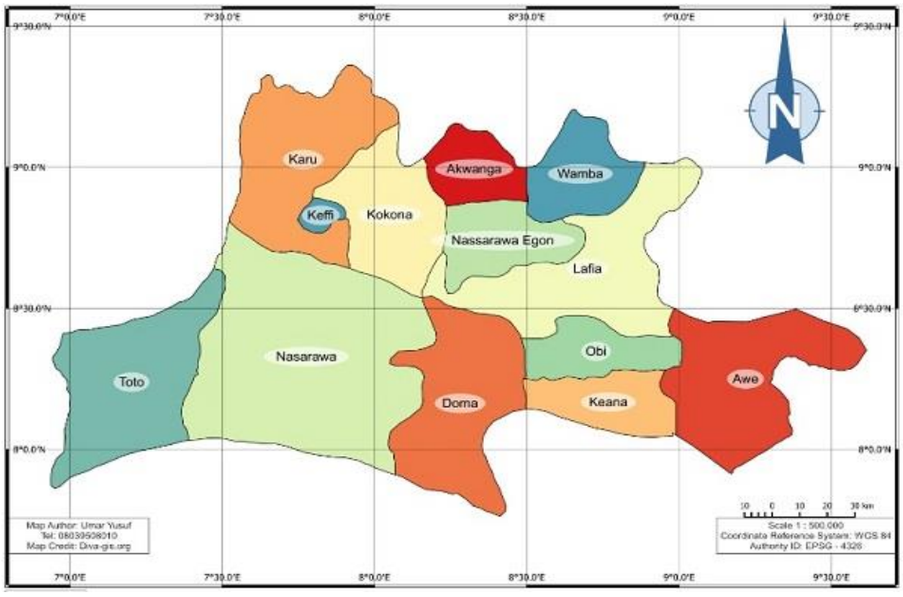


Figure 12: Map of Nassarawa State

The profile of Nassarawa State is summarised in the table below;

Table 13: Profile of Nassarawa State

State Capital	Lafia	www.nasarawastate.gov.ng/about-nasarawa-state/
Slogan	Home of Solid Minerals	www.nasarawastate.gov.ng/about-nasarawa-state/
Location on Nigeria Coordinates	8°32′N 8°18′E	www.en.wikipedia.org/wiki/Nasarawa_State
Current Governor	Abdullahi Sule	www.nasarawastate.gov.ng/about-nasarawa-state/
Landmass	26,256 km2 (10,137 sq mi)	www.nasarawastate.gov.ng/about-nasarawa-state/
Estimated Population	2,886,000 (2022)	www./nasarawastate.gov.ng/about-nasarawa-state/
Main Economic Activities	Agriculture and Mining	www.nasarawastate.gov.ng/about-nasarawa-state/
Weather condition	Average annual temperature is 29.39°C (84.9°F).	www.en.wikipedia.org/wiki/Nasarawa_State
Rainfall	Average of 136.71mm annually	www.en.wikipedia.org/wiki/Nasarawa_State
Gross Domestic Product	$12.01 billion (2021)	www.en.wikipedia.org/wiki/Nasarawa_State
Number of LGA	13	www.nasarawastate.gov.ng/about-nasarawa-state/

4.11 Description of Oyo State

Oyo State, located in southwestern Nigeria, is a state with historical and cultural significance. It was originally part of the old Western State before it was created as a separate state on February 3, 1976, during the state creation exercise by the military government. The creation of Oyo State was aimed at promoting effective governance and bringing development to the region. The state consists of 33 local government areas and three Senatorial District.

Oyo State is bordered by several states, including Kwara State to the north, Osun State to the east, Ogun State to the south, and Ondo State to the southwest. Its capital city is Ibadan, which is one of the largest cities in Africa. The state is predominantly inhabited by the Yoruba ethnic group, who have a rich cultural heritage and a long history of civilization.

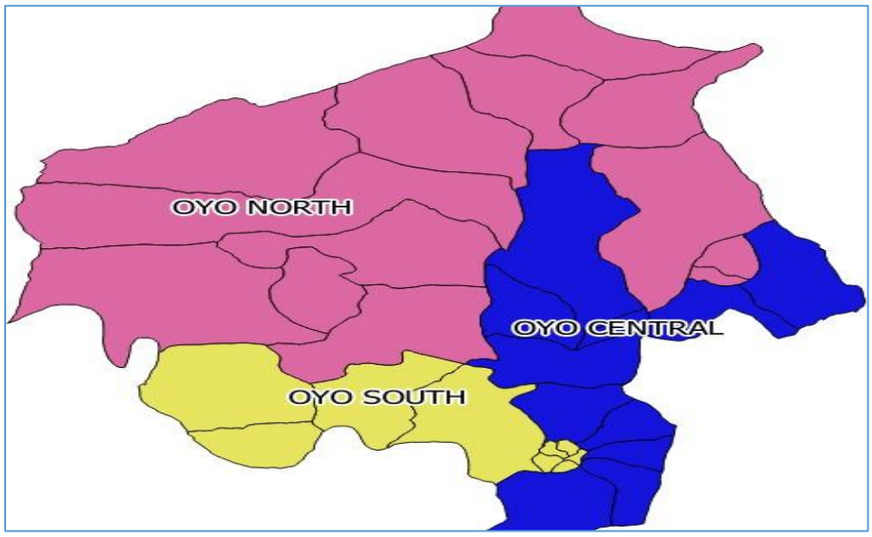


Figure 13: Map of Oyo State

The profile of Oyo State is summarised in the table below;

Table 14: Profile of Oyo State

State Capital	Ibadan	www.oyostate.gov.ng/about-oyo-state/
Slogan	The pacesetter State	www.oyostate.gov.ng/about-oyo-state/
Location on Nigeria Coordinates	8°00′N 4°00′E	www.en.wikipedia.org/wiki/Oyo_State
Current Governor	Oluwaseyi Makinde	www.en.wikipedia.org/wiki/Oyo_State
Landmass	28,454 square kilometres	www.oyostate.gov.ng/about-oyo-state/
Estimated Population	5,580,894 (2006)	www.en.wikipedia.org/wiki/Oyo_State
Main Economic Activities	Agriculture	www.en.wikipedia.org/wiki/Oyo_State
Weather condition	Average temperature of 25 °C (77.0 °F) to 35 °C (95.0 °F) annually.	www.oyostate.gov.ng/about-oyo-state/
Rainfall	1677 mm per annum	www.en.climate-data.ord>Nigeria>Oyo
Gross Domestic Product	$23.8 billion (2021)	www.en.wikipedia.org/wiki/Oyo_State
Number of LGA	33	www.en.wikipedia.org/wiki/Oyo_State

4.12 Description of Plateau State

Plateau State, located in the north-central region of Nigeria, is positioned near the country's geographical center. It is bordered by Kaduna, Bauchi, Nasarawa, and Taraba to the northwest, northeast, southwest, and southeast respectively. The state lies between latitude $8^{0}24$'N and $10^{0}30$'N and longitude $8^{0}32$'E and $100^{0}38$'E. Known for its almost temperate climate, Plateau State experiences a mean temperature range of 18°C to 22°C. The coldest weather occurs between December and February, while the warmest temperatures are observed in March and April. Spanning approximately 30,914 square kilometers, Plateau State is divided into three senatorial zones: the central, northern, and southern zones. According to the 2006 population census, the state's population was recorded at 3,206,531. As of March 2022, the estimated population of Plateau State is 4,712,300, with a projected annual growth rate of 2.4%. The state is abundant in mineral resources, including tin, kaolin, marble clay, granite, salt, coal,

tantalite/columbite, lead/zinc, cassiterite, emerald, iron ore, bentonite, bauxite, gemstones, and wolfram, among others. Additionally, Plateau State offers captivating natural attractions such as Kura Falls, Wase Rock, Assop Falls, and the Kerang Highlands, which attract tourists. Farming, petty businesses, and mining are the primary sources of livelihood in Plateau State.

Figure 14: Map of Plateau State

The profile of Plateau State is summarized in the table below;

Table 15: Profile of Plateau State

State Capital	Jos	https://www.plateaustate.gov.ng/
Slogan	Home of Peace and Tourism	https://www.plateaustate.gov.ng/
Location on Nigeria Coordinates	9°10′N 9°45′E	https://en.wikipedia.org/wiki/Plateau_State
Current Governor	Caleb Mutfwang	https://www.plateaustate.gov.ng/
Landmass	30,913 km^2 (11,936 sq mi)	https://www.plateaustate.gov.ng/
Estimated Population	3,206,531(2006)	https://www.plateaustate.gov.ng/
Main Economic Activities	Agriculture and Tourism	https://en.wikipedia.org/wiki/Plateau_State
Weather condition	A near-temperate climate, with an average temperature between 13 and 22 °C.	https://en.wikipedia.org/wiki/Plateau_State
Rainfall	The mean annual rainfall varies between 131.75 cm (52 in) in the southern part to 146 cm (57 in) on the plateau, with the highest rainfall during the wet season in July and August.	https://en.wikipedia.org/wiki/Plateau_State
Gross Domestic Product	$9.69 billion (2021)	https://en.wikipedia.org/wiki/Plateau_State

Number of LGA	17	https://en.wikipedia.org/wiki/Plateau_State

4.13 Description of Sokoto State

Sokoto State is one of the States in the North west geopolitical zone of Nigeria, created on 3 of February 1976 under the Military administration of General Murtala Mohammed (see figure below for map of Sokoto state).

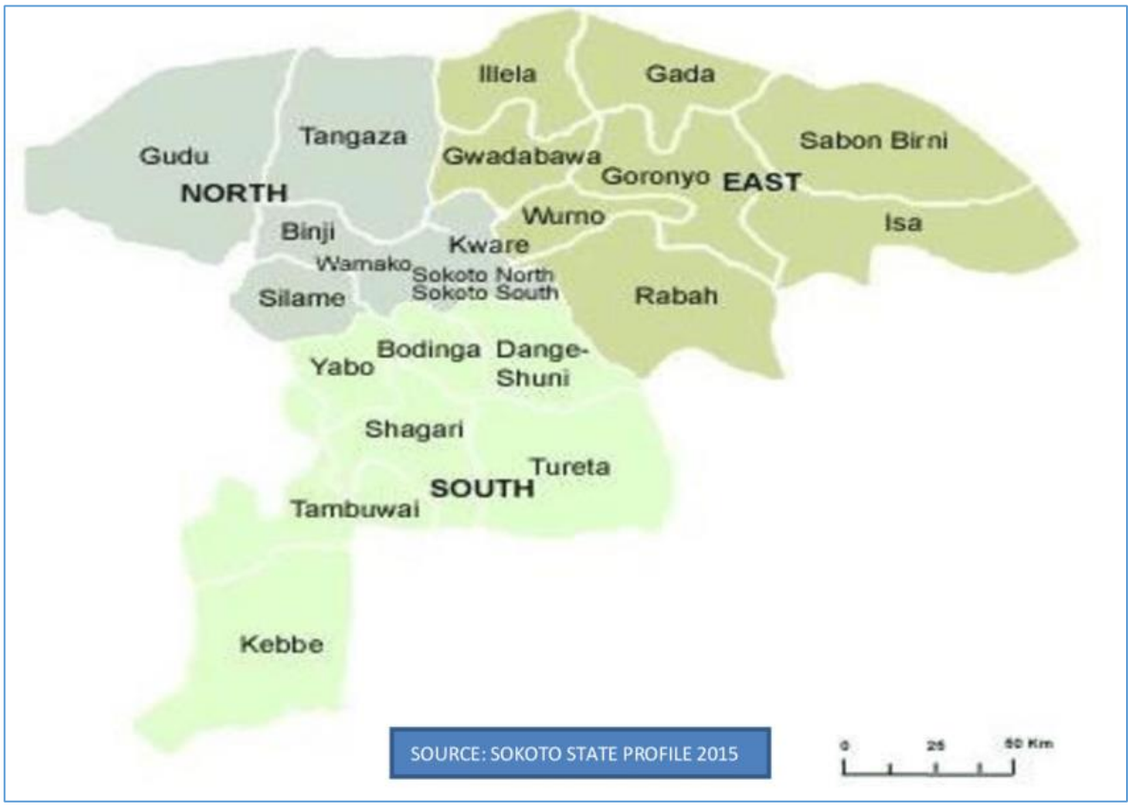


Figure 15: Map of Sokoto State

Table 16: Profile of Sokoto State

State Capital	Sokoto	www.sokotostate.gov.ng/
Slogan	Seat of the Caliphate	www.sokotostate.gov.ng/
Location on Nigeria Coordinates	13°05′N 05°15′E	www.en.wikipedia.org/wiki/Sokoto_State
Current Governor	Ahmed Aliyu Sokoto	https://sokotostate.gov.ng/
Landmass	25,973 km2 (10,028 sq mi)	www.en.wikipedia.org/wiki/Sokoto_State
Estimated Population	3,702,676 (2006)	www.en.wikipedia.org/wiki/Sokoto_State
Main Economic Activities	Agriculture	www.sokotostate.gov.ng/
Weather condition	The dry season is between October and April while wet season is May to September.	www.sokotostate.gov.ng/
Rainfall	Average rainfall of 50mm to 1,300mm annually	www.sokotostate.gov.ng/
GDP	$18.44 billion (2021)	www.en.wikipedia.org/wiki/Sokoto_State
Number of LGA	23	www.sokotostate.gov.ng/

4.14 Description of Yobe State

Yobe is a state located in northeastern geopolitical zone of Nigeria, created on 27th August 1991. The state borders with Borno State to the east, Gombe State to the south, Bauchi and Jigawa States to the west and Niger Republic to the north (See figure 16 below for Yobe Map).

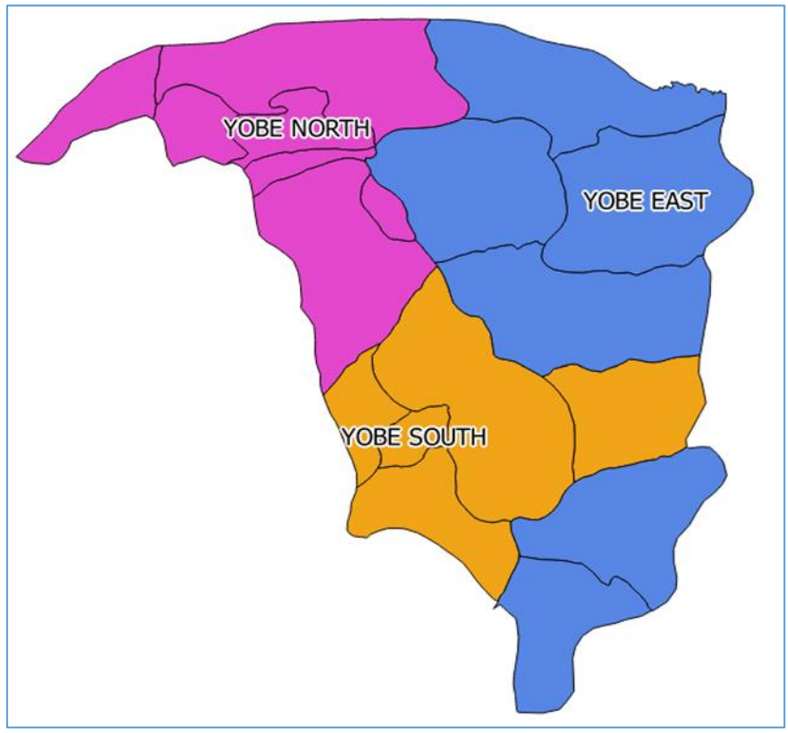


Figure 16: Map of Yobe State

The profile of the state is as summarized in the table below;

Table 17:Profile of Yobe State

State Capital	amaturu	ww.yobestate.gov.ng/about-us/
Slogan	ride of the Sahel	ww.yobestate.gov.ng/about-us/
Location on Nigeria Coordinates	2°00′N 11°30′E	ww.en.wikipedia.org/wiki/yobe _State
Current Governor	Mai Mala Buni	ww.yobestate.gov.ng/about-us/
Landmass	5,502 km2 (17,568 sq mi)	ww.en.wikipedia.org/wiki/yobe _State
Estimated Population	000,000 (2021)	ww.en.wikipedia.org/wiki/yobe_State
Main Economic Activities	griculture and mining	ww.en.wikipedia.org/wiki/yobe_State
Weather condition	verage daily temperature of 37 C (98.6 °F).	ww.yobestate.gov.ng/about-us/
Rainfall	ainy day is between August and ecember	ww.yobestate.gov.ng/about-us/
GDP	7.05 billion (2021)	ww.en.wikipedia.org/wiki/yobe_State
Number of LGA	7	ww.yobestate.gov.ng/about-us/

4.15 Socio Economics of the Communities Within the 14 Participating States

4.15.1 Socio-economic survey

The socio-economic assessment studies were aimed at examining the socio-economic conditions of the people living around the facility environment. This was to ensure that the potential impacts of the proposed rehabilitation work at the PHCs is captured and described while proffering solutions to possible negative impacts to human habitat, health and livelihoods. Some of the responses from the Respondents were presented through the Northern-Southern perspective (northern and southern states)

Figure 17: Pictures from the Field works conducted

4.15.2 Review of available literature

Field data acquisition including questionnaire administration and Focused Group Discussion (FGD) was conducted. However, questionnaires were both done through physical interaction and virtually and the number of Respondents interviewed represent a common sample size of population across the host communities of the participating PHCs. Focal Group Discussion (FGD) with different interest groups including women group and youth were also conducted across the 14 participating States.

Application of professional knowledge and experience. Various field observations were made using the ground trotting method. It provided the avenue to cross check information given by community members against existing situations, particularly with respect to the status and functionality of available social infrastructure. The observable physical features in the community were recorded.

4.15.3 Gender Distribution of Respondents

Majority of the Respondents (about 65.70%) are males while the remaining 34.3% are females as depicted below. However, secondary data of population within the local government where the PHCs are located that the female population is higher than males. This may be attributed to the willingness of the male respondents to respond to the questionnaires.

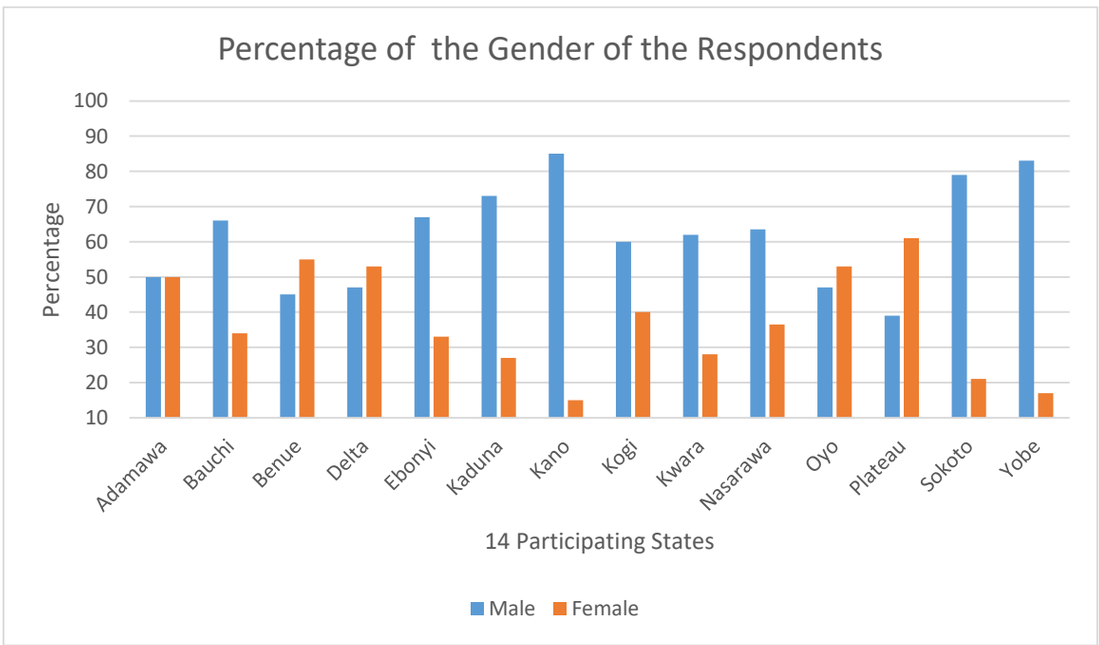


Figure 18: Respondents Gender Percentage Distribution Chart Across the 14 participating States

4.15.4 Age Distribution of Respondents

The respondents range from 23 to above 75 years. Those between ages 26-60 years and those above 60 years constitute the dominant population of Respondents with a combined proportion of about 70.66%. The least age group among Respondents belongs to those from 0-15 with a population of 0.35%. The highest population of Respondents (39.86%) were within 45years and above. The younger population are predominant around PHCs in Urban areas while the more elderly is visible in and around PHCs in the rural areas

4.15.5 Marital status of Respondents

Respondents are predominantly married people (about 89.86%). Singles and the other marital status are respectively captured among the Respondents. The significance of this result is that Respondents are majorly men and women who are the breadwinners and help mates in their respective households. Sampling was performed within the host communities of the PHCs.

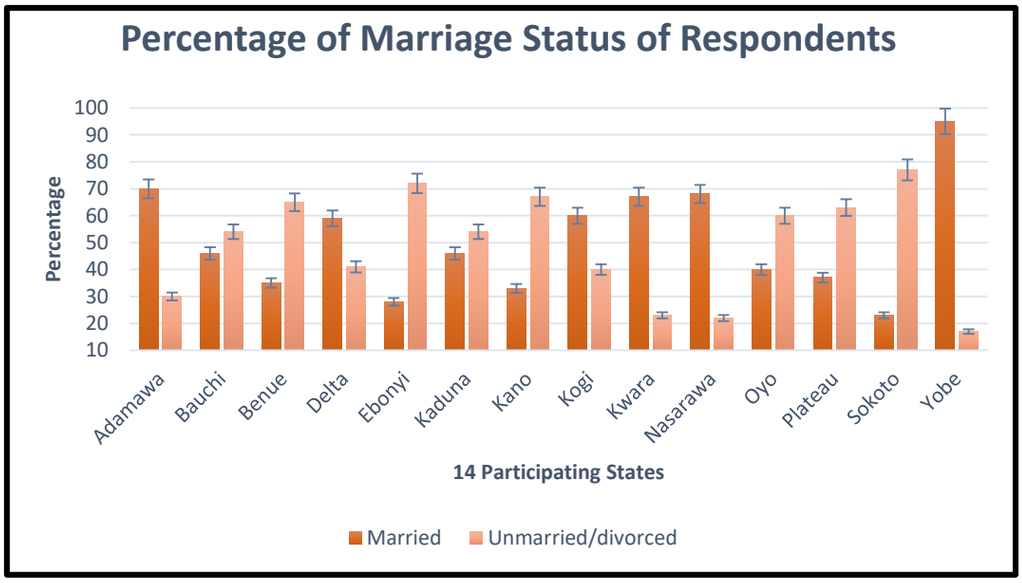


Figure 19: Respondents Percentage of Marriage Status of Respondents

4.15.6 Religious practice of Respondents

The response from the Respondents interviewed in the 11 Northern participating States shows that the predominant religion of the respondents is Muslim with 63.2 percent, with 36.2% Christians and 0.6 identified as African Traditional Religion worshippers. While the response from the Respondents from the 3 Southern states have 99.1 percent Christians and 0.9 percent African Traditional Religion worshippers.

Most of the respondents interviewed are either Muslims or Christians, indicating the observance of Fridays and Sundays as holy days in the week within and around the PHCs host States.

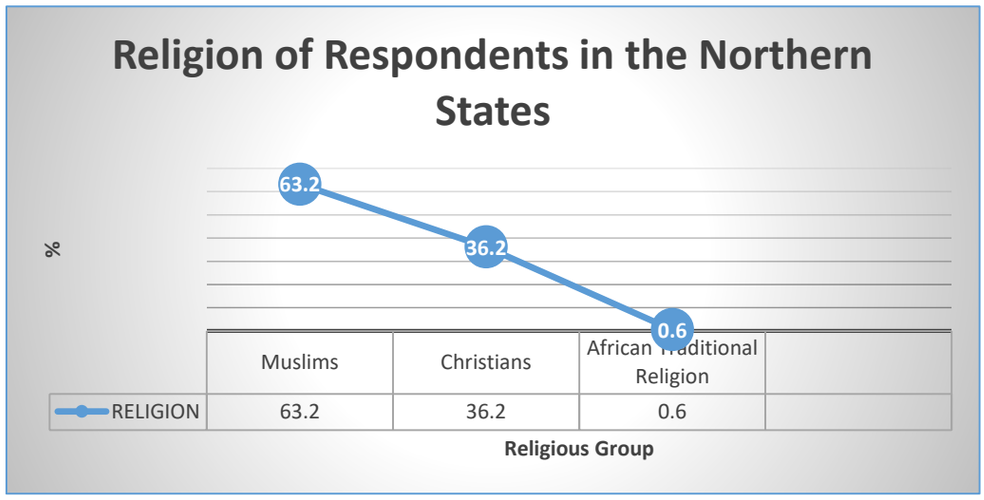


Figure 20:Religion of Respondents in the Norhern participating States

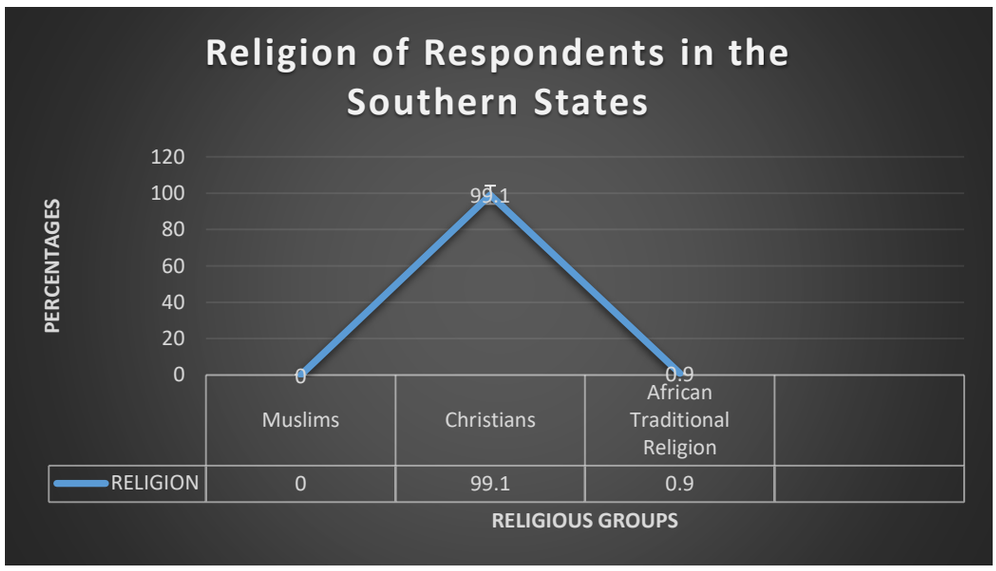


Figure 21: Religion of Respondents in the Participating Southern States

4.15.7 Literacy Level of the Respondents

Most people or Respondents have some form of education (95.68%). The highest number of Respondents (38.95%) Indicated that their lowest level of academic qualification is the First School Leaving Certificate FSLC. About 6.32% of the Respondents don't have any form of formal education. This shows that majority of Respondents have the minimum level of education that might help them in making informed decision or participate meaningfully during discussions as it affects the project implementation.

4.15.8 Water and Sanitation

From the interview conducted, in the 11 Northern States, 58% of respondents mostly from the PHCs host communities get domestic water from commercial boreholes while 36% of the respondents mostly from urban get their water from Private Boreholes, and 3% get theirs from public pipe borne water while 3% from pond water.

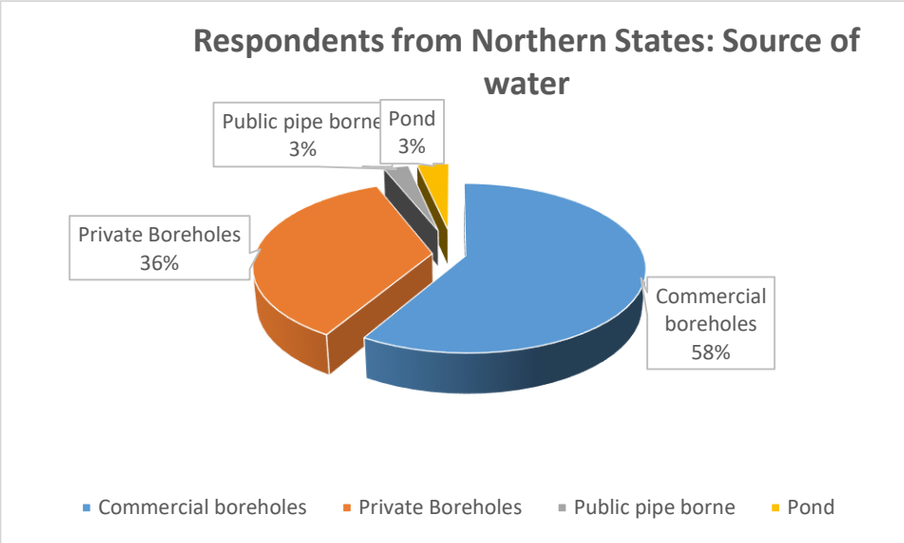


Figure 22: Source of Water for respondents from Northern Participating States

From the interview conducted, in the 3 IMPACT Project participating States, 40% of respondents mostly from the PHCs host communities get domestic water from commercial boreholes while 55% of the respondents mostly from urban get their water from Private Boreholes, and 5% get theirs from public pipe borne water while 0% from pond water.

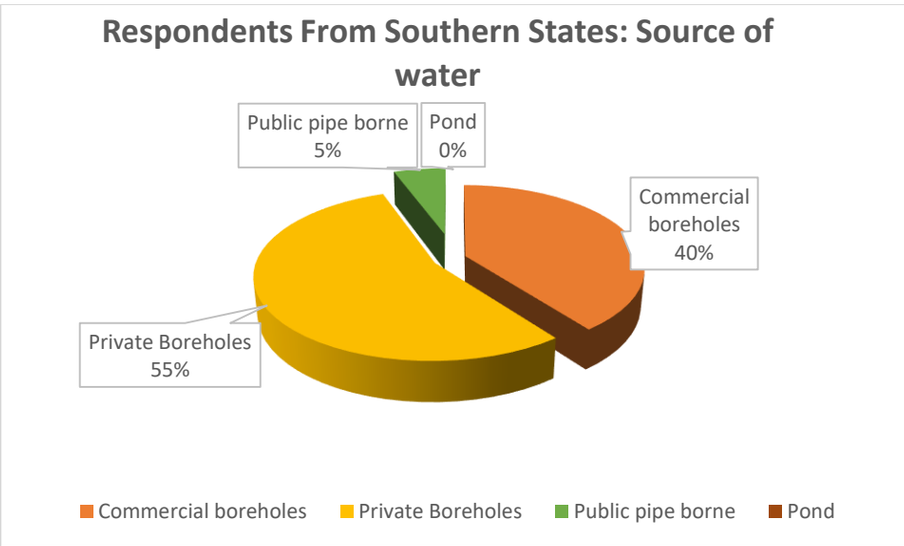


Figure 23: Source of water form respondents from the Southern States

4.15.9 Source of Water for Domestic Use.

It was also deduced from the field work that about 49% of the respondents mostly from the communities use Pit toilet while 42% mostly from make use of Water closet and 2% others make do into the river and 7% bush as shown in the figure below. From the interaction with the respondents, its shown that the use of rivers and bushes mostly occur in the rural host communities as against the use of water closet in urban communities and pit toilets in semi-urban PHCs host communities.

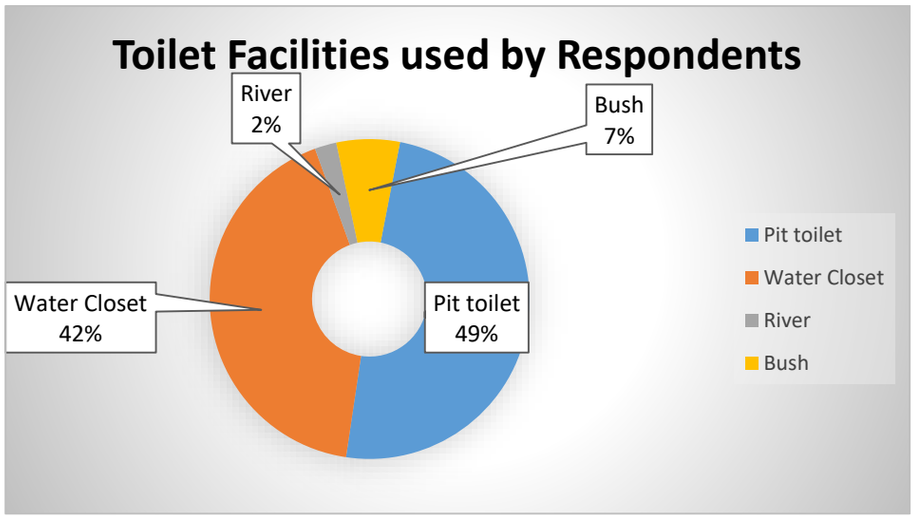


Figure 24: Percentage of type of Toilet Facility used by Respondents

4.15.10 Household Waste Disposal, Cooking Fuel and Electricity

Majority (82.9%) of the respondents in the dispose their household waste in an open dump indiscriminately,11.4% within the communities operates a vendor system of waste collection while 4.7% burn their refuse, 1.1% accounts for drainage refuse dumping.

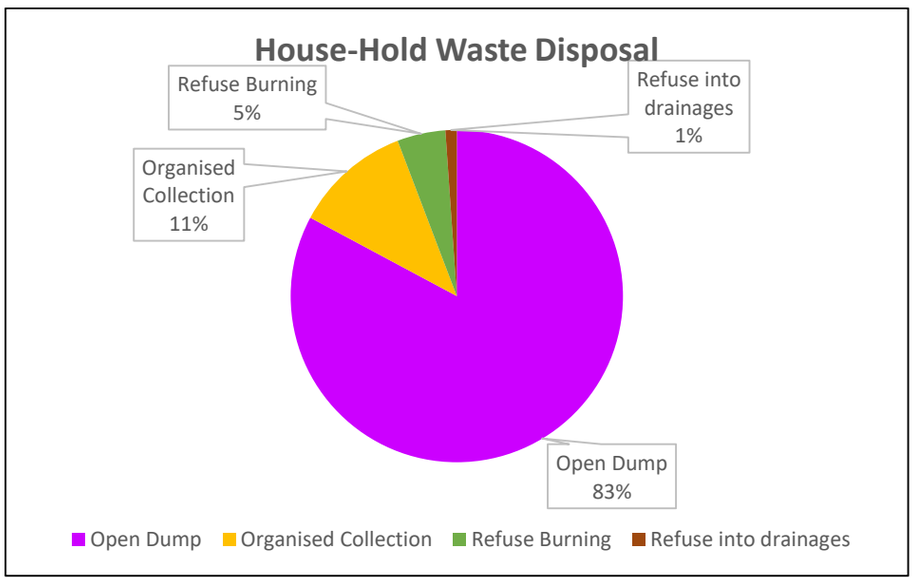
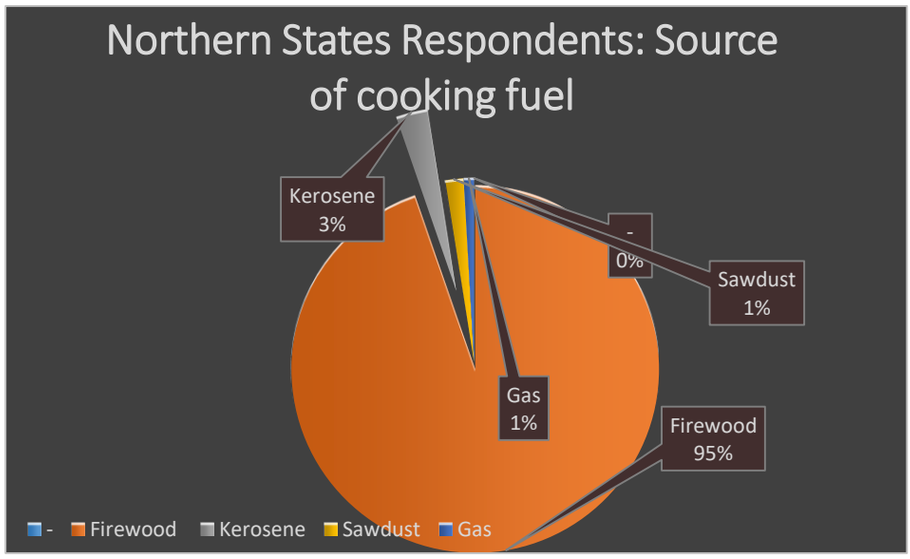
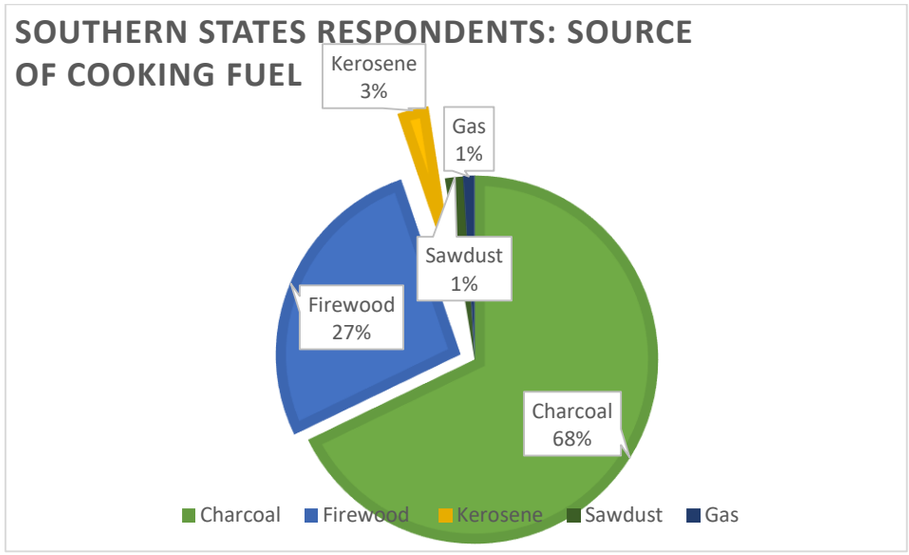


Figure 25: House-hold waster disposal method of the Respondents

About 94.70% of the respondents make use of firewood for cooking while 2.8% make use of kerosene and 1.6% make use of sawdust with the remaining 0.9% make use of gas. The survey also showed that electricity is obtained from the national grid within the project communities, of which 97.10% of respondents are connected to it. However, their services are epileptic. As an alternative source of electricity, few people alternate with generator and hurricane lamps.





4.15.11 Average household size of Respondents

The survey from the 11 participating Northern States shows (28.9%) Respondents run small sized households. 67.3% of the Respondents have medium sized households while 3.8% have large families. Here the family size categorization is based on the number of the member of the family, Small (2-4), Medium (5-7), Large (above 7). While in the 3 participating States, 67.2% medium sized and 5.5 run large sized families

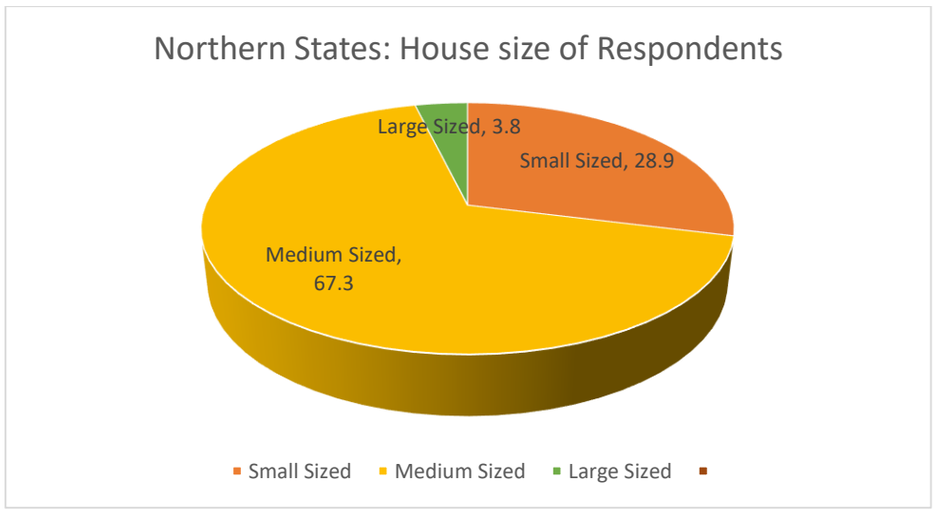


Figure 26: Size of House-hold of Rrspondents in the Northern States

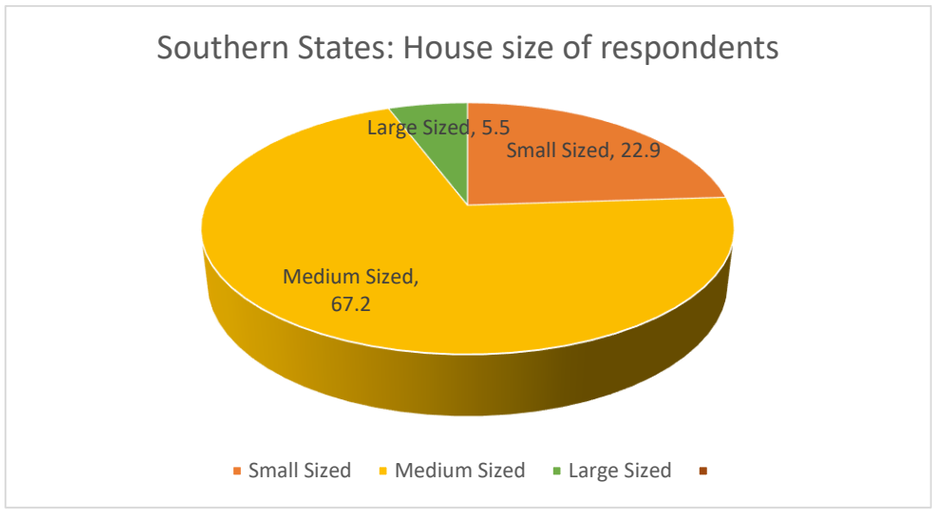


Figure 27: House Hold size of Respondents in the Southern State

4.15.12 Occupation

The figures below show that majority (69.9%) of the Respondents in the PHCs host community in the Northern States are into businesses, 24.9% are civil servants mostly with government institutions and 5.6 and self-employed (with 60% of this self-employed being artisans and 40% are farmers.). The Southern States Respondents shows that 65.6% are self-employed, 23.9% are civil servants while 10.5% are Business owners.

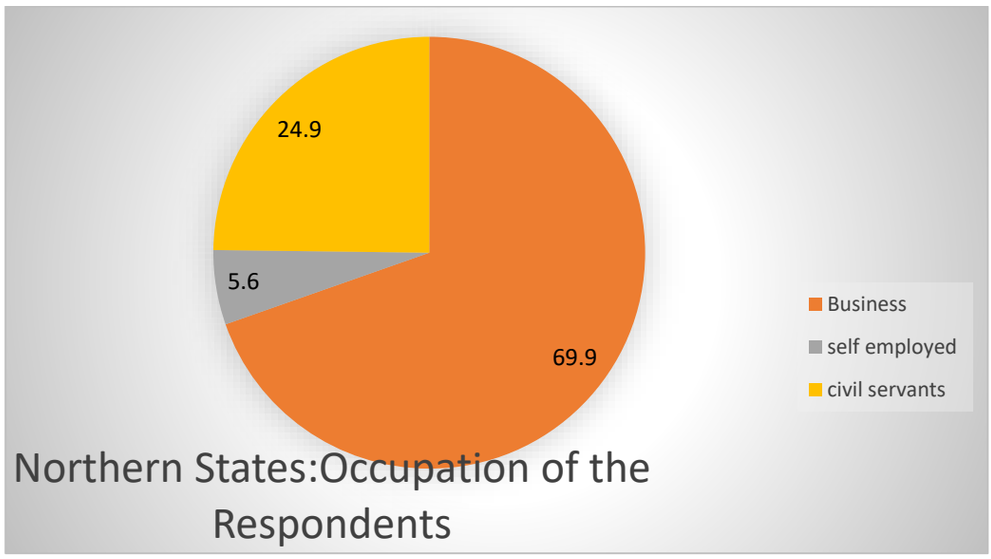


Figure 28: Occupation of Respondents from the Northern States

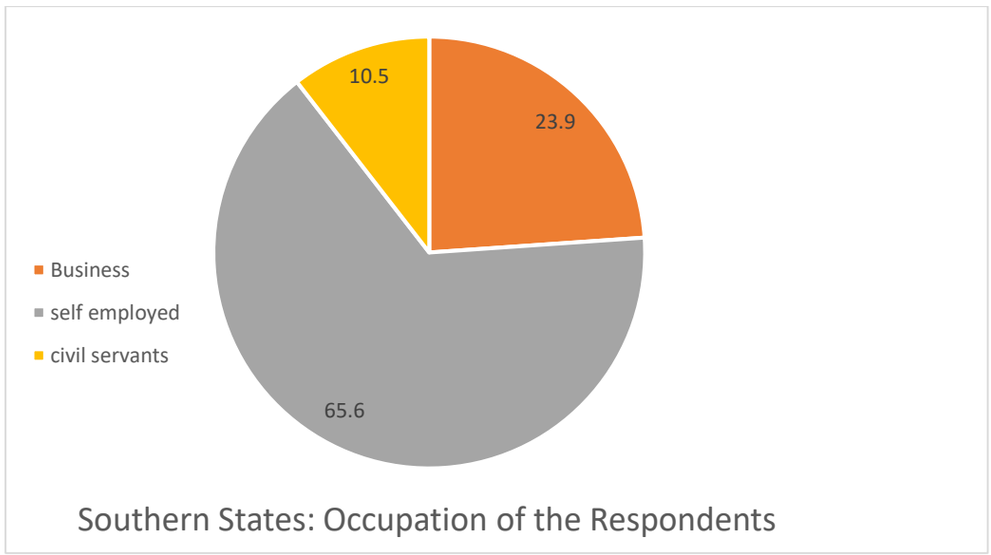


Figure 29: Occupation of Respondents from the Southern States

Occupation of the Respondents

4.15.13 Average Monthly Income status of Respondents

Field survey (depicted in the figure below) shows that dominant income groups amongst Respondents fall within ₦0--17,900 per Month. The survey also shows that about 19.93% fall within the income of ₦18,000-₦30,000 per month while about 9.42% of Respondents earn ₦31,000 to ₦60,000 per month.

Average income of Respondents in the project area were measured at two levels; the overall average which indicates an aggregation of middle- and low-level-income earning Respondents and the low-income groups with lowest limit of N500 per day. The outcome is that on the overall aggregation, Respondents mean income is ₦3,600 or $2.4 per day (for middle and low income combined) and ₦1,500 or $1 per day for lower income group using an exchange rate of ₦1,500/1$.

Based on the statistics, Respondents in the project area earn on the average, about $1,640 per annum. This Figure puts Respondents in the class of low-income economy group according to World Bank development indicators (World Bank, 2016) Lower-middle-income and upper-middle-income economies are separated at a GNI per capita of $2,125.

Although these results imply that Respondents can maintain reasonably, good standard of living, it is however, not inconceivable that impacts on their sources of livelihood may have adverse impacts on their income sustenance and standard of living, especially with the dependence on trading, farming as well as low rate of saving culture in the less developed countries.

4.15.14 Power Supply

National Electricity Distribution Companies (NEDC) are responsible for the supply of power in the host PHCs communities. The supply of power from this source is often not regular and homes supplement the power with power generating sets and other sources.

CHAPTER FIVE: POTENTIAL IMPACTS AND MITIGATION

5.1: Introduction

The assessment process was conducted through the use of an environmental and social risk assessment checklist. The checklist was administered per site through observation and consultations. This was used to identified site-specific issues and potential impact of the proposed rehabilitation works. To gain an understanding of the potential risks and impacts of the proposed works, rating of identified risks was conducted into high, substantial, medium and low risks as shown below. The project generally, is a low-risk project, involving rehabilitation of existing structures in existing PHCs. Broadly, the methodology adopted for the identification and rating of the potential impacts of the proposed works is presented in figure below, and discussed in detailed.

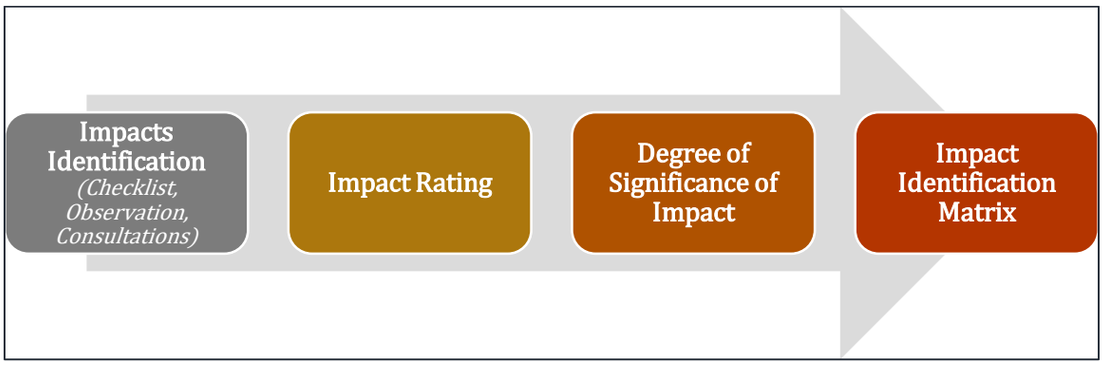


Figure 30: Impact Assessment Methodology

5.2 Impacts Identification

The process involved the administration of developed checklist (electronic using *Kobotoolbox /* ODK Collect open-source platform), site visits, observations, and consultations with stakeholders. The environmental and social sensitivities that may be impacted during the project works are presented below.

Table 18: Environmental and Social Sensitivity

Environmental Sensitivities	Social Sensitivities
Air Noise (Vibrations and sound waves) Surface water Soil Topography ad Landscape Erosion Sites	Air (Odor) Noise Nuisance Visual Sensitivity Economic and Agricultural activities Employment Public Health Occupational Health and Safety Transport and Traffic Religious Activities Leisure and social activities Community affairs and Grievance redress

5.2.1 Impacts Rating

In order to understand the magnitude or severity of the potential impacts of the proposed works, rating of identified potential impacts was conducted. Table below presents the magnitude or severity of the effect to the physical and social environment caused by the potential impact of an activity, and the level of sensitivity of the receiving environmental and/or social receptor. The rating was done using a Leopold Matrix.

Table 19: Potential Consequence Classification Matrix

	Magnitude of Effect		
Receptor Sensitivity	**Low change**	**Medium change**	**High change**
Low receptor sensitivity	Low	Medium	Substantial
Medium receptor sensitivity	Low	Medium	Substantial
High receptor sensitivity	Medium	Substantial	High

Degree of Significance

Table 21 below shows the impact significance with associated impact ratings.

Table 20: Degree of Impact Significance

Impact Significance	Impact Ratings
Major significance	Major Impact
Moderate Significance	Moderate Impact
Minor Significance	Minor Impact
Negligible Significance	Negligible Impact

Impact Table

The impact assessment matrix shows the magnitude or severity of the potential consequences. Only moderate and major impacts was considered for impact mitigation. Continuous improvement practices are expected address low impacts. Furthermore, the positive impacts shall be monitored and enhanced when expedient.

Table 21: Impact Assessment Matrix

	Potential Consequences						
Likelihood	Positive		Negative				
			Hardly Any	Little	Considerable	Great	Extreme
			Moderate	Moderate	Major	Major	Major
High			Minor	Moderate	Moderate	Major	Major
Medium			Minor	Minor	Moderate	Moderate	Major
Medium			Negligible	Minor	Minor	Moderate	Moderate
Low			Negligible	Negligible	Minor	Minor	Moderate

5.3 Impact Identification Matrix

The proposed project is expected to be largely beneficial to the communities and the state at large. Table 23below highlights some of the beneficial impacts of the project. The rehabilitation activities will largely take place within existing PHCs, however, the nature of civil work activities will entail use of vehicles and labour influx which will inevitably predispose the bio-physical and social components of the environment to varying degrees of negative impacts which range between minor and moderate.

Table 22: Summary of Potential Positive and Negative Impacts

Potential Positive Impacts	Potential Negative Impacts	
	Environmental & OHS Impacts	Social Impacts
1. Improved and conducive environment for the staff and patients of the PHCs. 2. Rehabilitation of toilets and WASH facilities will promote hygiene and sanitation in the facility and thus better health status for both patients and staff 3. Creation of short-term employment for skilled and unskilled workers during the rehabilitation works	10. Loss of vegetation from minor removal of vegetation (shrubs) to gain access to renovation area. 11. Dust generation from movement of vehicles and equipment on earth roads to sites may lead to air pollution (Negligible) 12. Noise pollution from mobilization of vehicles and machineries /equipment to site and rehabilitation activities (Negligible) 13. Sourcing of rehabilitation materials such as sand, clay, gravels will lead to	22. Minor disturbance of the PHCs activities and communities due to rehabilitation activities such as movement of vehicles/materials/equipment to site and civil works/operation of machinery on-site (Minor) 23. Community health and safety risks from movement of equipment and vehicle to site which could lead to accidents for community members, patients and staff (Minor) 24. Encumbrances in some sites on the access routes due to farm activities which could lead to loss of livelihoods. Also, tampering with communities'

Potential Positive Impacts	Potential Negative Impacts	
	Environmental & OHS Impacts	**Social Impacts**
4. The project will promote human capital development which will support economic growth and poverty reduction 5. Support change towards health care in Nigeria which will help in improvement overall of health conditions of the people 6. It will reduce the mortality rate of the community members. 7. It will improve the life expectancy of Nigerians in general. 8. The project GBV activities such as GBV Mapping, Code of Conducts etc. will support the overall drive for the state in prevention of GBV related issues and provision of a response mechanism for survivors 9. Promote synergy amongst MDAs at the state level including Ministries of Health, Women Affairs, Environment, Health amongst others	impacts related to sand mining and extraction of gravel from unlicensed quarries (Minor) 14. Occupational health & safety risks from civil works and operation of machinery could lead to injuries, accidents for workers (Minor) 15. Poor labour and working conditions could lead to ill-health, grievances discrimination etc. (Minor) 16. Waste generated from renovation activities such as cement, wood, iron rods etc. could lead to environmental pollution if poorly managed. This could also lead to public health concerns especially for the patients and Facility Staff (Moderate) 17. Electrical and electronic wastes such as electrical wires, sockets etc. could lead to toxicity if poorly managed (Minor) 18. Poor maintenance of toilet and WASH facilities at operation phase could lead to damage of facilities and environmental pollution especially from poor sewage management. This could lead to air, land and underground water pollution and spread of disease. (Minor) 19. Burning of e-waste and debris as a disposal/management procedure may increase the risk of global warming and climate change (Minor) 20. Further deplorable of few earth-based roads (Minor) 21. PHCs contractor workers may be exposed to security risks such as banditry, kidnapping	structures & facilities such as electric poles that may be encumbrances to access may result in grievances (Minor) 25. Conflicts may arise from presence of foreign workers in the communities who may abuse cultural norms or display unruly/unaccepted behaviours (Minor) 26. Material and equipment stacking could restrict access for patients and community members (Minor) 27. Increase in traffic and delay time, disturbance of market and religious activities due to movement of vehicles/materials/equipment to site (Negligible) 28. Labour influx may induce SEA/SH/GBV risks, risk of STIs/STDs for community members. Influx of Camp Followers[1] could also increase the presence of sex workers in the communities (Minor) 29. Conflicts may arise with community members/ PHCs Management and community members competing for scarce resources such as water, toilet facilities, health facilities etc. (Minor) 30. Vulnerable persons/groups could be further disadvantaged by not benefitting directly from the project, engaged labor or facilities if there are no provisions for inclusion. (Minor) 31. Sourcing for unskilled labour may lead to risks of child labour and increase dropout during rehabilitation activities. This could further predispose children to health & safety risks, Violence Against Children (VAC) etc. 32. Poor labour and working conditions especially wages for community workers could lead to grievances.

[1]who follow the incoming workforce with the aim of selling them goods and services, or in pursuit of job or business opportunities

Potential Positive Impacts	Potential Negative Impacts	
	Environmental & OHS Impacts	Social Impacts
	during rehabilitation phase.	

The area of influence of the proposed rehabilitation will be described with respect to the following:

- Physical Environmental Media Influence.
- Geographical Area of influence.
- Community influence and
- Institutional Influence

Physical Environmental Media Influence

The proposed project's activities may have an impact on air quality, land (landscape), and surface and ground water. The proposed project site's landscape features include soil, flora, and fauna, and runoff water will be channeled to drains along the proposed site.

Geographical Area of Influence

The geographical area of influence includes the surroundings of the Primary Health Care Facilities proposed for rehabilitation. The area includes a 30m radius of the immediate direct environment or indirect environment which will be impacted e.g. traffic disruption as a result of work vehicles.

Community Influence

The proposed projects could have positive impact on the finances of vendors that will be selling around the facility under rehabilitation. Projects such as this, provides opportunities for local food vendors to sell to construction workers in a secure environment.

Artisans and other construction workers will also be employed on a temporary basis as a result of the project.

Institutional Influence

The major institutions to be influenced or involved in the proposed project include:

- ✓ Immediate environment of the Primary Health Care Facility
- ✓ National Environmental Standards Regulatory Agency NESREA
- ✓ Federal Ministry of Environment
- ✓ States Ministry of Environment
- ✓ States Environmental Protection Board
- ✓ State Health Management Board
- ✓ National Primary Health Care Development Agency (NPHCDA)

Project Activities of Environmental and Social Concern Activities of potential environmental and social impact identified with the proposed project are outlined under three (3) major phases of project activities: Pre-rehabilitation , Rehabilitation, Operation, and Maintenance.

- Pre Rehabilitation phase impacts

During the pre-rehabilitation phase, the potential negative impacts may arise from Land Preparation which includes Occupational Health and Safety/ Traffic/ Public Safety Issues.

Key mitigation measures for these risks will be:

- Public and stakeholder consultation during site selection and preparation and validation of studies.
- Quality control and implementation of validation procedures for environmental studies and their dissemination.
- Regular supervision of the building sites by environmental experts.
- Proper Development and implementation of Occupational Health and Safety Plan
- Proper Development and implementation of Community and Public Safety Plan.

- **Rehabilitation phase impacts**

Rehabilitation phase risks and impacts will be site specific and may cause inconvenience for workers and all those living or working on the healthcare facility. The following are the most significant of these effects:

Negatives impacts

- ✓ Loss of vegetation and impacts on fauna.
- ✓ Effects on the local microclimate
- ✓ Soil pollution, disturbance and erosion.
- ✓ Air quality deterioration.
- ✓ Vibration and noise nuisance.
- ✓ Generation and disposal of solid waste.
- ✓ Risk of pollution and deterioration of water quality
- ✓ Hygiene, health and safety of workers
- ✓ Risk of work accidents and occupational diseases
- ✓ Risk of spread of respiratory and skin infections
- ✓ Public Safety issues
- ✓ Risk of grievance and conflict
- ✓ GBV including SEA/SH risks

Positive impacts

- ✓ Increased and improved economic activities around the project site
- ✓ Temporary employment opportunity, business opportunity

3. Occupation and Maintenance phase

During the occupancy and maintenance phase, Primary Health Care activities should not pose any environmental or social problems. Potential negative impacts might generally be due to:

Negative impacts

- Waste management and disposal
- Fire hazards
- Emission of bad odours
- Early degradation of the building due to misuse and lack of maintenance
- Public health and safety
- Occupational health and safety
- gender-based violence and sexual harassment
- Risk of spread of respiratory and skin infections
- failure to take account of vulnerable people (disabled patient, etc.) risk of grievance and conflict
- Noise pollution

Positive impacts

- Improvement of the aesthetics of the PHC facility
- development of green spaces around the building
- Increased economic activity around the PHC during rehabilitation
- employment opportunity, business opportunity
- Assess to improve health care services
- Achievement of the IMPACT Project objectives

Criteria for Impact Evaluation

The following criteria was used to assess the impacts:

The impact's duration: this will consider whether the impact is temporary or permanent. Temporary effects must be reversible, lasting a few days, weeks, or months, whereas permanent effects are frequently irreversible.

The scope of the impact: the scope should be regional, local, or site specific. When a large portion of a region's population is affected, the extent is regional. When it only affects a small portion of the study area, the extent is considered local. If the extent is felt in a small and well-defined space, it is site-specific.

The impact's intensity: an impact's intensity is classified as strong when it is associated with a significant modification of the components. When an impact causes moderate disruption in the use of its components but is not irreversible, it is classified as average. A component is also classified as low or weak intensity if it does not jeopardize some of its usage or characteristics.

Impact severity: an impact can be severe, moderate, or minor. A significant impact is one that has far-reaching environmental consequences that cannot be easily mitigated. When an impact falls within the accepted legal limits and threshold, it is considered moderate. Because of the significant environmental impact, these consequences can be mitigated through specific mitigations. An impact is minor when its environmental impact is minor and can be mitigated with little or no effort.

5.4: Evaluation of Potential Adverse Impacts Associated with the Proposed project

The potential adverse impacts are evaluated with respect to the Pre-rehabilitation phase, rehabilitation phase and the Operation and Maintenance phase. Impacts are classified as Major, Moderate and Minor.

- **Major Impact**: An impact of major significance is one where an accepted limit or standard may be exceeded, or large magnitude impacts occur to highly valued resource. The impact is very strong and cannot easily be reduced.
- **Moderate Impact**: an impact is described as moderate when it is within the accepted limits and standards. The impact on the environment is substantial but can be reduced through specific mitigation measures.
- **Minor Impact**: An impact is minor when the magnitude is sufficiently small and well within accepted standards and receptor is of low sensitivity. The impact on the environment is significant but subdued and may or may not require the application of mitigation measures

5.4.1 Evaluation of potential Pre-rehabilitation phase Adverse Impacts

The identified impacts are evaluated in the table below.

Table 23: Potential Impacts Associated with the Pre-rehabilitation Phase

No.	Impact	Key receptor(s)	Evaluation	Significance
•	Occupational health and safety, public issues	Workers, public	Setting out of material placement portion, hoarding of site, positioning of materials and equipment. These may pose injury to workers and the public. The use of standard safety practices will be implemented.	Minor

5.4.2 Evaluation of potential Rehabilitation Phase Adverse Impacts

The identified impacts are evaluated in the table below.

Table 24: Potential Impact Associated with the Rehabilitation Phase

No.	Impact	Key receptor(s)	Evaluation	Significance
•	Air quality deterioration	Rehabilitation PHC workers, Ambient air environment and patients	Loading, haulage and dumping of rehabilitation aggregates as well as cement handling will generate dust that can affect the air quality. Dust particles can be blown from the site through winds. Dust levels will be temporary, local in extent and average in intensity depending upon the weather conditions.	Minimal

•	Vibration and noise nuisance	Construction and institutional workers, Ambient air environment and patients	The pumping of pre-mix concrete, operation of onsite concrete mixers, carpentry and welding works will generate noise and vibration. The impact from the construction related noise will be intermittent, temporary and of local extent.	Moderate
•	Generation and disposal of solid waste	soil	Wall scraped materials are likely to form the bulk of waste to be produced from the rehabilitation activities. Cement papers, food wrappers, used sachet water plastics and domestic refuse from food vendors who may be selling on the site will generate waste. This impact is local extent and temporary, lasting throughout the rehabilitation phase.	Moderate
•	Risk of spread of respiratory and skin infections	Construction workers and Artisans	Interaction of workers on site through work activities may create the avenue for the spread of , respiratory and skin Dust from rehabilitation activities is most likely	Minimal
•	Occupational health and safety	Construction workers	Movement of equipment, material handling and lifting, dust generation, pose a threat to the staff and artisans on the project site. The extent of impact could be temporary or permanent.	Major
•	Public safety issues	Public, PHC	Movement o and transportation of rehabilitation materials such as sand, stone, chippings, reinforcements, cement through the Facility may pose movement safety concerns within the facility.	Minor
•	Risk of grievance and conflicts	Construction workers	Grievances and conflicts on sites may disrupt work activities that could ultimately lead to project delays.	Minimal to Non existence

5.4.3 Evaluation of potential Operation and Maintenance Phase Adverse Impacts

Table 25: Potential Impact associated with the Operation and Maintenance Phase

No.	Impact	Key receptor(s)	Evaluation	Significance
•	Waste management disposal	Community	Disposal of soil and waste from the building. The extent of impact is continuous and local.	Moderate
•	Public health and safety	Public	Irregular maintenance of horticultural works and surrounding fauna which may lead to the breeding grounds for mosquitoes and other reptiles like snakes.	Moderate
•	Occupational health and safety	Workers	Internal and external cables that are not properly buried can lead to electrocution. Rehabilitation wastes that are still on site after project has been completed. See	Major

			Appendix 3 for the Waste Management Plan	
•	Fire hazards	Workers, Community	Poor cabling works and lack fire furniture i.e., smoke detectors, fire extinguishers.	Major
•	Emission of bad odours	Sanitary appliances, waste lines	Lack of proper ventilation of waste lines for W.Cs and installation of sanitary accessories such as bottle traps for basins leading to the emission of bad odours	Moderate
•	Early degradation of the building due to misuse and lack of maintenance	Building facility	Poor maintenance of building i.e., painting, replacement of damaged fittings etc. that will lead to fast deterioration of the building.	Major
•	Gender-based violence and sexual harassment	workers	Gender-based sexual advances at the workplace that are unconsent in nature.	Major
•	Failure to take account of vulnerable people (disabled patients, etc.) risk of grievance and conflict	Building accessibility	Poor initial design to incorporate the account of vulnerable and disabled patients	Major

5.5 Environmental and Social Mitigation Plan

5.5.1 Mitigation Plan

This section outlines an environmental mitigation management plan which will ensure good environmental practices throughout the various phases of the project. It discusses and allocates appropriate resources and responsibilities in mitigating the potential significant adverse impacts and issues relating to procedures for the management of unexpected change that will result by the implementation of the project.

Table 26: Environmental and Social Mitigation Plan

No.	Identified Impact	Project Activities	Proposed Mitigation Measures	Responsibility
Pre-Rehabilitation phase				
	Occupational health and safety, public issues	• Setting out of works • Positioning of materials and equipment on site	• Hoarding of the whole project site • Positioning of safety and warning signs around the project site	Contractor
Rehabilitation phase				
	Risk of pollution and deterioration of water quality	• Site Clearance	• Consultation with vulnerable people	Contractor Consultant
	Air quality deterioration	• Site clearing of • Excavation works • Concrete works • Transportation construction materials	• Sand and cement loads in transit will be well covered to reduce dust levels rising above acceptable levels. • Engines of vehicles, machinery and other equipment will be switched off when not in use.	Contract or Consultant
	Air quality deterioration	• Site clearing of • Concrete works Transportation of rehabilitation materials	• Sand and cement loads in transit will be well covered to reduce dust levels rising above acceptable levels. • Stockpiles of exposed soil and unpaved access roads will be sprinkled with water to regulate dust levels. • Engines of vehicles, machinery and other equipment will be switched off when not in use. • Construction and civil works will be phased out or controlled to reduce emissions from equipment and machinery in use.	Contract or Consultant

	Vibration and noise nuisance	• Site clearing • Excavation works • Transportation of construction materials • Concrete works • Disposal of waste material	• Rehabilitation activities will be in phases or controlled to reduce noise generation during rehabilitation. • Concrete mixer and other construction equipment will be located away from sensitive environmental receptors. • Engines of vehicles, equipment and machinery will be turned off when not in use.	Contractor Consultant
	Risk of work accidents and Occupational diseases	• All rehabilitation activities	• Conducting of Health and safety debriefing to sensitize workers on risk of accidents and occupational diseases. • Use of caution signs and banksmen in the operation of earth moving equipment	Contractor Consultant
	Generation and disposal of solid waste	• All rehabilitation activities	• Excavated earth material will be re-used as much as possible to back fill if it meets the standard to reduce waste. ● Excavated waste that is unsuitable for backfilling will be collected on site and disposed of at approved sites. ● Provide bins on site for temporary storage of garbage such as empty drinking sachets and carrier bags. • All metal scrap waste will be disposed of approved sites. • Contractor to prepare and abide by an agreed "Solid Waste Management Plan" throughout the rehabilitation period.	Contractor/ Consultant
	Risk of spread of STI- AIDS, COVID19, respiratory and skin infections	• All rehabilitation activities	• Provision of wash points at the entrance of sites and at vantage site points, the use of nose masks on site to help in regulating the spread of COVID19. • Conducting of sex education meetings and enforcement of rules on site that prohibits any form of sexual encounters.	Contractor/ Consultant

	Occupational health and safety issues	• All rehabilitation activities	1. Engage experienced artisans for rehabilitation work. 2. All workers should be given proper induction/ orientation on safety. 3. The contractor's / engineering consultant to develop a Health and Safety Policy and procedures to guide the construction activities. 4. Ensure there are first aid kits on site and a trained person to administer first aid. 5. Provide and enforce the use of appropriate personal protective equipment (PPE) such as safety boots, reflective jackets, hard hats, nose masks, ear plugs etc. 6. Comply with all site rules and regulations	Contractor / Consultant
	Public Safety Issues	• All construction activities	1. Hoard off the rehabilitation sites to prevent access to unauthorized persons. 2. Warning signs and notices will be placed at all dangerous locations, e.g., open trenches 3. Speed limit for all vehicles and construction equipment should be less than 20km/h within the construction space. 4. Ensure delivery trucks are in good condition to prevent breakdown on the roads leading to the Facility. 5. Provide adequate signage to warn motorists of ongoing activities on roads along the construction site.	Contractor/ Consultant
	Risk of grievance and conflicts	• Construction workers • Design and cost variation	1. Insist on a grievance mechanism to be used on site by the contractor. 2. Stated form of arbitration in the contract document to address any form of grievances.	Contractor/ Consultant
Operation and Maintenance phase				
No.	**Identified Impact**	**Project Activities**	**Proposed Mitigation Measures**	**Responsibility**

	Waste Management and disposal	• Disposal waste materials from the building. • Disposal of refuse from the building.	• Implementing the Project's HCWMP that ensures the principles of WM (waste minimization, segregation, storage etc) are adhered to • Have in place a disposal management system for waste and refuse.	Facilities management team.
	Public health and safety impacts	• External works	1. Ensure the period maintenance of landscaping. 2. Fumigation of shrubs and fauna to prevent the presence of snakes and mosquitoes.	Facilities management team
	Occupational health and Safety	• Cleaning of facility. • Layout of cables in office and facility spaces. • Access to emergency openings. • Laboratory activities	1. Placing of notifications for wet floors during cleaning of facilities. 2. Proper arrangement of cables to prevent trips during movement. 3. Provide adequate signages throughout the building. 4. Proper use of PPEs in Laboratories and organization of periodic Health and safety trainings to create awareness.	Facilities management team
	Emission of bad odours	• Usage of sanitary fittings	• Daily disposal of bins in the building to the central refuse system of the project.	Facilities management team
		• Disposal of refuse from the building	• Daily cleaning and disinfection of washrooms.	
	Early degradation of the building due to misuse and lack of maintenance	• Daily usage of building • Precipitation on building walls.	• Preparation of maintenance schedules to prevent the degradation of the building.	Facilities management team
	Gender-based violence and sexual harassment	• Daily work activities	• Contractor and workers all sign the Code of Conduct • Enforcement of the IMPACT Project sexual harassment policy against any offender. • Education of employees on sexual harassment	Facility Management Team
	Failure to take account of vulnerable people (disabled patients, etc.) risk of grievance and conflict	• Project Design	• Ensure disability friendly access to the building and other facilities during the design stage of the building	Consultant

S/No	Environmental component	Monitoring Parameters	Monitoring Site	Frequency	Responsibility
Pre-Rehabilitation phase					
1.	Occupational health and safety, public issues	• Evidence of warning signs on the construction site.	Rehabilitation site	Daily	Contractor / Consultant
Rehabilitation phase					
2.	Loss of vegetation	• Presence of vegetation within the project site.	Rehabilitation site	Daily	Contractor / consultant
3.	Effects on the local microclimate	• Presence of trees not in the layout of the project left untouched	rehabilitation site	Daily	Contractor consultant
4.	Soil disturbance and erosion	• Evidence of gullies from rushing water after rains.	Rehabilitation site	Daily	Contractor consultant
5.	Air quality	• Observation of dust and exhaust fumes	• Rehabilitation site • Immediate environment	Daily	Contractor consultant
6.	Vibration and noise	• Complaints on noise from adjoining institutions.	• Rehabilitation site • Immediate environment	Daily	Contractor consultant
7.	Waste Management	• Availability and use of bins • Records on frequency and location of waste disposal site of domestic and construction waste	• Rehabilitation site	Daily	Contractor consultant
8.	Risk of pollution and deterioration of water quality	• Presence of a clearly demarcated area with notes on the average depths of existing water service lines	• Rehabilitation site	Daily	Contractor consultant
9.	Occupational health and safety	• Availability and proper use of PPE's • Adherence to health and safety procedures • Records on frequency, type, and source of illness/accident/injury	• Rehabilitation site	Daily	Contractor consultant

		• Records on non-compliances			
10.	Risk of work accidents and Occupational diseases	• Availability of road signs clearly indicating speed limits for construction equipment and trucks. • Availability and Presence of a banksman during excavations and tipping of materials such as chippings, sand etc. on site.	• Construction site, Road leading to the project site	Daily	Contractor consultant
11.	Risk of spread of respiratory and skin infections	• Wearing of nose masks on site • Availability of a running water system and wash hand bowls or basins at the entrance of the site. • A site durbar on the avoidance of any sexual activity on site.	• Construction site	Daily	Contractor consultant
12.	Public safety and traffic issues	• Hoarding of project site • Records on frequency, type and source of accident / injury	• Construction site	Daily	Contractor consultant
13.	Risk of grievance and conflicts	• Presence of mode of arbitration and dispute resolution in the contract document	• Preparation of tender stage	Daily	Consultant
14.	Noise	Working during off-peak periods to avoid disturbances	Rehabilitation Space	Daily	Contractor, Consultant, Health-Care Facilities Management
Operation and Maintenance phase					
15.	Waste generation and disposal	• Record of Planned disposal management system	Rehabilitation project	Daily	Health-Care Facilities Management Committee
16.	Public health and safety impacts	• Availability of signage's to guide unauthorized entry and safety.	Rehabilitation space	Daily	Health-Care Facilities Management Committee
17.	Occupational health and safety	1. Availability and proper use of PPE's during maintenance and cleaning works 2. Adherence to health and safety procedures 3. Records on frequency, type, and source of illness/accident/injury 4. Records on non-compliances	Rehabilitation space	Daily	Health-Care Facilities Management Committee
18.	Fire hazards	1. Availability of working fire extinguishers at designated spaces. 2. Availability of smoke detectors in all spaces.	Rehabilitation Space	Daily	Health-Care Facilities Management Committee

19.	Emission of bad odours	Daily disposal of bins Daily cleaning of washrooms	Rehabilitation Space	Daily	Health-Care Facilities Management Committee
20.	Early degradation of the building due to misuse and lack of maintenance	• Records of Maintenance schedules for all fittings and fixtures	Rehabilitation Space	Daily	Health-Care Facilities Management Committee
21.	Gender-based violence and sexual harassment	• Availability of sexual harassment policy	Rehabilitation space / working environment	Daily	Health-Care Facilities Management Committee
22.	Failure to take account of vulnerable people (disabled patients, etc.) risk of grievance and conflict	• The Presence of environmentally friendly access for the disabled patients. • Availability of IMPACT Project s grievance and conflict resolution mechanism / procedure	Rehabilitation space / working environment	Daily	Consultant, Health-Care Facilities Management Committee NPHCDA/IMPACT Project, Safeguards Officer

Table 27: Proposed Environmental and Social Monitoring Plan

CHAPTER SIX: GRIEVANCE MECHANISM (GRM)

6.1 Introduction

This section provides a mechanism for the receipt, processing and resolution of complaints under the IMPACT Project. A grievance is a concern or complaint raised by an individual or a group affected by project operations. Both concerns and complaints can result from either real or perceived impacts of a project. Based on the impacts identified in chapter 5 of this ESMP, there are potentials for conflicts and grievances to arise as a result of project activities, thus it is important to have a pathway for addressing such conflicts when they arise.

The IMPACT project has prepared a detailed GM Manual which was prepared and is being operationalized by the various states. Therefore, the following sections only provide a summary of key areas relevant to the rehabilitation subproject.

6.1.1 Objectives of the GM

The Grievance Mechanisms was designed to achieve the following Objectives:

1. Provide clear procedures for resolving grievances and disputes in the communities where the sub-projects will be implemented
2. Resolve grievances when they occur, and mitigate their consequences, as well as preventing them from escalating
3. Allow communities to express views, on project activities (for example, quality of the rehabilitation works and malpractices)
4. Improve stakeholder participation and decision making through dialogues and registration of grievances and conflicts

6.1.2 Approach to Development of the GM

There are several steps which lead to the development of a concrete G

M, which includes the following:

1. Appraising the nature of the rehabilitation/renovation component to consider areas of likely grievances or friction
2. Field consultations to appraise the prevalent situation around the project areas of influence, as well as to get understanding of the operational environment of the project and the issues that may emerge.
3. Reviewing the current situation of handling grievance in the project locations through consultations with stakeholders in the PHCs and project communities
4. Consulting already prepared policy documents for the Project, as well as laws, conventions and policies as they relate to development, especially World Bank projects.

6.1.3 Potential Areas for Grievances under the Rehabilitation Works

a. Delay in execution of project leading to breakdown of trust

b. Disturbance to communities and PHC activities due to noise, dust emission, movement of rehabilitation materials and equipment to site etc.
c. Community health and safety issues such as accidents, pollution from poor waste management practices may lead to grievances
d. Potential increase in STDs, sexual exploitation and abuse/sexual harassment (SEA/SH), unwanted behaviour due to labour influx
e. Lack of employment of the community youths as unskilled labor may lead to lack of cooperation and also complaints from the communities
f. Competition for local resources such as water, health facilities, recreational facilities from HCFM workers may lead to grievances

6.2 Grievance Mechanism Process

The following are the steps in the GM

1. Channelling and receiving the grievance
2. Recording the grievance
3. Screening of the grievance
4. Investigation of the grievance
5. Resolving the conflict/ escalating the grievance to higher level
6. Conclusion and feedback process
7. Reporting, monitoring and evaluation

6.2.1 Channels for Receiving Complaints

These are several channels for stakeholders to report their grievances to the IMPACT project which includes the following:

- Compliant boxes – which will be mounted in all the project impact locations including within the PHC and in the community (near the house of the village head as decided by stakeholders during consultations). The GM focal persons will retrieve the contents of the complaint boxes periodically (at least every 48hrs) and channel to the Grievance Redress Committee (GRC) for investigation and resolution.
- Grievance Redress Committee (GRC)- GRCs will be set up in the project locations which will have members from the Health Care Facility Management (HCFM), community leadership, women representative amongst others as described in the GRM manual. Stakeholders can channel their grievances to/through any member of the committee
- Oral reports/meetings/consultations – grievances can be reported at meetings, consultations or to any leader or representatives in the community/PHC. In all cases, this should be escalated to the GRM focal person or any member of the GRC for proper handling.
- GRM Phone lines – stakeholders can utilize the toll-free phone lines that will be provided to the GRCs by the SPIU

In all cases the grievance received will be channeled to the GM focal person in the project location to be properly handled in line with the IMPACT Project grievance management procedures

6.2.2 Structure of Grievance Redress Committees

The grievance redress committee is planned in three-levels: community level, SPIU level and National level

First level GRC – Project Site/Community Level

This GRC is easily accessible to complainants in the project area (facility /community people), without any costs.

Members of the 1st level GRC should include:

1. A Representative of community leadership
2. Health Facility Manager
3. Gender Officer
4. Community representative

With the support of the SPIU Social and GRM Officers, the GRC will sensitize the Facility staff, community members on how to channel complaints to the committee through any of its members or other available channels such as complaint boxes, phone lines etc.

Second level GRC – SPIU Level

This GRC is formed at the SPIU level and can receive complaints from the 1st level GRC or directly from complainants through phone calls or in-person during visit to the communities.

Members of the 2nd level GRC include:

a. State Project Manager
b. GM Officer at the SPIU
c. Social Development Officer at the SPIU
d. Environmental Officer at the SPIU
e. Communication Officer at the SPIU
f. GBV Officer at the SPIU

Third level GRC – NPCU Level

This GRC is formed at the National office level and can receive complaints from the 2nd level GRC or directly from complainants.

Members of the 3rd level GRC include:

1. National Project Manager
2. GM Officer
3. Social Development Officer
4. Environmental Officer
5. Communication Officer
6. GBV Officer

6.3 Processing of Complaints

Complaints received will pass through major processes as follows:

1. Registration of complaints
2. Verification and investigation of complaints
3. Escalation/ resolution and closure
4. Feedback

6.3.1 Registration of Complaints

The secretary (GRM focal person) of the committee will register the compliant in the grievance logbook and acknowledge receipt of complaints grievance to the grievant within 1 day. The registration will capture the name of the complainant, date of the grievance, category of the grievance, persons involved, and impacts on complainant life, proofs, and witnesses.

6.3.2 Verification and investigation of complaints

This involves the verification of grievance to determine among other things whether the matter is related with IMPACT project activities, and whether the matter can be handled/resolved at the level where it is presented. The compliant will be investigated: this involves options and approach taken to resolve the case. This may involve site visit for physical inspection and determination of the claim, negotiation with the aggrieved PAP and feed back to the parties involved. Part of the investigations may also be to assess the cost of lost or risk involved in the grievance. Where the compliant is not related to IMPACT it will be referred to the appropriate authorities and the complainant informed.

6.3.3 Escalation/ resolution and closure

Where the case is resolved and all parties are in agreement, the case will be closed and documented in the grievance logbook. However, where the case is unresolved it will be escalated to the next level GRC. 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.

6.3.4 Feedback

Feedback on outcome of each case should get to the complainant through the secretary of committee or GRM officer as the case may be. It is expected that reported complaints are treated within the timelines stipulated in table below

6.4 Time Frame for Processing Grievances

Table below outlines the timeframe, process, task and responsibility for reporting grievances

Table 28: Timeline for Grievance Process

PROCESS	DESCRIPTION	COMPLETION TIME FRAME	RESPONSIBLE AGENCY/PERSON
Receipt of complaint	Document date of receipt, name of complainant, location, nature of complaint etc.	1 day	Secretary to GRC at project level
Acknowledgement of grievance to the complainant	By letter, email, phone	1 day	Secretary to GRC at project level
Screen and Establish the Merit of the Grievance	Review the complaint/ Listen to the complainant and assess the merit	2 days	Project level GRC Secretary & the aggrieved PAP or his/her representative
Refer unrelated project grievances	Where complaint is not related to IMPACT refer to appropriate authority and inform complainant	2 days	Project level GRC Secretary & the aggrieved PAP or his/her representative

PROCESS	DESCRIPTION	COMPLETION TIME FRAME	RESPONSIBLE AGENCY/PERSON
Investigate the grievance	Visit the site, conduct investigations and interviews	1 – 3 days	Project level GRC members
Implement a redress action	Discuss and agree on the grievance resolution	1 – 7 days	Project level GRC members & the aggrieved PAP or his/her representative
Escalate to SPIU for a dissatisfied scenario	Refer the complainant to the SPIU GRC	3 – 10 days	Project level GRC Chairman
Receipt and record of complaint at SPIU GRC	Document date of receipt, name of complainant, location, nature of complaint etc.	1 day	SPIU GRM Officer
Investigate/ Implement a redressal action	Review the previous action by the project level GRC/ conduct investigations and interviews. Recommend grievance resolution	2 – 7 days	SPIU GRC
Escalate to IMPACT NPCU for a dissatisfied scenario	Refer the complainant to the NPCU GRC	3 – 10 days	State Project Manager
Receipt and record of complaint at NPCU GRC	Document date of receipt, name of complainant, location, nature of complaint etc.	1 day	IMPACT GRM Officer
Investigate/ Implement a redressal action	Review the previous action by the GRCs/ conduct investigations and interviews. Recommend grievance resolution	2 – 5 days	IMPACT GRC
Last resort - Advice complainant of option to seek judicial redress	Where resolution is not reached, complainant is free to seek judicial redress. NPCU to document the case including all attempts at resolution and send a report to the TTL	7days 5days	National Project Manager
Close the case	Follow up to obtain feedback and document resolution in logbook	As required	GRM officers

6.5 GBV-GRM

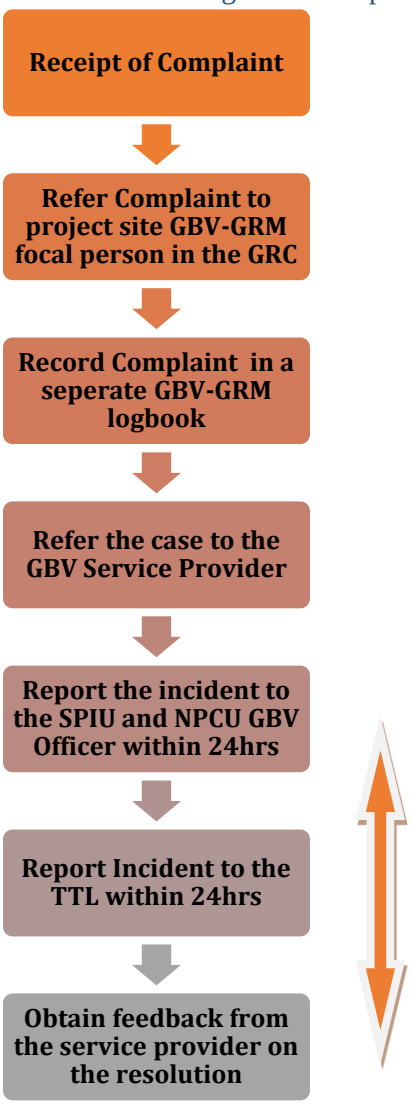
The GBV GRM will have special procedures for responding to allegations of sexual exploitation and abuse (SEA) and sexual harassment (SH) that are made against a project actor. However, for any complaint that is reported to the GRM (including complaints involving other forms of GBV that are not related to the project), the GRM will also have procedures in place to refer the individual to GBV service providers.

To fulfil the role of addressing GBV, all staff and volunteers at all levels of IMPACT Project should be trained (and/or have previous knowledge and experience) on the GBV Guiding Principles and the specialized procedures for receiving and referring GBV-related complaints. This set of skills will help GRM staff and volunteers to support the quality of the complaint mechanism, while at the same time ensuring the adherence to these Guiding Principles and a survivor-centered approach, including right to safety, respect, and confidentiality, of the complaint intake and management. Hotline operators in

particular should receive training on the handling of GBV-related complaints in line with the principles of confidentiality and the specialized procedures.

When receiving a grievance/during the intake process, the person receiving the complaint shall respect the wishes, choices, rights and dignity of the complainant. In order for the survivor/complainant to make informed decisions about whether to seek services and whether to file a complaint with the project (where the complaint involves SEA or SH), she/he needs to be provided with clear and simple information on the functioning of the system, on the possible outcomes, likely timelines, and the types of support that can be provided. The survivor/complainant must also give their consent for the sharing of basic, anonymous, non-identifiable monitoring data about the incident with the SPIU/NPIU and with the World Bank. If a complainant chooses not to be referred to GBV service providers or have the project take further action, then the case will be closed. The officer or volunteer must seek the survivor/complainant's consent to share basic monitoring data, and if no consent is given, no data will be recorded. For GBV cases, it is important to ensure that access to the complaints processes is as easy and as safe as possible for the complainant/survivor and that they clearly understand the referral process.

6.5.1 Process for Receiving GBV Complaint and Referral



Keep complainant/survivor information confidential and anonymous

Complainant should be immediately referred to the GBV-GRM focal person at the lity or Community without asking further questions or details

The GBV-GRM Focal Person needs to provide the survivor in information on services available and with their consent, move to recording. The GBV-GRM FP will record the nature of the complaint only with no identifiable information on the survivor. Refer the survivor immediately to the project's registered GBV service providers

The GBV-GRM officer to immediately refer the case to the relevant GBV service provider identified in the referral directory

If the survivor wishes to take police or legal action, information as contained in the referral directory is provided by the GBV Officer

There may be need for the service provider to re-sensitize stakeholders at the project level on SEA/SH/GBV in collaboration with the SPIU and also develop strategies to prevent such re-occurrence.

6.5.2 Documentation of GBV-GM Cases

GBV-related complaints would provide information only on the nature of the complaint (what the complainant says in her/his own words), and operators would link the complaint to a GBV service provider for necessary attention and action.

The GBV-GM focal persons will be trained by the NPCU/SPIU GBV Officers in liaison with GBV service providers on how to receive GBV/SEA/SH cases in a survivor centric approach, hinged on confidentially and empathetically (with no judgement)

1. In recording the incident, the identity of the survivor should be protected, keeping survivor information confidential and anonymous (no names in the record book). This information is limited to (a) the nature of the allegation or incident; (b) whether the incident is likely to be project related; (c) the age/sex of the survivor (if known); and (d) whether the survivor was referred for services.

2. Ensure that no identifiable information on the survivor is stored in the GRM
3. Document the exact complaint (no detailed information of the incident is expected), date, action taken and close the report
4. As required, refer complaints to the GBV service provider

6.6 Awareness of the GM

The GM should be given a wide publicity among stakeholder groups such as facility management/staff, affected parties, interested groups, project MDAs etc. Effective awareness of GM process makes people better understanding about their options, depending on the types of complaints. However, measures should also be taken to encourage stakeholders not to submit false claims. Criteria for eligibility need to be communicated and also awareness campaigns should be launched to give publicity to the roles and functions of the GM.

Awareness should include the following components:

1. Scope of the project, planned rehabilitation phases, etc.;
2. Types of GRCs available; purposes for which the GM can be accessed, e.g., rehabilitation-related grievances, grievances related to physical and economic displacement. Members of the GRCs in that location and contact details
3. How to access the GM
4. How complaints can be reported to those GRC and to whom, e.g., phone, postal and email addresses, as well as information that should be included in a complaint
5. Procedures and time frames for initiating and concluding the grievance redress process; boundaries and limits of GM in handling grievances
6. The need for them to take part in GRC meetings and the steps of resolving process and timeline adopted in this mechanism
7. A variety of methods can be adopted for communicating information to the relevant stakeholders. These methods could include display of posters in facility premises, project offices, community centers as stated by stakeholders during consultations.

6.7 Monitoring and Evaluation

The Project GM focal persons/ GM officer will be responsible for:

1. Providing the grievance Committee with a weekly report detailing the number and status of complaints
2. any outstanding issues to be addressed
3. Monthly reports, including analysis of the type of complaints, levels of complaints, actions to reduce complaints and initiator of such action will be sent to the NPCU
4. Quarterly grievances reports will be sent to the Bank
5. Periodic feedback on the accessibility, fairness and efficiency will be obtained by the SPIU GM officer through surveys/consultations in the project areas
6. Areas that are identified for improvement will be addressed and improved upon

CHAPTER SEVEN: ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

7.1 Introduction

The overarching objective of the Environmental and Social Management Plan (ESMP) is to ensure that all impacts of the rehabilitation works are contained and brought to an acceptable level to guarantee economic, environmental and social sustainability of the project. The ESMP Matrix has been developed to meet international and national standards on E&S performance. It details the mitigation measures the IMPACT Project Safeguard Officers will be deploying during the rehabilitation. This ESMP is prepared for facility-based monitoring and management. The cost provided in the ESMP is to be used specifically for each of the facility to be rehabilitated as all the impacts envisaged are all site-specific and should be mitigated individually by the Safeguard Officers in each Primary Health Care.

The negative impacts identified in the previous chapter will be outlined in this section with adequate details on mitigation measures and its respective plans. These impacts consist of environmental, social and occupational health and safety issues associated with the rehabilitation are described in the matrix table below. The matrix table below is the E&S Management and Monitoring Plan which outlines action plans with well-defined desired outcomes, mitigation measures to address all potential impacts identified with parameters to be measured, methods of measurement, location of measurement, performance indicators (targets or acceptance criteria) that can be tracked over defined time periods, and with estimates of the resources. The table also includes a column for Monitoring Indicators and Monitoring Frequencies with the different phases of the project (Pre-rehabilitation, Rehabilitation and Operation Phases). Based on assessment, most of the potential adverse impacts are likely to arise during the rehabilitation phase of the project.

The Environmental and Social Management Plan (ESMP) is to be implemented by the State Project Implementation Unit with considerable assistance from the Health Care Facility Management (HCFM). The cost of the ESMP attached is for effective monitoring by the SPIU and mitigation by the Contractor throughout the Pre-rehabilitation, Rehabilitation and then during the implementation phase of the facility till its Decommissioning. management and monitoring at the level of the HCFM with its Safeguard Officers.

7.2 ESMP Matrix

Table 29: Environmental & Social Management Plan

PRE-REHABILITATION PHASE

S/No	Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (N)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Monitoring Frequency	Institutional Responsibility (Monitoring)	Cost (N)
ENVIRONMENTAL IMPACTS												
1A	One-Off movement of materials, vehicles and equipment to site	Dust generation from untarred road; exhaust fumes of vehicles, equipment	Ensure that all vehicles are serviced; undergo vehicle emission testing (VET) and vehicle exhaust screening (VES). Mark out access route within the PHC Facility	c Contractor	0	SO_2, NO_X, CO, VOC, $PM_{2.5}$, PM_{10} Number of vehicles/sites Access route marked out	In-situ measurement Site inspection	Air Quality Parameters are within permissible limits Evidence of VET and VES Evidence of compliance	Project area and within 1km Project area	Before movement of vehicles	State Environmental & Protection Agency	150,000
	Mobilization of Workers and equipment	Minimal noise impacts	Carry out activities during PHC patient time out or off-peak periods Provide PPEs for workers Put off equipment when not in use	Contractor	300,000	No of Complaints from affected communities No of retrofitted vehicles; Vehicle movement frequency Usage of ear plugs/ muffs	Noise measurement	Evidence of Compliance	Project Area	Daily	SPIU E&S, SEPA	200,000

S/No	Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (N)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Monitoring Frequency	Institutional Responsibility (Monitoring)	Cost (N)
2A	Same as 1A	Risk of accidents and injuries Respiratory diseases to Workers due to inhalation of dust from asbestos roofs or other dusts particles Noise Pollution Community Health and Safety both to staff and residents	Training and Implementation of site specific Occupational Health and Safety Management Plan (OHSMP) Adherence to the Asbestos Management Plan Provision of adequate first aid, first aiders, use of PPE, signage (local language and English languages). Cordon off unauthorized areas such as staging area, work area etc Provision of specific personnel training on worksite OHS management Workers should get a dailyinduction/toolbox before work commences Use reflective tapes and signage integrated in all worksites for safety at night	ContractorHCFM	500,000 350,000	Compliance with OHSMP No of workers Trained No of accidents, incidents or injuries Noise level	Site inspection Consultation	Numbers and Minutes of OHS training /tool box meeting Evidence of Compliance through minutes of meetings	Project area	One off	SPIU E&S Team	50,000
	Sub-total				1,150,000							400,000
SOCIAL IMPACTS												
1B	Movement of materials and equipment to staging area	Obstruction of access route for patients and staff Grievances from locals over movement of	Movement of equipment and materials should be done when PHC have closed for the day Explore alternative routes. Plan transportation schedules during	Contractor	400,000	Evidence of cordoned area off access route	Site inspection	No. of complaints	Project site	Weekly	SPIU E&S Team	40,000

S/No	Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (N)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Monitoring Frequency	Institutional Responsibility (Monitoring)	Cost (N)
		equipment and vehicles Conflicts between locals and workers	non-peak hours to minimize traffic disruptions. Coordinate with local authorities for traffic management strategies. Implement Traffic Management Plan (TMP) Ensure HCFM employ locals Keep the local community informed about the renovation project, including transportation schedules. Address concerns promptly through community meetings and feedback mechanisms. Sensitization and meetings with the traditional institutions			No of locals recruited	Recruitment records	HCFM compliance		Daily		
		Increase in noise level above permissible noise level, (90dB) during vehicular movement may create nuisance for locals & patients	Ensure all vehicles and machines are serviced before being brought to site Select and use vehicles/ equipment with lower sound power levels. Ensure vehicles/ equipment not in use are turned off	Contractor HCFM	300,000	Noise level Number and frequency of complaints in project area	In-situ measurement of noise level	Noise level (Not to exceed 90dB(A) for 8 hours working period	PHC area	Daily	E&S Team SPIU	0

S/No	Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (N)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Monitoring Frequency	Institutional Responsibility (Monitoring)	Cost (N)
2B	General renovation and Demolition works	Grievances from residents, and staff over movement of equipment, flying materials from moving vehicles and if equipment is not parked at designated location.	Mobilization of equipment and machinery should be done at off-peak period Ensure caution signs at strategic locations in both English and local languages to warn stakeholders. Ensure vehicles and equipment are parked at Camp site and designated areas ONLY. Any incident/ accidents should be reported immediately to the HCFM & SPIU Cover truck conveying materials to site with tarpaulin to prevent materials falling and causing injuries to pedestrians & motorists	Contractor HCFM	300,000	Appropriate signage's in local languages Incident/ Accident Report	Visual observation Interview	No. of complaints received within the project area. Zero incident/accident report	Project Area	Weekly	SPIU E&S Team, Facility E&S Team	100,000
3B	Presence of non-local workers	Anxiety from locals in terms of insecurity, competing for scarce resources may induce threats to life and safety	Provide sensitization training to improve awareness and sensitivity of workers Implement GRM.	Contractor HCFM	100,000	Number of trained Personnel	Attendance list / training report	Compliance to SEA/SH Accountability and Response Plan	Project Area	Prior to project implementation	SPIU Gender/GBV Officer	50,000
		Labour Influx which could lead to Increase in sexual activities and potential spread of	Limit the number of migrant workers by engaging local workers. Awareness campaign on sexual diseases, and	Contractor's OHS, Environmental Personnel HCFM	100,000	No of reported. cases Stakeholders concerns on risk of GBV.	Visual observation and interviews Rapid health survey Consultations GBV Incident Report	Community perception and level of satisfaction. Level of awareness and knowledge of	Project area	Once during pre-rehabilitation Once during rehabilitation	SSO, Gender & GBV Officers of the SPIU	200,000

S/No	Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (N)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Monitoring Frequency	Institutional Responsibility (Monitoring)	Cost (N)
		STDs/STIs within the project area May induce SEA/SH and other GBV Issues	distribution of male and female condoms. Develop an induction program including a code of conduct for all workers. Ensure contractors and workers sign Code of conduct to address the following: Respect for local residents; Zero tolerance of illegal activities such as child sexual exploitation and underage sex, prostitution, harassment of women, GBV, purchase or use of illegal drugs, Disciplinary measures and sanctions (e.g. dismissal) for infringement of the code of conduct and/or company rules; Commitment /policy to cooperate with law enforcement agencies investigating perpetrators of gender-based violence.			Workers manual, employment codes etc Level of awareness of local culture by migrant workers. Grievance Redress System Ratio of migrant to local workers Presence of security personnel Level of Awareness and Education		preventive measures. Signed CoCs with the SPIU Conduct of sensitization campaigns				
	Sub-total				1,200,000							390,000
	PRE-REHABILITATION SUB TOTAL				2,350,000							790,000

REHABILITATION PHASE

S/No	Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (N)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Monitoring Frequency	Institutional Responsibility (Monitoring)	Cost (N)
ENVIRONMENTAL & OHS IMPACTS												
1A	works at the facility	Increase in cement and fugitive dusts	Implement activities after PHC closed or liaise with the Facility Management for appropriate time if the facility runs for 24 hours Use PPEs Ensure watering where applicable prior to and during civil works in order to reduce the release of dusts Implement Waste Management Plan (See Annex 9)	Contractor HSE Personnel	100,000	Period of implementation	Site inspection	Reduction in onsite/work area dust levels	Project facilities; specifically work areas	Weekly	SPIU E&S Team, SEPA	0
		Indiscriminate defecation or open defecation by construction workers	Provision of mobile toilets Staff Toilets in the facility should be rehabilitated	Contractor HSE Personnel Implemented by site Contractor	150,000	Evidence of useable toilets	Site Inspection	HCFM's compliance	Project Area	Daily	SPIU E&S Team. SEPA	200,000
	Mixing of cement	Noise disturbance in a serene environment Dust due to cement mixer Flying objects/materials may get into eyes, lungs of locals or residents	Hire and use only good cement mixer Implement activities during Facility time out or close out Cover vehicles with tarpaulin	Contractor HSE Personnel	0	Noise level and air quality No of complaints as regard facility health disruptions Vehicle Movement Manifest Number of vehicles using tarpaulin	Site inspection Vehicle inspection	Number of complaints HCFM's compliance and document verification	Project Area	Daily	SPIU E&S Team, SEPA	
2A	Civil works, Roofing, fixing of doors, windows, Wall finishing and painting	Accidental spillage of lubricants and paints chemical	Buy and use only required quantity Collect slurry into labelled container	Contractor HSE Personnel	30,000	Number of waste collection containers	Site inspection	HCFM's Compliance	Project Site	Weekly	SPIU E&S Team	0.00
		Accumulation of solid wastes including	Ensure proper sorting; storage and final disposal especially waste from	Contractor HSE Personnel	0	Waste Manifest	Site inspection	Reduction in visible waste site or debris	Project Area	Weekly	SPIU E&S Team, SEPA	0

S/No	Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (N)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Monitoring Frequency	Institutional Responsibility (Monitoring)	Cost (N)
		construction waste and debris	dilapidated roofs and ceilings by a licensed waste disposal agency Implement Waste Management Plan (see annex 2) Ensure recycling of removed materials through approved recycling facilities to conserve resources. Ensure no waste is left behind at project site after construction			Manifest for waste reuse	Verification of documents					
3A	Operation of equipment used during the rehabilitation phase	GHG Emission	Turn off engine when not in use Use or hire vehicles or equipment that are in good condition generally less than 5 years old.	Contractor	0.00	GHG Emissions	Air quality assessment	Compliance Card Report	Project Area	Weekly	SPIU E&S Team,	
4A	Electrical works at the various blocks, Laboratories, etc	Generation of hazardous waste, e-wastes from removal and replacement of electric wires, switches, sockets etc.	Collection, segregation and sorting; Implement WMP; Liaise with the SEPA or Sign agreement with a licensed waste	Contractor	0100,000	Waste Manifest	Site inspection	Absence of e-waste on site	Project Area	Weekly	SPIU E&S	200,000
5A	Same as 1-4A	Accidents such as Injuries, explosions, electrical fires, leakages, falls, slips, release of hazardous energy, deaths etc	OHS training and education i.e Conduct routine JHA Use of PPE;	Contractor	100,000	No of workers trained OHS Plan Compliance	Consultation with workers Site Observation	Number of accidents/incidents Minutes of Training /tool box talk	Project Area	Weekly	SPIU E&S Team	0
		Community health and safety	Implement the OHS within this report &: Develop SOP for all tasks	Contractor	300,000		Documentation	No of Complaints from Community/patients/facility Staffs	Project Area	Bi-monthly	SPIU E&S Team	200,000
		Soil contamination from spillages of oil and other petroleum products from leakages and/or improper handling during	Ensure fuel storage tanks are installed in a bunded area and checked daily. Ensure all vehicles and machines are serviced	Contractor	50,000	Installation of impermeable platform at limit zone.	Visual observation	Soil quality	Project camp sites and equipment packing zones	Monthly	SPIU E&S Team, SEPA	

S/No	Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (N)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Monitoring Frequency	Institutional Responsibility (Monitoring)	Cost (N)
		maintenance of vehicles and equipment	before being brought to site to avoid leaks of oil. Prevent unregulated dumping of fuel waste. Install impermeable surface at fuel storage areas, vehicle servicing & limit zone to contain potential leakages.									
		Generation of spoils and other excavated materials	Ensure stockpile and disposal areas are stable and protected against erosion and not interfere with run off or subsequent Construction activities. Stockpile to be covered and stored in a sealed and bonded area in order to divert storm water away. Reuse stockpile as fill materials	Contractor		Evidence of stockpile protection Evidence of spoil reuse	Visual observation	Compliance with Mitigation	Bridge location, along realigned section of the approach road	Monthly		
	Sub-total											
SOCIAL IMPACTS												
1B	Renovation of Labs, administrative block, installation of furniture, fittings, roofs, walls, hostels (if any) Roofing, fixing of doors, Wall finishing and painting	Risk of Child Labour which can lead to Violence Against Children	Ensure that children and minors are not employed directly or indirectly on the project Implement sensitization campaign against child labour Good work enforcement procedures Regular stakeholders' meetings All employees and HCFM must sign code of conduct that stipulate zero	HCFM; SPIU Gender/GBV Officer, NGO	To be determined in consultation with the Consultant procured for the Asbestos Management Plan	Categories of employees Number and reports of campaigns and meetings Signed Code of Conduct Compliance to Labour Management Plan (LMP) in Annex 5	Documentation Consultations	HCFM Compliance Absence of underaged children Number of complaints	Project Corridor	Bi-monthly	State Ministry of Health SPIU E&S Team	10,000

S/No	Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (N)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Monitoring Frequency	Institutional Responsibility (Monitoring)	Cost (N)
			tolerance to child labour either directly or indirectly Implement LMP which addresses Child labour									
2B	Staging Area	Obstruction to movement of patients, residents and staff	Select and cordon-off areas off access route	HCFM	As recorded in Pre-rehabilitation Stage	Project Site	Site inspection	HCFM Compliance No of complaints	Project site	Daily	SPIU E&S Team, E&S Safeguard Facility Officers Community actors	20,000
3B	Movement of materials and equipment Same as 1-2B	Fugitive Dust may likely affect the community health & safety especially areas with earth-based roads Noise: disturbance in a serene environment may affect their daily work schedule, psychology and peace of mind of both residents and workers	Rehabilitation should be done during PHC close time out or 10am- 4pm for the PHCs that runs for 24hours as observed from the questionnaires administered. Vehicles conveying materials should be covered with tarpaulin Ensure all vehicles and machines undergo service before being brought to site with continuous regular maintenance. Select and use vehicles/ equipment with lower sound power levels. Ensure vehicles/ equipment not in use are turned off Fit vehicles with sound proof devices and use good vehicles Provide PPEs for workers	HCFM	As recorded in Pre-rehabilitation Stage	Air quality Vehicles with tarpaulin Noise level	In-situ measurement Vehicle inspection Consultation with residents	Air quality is within permissible limits HCFM's Compliance Number of complaints	Project Area and its corridor	Weekly	SPIU E&S Team, SEPA	

S/No	Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (N)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Monitoring Frequency	Institutional Responsibility (Monitoring)	Cost (N)
4B	Renovation works	Labour Influx; which may lead to conflicts amongst locals and employees; competition for limited resources such as water, light, materials etc.	Engage local workforce in the appropriate skills Incorporate social environmental measures into the civil works contract Implement the LMP within this report	ContractorHCFM	100,000	Number of local work-force Evidence of social and environmental measures in civil works contract	Contract Verification Site inspection Document verification	HCFM compliance to, E&S Measures Number of local employees	Project Corridor	One-off Monthly	Component Lead 1.2, SPIU NPCU E&S Team SPIU E&S Team	
5B	General Renovation and Demolition works	Occurrence of onsite/off-site, social vices (Fights, rape, harassments, theft, vandalization, drug use etc.) Threat to health and safety of locals Increase in SH/SEA due to presence of foreign workers near local residents	Mandatory and regular training for workers on required lawful conduct in host community and legal consequences for failure to comply with laws. Engage local residents as part of employees and train them on code of conduct, GBV (SEA/SH) Training program for project personnel to include GBV(SEA/SH) issues. Project workers should enjoy the privilege of retreating to visit their families before returning to site. Provision of gender-based awareness campaign within the communities. Partnering with NGOs/CBOs in the project area who are	ContractorHCFM	300,000	No of Training Conducted and attendance list	Consultation Records Site inspection and observation	HCFM Compliance Level of awareness	Project Area	Monthly	SPIU E&S Team	

S/No	Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (N)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Monitoring Frequency	Institutional Responsibility (Monitoring)	Cost (N)
		Abuse of cultural norms	actively involved in gender-based issues. Develop an induction program including a code of conduct for all workers. Code of conduct to address the following: Respect for local residents; No hunting or unauthorized taking of products or livestock. Provide cultural sensitization training to improve awareness of and sensitivity of workers to local cultures, traditions, and lifestyles.									
6B	Movement of vehicles, materials and equipment On-going rehabilitation works	Temporary disruption of PHC operational activities	Construction should be done during Facility Closed time out	ContractorHCFM	0	Construction period Staff time-in and time out	Site inspection	No of complaint	Project Area	Weekly	SPIU E&S Team	0
		Risk of communicable diseases such as sexually transmitted diseases (STDs) including HIV/AIDS from interaction among construction workers Increase risk of transmission of COVID-19	Provide opportunities for workers to regularly return to their families if there is need for that Institute Sexually Transmitted Infections (STI) prevention programs (peer education etc.) Liaise with appropriate health focused NGOs to undertaking health awareness and education initiatives on STDs amongst workers and in nearby communities.	Contractor		Number of trainings, awareness and attendance list	Consultations Interviews	Number of complaints/incidents	Project Area			

S/No	Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (N)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Monitoring Frequency	Institutional Responsibility (Monitoring)	Cost (N)
			Sensitization and awareness for employees on STIs and the use of non-pharmaceutical preventive measures Ensure compliance to guidelines prepared by the NCDC and WHO			Sensitization record sheets for STIs Sensitization reporting						
7B	Ongoing rehabilitation works	Grievances from non-payment of staff which can lead to delay in job completion, social vices and other conflicts	Engage only personnel you can adequately pay Engage more casual workers to reduce financial cost Prepare payment schedule alongside materials BOQ	ContractorHCFM	0	Record of payment schedule Number of permanent/casual workers	Document Inspection	No of complaints	Project Site	Monthly	SPIU E&S Team, HCFM	100,000
		Use of illicit drugs	Prohibition of drug and alcohol use by workers while on the job through awareness & sensitization on side effects of drug abuse	ContractorHCFM	200,000	Records of awareness	Visual and random observation Discussions	Number of workers fully educated on the side effects	Project Area	Bi-monthly	SPIU E&S Team	
8B	Conveying and lifting heavy equipment Same as 1-3B	Collapse, injuries, falls, cuts, abrasions, deaths which can lead to delay in completion of daily tasks and project timeline	Develop and implement site specific Occupational Health and Safety Plan which will include JHA/PHA, Safe work Practice, Use of PPE Provision of adequate first aid, first aiders, PPE, signages (English and Hausa languages), engineering barriers Restrict unauthorized access to all areas of high-risk activities. Implementation of specific personnel training	Contractor	500,000	No of trained workers, first Aiders Usage of appropriate PPE Usage of signages and demarcations Accident/ Incident Report	Visual observation Records	Zero incident/accident report	Project Site	Weekly	SPIU E&S Team	

S/No	Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (N)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Monitoring Frequency	Institutional Responsibility (Monitoring)	Cost (N)
			on worksite OHS management. Ensure that staging areas for equipment are adequately delineated and cordoned off with reflective tapes and barriers. Any uncovered work pits should have appropriate signage and protection around them. Workers should get a daily induction/toolbox before going on the site and a refresher of what happened on site a day before. Adequate safety signage within construction sites should be installed to alert community/ drivers/pedestrians. Lighting and reflective tapes and signages should be worn by all workers.									

S/No	Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (N)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Monitoring Frequency	Institutional Responsibility (Monitoring)	Cost (N)
		Security risks to workers e.g kidnapping, hostage taking and armed attacks in view of the prevailing insecurity in the country	Appropriate security measures in place to prevent harassment or kidnapping. Consult the local residents on present security measures Employ local vigilantes as security personnel and inform Police and Civil Defence about the project work. Reduce working hours, road travel and exposure to security threats. Engage local workers to reduce the number of migrant workers. Implement Project security risk management plan	HCFM	600,000	Security personnel engaged. Level of SRMP implementation	Records of consultation and Interviews	No of security incidents	Project Area	Bi-monthly	Supervision Consultant SPIU E&S Team HCFM Police	150,000
	Sub-total				2,530,000							1,020,000

OPERATION PHASE

S/No	Activities	Potential Impact	Mitigation Measures	Responsibility for Mitigation	Mitigation Cost (N)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Monitoring Frequency	Institutional Responsibility (Monitoring)	Cost (N)
ENVIRONMENTAL & OHS IMPACTS												
1A	**Usage of Facility furniture, WASH and other facilities**	Generation of different types of wastes	Provide waste bins that are immovable but can be easily tipped off from down or up Sign an agreement with SEPA or licensed waste collector for regular disposal at some dumpsites	Head of facility/ Director	To be determined	Waste Manifest Number of waste collection	Document inspection	Good housekeeping	Project Area	Bi-monthly	SPIU E&S Team, SEPA	0
		Poor maintenance of WASH Facilities	Prepare a maintenance schedule Avoid using water closet for the VIP toilets Attach water points to WASH Facilities	Director/Sanitation staff	N/A	Provision of water	Physical inspection	No of complaints Good housekeeping	WASH Facilities	Bi-monthly	SPIU E&S Team	0
		Termite infestation of furniture/ equipment	All furniture supplied must be coated with termite proof paint Provide seedlings for tree planting	Supplier/HCFM SPIU E&S Team	100,000	Furniture coated with the appropriate proof paint	Document Inspection	No of Complaints	All Project sites	Quarterly	SPIU E&S Team, HCFM	
	Sub-total				**200,000**							100,000
SOCIAL IMPACTS												
1B	**Closure of civil works**	Loss of employment	Inform employees that employment is short term at the beginning of the contract	HCFM	Nil	Information process	Survey	Proper termination of employment	Project Area	One-off	SPIU Team	0
	Sub-total				200,000							**100,000**
	GRAND TOTAL				**5,080,000**							**1,910,000**

7.2.1 Contractual Measures

As seen in Table 29 (ESMP Matrix) all the mitigation measures are the obligation of the Contractors while the monitoring is primarily with HCFM, SPIU and other State actors mentioned during the pre-rehabilitation and rehabilitation phases of the project.

Table 30: Work Agreement Measures

S/No	Actions	Response
1.	All measures as described in the ESMP Matrix shall be included in the work agreement documents with appropriate flexibility to adjust these measures to site circumstances, and that the potential Contractors will have to prepare their proposals taking into account these measures.	The non-inclusion of these measures in the proposal will lead to a disqualification of the proponent.
2.	Specifically, the measures should be translated into a suite of environmental specification that are written in the same language style and format as the rest of the contract document	This approach will ensure that the environmental and social controls integrate seamlessly and are presented in a familiar form to the accountable member of the HCFM
3	The cost for mitigation measures should only be added into the cost of the contractual document as provisional sum	The HCFM must consider and put the cost for the environmental and social mitigation requirements specified in the ESMP.
5	HCFM Code of Conduct – Preventing GBV and Violence Against Child (VAC): A HCFM's Code of Conduct should be prepared by the HCFM, and given to the Contractor/s to be signed; and forms part of the bids/contract agreement. To a minimum, the Code of Conduct should address: Standards of Conduct such as (i) Conflicts of interest (ii) quality of products and services, (iii) health and safety- reporting injuries and unsafe conditions (iv) workplace violence, labour and human rights, ethics, customer relations, reporting violations, (v) sex with anu person under 18 is prohibited etc	The HCFMs Code of Conduct indicates the HCFMs' commitment to be of best behavior and comply professionally with the requirements of its contract and World Bank's safeguards standards
6	Individual Code of Conduct Preventing SH/SEA and Violence Against Child (VAC): To a minimum, the individual code of conduct should spell out acceptable behaviour, consequence of violation, the routes for resolution of conflicts in any instance where personal interests conflict general interests regarding to the project work, outside work conduct, due diligence in providing required services, individual commitment to sustainable environmental practice during project implementation activities.	The Individual Code of Conduct indicates the employee's commitment to be of best behaviour and comply professionally with the requirements of his/her contract with the SPIU/HCFM

7	Manager's Code of Conduct Preventing SH/SEA and Violence Against Child (VAC): The Manager's Code of Conduct should to a minimum, will address: Manager's obligations to workers which include a) worker's compensation plan, b) resolution of conflict among workers (c) obligations to payment of workers' salaries (d) workers' health care (e) general communication protocol (f) disciplinary procedures (g) procurement recruitment and termination procedures, etc.	The Manager's Code of Conduct indicates the Manager's commitment to employee welfare and work procedures and ethics

7.3 Monitoring and Evaluation Plan

The monitoring and evaluation plan will be the responsibility of the SPIU for all measures outlined in the ESMP matrix but will delegate certain responsibilities to the HCFM (in this case is responsible for the rehabilitation works) and Such delegation of responsibility shall be documented in the ESMP to guarantee compliance and commitment on the part of the HCFM to supervise the works and implement the mitigation part of the ESMP and others.

The monitoring plan (Internal and External Monitoring) for the ESMP is presented in Table 31 below. Monitoring results shall be documented with preventive/corrective actions to be implemented

Table 31: Monitoring Plan

Monitoring	Action	Responsibility	Period	Performance Indicator
Internal Monitoring	Regular site visit to ensure that the mitigation measures and actions specified in the ESMP Matrix are implemented and as bound by the contract is satisfactorily implemented.	HCFM, E&S Officers from the SPIU	During Pre-rehabilitation, Rehabilitation and Operation Phases	Monitoring Reports and documentation as described below
	Site visit for monitoring and inspection to ensure HCFM adhere strictly to the engineering designs and specifications for the project		During Rehabilitation Phase	Observations and Monitoring Reports presented to the SPIU.
External Monitoring	Regular site visit to ensure project is implemented in an environmentally & socially sustainable manner using the monitoring indicators specified in the ESMP Matrix and other national and international environmental & social requirements	SEPA, FMEnv and other relevant MDAs.	During Pre-rehabilitation, Rehabilitation and Operation Phases	Inspect monitoring reports from Safeguard units Provide feedback on observations. Enforce corrective actions where necessary.

7.4 Institutional Responsibilities and Accountabilities

The successful implementation of the monitoring program will depend on the commitment and capacity of the E&S safeguards unit of the HCFM/SPIU and other third parties/institutions to implement the program effectively. The roles and responsibilities of those that will be involved in the implementation and monitoring of this ESMP are discussed in Table 32 below

Table 32: Institutional Responsibilities & Accountability

S/No	Category	Responsibilities
1	NPCU IMPACT Project	Disclosure of the ESMP Overall monitoring of the ESMP implementation in all the 14 participating States
2	E&S Team HCFM	Assess the Contractor to ensure compliance with the ESMP Ensure adequate review and compliance of the safeguard issues and report to the SPIU Making sure that the ESMP is strictly adhered to.
3	E&S Team SPIU	Assists the SPIU to comply with and fully implement World Bank Safeguards Policies and other relevant laws in Nigeria. Take lead in ensuring adequate screening and scoping of project for the appropriate safeguard instrument Ensure adequate review of all safeguard reports before sending to the NPIU. Supervision of the HCFM (HCFMs), supervisors, training of HCFMs and workers, monitoring of the implementation of the ESMP, and other safeguard instruments.
4	Safeguard Unit, IMPACT Project	Implementing authority, has the mandate to ensure: Compliance with World Bank Safeguards Policies and other relevant laws in Nigeria in line with this ESMF Smooth and efficient implementation of the project Oversight functions of reviewing reports and document policies before sending it to the Bank Implementation of the ESMP and other safeguard instruments developed for each subproject.
5	Federal Ministry of Environment	Review of the ESMP report (in liaison with State Ministry of Environment), receiving comments from stakeholders, public hearing of the project proposals and social liability investigations, monitoring and evaluation process and criteria. Grant approval for Public disclosure of instrument (ESMP)
6	14 Participating State's Environmental Protection Board	Collaborate with the FMEnv and participate in the EA processes and in project decision-making that helps prevent or minimize impacts and to mitigate them and ensures conformity with applicable standards, environmental and social liability investigations, monitoring and evaluation process etc.
7	14 participating State's Ministry of Health	Coordinates state-wide awareness on the operation of the new cons facilities. Support the Project in the operation and maintenance of the new facilities.

8	State Ministry of Women Affairs & Social Development	Oversee GBV issues through identified GBV Service providers Provide personnel or services to the SPIU E&S Team
9	State Government MDAs	Other MDAs come in as and when relevant areas or resources under their jurisdiction are likely to be affected by projects. Participate in the EA processes and project decision-making that helps prevent or minimize impacts and to mitigate them. MDAs may also be required to issue a consent/approval for an aspect of a project; allow an area to be included; or allow impact to a certain extent or impose restrictions/conditions, monitoring responsibility or supervisory oversight.
10	State Environmental Protection Agency	Help the E&S to coordinate the State-wide environment management condition of the project sites Help the E & S Unit of the SPIU in monitoring the management of the Waste that will be generated in the course of the rehabilitation
11	LGAs	Provision of oversight function across project within its jurisdiction for ESMP compliance. Monitoring of activities related to public health, sanitation, waste management amongst others.
	NGOs/CSOs	Assisting in their respective ways to ensure effective response actions, conducting scientific researches alongside government groups to evolve and devise sustainable environmental strategies/techniques.

7.5 Capacity Building

Based on the assessment capacity of the SPIU, the key actors possess just the basic capacity to implement and supervise its project. Nevertheless, for effective implementation of the ESMP, it is recommended that the SPIU undergoes training in order to enhance its capacity in Environmental Assessment (EA), Implementation and Monitoring. Training is essential for ensuring that the ESMP provisions are implemented efficiently and effectively. The PIU shall therefore ensure that all persons that have roles to play in the implementation of the ESMP are competent with appropriate education, skills, training or experience.

It is critical to point out that the HCFM shall be required to undertake general E&S with OHS awareness training for their project workforce including specific training for those whose work may significantly have adverse impact on the environment. This is to ensure that they are fully aware of the relevant aspects of the ESMP and are able to fulfil their roles and functions. As a minimum, the HCFMs shall ensure they provide the following training to their personnel:

- **General Awareness in Occupational Health and Safety (OHS) Training;** OHS/HSE Induction/Orientation Course for all workers to include (site safety rules, PPE requirements, Emergency Preparedness and Response); Daily tool box talks for workers at the start of each day's job; Refresher OHS Courses as at when required.
- **Project Specific Occupational Health and Safety (OHS) Training:** Material Handling Techniques; First Aid Training (for Site First Aiders); Safe Driving Techniques (for drivers)

The HCFM will be required to forward internal OHS training and procedures to the E&S Team of the SPIU for approval before commencement of civil works.

Based on the assessment of the institutional capacities of the different agencies that will be involved directly in the implementation of the ESMP in particular the HCFM, Project end-users, SPIU, two broad areas of capacity building have already been identified and recommended for effective implementation of the ESMP.

Based on the observed gaps we recommend that the National Coordinating Office of IMPACT Project should organize refresher courses for the SPIU on general ESHS Guidelines, Code of Conduct and E&S Safeguard Standards.

Table 33: Capacity Building/Training Plan under the ESMP

S/No	Training Modules	Participants	Duration	When	Who to Conduct Training	Budget (₦)
	ESHS Guidelines, Due Diligence and Specifics of ESS, Cost Management for ESMP Implementation, Sustainable Procurement and E&S Standards, Communication Management, GRM Implementation	Environmental, Social, Gender, GRM officers, Procurement.	2 days	During project preparatory stage	Environmental and Social Safeguard Specialist NPMT	1,500,000
	Environment and Social Assessment: including E & S Process, E & S Considerations in project, E&S components affected during rehabilitation and operation stages; Stakeholder participation, GRM, E&S due diligence: ESMP Implementation, Monitoring, Evaluation and Reporting during rehabilitation.	HCFM and their workers	1 day	During project preparatory, twice during rehabilitation stage	Environmental and Social Safeguard Specialist NPMT	900,000

S/No	Training Modules	Participants	Duration	When	Who to Conduct Training	Budget (₦)
	Solid Waste Management including Composting, recycling and earth-based method of disposal	E&S Team SPIU, HCFM workers, Project End-users	1 day	During project preparatory, twice during rehabilitation stage	Environmental and Social Safeguard Specialist NPMT	1400,000
	Gender Considerations (including GBV, Equity, Environmental, Social and other project specific issues of concern affecting Women, Children and other Vulnerable groups) and Codes of Conducts	E&S Team SPIU, HCFM Workers, Project end-users	2 days	During project preparatory, twice during rehabilitation stage	Gender and Vulnerability Specialist NPMT	1,600,000
Total						₦5,400,000

7.6 Cost of Implementing the ESMP

The total estimated cost to effectively implement the mitigation and monitoring measures recommended in the ESMP Matrix above including Capacity Building and others is Thirteen Million, Five Hundred and Ninety Thousand naira only. – **N13,590,000** as seen in Table 30 below. The cost of mitigation is Five Million, Eighty Thousand naira only- **N5,080,000** and should be included in the contract as part of the implementation cost to the Contractor by the SPIU**.** Four essential trainings were identified before and during the implementation of this ESMP and its cost implication is Five Million, Four Hundred Thousand Naira Only-N5,400,000.

The cost embedded in the ESMP is Health Care Facility specific and should be used to mitigate and monitor the activities of the contractor during the rehabilitation works per facility.

Table 34: Summary of cost for the implementation of the ESMP

Item	**Responsibility**	**Cost Estimate in Naira (N)**	**Cost Estimate in Dollars ($)**
Mitigation	HCFM	5,080,000	3,060
Monitoring	E&S Team SPIU,	1,910,000	1,150
Capacity Building/Training	SPIU/ NPCU	5,400,000	3,253

GRM Operation	SPIU, HCFM	1,200,000	722
Total		13,590,000	8,186

CBN RATE 1$US=N1,660 as at February 24, 2024

CHAPTER EIGHT: STAKEHOLDERS ENGAGEMENT AND PUBLIC CONSULTATION

8.0 Introduction

Stakeholders' engagement is essential in achieving the major objectives of any project implementation and sustainable development. Participatory approaches in project planning and implementation enhance project policy, ownership and sustainability and also empower targeted beneficiaries.

The objectives for stakeholders' engagement and sensitization includes but not limited to the following;

- To create general public awareness and understanding of the project, and ensure its acceptance;
- To develop and maintain avenues of communication between the project proponents, stakeholders and PAPs in order to ensure that their views and concerns are incorporated into the project design and implementation with the objectives of reducing, mitigating or offsetting negative impacts and enhancing benefits from the project;
- To inform and discuss about the nature and scale of possible adverse impacts of the rehabilitation work and to identify and prioritize the mitigation measures for the impacts in a more transparent and direct manner;
- To document the concerns raised by stakeholders and PAPs so that their views and proposals are mainstreamed to formulate mitigation and benefit enhancement measures;
- To sensitize MDAs, Local Authorities, Non-governmental Organizations (NGOs) and Community Based Organizations (CBOs), Faith Based Organizations (FBOs) about the project and solicit their views and discuss their share of responsibility for the smooth functioning of the overall project operations; and
- Reducing conflict between stakeholders, project proponents and PAPs.

In summary, it goes to spell out the role of stakeholders in the project planning, implementation and monitoring.

Envisaged Benefits

The envisaged benefits of the Stakeholders engagement and sensitization exercises include;

- Provision of opportunities to foresee and/or resolve potential obstacles, constraints and conflicts;
- Means to identify and address potential negative social and environmental impacts as envisaged by stakeholders;
- Opportunities to generate social learning and innovations based on local field experiences;
- Means of ensuring that project benefits are distributed equitably, and;
- Strengthened working relations between stakeholders; Federal and State Governments, etc., and the World Bank.

8.1.1 Fundamentals of Stakeholder Engagement Approach

Consultations

Meaningful consultations can contribute to improved design, implementation, and sustainability of development interventions. The objectives of consultations include receiving input for improved decision-making about the design and implementation arrangements of a development program or project, to contribute to improved results and sustainability. In this context, consultations can potentially give voice to the needs of different population groups, including vulnerable and marginalized groups; improve risk management by identifying opportunities

and risks from and to a project; and increase transparency, public understanding, and stakeholder involvement in development decision-making.

Consultations with key stakeholders, including Project Affected People (PAP) and Civil Society Organizations (CSOs) are mandatory in development projects so as to satisfy "best practices". Consultation methods include public hearings or meetings, focus group discussions, household surveys and interviews, electronic consultations, and advisory/expert groups. In addition, consultations can include informal structures at the local level, such as village councils and women's groups. Good practice approaches to consultation, including closing the feedback loop, need to be applied more systematically.

Collaboration

Collaboration with stakeholders in decision-making processes and events can make decisions more responsive to stakeholder needs and improve the sustainability of program and project outcomes through increased ownership by stakeholders. Mechanisms for collaboration include stakeholder/user membership in decision-making bodies, integrity pacts, participatory planning and budgeting, and stakeholders' juries.

Collecting, Recording, and Reporting on Inputs from Stakeholder

Stakeholder feedback can be collected periodically on various dimensions of public services provided, such as effectiveness, inclusiveness, quality, delivery time, transaction costs, and targeting, as well as on resource utilization or engagement processes. Tools include satisfaction surveys, focus group discussions, hotlines, community scorecards, stakeholder report cards, or SMS/online feedback.

8.1 Public Consultation

During our fieldwork for this study, the team interacted with the Project Affected Persons (PAP) and the Stakeholders (direct and indirect), (physically and virtually) on the proposed rehabilitation. The consultations and interaction provided an opportunity to discuss subproject risks, impacts, and proposed mitigations, as well as evaluating the overall satisfaction and acceptance of the proposed intervention. Recommendations and suggestions that could improve the rehabilitation process were gathered.

Project-Affected Parties

Project-affected parties are defined as "those likely to be affected by the project because of actual impacts or potential risks to their physical environment, health, security, cultural practices, well-being, or livelihoods". As the maintenance activities will be implemented inside the health facility, the scope of this interactions, has project-affected party categories: the health authorities, health workers, patients, and their caregivers (e.g. family members), occupants of the adjoining buildings, site workers etc.

The table 35 below shows the locations of PHC Facilities where consultation were held and the community members and relevant stakeholders while table 36 is the summary of the stakeholders with the members of some host communities of 14 participating States

Table 35: List of Communities visited for the Stakeholders interaction.

	STATE	LOCAL GOVERNMENT	WARD/COMMUNITY	LONGITUDE	LATITUDE
1.	Kaduna	Kajuru	Kasuwan Magani	7.715364	10.39614
2.	Kaduna	Makarfi	Dandamisa	7.838325	11.25899

3.	Kaduna	Zaria	Ang Fatika	7.692555	11.0485733
4.	Kaduna	Sabon Gari	Dogarawa	7.4474317	10.5636849
5.	Kaduna	Makarfi	Tudun Wada (Makarfi)	7.9075167	11.4074567
6.	Kaduna	Soba	Garu	8.0521444	10.9245762
7.	Kwara	Ifelodun	Ile-Ire I	5.0310872	8.5523939
8.	Kwara	Ilorin West	Ajikobi	4.5370967	8.5096717
9.	Kwara	Ifelodun	Idofian I	4.682455	8.408465
10.	Kwara	Baruten	Bode/Babane=Gwedere/ Babane	3.1470673	8.8794353
11.	Kwara	Asa	Ogele	4.6168018	8.5389704
12.	Kwara	Patigi	Lade Ward Iii	5.4723683	8.680955
13.	Bauchi	Ningi	Balma	9.57454	11.0938517
14.	Bauchi	Dambam	Gargawa Ward	10.2984021	10.774776
15.	Bauchi	Katagum	Magwanshi	10.3952381	11.6343463
16.	Bauchi	Bogoro	Mwari	9.5160763	9.5488311
17.	Bauchi	Jama'are	Dogon Jeji B Ward	9.9478417	11.75258
18.	Bauchi	Gamawa	Kafiromi	10.5350608	12.1242314
19.	Adamawa	Yola North	Doubeli	12.4343344	9.278331
20.	Adamawa	Jada	Jada I	12.155589	8.7550741
21.	Adamawa	Maiha	Mayo-Nguli	13.2348733	10.0544783
22.	Adamawa	Gombi	Gombi North	12.7424224	10.1617498
23.	Adamawa	Mubi North	Sabon Layi	13.2672496	10.2650759
24.	Adamawa	Yola North	Jambutu	12.418536	9.2681426
25.	Delta	Oshimili South	Okwe	6.7462211	6.1636036
26.	Delta	Oshimili South	Okwe	6.7462211	6.1636036
27.	Delta	Burutu	Kiagbodo	5.8375266	5.4203756
28.	Delta	Isoko North	Ellu (Ellu/Aradhe/Ovrode)	6.32757	5.5889767
29.	Delta	Ughelli South	Ekakpamre	5.8526939	5.5379774
30.	Delta	Uvwie	Ugbomro(Ugbomoro/Ugbolokposo)	5.8134646	5.5746179
31.	Plateau	Jos Norh	Kabong	8.8605712	9.9471155
32.	Plateau	Jos Norh	Jos Jarawa	8.9437683	9.91297
33.	Plateau	Pankshin	M/Nyelleng	9.4469267	9.433195
34.	Nasarawa	Toto	Umaisha	7.1824685	8.0090896
35.	Nasarawa	Kokona	Agwada	8.0013483	8.5440983
36.	Nasarawa	Doma	Agbashi	8.1196217	8.0060633
37.	Nasarawa	Kokona	Haderi	8.0637695	8.8488236
38.	Nasarawa	Obi	G/Ausa 1	8.5279897	8.4985878
39.	Nasarawa	Obi	Obi	8.7682535	8.3676891
40.	Oyo	Ibadan South East	Oy Owode Ward	3.9624432	7.3086553
41.	Oyo	Afijio	Oy Jobele Ward	3.9354102	7.7800579
42.	Oyo	Ibadan North West	Oy Afonta Ward	3.8505763	7.3002291
43.	Oyo	Egbeda	Wakajaye	3.9819433	7.4229093
44.	Oyo	Saki West	Oy Adabo Ward	3.3856653	8.6707453
45.	Oyo	Ido	Oy Ogundele Alaho/Siba Ward	3.8186255	7.3666799
46.	Kogi	Lokoja	Lokoja -Ward A	6.7375239	7.8064764
47.	Kogi	Kabba/Bunu	Okedayo	6.1147652	7.7527043

48.	Kogi	Dekina	Abocho	6.98273	7.49257
49.	Kogi	Olamaboro	Ogugu 2	7.5516363	7.1897324
50.	Kogi	Ofu	Ogbonicha	7.310245	7.249105
51.	Kogi	Ijumu	Iyara	5.9764832	7.8432708
52.	Yobe	Bade	Dagona Phc Center	10.7621885	12.8493398
53.	Ebonyi	Ikwo	Ekpelu	8.0136236	6.0712476
54.	Kogi	Yagba West	Odo Egbe I	5.5135453	8.2247478
55.	Ebonyi	Ohaozara	Ugbogologo	7.8665481	6.0533866
56.	Oyo	Lagelu	Ajara/Opeodun	3.9519974	7.4515918
57.	Plateau	Barkin Ladi	Mazat	8.9589567	9.4445083
58.	Plateau	Barkin Ladi	Marit	8.9934683	9.4744017
59.	Yobe	Bade	Dagona Phc Center	10.7621885	12.8493398
60.	Plateau	Kanke	Ampang B Ward	9.5793569	9.3371166
61.	Plateau	Barkin Ladi	Pomol Chit	8.8908428	9.6235272
62.	Nasarawa	Obi	Kyakale	8.5633458	8.2962366
63.	Plateau	Mangu	Langai	9.1966546	9.5835889
64.	Bauchi	Bauchi	Makama-B	9.8377796	10.3013995
65.	Plateau	Bokkos	Mbar/Mangar	8.9595551	9.2874095
66.	Oyo	Ibarapa East	Oy Anko Eruwa Ward	3.4253868	7.5437084
67.	Oyo	Ona Ara	Badeku Ward 4	3.9958739	7.38126
68.	Plateau	Wase	Kumbur	9.8882567	8.95685
69.	Adamawa	Shelleng	Kiri	11.995981	9.6854492
70.	Bauchi	Gamawa	Gololo-South	10.6919999	12.3202024
71.	Delta	Udu	Emadaja(Udu Ii)	5.8197264	5.4365158
72.	Yobe	Damaturu	Mairi I Phc Center	0	0
73.	Nasarawa	Toto	Karmo Buga	7.4896183	8.4966233
74.	Bauchi	Bogoro	Dutsen Lawan Ward	0	0
75.	Delta	Aniocha North	Issele-Azagba	6.5518184	6.2672843
76.	Kwara	Ilorin West	Baboko	0	0
77.	Kaduna	Sabon Gari	Bomo	7.6314733	11.1825033
78.	Kaduna	Soba	Richifa	7.7713831	11.1872899
79.	Yobe	Yunusari	Kujari Phc Center	11.9235746	12.8928606
80.	Adamawa	Yola North	Karewa	12.4249833	9.2485585
81.	Oyo	Akinyele	Moniya	3.90992	7.5318183
82.	Oyo	Ogbomoso South	Ijeru I Ward	4.243005	8.1265267
83.	Kaduna	Kubau	Haskiya	8.3757704	10.9631402
84.	Bauchi	Bogoro	Lusa	9.5617617	9.6266017
85.	Nasarawa	Lafia	Shabu/Kwandere	8.5101463	8.5210725
86.	Ebonyi	Onicha	Enuagu	7.8012783	6.1518741
87.	Ebonyi	Ikwo	Ekpelu	8.0136236	6.0712476
88.	Adamawa	Fufore	Ribadu	12.7251831	9.3003796
89.	Plateau	Jos Norh	Naraguta B	8.913324	9.9363769
90.	Kogi	Dekina	Ogbabede	6.9044017	7.54875
91.	Oyo	Kajola	Oy Ilaji -Oke/Iwere Oke Ward	3.3382617	8.05621
92.	Bauchi	Tafawa-Balewa	Lere South Ward	9.4566367	9.6950617
93.	Plateau	Riyom	Fangroi	8.6164933	9.6972367
94.	Ebonyi	Afikpo South	Owutu	7.8556656	5.8063143

95.	Bauchi	Shira	Kilbori Â€˜aâ€™	10.1169912	11.583772
96.	Kwara	Edu	Tsaragi Ii	4.9531097	9.0694785
97.	Oyo	Ibadan North	Oy Basorun Ward	3.9315968	7.4176102
98.	Ebonyi	Ivo	Amagu Ihe	7.5590855	5.9393345
99.	Yobe	Bade	Dagona Phc Center	10.7621885	12.8493398
100	Plateau	Kanke	Ampang B Ward	9.5793569	9.3371166
101	Plateau	Barkin Ladi	Pomol Chit	8.8908428	9.6235272

Table 36: Summary of Stakeholders engagement within the 14 participating communities

Overview			
Date: 1st September – Date: 10th September- 15th September 2023 (Kano State) Date: 12th -24th February, 2024 (14 Participating States) Venue: PHC Facilities, Project Management Office Venue: Virtual Participants: Facility Management, Staff, Patients			
Consultations were held with the Oyo State Primary Health Care Board, the Project Manager with the Staff and the Staff of various stakeholders at the project sites situated in Oke Apon, Oke Bola and Yemetu Communities in Oyo State. The representative of the IMPACT Project and the E&S Consultants introduced the project and ESMP process and objectives to the stakeholders. The Consultant further highlighted potential environmental and social risks and impacts that may be caused by the rehabilitation activities and emphasized the role that each stakeholder had to play to ensure that the negative impacts are minimized and the positive impacts enhanced. The participants appreciated the team and expressed their concerns/questions which were addressed by the consultant. The summary of the key concerns/questions/issues raised during the consultations at the project sites are presented below, including the consultant's responses/remarks.			
No.	**Agenda**	**Concerns/Questions**	**Consultant's Response/Remark**
4	Perception of the project	• The State Primary Health Care Management Board (SPHCMB), staff and patients complained about deficient infrastructure especially within the rural areas which currently isn't quite suitable due to the dilapidated floors, walls and absence of furniture's, hence they were happy that IMPACT Project will help in bridging these gaps. • The SPHCMB also appreciated for the extensive stakeholder consultations they have been holding with them. • They also enquired if PHC Facilities lacking furniture's and equipment will also be looked into	The team responded that the need for each facility was taken into consideration before now. Those facilities that have deficiency in areas of furniture and equipment will be taken care of.
5	Potential Adverse impacts	• The end-user inquired if there would be any risks such as OHS associated with the rehabilitation works? • They are also skeptical about having strangers/foreigners within the community.	• The consultant alleviated their fears of possible risks, as the ESMP Matrix is well detailed with mitigation measures, responsibilities and monitoring principles to reduce such risks to the barest minimum.

			• Rehabilitation activities will be implemented during off- patient hours or weekend • More so, the Facility or project sites would likely be vacated during rehabilitation period, thus there will be less interference. • There will be adequate sensitization through the SPHCMB on ways to avoid been exposed to SEA/SH. **RESPONSE OF SPIU** The SPIU also stated that the project will conduct such sensitization in the State and project communities; in addition, HCFM will sign Code of Conducts against GBV/SEA/SH. The SPHCMB also promised to coordinate the activities of the HCFMs.
6	Concerns raised by other stakeholders	• In some PHC, availability of water is an issue for the patient and staff. • Some other PHC complained of how dilapidated the PHC are, and how unfit it is for the patients as most of them sit on bare floor, due to insufficient furniture's. They are really hoping the project will commence soon and such issues would be priotized	• The PHC was advised to list their needs in terms of priority • The consultants assured them that all pressing issues will be efficiently documented and properly addressed through the appropriate channels

8.3 Labour Influx

The project may face an influx of non-local labor and working conditions issues as skilled laborers might not be available in some of the project sites. The project will take concrete measures to mitigate potential labor influx-related risks such as workers' sexual relations with minors and resulting pregnancies, presence of sex workers in the community, the spread of HIV/AID, sexual harassment of female employees, child labor and abuse, inadequate resettlement practices, and fear of retaliation, failure to ensure community participation, poor labor practice, and lack of road safety. These risks require careful consideration to improve social and environmental sustainability, resilience and social cohesion. Therefore, the project will include mitigation measures such as:

- assessing living conditions of workers' camps and ensuring appropriate living conditions;
- establishing and enforcing a mandatory Code of Conduct for the company, managers and workers, and an Action Plan for implementation;
- ensuring appropriate location for these camps;
- taking countermeasures - indicated in the Social Management Plan - to reduce the impact of the labor influx on the public services; and,
- devising and implementing a strategy for maximizing employment opportunities for local population, including women.

The following guidelines lay out the principles that are key to properly assessing and managing the risks of adverse impacts on project area communities that may result from temporary induced labor influx.

- The Contractor will have to hire, to the maximum extent, skilled and unskilled workers from affected communities in the project area. The SPMU will adopt or implement all possible measures to avoid if not minimize labor influx into the project area.
- The SPMU will assess and manage labor influx risk based on appropriate instruments such as those based on risks identified in the ESIA and the Bank's sector-specific experience in the country.
- Depending on the risk factors and their level, appropriate mitigation instruments need to be developed including the ESMP, Site-specific Labor Influx Management Plan and/or a Workers' Camp Management Plan[2] .
- Risk factors to the SPMU that should be considered, include,
- weak institutional capacity of the implementing agency;
- predominant presence of contractors without strong worker management and health and safety policies;
- anticipated high volumes of labor influx;
- pre-existing social conflicts or tensions;
- weak local law enforcement
- prevalence of gender-based violence and social norms towards it in the community (acceptance of gender based violence);
- prevalence of transactional sex;
- local prevalence of child and forced labor;
- existing conflict situation between communities;
- absorption capacity of workers to the community
- The SPIU will be required to incorporate social and environmental mitigation measures into the civil works contract and responsibilities for managing these adverse impacts. This will be a binding contractual obligation on the SPIU, with appropriate mechanisms for addressing non-compliance.
- The Supervision Consultant shall be responsible for monitoring the contractor performance and adherence to the labor influx guideline and that of its Sexual Exploitation and Abuse (SEA) obligations, with a protocol in place for immediate, timely, mandatory and confidential reporting in case of incidents to project community.
- This allows the SPIU to enforce the implementation of such mitigation measures, which are required to ensure the consultant's own compliance with Bank policy requirements. While the Bank reviews and clears project-level safeguard instruments such as the ESIA/ESMP, it is the SPIU's responsibility to: (i) ensure the ESMP is reflected in the contractor's Contract and (ii) ensure the project is implemented in accordance with the ESMP, safeguard instruments and other relevant contractual provisions.

CHAPTER NINE: CONCLUSION AND RECOMMENDATION

9.1 Conclusion

The project is envisaged to have a largely positive impact on the benefitting Primary Health Care Facility, recipient communities, 14 States Ministry of Health and the 14 participating States at large. The potential negative environmental and social impacts which were identified can be mitigated with strict compliance to the mitigation measures stated in the ESMP Matrix. The ESMP and the mitigation costs will need to be embedded in the Bill of Quantity (BOQ) to ensure implementation costs are adequately budgeted for by the HCFM. The implementation of the ESMP is tailored to be Facility-specific and should be monitored largely by the State SPIU with support from the HCFM.

9.2 Recommendation

The following recommendations are provided for the effective implementation of this ESMP:

- The SPIU and persons/HCFM/MDAs involved in monitoring of the ESMP implementation will need to be adequately trained in line with the capacity building plan in the report
- The SPIU should endeavour to establish the GRM in all project locations timely to enable stakeholders channel enquiries to the project. This includes installing complaint boxes, setting up GRCs amongst others
- The SPIU should sensitize the PHC personnels and communities on the available grievance redress channels
- Considering the security situation across locations in the Country, it is advised that the HCFM, workers and any other team engaged by the project make adequate security arrangements for site work. The SPIU should also keep abreast of the security situation in the various project LGAs and inform all relevant parties accordingly.
- With respect to GBV, it is important for the SPIU to conduct SEA/SH/GBV sensitization program for the facility staff, HCFM, and community members especially women and girls on prevention strategies and the available reporting and response mechanisms.
- In addition, the state should conduct mapping of GBV service providers and make the inventory available to the GBV focal persons in each project location
- As earlier stated, in the course of rehabilitation works, there would be moderate to severe likelihood of the occurrence of workplace hazards. Personnel will be predisposed to hazards. “Unsafe behaviours” and “unsafe conditions”. Occupational disasters happen more due to “unsafe behaviours” compared to “unsafe conditions”. Hence, project/site workers should be trained on unsafe behaviours and be provided with necessary equipment to practice safe behaviours. Further, the necessary facilities to facilitate safe conditions and discourage unsafe behaviours should be made available to workers
- For effective waste management on site, the HCFM should sign an agreement with relevant State Environmental Protection Agency. This would ensure control of proper collection and disposal of construction wastes.
- Construction Safety signs and boards should be installed to protect workers and the public around the construction sites

- Priority should be given to local workers especially in the category of unskilled and semi-skilled workforce during project implementation to stimulate local socioeconomic activities, improve livelihood and poverty reduction in the affected communities. Ensure affected communities are assisted and have a voice in appropriation of mitigation measures.

APPENDIX 1: TERMS OF REFERENCE

IMMUNIZATION PLUS AND MALARIA PROGRESS BY ACCELERATING COVERAGE AND TRANSFORMING SERVICES (IMPACT) PROJECT PREPARATION OF AN ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) FOR THE RENOVATION OF ALL IMPACT IMPLEMENTING PRIMARY HEALTHCARE FACILITIES ACROSS 14 STATES IN NIGERIA

Background and Context

The Federal Government of Nigeria (FGoN) in collaboration with the World Bank has prepared a Program called Immunization Plus and Malaria Progress by Accelerating Coverage and Transforming Services (IMPACT) Project. The Program follows the multi-phased approach (MPA) with the intent of reducing under-five mortality rate (U5MR) in Nigeria from 132 to 79 per 1,000 births by 2030. This will cut U5MR by 40 percent in 10 years.

The IMPACT project also aims to catalyze overall improvements in health services both at the national participating states to improve access to quality vital services that benefit children and women directly. IMPACT project will also strengthen National M&E systems and contribute to demand generation nationally, thereby enhancing and improving the overall wellbeing of the population at the grass root (community level).

Major health challenges in the country range from inadequate funding (less 5% of Nigeria's total annual budget or about $5 per person) to inaccessibility to HCF by communities and poor health infrastructure, fake drugs, insufficient financial investment, and lack of sufficient health personnel. These factors have culminated in low immunization rates, a high rate of U5MR which has necessitated the MPA program.

In addition, slashing U5MR has important socio-economic benefits for Nigeria, including on its human capital formation and particularly in (i) Cognitive Development: *Improved child health has an important influence on cognitive development*; (ii) Nutritional Impact: *Children who are frequently sick are also at high nutritional risk. Frequent illness and malnutrition combine in a vicious cycle*; (iii) Fertility reduction: *There has never been a significant reduction in fertility that wasn't preceded by a steep reduction in U5MR*; (iv) Economic Growth: *reductions in mortality account for about 11% of recent economic growth in low and middle-income countries based on national income accounts*; (v) Reductions in Child Mortality have preceded economic take-off: *Whether they are causal or not, improvements in child mortality preceded the economic take-off observed in East Asian "tiger" economies*

The IMPACT Project is implemented by the National Primary Health Care Development Agency (NPHCDA) and the National Malaria Elimination Program (NMEP) with the project development objective to improve the utilization and quality of immunization plus and malaria services in selected states.

The Project Development Objective of the IMPACT Project is to improve the delivery and uptake of immunization and malaria services in selected states. The total financial outlay of IMPACT is US$ 650m.

The IMPACT Project has the following Four components

Component 1: Malaria Control (US$188.0 Million Equivalent IDA Credit):

Component 2: Immunization Plus: (US$409.3 Million Equivalent IDA Credit)

Component 3: Knowledge for Change (US$52.7 Million Equivalent IDA Credit)

Component 4: Contingent Emergency Response Component (CERC) (Us$0 Million IDA)

However, this Consultancy will be focused on Component 2 which will support strengthening service delivery and health systems for immunization, maternal, child and neonatal services and will finance vaccines and cold chain strengthening. This component is under management/supervision of the NPHCDA. As part of the activities under Component 2, the Project will provide Decentralized funding with performance-based allocation for quality improvement directly to primary healthcare (PHC) facilities. The project will provide operating budgets directly to PHC facilities, an innovative approach known as Decentralized Financing Facility (DFF). DFF will strengthen provision of immunization services; curative care for under-five children; outreach activities in reproductive, maternal, and child health services; skilled delivery; postnatal care; and maintenance and minor repair of existing PHC infrastructure. Due to some potential environmental and social impacts associated the rehabilitation of the facilities, the World Bank Operation Policy (OP) 4.01 on Environmental Assessment is triggered on the Project. The project has been assigned an Environmental Assessment (EA) Screening Category "B". This rating is based on the scope of the project, which indicates limited adverse environmental and social impacts.

In meeting the requirements of OP 4.01, the Project has developed an Environmental and Social Management Framework (ESMF) and a Healthcare Waste Management Plan (HCWMP). The ESMF and HCWMP were disclosed in country on 7th October 2019 as well as in two national daily newspapers.

A. RATIONAL FOR THE ASSIGNMENT

The proposed health facilities improvements will involve renovation and minor repairs to doors, roofs, floors, and walls in the PHCs. These activities will involve some potential minor environmental and social impacts that may arise during the anticipated works: such as the generation of hazardous, non-hazardous waste and medical wastes, noise/air pollution, accident from the movement of equipment and materials within and away from the PHCs, occupational health & safety risks, risks associated with use of labour, community health and safety issues, grievances and complaints. Before the commencement of such works, an Environmental and Social Management Plan (ESMP) is prepared to address all potential environmental and social concerns related to the renovation works. Since the proposed works are minor and impact easily mitigated, the ESMP will cover the 14 states supported by the IMPACT Project.

B. DESCRIPTION OF PROPOSED INTERVENTION

The National Primary Health Care Development Agency (NPHCDA) has selected Primary Healthcare Centres (PHCs) where minor renovations will be carried out. These PHCs are located across 14 states namely Adamawa, Bauchi, Benue, Delta, Ebonyi, Kaduna, Kano, Kogi, Kwara, Nasarawa, Oyo, Plateau, Sokoto and Yobe States. The works will involve renovations which will focus on 5 main areas: doors, roofs, floor/tiles, walls and windows. Renovations works of E&S concerns per focus area will involve

1. Doors: Replacement/fixing of doors, renovation of doors
2. Floors: Plastering, tiling, replacement of tiles
3. Roof: Fixing of leaking sections of roofs, repairs of ceilings, fixing of roofs largely with zinc and wood
4. Walls: painting, plastering, covering of cracks
5. Windows: Replacements and repairs of windows, glasses and fixing of burglary proof

C. OBJECTIVES OF THE ESMP

The specific objective of the ESMP will be to assess the potential environmental and social impacts of the proposed works and prepare an Environmental and Social Management Plan (ESMP) with appropriate mitigation measures to address the negative impacts associated with the renovations. The ESMP will also outline mitigation costs & responsibilities for each sub-activity.

D. SCOPE OF WORKS

The assignment is for the preparation of an ESMP for renovation works to be carried out in All IMPACT implementing PHCs spread across 14 states. The consultant will work in close collaboration with the NPHCDA and the various State Project Implementation Unit's (SPIUs) safeguard team, and with other actors as directed by the SPIUs and the NPHCDA. The consultant will have to take into account the technical variants of the proposed renovations.

The specific task for the consultancy assignment shall include but not limited to the following:

- Review the existing PAD, ESMF prepared for the project.
- Review Environmental and Social Safeguards policy (OP 4.01 Environmental Assessment) of the World Bank triggered on the project.
- Identify the policy, legal and administrative framework relevant to the sub-projects.
- Review of preliminary proposed renovation designs.
- Describe the proposed project by providing a description of the project relevant components.
- Present desktop information on the biophysical, the socio-economic, cultural and risk context per state.
- Assess the potential environmental and social impacts related to project activities.
- Define appropriate mitigation/enhancement measures to prevent, minimise, mitigate negative impacts or to enhance the project environmental and social benefits
- Visit 2 Primary Healthcare facilities to understand the scope and boundary of the facilities and carry out consultations with relevant stakeholders in order to obtain their views about the project. These consultations shall occur during the preparation of the ESMPs to identify key environmental and social issues and impacts
- Prepare an Environmental and Social Management Plan (ESMP). The ESMP should identify:
- The potential environmental and social impacts resulting from project activities
- The proposed mitigation measures;
- The monitoring indicators;
- The institutional responsibilities for monitoring and implementation of mitigation measures; ▪ The costs of mitigation, monitoring activities and implementing the ESMP.
- Ethical requirements
- Before undertaking any activity, the team will make sure that it understands all ethical considerations related to working GBV (in particular Sexual Exploitation and Abuse). The consultant should not collect any primary data, they should NOT conduct interviews or research using the SEA survivors and will only make use of secondary sources and data. This is with the objective to minimize harm to women and children.[3]

The typical contents of an ESMP Report are presented hereafter in section I. It shall be noted that the presentation of the Report may be adapted pending on the nature and specific requirements of the project.

[3] *"A woman may suffer physical harm and other forms of violence if a partner finds out that she has been talking to others about her relationship with him. Because many violent partners control the actions of their girlfriends of wives, even the act of speaking to another person without his permission may trigger a beating." For more information on ethical considerations see: VAWG Resource guide, http://www.vawgresourceguide.org/ethics*

E. QUALIFICATION OF CONSULTANT

- At least a master's degree in environmental sciences, natural sciences, environmental management or similar field.
- The consultant must have a working knowledge of World Bank Environmental and Social Framework, Operational safeguards policies gained through hands-on experience in the preparation and implementation of environmental and social management plans in an urban/rural area
- Proven skill in World Bank (WB) Environmental and Social safeguard policy implementation including addressing cross-cutting issues in development project and must have prepared at least five (5) ESMPs for World Bank funded projects.
- Excellent communication and report writing skills

F. DELIVERABLES AND TIMING

An inception meeting will be organized with the World Bank E&S team to understand the scope of the assignment.

Inception Report: An Inception report detailing the workplan for execution, review of relevant project documents and preliminary impacts identified shall be submitted to the SPIU two days after contract signing.

Draft Report: A draft ESMP report shall be submitted to the NPHCDA for review one (1) week from the date of contract signing.

Draft Final Report: A Draft Final ESMP report taking into account all comments from the NPHCDA and World Bank shall be submitted within two (2) weeks from the date of contract signing.

Final ESMP Report: A Final ESMP report shall be submitted within three (3) weeks for a No Objection from the Bank date of contract signing.

G. PAYMENT MILESTONE

15% upon submission of Inception Report

45% upon submission and acceptance of the Draft ESMP

20% upon submission and acceptance of the draft final ESMP

20% upon approval of the Final ESMP Report

H. REPORT OUTLINE

LIST OF TABLES

LIST OF FIGURES

LIST OF PLATES

ABBREVIATIONS AND ACRONYMS

EXECUTIVE SUMMARY

CHAPTER ONE: INTRODUCTION

Background, Description of the proposed intervention; Scope of the assignment; Rationale for ESMP; Objectives of the ESMP; Methodology

CHAPTER TWO: ADMINISTRATIVE & REGULATORY FRAMEWORK

Summary of relevant local and federal policy, legal, regulatory, and administrative frameworks

Discussion of the World Bank safeguard policy triggered by IMPACT and the proposed activity including the disclosure process

CHAPTER THREE: PROJECT DESCRIPTION

Description of the Proposed Project, Project Component and Activities

CHAPTER FOUR: DESCRIPTION OF PROJECT ENVIRONMENT

Description of the environmental and social baseline (brief description required)

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 negative environmental and social impacts of the proposed project

CHAPTER SIX: GRIEVANCE REDRESS MECHANISM

- Description of grievance redress mechanism (in alignment with the ESMF and Project's GRM

Manual to address situations of conflicts or disagreements about some of the project activities

CHAPTER SEVEN : ENVIRONMENTAL & SOCIAL MANAGEMENT PLAN

The ESMP table should itemize the impact, mitigation, attendant cost for mitigation and monitoring for project specific activities, e.g. painting, fixing of roofs, tiling, etc.

Institutional responsibilities and accountabilities

Capacity building plan

Monitoring and evaluation plan, including suitable indicators for the proposed project

Implementation Schedule

Costs of implementing the ESMP

CHAPTER EIGHT: PUBLIC CONSULTATION

Summary of consultations with relevant stakeholders

CHAPTER NINE: CONCLUSION AND RECOMMENDATIONS REFERENCES

APPENDIX 1: TERMS OF REFERENCE FOR THE ESMP

APPENDIX 2: SIMPLIFIED WASTE MANAGEMENT PLAN

APPENDIX 2: WASTE MANAGEMENT PLAN

The categories of waste envisaged under the sub-project are as follows:

Vegetal waste – This will be vegetation clearance during site preparation and mobilization of equipment to the site. However, vegetal waste is expected to be minimal considering most of the PHCs are already in existence.

Rehabilitation waste – This will include Cement, sands, Paints, Zincs, Metal Scraps, Woods etc.

Particulates Matter & Gases – from movement of vehicles, machine operations, site clearing activities, mixing of materials and chemicals such as paints

Liquid waste - Leakages from vehicles, oil containers, chemicals, adhesives, etc.

Sanitary waste – Waste generated by workers onsite, campsite. Such as, domestic sewage, faeces, urine, wastewater, food remnant, food packaging etc.

The table below shows how this waste generated will be managed.

Table 37: Waste Management Plan

S/N	Potential Source	Waste Type	Waste Streams	Management
A	PREREHABILITATION			
1	Movement of vehicles on unpaved surface and engine exhaust	Emission	COx, SOx, NOx, CO, Dust	Use water suppression to prevent dust emission Maintain vehicles and machineries to reduce emission Maintain low speed to reduce dust and gaseous emission
2	Site Clearing and Installation of temporary workers camp and offices and workshops	Non-Hazardous	Vegetal Waste Industrial Waste: Metal scraps, packaging waste	Vegetal waste shall be supplied to farmers for use as compost. Woody vegetal shall be supplied to host communities for domestic uses including as fuel wood for cooking. Segregated and stored on site to be collected at least once a week for reuse or recycle through the Kano State Environmental Planning and Protection Agency or licensed third party facilities.
3	Workers' camp	Domestic and Sanitary	Food remnant, kitchen wastes. Food packaging etc	To be transferred to locals for use as compost and animal feed. Plastic and other packaging to be recycled through licensed recycling

			Domestic Sewage	third parties or collected by refuse management and sanitation board Sewage will be collected in a properly closed constructed septic tank and will be evacuated in conjunction with State's Waste Management Board at least twice during the period or as required.
B	REHABILITATION			
1	Movement of vehicles on unpaved surface and engine exhaust	Emission	COx, SOx, NOx, CO, Dust	Use water suppression to prevent dust emission Maintain vehicles and machineries to reduce emission Maintain low speed to reduce dust and gaseous emission Use of cleaner technologies and modern equipment
2	Civil works Workers' camp/offices	Non-Hazardous /Industrial	Spoils Waste Packaging and Dunnage such as scrap wood, scrap metal, steel, glass, plastic, paper and cardboard, empty metal containers, excess concrete, broken equipment, or components Domestic-type waste: wastepaper and food scraps, metal cans	Segregated and kept securely in closed containers on site. To be evacuated by State's Waste Management Board or transferred to approved recycling third parties for reuse/recycling. Non-recyclables to be removed by State's Waste Management Board) or other approved waste company in the state To be transferred to locals for use as compost and animal feed. Plastic and other packaging to be evacuated by State's Waste Management Board or recycled through licensed recycling third parties.
3	Civil Works	Hazardous Waste	Solid Wastes: used batteries, chemical containers, concrete etc	Store on site in closed and labelled containers with secondary containment to be evacuated by the State's Waste Management Board

			Liquid Waste: spent lubricating oils, hydraulic fluids, brake fluids, battery electrolyte, and dielectric fluids, chemical cleaning agents, paints, primers, thinners, and corrosion control coatings; sealants and adhesives etc	
	Civil works	Waste Water	Wastewater from equipment washing and concrete production	Discharged to the ground as only very small quantity is envisaged at this stage.
	Civil works	Electrical and electronic waste (e-waste)	Electrical wirings, cables, damaged computers etc.	This will be sent to Material Recovery Facilities/ recycling facilities in the state for proper management
C	OPERATION			
1	Movement of vehicles	Emission	COx, SOx, NOx, CO, Dust	See A1
2	Operations	Solid waste Chemical waste Sewage E-waste	Maintenance of buildings, roofing sheets, iron sheets, paint. Sewage evacuation from constructed toilets	Segregated and kept securely in closed containers on site to be collected by State's Waste Management Board. Non-recyclable solid waste to be sent to approved State's dumpsites. Recyclable waste to be sent to a facilities and recycling facilities, this will be done in liaison with State's Waste Management Board. Liaise with WASH departments at the LGA and other WASH projects like SURWASH on Sewage management and WASH facilities
Cost (Also captured the relevant section of ESMP Matrix Table)				

APPENDIX 3: OCCUPATIONAL HEALTH AND SAFETY PLAN

Every project poses its own HSE risks. This plan is developed to meet up with OHS standards and to achieve the objectives set for this site specific project. The project team shall undertake to ensure high performance standards and conformity with contract requirements by managing the works in a systematic and thorough manner.

- **Competency**

All personnel required to operate or work with any equipment or machine must be competent, be tested for each equipment that he/she shall be operating. All personnel who as part of their profession require licensing or certification must obtain the necessary certification before he/she shall be allowed to work on the site.

- **Fitness**

All personnel working on site shall be required to be certified medically fit to do so by an approved medical facility or Medical Doctor (pre-employment medical examination)

- **HSE Training**

Induction/Orientation

Every new or rehired employee and employees must undergo mandatory OHS orientation / induction. The purpose of the Induction is to educate workers and make them aware of the major potential hazards he or she shall come into contact with while working on the site; also, it is one more opportunity to stress the importance of HSE being the first priority in the operations.

The content of the HSE orientation / induction shall cover the following subjects:

1 Site safety rules.
2 Personnel protective equipment requirements (PPE).
3 Environmental sensitivity and protection.
4 Preparation and planning of the job (Daily Pre-task talk).
5 Emergency plan and muster points.
6 SEA/SH and GBV prevention strategies
7 COVID-19 prevention strategies

Project Specific HSE Training

In addition to the HSE orientation /induction, there shall be specific site HSE trainings which shall cover the following topics:

- Manual handling.
- Electrical Safety
- Emergency Prevention, Preparedness and Response
- Work at height training
- First Aid training (for site First Aiders)
- Lifting and Rigging
- Safe Driving techniques (for drivers)

EMERGENCY PREPAREDNESS AND RESPONSE

Emergency procedures and evacuation plan shall be developed by the HSE Department and displayed on the notice board. These procedures shall be communicated to all staff. Also each section/department shall have at least a trained first aider at all times.

HSE IMPLEMENTATION AND PERFORMANCE MONITORING

HSE Meetings

HSE management meetings shall be held once a month. The meeting is to help identify safety problems, develop solutions, review incident reports, provide training and evaluate the effectiveness of our safety program. Some of the meetings shall be:

- Project/Site Management HSE Meeting for management and supervision (Monthly).
- Tool box talk meetings for all workforce (Weekly).
- Pre-task briefing for all workforces (Daily).
- Special situation meeting (As required).

HSE Reporting

All incidents and illnesses must be reported to site supervisor after which investigation shall commence and recorded so that appropriate corrective actions shall be implemented to prevent any re-occurrence and report findings shall be forwarded to management for review. Reporting requirements shall include notification of incident, investigation report, and monthly report. Notification of Incident form shall be developed which shall be filled and submitted to HSE department for investigation.

HSE Inspection and Audits

For continual improvement of HSE management system, HSE inspection and audit shall be conducted. An inspection checklist shall be developed. This is to ensure that the HSE management system is being adhered to. The inspection shall be conducted by the HSE department together with site management.

Corrective and Preventive Actions and Non Conformities

During the cause of inspections, concerns raised shall be addressed and closed out. It is expected that in a period of two weeks, a close out inspection shall take place to verify that the corrective actions have been closed.

Project HSE Rules

The project HSE rules shall be developed and supervision shall develop specific rules and procedures when necessary.

The following site rules shall be implemented at all times. The Site Manager shall draw these rules to the attention of their own workmen or staff. All sub-Hs must ensure that these rules are drawn to the attention of their workmen and staff.

The HCFM may implement additional site rules during the contract programme. Any such additional rules shall be notified to all personnel engaged on the project prior to their implementation. The HSE rules shall include but not limited to:

- Personal Protective Equipment must be worn at all times.
- All instructions issued by the Site Manager regarding the storage, handling or cleaning of materials, plant and equipment must be followed.
- All vehicles must be parked in the designated areas.
- Any workman suffering from a medical condition that might affect his work and/or that could require specific Medical treatment must inform the supervisor before commencing work.
- All site tools shall either be battery operated or 110 volts.
- No one shall be permitted on site if it is believed that they are under the influence of alcohol or drugs.
- Vehicles must not reverse without a banksman in attendance.
- All visitors to site must undergo a site-specific induction and operative Identity badges must be worn at all times.

- All excavations must be secured.
- Smoking and eating shall only be permitted in the designated area. This area shall be identified during induction.
- No hot works operations are permitted without a hot work permit in place.
- There shall be no radios or other music playing devices on site.
- Good housekeeping practices to be adopted**.**
- Compliance with all Ethical Power Permit to Work systems
- The site keyed access procedure must be strictly adhered to.
- All HCFMs must comply with Site Health & Safety Guidelines / Site Safety Method Statement
- No untrained worker shall be permitted to operate heavy machineries.
- COVID-19 protocols to be adhered to including frequent handwashing, use of nose masks when in crowded spaces, timely reporting of any symptoms to HSE officer and immediate isolation

Safe Work Practices/Personal Protective Equipment (PPE)

The basic PPE required for the project shall be Safety Glasses, Safety Boots, Hand Gloves, Hard Hat, ear plugs and Coverall. Any other PPE shall be used as applicable. Management is responsible for the provision of PPE and usage shall be enforced at all time.
PPE shall be provided in circumstances where exposure to hazards cannot be avoided by other means or to supplement existing control measures identified by a risk assessment. An assessment shall be made to ensure that the PPE is suitable for purpose and is appropriate to the risk involved.

Information, instruction & training shall be given to all employees on safe use, maintenance and storage of PPE. Employees shall, in accordance with instructions given, make full use of all PPE provided and maintain it in a serviceable condition and report its loss or defect immediately to the maintenance department where it shall be replaced.
PPE shall be replaced when it is no longer serviceable and returned on a new for old basis. Employees shall sign to state that they have received PPE when issued.

Welfare Facilities
The provision of welfare facilities on the site shall be communicated to all operatives at site induction.
A cleaning regime shall be implemented and maintained for the duration of the construction phase to ensure the site welfare facilities remain in a clean and tidy condition.
If mains drinking water becomes unavailable during the construction phase bottled water shall be brought to site for all operatives for the necessary period.
Signage
Adequate provision for warning and directional signs shall be made.

APPENDIX 4: TRAFFIC MANAGEMENT PLAN (TMP)

The main objective of this TMP is to provide safe passage for community members, pedestrians, motorcyclist, cyclists and vehicular traffic in the project areas during the construction.
The HCFM should designate a TMP Supervisor who will oversee traffic management along major roads within the project corridors.
The following are the minimum requirements for traffic management on the project:

i. Design and layout of Road Systems

The HCFM in conjunction with the community, SPIU and FRSC must: -
a) Plan traffic routes to give the safest route between places within the project route
b) Make traffic routes wide enough for safe movement of the largest vehicle using them.
c) Ensure all drops and falls are adequately protected.
d) Avoid traffic routes passing close to vulnerable areas such as fuel tanks.
e) Ensure there are designated safe areas for loading, unloading and plant maintenance.
f) Avoid sharp corners or blind bends, if these cannot be avoided install mirrors.
g) Road crossings and junctions, should be clearly signed and marked.
h) Make entrances and gates wide enough.
i) Set speed limits and clearly mark on traffic routes; (5mph).
j) Give prominent warning of limited headroom and overhead cables.

ii. Liaisons with Government Traffic Agencies

The TMP will ensure liaisons with the FRSC at the State level. In situations where heavy traffic impacts are envisaged, the HCFM will liaise with the FRSC to ensure traffic coordination and mitigate adverse traffic impacts.

iii. Pedestrians

a) Provide separate routes for pedestrians and where needed provide suitable barriers.
b) If traffic routes are used by both pedestrians and vehicles they should be wide enough.
c) Provide suitable well marked crossing points.

S/N	Aspects	Descriptions	Responsible Party
1	Traffic/Safety Signage	• Safety signage should be put at strategic locations to warn road users of the ongoing construction activities. • Signages should also be located along borrow pits, engineering yards and workers' camp.	HCFM
2	Movement of Vehicles and Equipment	• Mobilization of equipment and materials should be done at off-peak period (10am – 4pm), mainly on weekends, holidays • Enforce speed limit. • Ensure vehicles and equipment are parked at Camp site and designated areas ONLY. • Untarred access roads shall be sprinkled with water frequently to suppress dust emissions. • The HCFM must ensure that trucks carrying sand/soil to and from the sites are well covered in order not to cause injury to the public.	HCFM

		• Station flagmen at junctions, diversion points, near public crossings such as PHCs and speed bumps will be installed in built up areas and near public facilities such as schools, mosques, churches to reduce speed and dust • During peak periods, such as market days FRSC will also be involved in assisting traffic and road safety management. Furthermore, the HCFM will engage the services of FRSC to train all project drivers.	
3	Training	• Hire drivers with appropriate driver's license. • Liaise with FRSC to train drivers • As part of refresher course for construction workers, train drivers on defensive driving and enforce speed limits	HCFM
4	Communication	• All Traffic and Safety signages should be boldly written in English & local languages. • Any incident/ accidents should be reported immediately to the SPIU within 24hrs. The SPIU will also report to the NPCU/WB within 48hrs including immediate action taken	HCFM SPIU HCFM
	Cost	**All actions and costs have been embedded in the ESMP Matrix Table**	

APPENDIX 5: LABOUR MANAGEMENT PLAN

This plan identifies labor requirements and sets out the procedures for addressing labor conditions and risks associated with the proposed rehabilitation project, which is aimed at helping IMPACT Project to determine the resources necessary to address project labor issues.

Sub-Category	Worker Impacts\Risks	Project Impacts\Risks	Mitigation Measures	Monitoring	Monitoring Frequency	Respons-Ibility
Employment	Influx of many foreigners into project communities	Competition on livelihood and job opportunity with locals	Unskilled labour shall be from the project communities. Where possible qualified skilled workers on contract shall also be sourced within the community	Verify	Onset of Rehabilitation works and bi-weekly	HCFM Monitoring: Supervision Consultant SPIU E&S team
Housekeeping.	The general appearance of the camp deteriorates making camp life unpleasant.	The overall camp experience is compromised which in turn leaves workers demoralised and unproductive.	Ensure that camp grounds and common areas are routinely cleaned and organised with appropriate signage in place. Establish easily accessible, designated smoking areas which are clearly highlighted and regularly cleaned.	Verify	Daily	HCFM Monitoring: Supervision Consultant SPIU E&S team
Recreation.	Workers spend most of their time in the camps	Tensions arise from the local communities as	Provide appropriate recreational	Assessment	Daily	HCFM

	and could become disenchanted and bored. They may want to leave the camps and go into the local towns and villages in search of recreation.	workers impact their activities in search of recreation. An increase in alcohol consumption and prostitution could result due to the influx of workers into local communities.	facilities and activities, that are suitable to the workers' interests, while also been mindful of the community's cultural norms. These should be discussed with the camp residents' committee.			Monitoring: Supervision Consultant SPIU E&S team
Spiritual /Religion.	Workers will want access to places of worship for their chosen religion. They may leave the camps and go into the local towns and villages in search of an appropriate place of worship.	Tensions arise from the local communities as workers impact their activities.	Provide appropriate places of worship where residents express a need for this in accordance with cultural sensitivities, and assess transport arrangements on a case-by-case basis. Ensure that equipment and facilities are kept clean and well maintained.	Assessment	Weekly	HCFM Monitoring: Supervision Consultant SPIU E&S team

SUB-CATEGORY	WORKER IMPACTS\RISKS	PROJECT IMPACTS\RISKS	MITIGATION MEASURES	MONITORING	MONITORING FREQUENCY	RESPONS-IBILITY
Security.	Workers may be exposed to security risks such as banditry and kidnapping	Workers are kidnapped and stop work is issued until the issue is resolved	Security management to be prepared by the SPIU, HCFMs, supervision consultant in conjunction with the State Government and security agencies. Areas that have high security threats should be avoided	Assessment	Continuous	HCFM Monitoring: Supervision Consultant SPIU -E&S Team
Community relations.	Communities are negatively impacted by camp activities: noise, waste, traffic, lighting and so forth. This may result in negative actions towards camp operations such as road closures and the prevention of workers or suppliers from entering the worksite.	Workers are stopped from going to work, which affects productivity.	Implement control measures to avoid and minimise the impacts of camp and living conditions on communities. Limit foreign worker interaction with communities and provide cultural sensitivity awareness training to facilitate appropriate interaction with communities.	Assessment	Weekly	HCFM Monitoring: Supervision Consultant SPIU E&S TEAM

APPENDIX 6: ASBESTOS MANAGEMENT PLAN

This Asbestos Management Plan is principles-based and **should** be revised during implementation with the assistance of an asbestos expert to provide more specific guidance on management of asbestos containing materials (ACM) that will be encountered during rehabilitation process. The Management Plan draws on good international industry practice with the objective of protecting worker and community health.

Background and Problem Definition

Asbestos is a group of naturally occurring fibrous minerals with current or historical commercial usefulness due to their extraordinary tensile strength, poor heat conduction, and relative resistance to chemical attack (WHO). The properties that make asbestos fibers so valuable to industry are its high-tensile strength, flexibility, heat and chemical resistance, and good frictional properties.

There are two main types of asbestos containing materials (ACM): a) friable and b) bonded.

1. Friable asbestos products are soft and loose and can be crumbled into fine material or dust with very light pressure, such as crushing with your hand. Such products usually contain high levels of asbestos (up to 100% in some instances), which is loosely held in the product so that the asbestos fibers are easily released into the air. Friable asbestos products are dangerous because the asbestos fibers can get into the air very easily and may be inhaled by people living or working in the vicinity. Bonded asbestos products are made from a bonding compound (such as cement) mixed with a small proportion (usually less than 15%) of asbestos.

2. Bonded asbestos products are solid, rigid and non-friable. The asbestos fibres are tightly bound in the product and are not normally released into the air. When in good condition, bonded asbestos products do not normally release any asbestos fibres into the air and are considered a very low risk for people who are in contact with them, as long as appropriate safety precautions are used when they are disturbed (enHealth 2013).

The asbestos used as heat insulator in the identified building belongs to bonded asbestos products. And asbestos content can be upto 15%. Asbestos powder enters the body by inhalation of airborne particles or by ingestion and can become embedded in the tissues of the respiratory or digestive systems. Prolonged exposure to asbestos can cause numerous disabling or fatal diseases. Among these diseases are asbestosis, an emphysema-like condition; lung cancer; mesothelioma, a cancerous tumour that spreads rapidly in the cells of membranes covering the lungs and body organs; and

gastrointestinal cancer (OSHA, 1995).

Some PHCs management reported that the ceiling of their facility is made of asbestos, which is an outdated substance by the international bodies because of its health-risk when exposed to human.

Currently, about 125 million people in the world are exposed to asbestos at the workplace and approximately half of the deaths from occupational cancer are estimated to be caused by asbestos. In 2004, asbestos-related lung cancer, mesothelioma and asbestosis from occupational exposures resulted in 107,000 deaths and 1,523,000 (WHO, 2018)

Most people who develop asbestos-related diseases have worked on jobs where they frequently breathed in large amounts of asbestos fibres.

Regulatory Environment

International Labour Organisation (ILO)

The International Labour Conference at its 95th Session in 2006 adopted a resolution noting that all forms of asbestos, including chrysotile (so called blue asbestos) , are classified as human carcinogens by the International Agency for Research on Cancer (IARC), and expressing its concern that workers continue to face serious risks from asbestos exposure, particularly in asbestos removal, demolition, building maintenance, ship breaking and waste handling activities. The resolution calls for the elimination of the future use of asbestos and the identification and proper management of asbestos currently in place as the most effective means to protect workers from asbestos exposure and to prevent future asbestos-related diseases and deaths.

The ILO Asbestos Convention, 1986 (No. 162), provides for the measures to be taken for the prevention and control of, and protection of workers against, health hazards due to occupational exposure to asbestos.

Key provisions of Convention No. 162 concern:

1. replacement of asbestos or of certain types of asbestos or products containing asbestos with other materials or products evaluated as less harmful;
2. total or partial prohibition of the use of asbestos or of certain types of asbestos or products containing asbestos in certain work processes; and
3. measures to prevent or control the release of asbestos dust into the air and to ensure that the exposure limits or other exposure criteria are complied with and also to reduce exposure to as low a level as is reasonably practicable.

The ILO Occupational Cancer Convention, 1974 (No. 139), provides for the measures to be taken for the control and prevention of occupational hazards caused by carcinogenic substances and agents.

Key provisions of Convention No. 139 concern:

1. periodically determining the carcinogenic substances and agents to which occupational exposure shall be prohibited or made subject to authorization or control;
2. making every effort to have carcinogenic substances and agents to which workers may be exposed in the course of their work replaced by non-carcinogenic substances or agents or by less harmful substances or agents;
3. reducing the number of workers exposed to carcinogenic substances or agents and the duration and
4. degree of such exposure to the minimum.

World Bank Policy

The World Bank policy on asbestos (World Bank Group, 2009) promotes good practice in minimising the health risks associated with ACM by:

1. avoiding its use in new construction and renovation; and
2. by using internationally recognized standards and best practices to mitigate health and safety risks when removing existing ACM.

In all cases, the Bank expects borrowers and other clients of World Bank funding to use alternative materials wherever feasible. ACM should be avoided in new construction, including construction for disaster relief. In reconstruction, demolition, and removal of damaged infrastructure, asbestos hazards should be identified, and a risk management plan adopted that includes disposal techniques and end-of-life sites.

Asbestos Removal Procedures

The following is a general list of requirements for asbestos removal activities derived from the Safe Work Australia (2018) *Code of Practice: How to safely remove asbestos*.

Supervision

All asbestos removal activities must be supervised by a trained expert. For this project the supervision team will comprise the consultant asbestos specialist and the duly trained contractor's supervisor.

Training

A training program will need to be developed for the contractor's workers that will be involved in the removal, packaging, transport and disposal of ACM. The training program must be appropriate for the activity, undertaken prior to the commencement removal activities and include the following elements:

1. the nature of the hazards and risks
2. how asbestos can affect a person's health and the risks arising from exposure to airborne asbestos
3. the control measures in place and maintenance of the asbestos removal control plan for that job
4. the methods and equipment that will be used to do the job properly
5. choosing, using and caring for personal protective equipment (PPE) and respiratory protective equipment
6. (RPE)
7. decontamination procedures
8. waste disposal procedure; and
9. emergency procedures.
10. Two levels of training are proposed under the Safety Instruction on Asbestos Handling:
11. Supervisor (40 hours) - focused on planning and organizing asbestos removal and handling activities; and

12. Worker (8 hours) - focused on hazard awareness, protective equipment and following the asbestos management plan.

Asbestos Removal Control Plan

An Asbestos Removal Control Plan is a document that identifies the specific control measures to be used to ensure workers and other people are not at risk when asbestos removal work is being conducted. It is focused on the specific control measures necessary to minimise any risk from exposure to asbestos. An asbestos removal control plan helps ensure the asbestos removal is well planned and carried out in a safe manner. The Control Plan must include details of:

1. how the asbestos removal will be carried out, including the method, tools, equipment and PPE to be used; and
2. the asbestos to be removed, including the location, type and condition of the asbestos.
3. Each contractor will be required to prepare its own Control Plan which will need to specify the PPE that will be provided to workers and also the budget provision in its bill of quantities (BoQ).

Access Control

Signs are to be erected at each removal site to indicate where the asbestos removal work is being carried out and barricades erected to delineate the asbestos removal area. Access to the removal area must be limited to the following people:

• workers who are engaged in the removal work;

• other people who are associated with the removal work; and

• people who are allowed under the Regulations to be in the asbestos removal area (for example inspectors, emergency service workers).

Decontamination

Decontamination for the work area, workers, PPE and tools used in asbestos removal work is an important process in eliminating or minimising exposure to airborne asbestos fibres, particularly to people outside the asbestos

removal work area. The risks of each individual asbestos removal job should be assessed to determine the appropriate decontamination procedure.

Decontamination facilities must be available to decontaminate the asbestos removal work area, any plant used in that area, workers carrying out the asbestos removal work, and other persons who have access to the asbestos removal area because they are associated with the asbestos removal work.

Waste Containment and Disposal

Proper disposal of ACM is important not only to protect the community and environment but also to prevent scavenging and reuse of removed material. ACM should be transported in leak-tight containers to a secure landfill operated in a manner that precludes air contamination that could result from ruptured containers (World Bank, 2009).

The removal contractor must ensure that asbestos waste is contained and labelled before it is removed from the asbestos removal area. Waste must be disposed of as soon as is practicable at a site authorised to accept asbestos waste. The disposal site and method for disposal and containment will be determined in consultation with the 14 Participating State Ministry of Environment and State's Environmental Protection Agency

Removing Friable Asbestos

The asbestos within the pipe insulation is friable posing an increased risk of airborne fibre generation. All friable asbestos must be removed using the wet spray method. This method requires the use of a constant low-pressure water supply for wetting down asbestos and related items to suppress asbestos fibres. Asbestos fibres are significantly suppressed under this method however they are not entirely eliminated so the use of RPE is also essential. Consideration should be given to applying a polyvinyl acetate (PVA) emulsion as it may be more effective than water in minimising fibre release. Fully or partially enclosing shall be used at worksite with friable asbestos removal to avoid asbestos contamination spread to environment.

4. Personal Protective Equipment

As asbestos removal is a high hazard activity, appropriate personal protective equipment (PPE) must be worn regardless of other health and safety control measures in place. PPE must be selected to minimise the risk to health and safety by ensuring it is:

1. suitable for the nature of the work and any hazard associated with the work;
2. a suitable size and fit and reasonably comfortable for the person wearing it;
3. maintained, repaired or replaced so it continues to minimise the risk, including ensuring that the PPE is
    i. clean, hygienic and in good working order; and
    ii. used or worn by the worker, so far as is reasonably practicable.
    iii. Workers must be provided with information, training and instruction in the proper use and wearing of PPE; and its
    iv. storage and maintenance. A worker must, so far as reasonably able, wear the PPE in accordance with any information, training or reasonable instruction.

The effectiveness of PPE relies heavily on workers following instructions and procedures correctly, as well as fit, maintenance and cleaning. If PPE must be used for long periods, if dexterity and clear vision are needed for the task, or if workers have not been adequately trained on how to fit and use PPE properly, workers might avoid using it.

PPE includes the following items:

1. Coveralls - ideally disposable coveralls should be provided which are of a suitable standard to prevent tearing or penetration of asbestos fibres; one size too big, as this will help prevent ripping at the seams; and fitted with hood and cuffs to prevent entry of asbestos fibres;
2. Gloves - gloves should be worn when conducting asbestos removal work. If significant quantities of asbestos fibres may be present, single-use disposable nitrile gloves should be worn. Gloves used for asbestos removal work should be disposed of as asbestos waste;
3. Safety footwear - safety footwear (for example steel-capped, rubber-soled work shoes or gumboots) should be provided for all workers removing asbestos. Safety footwear should be laceless, as laces and eyelets can be contaminated and are difficult to clean. The footwear should remain inside the asbestos
4. removal area for the duration of the asbestos removal work and should not be shared for hygiene reasons;
5. Respiratory protective equipment (RPE) - all workers engaged in asbestos removal work must wear RPE conforming to the appropriate international standard,

Occupational Health and Safety, Occupational Health and Hygiene Requirements. The selection of suitable RPE depends on the nature of the asbestos removal work, the probable maximum concentrations of asbestos fibres expected and any personal characteristics of the wearer that may affect the facial fit of the respirator (for example facial hair and glasses).

Waste Transport and Disposal

When developing a waste transport and disposal plan, the following should be taken into account:

1. the containment of waste so as to eliminate the release of airborne asbestos fibres;
2. details of any asbestos or ACM to be left in situ;
3. the location and security of waste storage on site;
4. the transport of waste within the site and off site;
5. the location of the waste disposal site;
6. approvals needed from the relevant local disposal authority; and
7. any local disposal authority requirements that may apply to the amount and dimensions of asbestos waste.

Loose asbestos waste must not accumulate within the asbestos removal work area. The loose asbestos waste should be placed in labelled asbestos waste bags or wrapped in heavy-duty polyethylene sheeting (minimum 200 μm thickness) and labelled. Once the labelled asbestos waste has been removed from the asbestos removal area it should either be placed in a solid waste drum, bin or skip; or removed immediately from the site by an approved/licensed carrier for disposal.

Specific guidance for the IMPACT Project

A detailed methodology for the removal activities under the IMPACT Project will be prepared by the asbestos expert in consultation with the World Bank, IMPACT Project, Federal Ministry of Health, Federal Ministry of Environment and the 14 participating States' Ministries of Environment and the asbestos removal contractor. Methodology will focus on workers and community safety and follow above laid guidelines as well as Nigeria regulation – Safety Instruction on Asbestos Handling when adopted. The methodology will be prepared in advance of project works and will be a condition for initiation of tendering for works.

The methodology will focus on:

1. Requirements for contractor's and stipulations of clauses in the tendering documents
2. Risk assessment – determining the content of asbestos and risks of exposure incurred by workers, to assess them and to take the necessary precautions.
3. Notification to the occupational health and safety authority responsible for the work site of any demolition, refurbishment and maintenance work prior to commencement
4. Work plan9 with working instructions- lay down the technical and personal protective measures to be taken in a work plan. Working instructions for workers should be concise and clearly formulated
5. Training of project stakeholders and training of contractor and workers: initial and ongoing should be planned and documented.
6. Transport, Storage and Disposal of Asbestos