REPUBLIC OF THE GAMBIA

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

FOR THE

Western Africa Regional Digital Integration Project (WARDIP) – The Gambia
(P176932)

Ministry of Communication and Digital Economy (MoCDE)

JULY 2023

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LIST OF ACRONYMS AND ABBREVIATIONS

AREP	Adaptation Review and Evaluation Procedures
CBG	Central Bank of The Gambia
CBOs	Community Based Organizations
CERC	Contingency Emergency Response subcomponent
CoC	Codes of Conduct
CRR	Central River Region
CSS	Climate Screening System
DCD	Department of Community Development
EHSG	Environmental, Health, and Safety Guidelines
EIA	Environmental Impact Assessment
EA	Environmental Assessment
ES	Environment Specialist
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMS	Environmental and Social Management System
ESS	Environmental and Social Standards
E&S	Environment and Social
GBV	Gender and Gender-Based Violence
GDP	Gross Domestic Product
GEAP	Gambia Environmental Action Plan
GERMP	Gambia Electricity Restoration and Modernization Project
GESSP	Gambia Education Sector Support Project
GM	Grievance Mechanism
GoTG	Government of The Gambia
GRC	Grievance Redress Committee
HDRs	Human Development Report's
HR	Human Resources
ICT	Information Communication Technology
IDA	International Development Association
IFC	International Finance Corporation
ILO	International Labor Organization
IT	Information Technology
KM	Kanifing Municipality
LMP	Labor Management Procedures

LRR	Lower River Region
MoCDE	Ministry of Communication and Digital Economy
NAWEC	National Water and Electricity Company
NBR	North Bank Region
NEA	National Environment Agency
NEMA	National Environment Management Act
NGO	Non-Governmental Organization
OHS	Occupational Health and Safety
PAD	Project Appraisal Document
PDO	Project Development Objective
PFIs	Participating Financial Institutions
PIU	Project Implementation Unit
POC	Project Oversight Committee
PTC	Project Technical Committee
RCO	Regional Coordinating Office
SDGs	Sustainable Development Goals
SDM	Single Digital Market
SEA	Sexual Exploitation and Abuse
SEAH	Sexual Exploitation, Abuse and Harassment
SEP	Stakeholder Engagement Plan
SSS	Social Safeguard Specialist
TAC	Technical Advisory Committees
UNCRC	United Nations Convention on the Rights of the Child
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
URR	Upper River Region
VAC	Violence Against Children
VDCs	Village Development Committees
WARDIP	West Africa Regional Digital Integration Project
WARFP	West Africa Regional Fisheries Program
WB	World Bank
WBG	World Bank Group
WCR	West Coast Region
WHO	World Health Organization

GLOSSARY OF TERMS

Cumulative impacts/effects: The impact on the environment resulting from the action's incremental impact when added to other past, current and reasonably foreseeable future actions.

Direct impacts: These are effects that occur through the direct interaction of an activity with an environmental, social, or economic component.

Disclosure: Information is available to all stakeholders at all stages of the development of projects.

Environment: this is a diversity of things made up of natural and artificial environments. It includes chemical substances, biodiversity, socio-economic activities, cultural, aesthetic, and scientific factors likely to have direct or indirect, immediate or long-term effects on the development of an area, biodiversity, and human activities.

Environmental Impact Assessment (EIA): It is an instrument to identify and assess the potential environmental impacts of a proposed project, evaluate alternatives, and design appropriate mitigation, management, and monitoring measures.

Environmental Monitoring: This instrument provides, during project implementation, information about key environmental aspects of the project that enables the borrower and the bank to evaluate the success of mitigation as part of project supervision and allows corrective action to be taken when needed.

Grievance: An issue, concern, problem, or claim (perceived or actual) that an individual or community group wants a company or contractor to address or resolve.

Impact: A positive or negative effect caused by a project or an activity in the environment.

Indirect impacts: are effects that are not a direct result of the project, often produced away from or as a result of a complex impact pathway. They are also known as secondary or even third-level impacts.

Involuntary resettlement: This is a policy triggered in situations involving (a) involuntary taking of land resulting in (i) relocation or loss of shelter, (ii) loss of assets or access to assets, or (iii) loss of income sources or means of livelihood, whether or not the affected persons must move to another location; or (b) the involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons. The policy aims to avoid involuntary resettlement to the extent possible or reduce and mitigate its adverse social and economic impacts.

Mitigation measures: This refers to feasible and cost-effective measures that may reduce potentially significant adverse environmental impacts to acceptable levels.

Pollution: is the contamination caused by waste, harmful biochemical products derived from human activities that may alter man’s habitat and cause adverse effects on the environment like man's social well-being, animals, flora and fauna and the world they live in.

Scoping: The scoping is the process of determining the content and extent of matters that should be covered in the environmental information to be submitted to a competent authority or other decision-making body.

Screening: This determines whether or not an EIA is needed and is a formal requirement under the EIA Regulations.

EXECUTIVE SUMMARY

BACKGROUND AND PROJECT DESCRIPTION

Background

This Environmental and Social Management Framework (ESMF) is for the Western Africa Regional Digital Integration Project (WARDIP) – The Gambia. The proposed project aims to increase access to broadband and digital services by developing and integrating digital markets in the Western Africa region. The project will support The Gambia, ensuring an enabling environment for digital skills, innovation, and competitiveness in the regional single Digital Market. It will also ensure the realization of national digital development objectives more effectively and rapidly while cognizant of regional digital transformation objectives. Developing national policies, regulations, and the implementation of the strategic programs would need further enhancement and barriers to cross-border connectivity, data flows and digital services, allowing a seamless and competitive national and regional digital ecosystem to emerge. This would drive a reinforcing cycle of economic growth, investment, innovation, job creation and improved service delivery at national and regional levels. The WARDIP will focus on simultaneous integration of the connectivity, data, and online market layers. Advancement in each distinct market layer is expected to create a virtuous cycle as each segment builds on another, reinforcing the development, expansion, and integration of national and regional digital markets.

To implement the proposed project, the Government of The Gambia (GoTG) is expected to receive funding from the World Bank (WB) for an amount of US$ 57.5 million over five years. The project will be implemented by the Ministry of Communication and Digital Economy (MoCDE) in the Greater Banjul Area with some programs implemented across the country in all regions (Central River Region North (CRRN), Central River Region South (CRRS), North Bank Region, West Coast Region and Upper River Region North (URR).

Project development objective and Project components

WARDIP Program Development Objective (PDO) is to increase broadband access and usage, and strengthen the foundations for the establishment of a single digital market in Western Africa.

WARDIP SOP-1 PDO which includes the Gambia, Guinea, Mauritania and ECOWAS is to increase access and usage of broadband internet in order to strengthen the foundations for digital financial services (DFS) and enable the development of selected digital public services.

PDO Level Indicators

The proposed Project Development Objective (PDO)-level results in indicators for the WARDIP-Gambia are categorized according to the two main cardinals of the PDO and may include:

Increase access to and use of broadband

1. People provided with new or enhanced access to broadband internet (of whom include female users);

2. Increased volume of international traffic (Kbit/s per person). Adults with access to a transaction account (of who include female users)

3. Strengthen the foundations for DFS. Enable the development of selected digital public services.

4. Number of unique/registered users to the platform

Component 1: Enabling environment for the establishment of a continental SDM (To be implemented by AU Commission and Smart Africa)

Component 2: Connectivity Market Development and Integration (indicative US$28.65 million)

This component would support reforms to reduce barriers to the provision of cross-border telecom services through open markets and broadband connectivity infrastructure deployment under an MFD approach.

Component 3: Data Market Development and Integration (US$2.74 million)

This component aims to enable the secure exchange, storage and processing of data across borders to support regional deployment and access to data-driven services, innovation and infrastructure, including reducing regional restrictions on the free flow of data and increasing investments into data infrastructure.

Component 4: Online Market Development and Integration (US$12.89)

The component aims to support the development and integration of the online market, which would enhance the enabling environment for the cross-border delivery and access of digital goods or services.

Component 5: Project Management and Implementation support (US$5.72 million)

This component would provide technical assistance and capacity support for program preparation and implementation.

Component 6: Contingent Emergency Response Component (CERC) (indicative US$0 m, IDA)

In the COVID-19 crisis, a Contingent Emergency Response Component (CERC) is added to the project structure to support the participating countries in responding to emergencies, including the COVID-19 situation.

Methodology

The preparation of this ESMF included a desk review of WB ESF Requirements, Environmental and Social Standards, Environmental Health and Safety Guidelines, National Policies, institutional and regulatory frameworks applicable to this project. Institutional and community consultations/engagements were also held across all regions of the country through interviews in the form of Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) with National, Regional, District and village authorities and communities. The

questionnaire and Environmental and Social (E&S) screening form was designed on Survey Solutions, a Computer Assisted Personal Interview (CAPI) tool used for data collection, which ensured that the data collected was coherent and reliable. The information from the desk-reviewed documents and the baseline information and interviews with stakeholders were analyzed and put together to prepare this ESMF.

Baseline Environmental and Social Information

Desk review of the existing baseline information was undertaken to obtain understanding of the proposed project with information collected from lessons learned from the current and past World Bank projects in the same areas of operation. Baseline information looked at the physical, biological and social environment in The Gambia: physical environment (climate and weather conditions, water resources, geological characteristics, mangrove ecology); biological environment (forest and vegetation, wetland biodiversity); socio-economic environment (the Gambia population dynamics and characteristics, economy, agriculture, tourism ,employment, fisheries, health, land tenure, education); information, communication and technology (ICT) access; e-waste status and management in the Gambia and gender-related issues (gender empowerment, gender digital equality, gender and gender-based violence (GBV), and violence against children (VAC)).

General Policy, Legal and Institutional Frameworks

National policies and regulations relevant to the implementation of the project are discussed along with World Bank Environment and Social Standards, and international conventions of which the Gambia is a signatory. In the Gambia, key pieces of legislation governing the conduct of EIA are the National Environmental Management Act 1994 and the Environmental Impact Assessment Regulations (EIA) 2014 and EIA Guidelines. The National Environmental Act entrusts National Environment Agency (NEA) with responsibility to ensure compliance with the EA process in planning and execution of development and infrastructural projects. Other polices, legislation, and institutional procedures of the Gambia which are relevant to the WARDIP project are also discussed and included:1997 Constitution of The Gambia; Labour Act, 2007; The Gambia Environmental Action Plan (GEAP); Biodiversity and Wildlife Policy (2001) and Biodiversity and Wildlife Act (2002); Agriculture and Natural Resources (ANR) Policy; Forestry Act (1998) and Forest Policy (2009-2019); Local Government Act, (1990); The Sexual Offenses Act 2013; Domestic Violence Act 2013; Women Act 2010; Children's Act 2005 and National Policy Guidelines on HIV/AIDS 2014 – 2020.

With regards to the submarine cable, The Gambia is signatory to the International Convention for the Prevention of Pollution from Ships (MARPOL), as such it will ensure that ships involved in project activities related to the submarine cable activities, adopt and implement MARPOL provisions including measures in its technical annexes to address potential source of pollution as well as ensuring they are in compliance with national legislation and GIIP.

This project will apply the World Bank’s Environment and Social Framework (ESF). Environmental and social risk for the proposed project is rated Substantial and moderate, respectively. The Environment and Social Standards (ESSs) relevant to this project includes ESS1, ESS2, ESS3, ESS4, ESS5, ESS6, ESS7, ESS8 and ESS10.

Major Environmental and Social Risks of WARDIP

Environmental risks and impacts in the project could occur in two ways – potential impacts of prevailing baseline environmental conditions on the proposed project and potential environmental and social impacts of the proposed project on the baseline environmental and social conditions.

This project shall create more opportunities in line with improved access and availability of internet connection. It will further have immense positive environmental and socio-economic benefits through connecting clients from various spheres of life and government arms that would benefit from improved communication. While adverse impacts are envisaged in the project, mitigation measures have been put forward. Below is a summary of the positive and negative impacts.

Summary of positive and potential negative environmental and social impacts

Positive Impacts	Potential Negative Impacts
Provision of employment opportunities in beneficiary communities including skilled and unskilled jobs during landing station construction and rehabilitation and laying optical fiber cables.	E-waste and Hazardous waste generation from mainly end-of-life backup power batteries and poor waste management could lead to pollution,
Provision of markets for construction materials during the construction and installation phase	E-waste generation from institutions that will be connected to the internet and digital platforms as well as phones used by a large number of people in the country
Improved service delivery through online, e-commerce, e-government and teleconferences	Noise pollution from the installation of equipment and backup generators
Replacement of physical production and distribution of music, video, books, and software by the delivery of digital information over the network	Localized dust emissions from trenching and installation of equipment, emissions from vehicle fleets (exhaust fumes), and backup generators
Access to affordable smart devices and acquiring basic digital skills through components,	Generation of electronic wastes which are normally found in small electronic devices which could be dangerous to human health, such as mercury, lead, cadmium, etc.
Reduced resource consumption, waste generation and CO2 emissions	Occupational health risks from optical fiber cables such as permanent eye damage due to exposure to laser light
Reduction of deforestation and land degradation as people will lower the dependency on paper by using soft copies and information transfer through the	Potential for exploitation and unfair wages, discrimination at work and exposure to GBV/ SEA/ SH, the spread of HIV/ AIDs, COVID 19 and poor working conditions.

internet, hence contributing to climate change mitigation.	These could impact timely project delivery, and lead to injury and even fatalities.
Connectivity with neighboring countries will improve trade, commerce and regional security.	Potential increase in cross-border crime rates due to enhanced communication through increased broadband.
Boosting the use of ICTs in rural areas will connect agricultural producers to markets with key benefits of being able to sell produce at prices comparable to prevailing market conditions. It will be easy for farmers to know produce prices in urban areas and use these to negotiate for better farm-gate prices with traders	Easement and land acquisition, especially for fiber optics installation and towers or antenna installation

The above negative impacts will be addressed by preparing and implementing site-specific instruments and some mitigation measures, including the preparation of Environmental and Social Management Plans (ESMPs), Labour Management Plans (LMPs), land acquisition and easement plans, e-waste collection and safe disposal. Furthermore, positive measures include avoiding sensitive and protected areas, use of Personnel and collective Protective Equipment (PCPE) during construction, rehabilitation and installation, awareness and sensitization programs.

Environmental and social management requirements for sub-projects

The project will institute several management requirements to ensure that environmental and social risks and impact management guidelines are adequately followed throughout implementation. The project will have a monitoring framework to monitor these processes and ensure compliance. These activities and requirements are summarized in the table below.

Summary of activities and requirements for sub-projects

Subproject phase	Environmental & Social Compliance Requirement	Documentation required	Responsibility
Pre- Approval	Preparation of relevant safeguard documents	ESMF, RPF, ESCP, SEP, LMP	MoCDE/ Consultants, WB
	In-house E&S screening of sub-projects	In-house Appraisal Checklist including further and appropriate safeguard documentation as required	ES & SSS
	Register subproject with NEA for environmental screening and clearance (for sub-projects meeting eligibility criteria for registration)	Copy of forwarding letter and NEA EIA Screening Form	ES & SSS

Subproject phase	Environmental & Social Compliance Requirement	Documentation required	Responsibility
1. Sub-Identification, Appraisal, and Design	Obtain clearance and environmental permits for subprojects screened by NEA	Copy of permit and environmental compliance schedule for subproject implementation	ES & SSS
	Incorporate NEA screening and permit recommendations and E&S issues identified during In-house sub-project appraisal into subproject **project** formulation and design and contracts.	Copy of contract specifications	MoCDE PIU team
	Undertake field validation/verification on any land acquisition and crop/livelihood displacement and compensation issues identified during in-house screening	Completed guidelines for validating communal and individual lands, pictures of meetings, and signed list and addresses of people consulted during validation	ES & SSS
2. Sub-project Execution (ESMP Implementation)	Community/ key stakeholder engagements and sensitization	Sensitization reports (Community/ stakeholders)	ES & SSS
	Undertake training of key project actors (National, Regional, and Community levels in the project's E&S requirements for subproject implementation) a) Train contractors/ supervisors on E&S requirements. b) Include safeguards issues on the agenda for community pre-commencement meetings	Training reports/picture	ES & SSS World Bank
	2.3 Put measures for handling grievances/ complaints, accountability, and widely publicize them. Make available hotlines for receipt of grievances and complaints. Ensure that the Toll-free numbers for the Engagement Service and educate the communities about the Engagement Service Constitute Community Grievance/ complaints committee and train them	Single Window Citizens Engagement Service toll-free hotline, Community complaints notebooks, complaints files and records,	ES & SSS

Subproject phase	Environmental & Social Compliance Requirement	Documentation required	Responsibility
	Appoint and train Community Facilitators expected to be focal persons for community/ project level grievances		
	2.4 Institute and publicize measures for handling community exposure to diseases (e.g., malaria, HIV/AIDS, and COVID-19)	Education Flyers/ posters	ES & SSS
	2.5 Labour and Working Conditions Enforce the under-listed E&S mitigation measures Provision of temporary latrines at environmentally acceptable locations Provision of adequate potable water for the workforce Ensure the availability of a well-stocked first aid kit Appoint one beneficiary to serve as a caregiver	Site inspection reports/ pictures	ES & SSS Contractors' focal points
3. Post-Subproject Execution	Constitute Community Management Teams and train them	Training reports	ES & SSS

Stakeholder consultations and grievance management

In line with WB and national environmental laws, consultations were conducted with stakeholders, who potentially could be involved directly or indirectly in the project. Stakeholders were identified in two categories: (1) stakeholders at the central level such as institutions, and (2) stakeholders at the local level, including regional, district and village authorities and representatives of women, youth and individual community members in ICT business. In line with ESS10, participatory and interactive approaches were applied including Key Informant Interviews (KIIs), and focus group discussions (FGD) to solicit information from institutional representatives and persons consulted. Additionally, in line with COVID-19 prevention guidelines, wearing masks and physical/social distancing were observed. To further prevent the potential transmission of COVID-19, an E&S screening form guide was designed on Survey Solutions, a CAPI tool used for data collection. Stakeholders were informed of the proposed project and by using guiding questionnaires; relevant information on the likely impacts of the project activities and suggestions from stakeholders was collected.

In total, 214 persons were consulted across the country, with 34% being women. More than 27 focus group discussions and key informant interviews with stakeholder institutions at the regional and national levels were held. (See annex 5). The Stakeholder consultations were held

on March 14th – 30th 2022 with eight (8) data collectors and two (2) supervisors who were trained and familiar with data collection protocols and processes similar to this project.

The ESMF will be disclosed on the MoCDE website, the NEA website, the media, and the World Bank external website.

Institutional Arrangements and Capacity Analysis for Implementation of the ESMF

MoCDE having a PIU shall be the project implementing Agency. NEA/Ministry in charge of Environment, relevant ministries, departments, Communication agencies such as GAMTEL/GAMCEL, TAC, the private sector, and communities will support the project's environmental and social mitigation measures. Other institutions and agencies whose functions relate to the project regarding oversight, project design and technical support include the Project Steering Committee (PSC) and Project Technical Committee (PTC).

Roles of Key Institutions in the ESMF and Project Implementation

There are various institutions with specific mandates in the ESMF. The implementation of the ESMF is the responsibility of the MoCDE. Monitoring the ESMF is paramount as it ensures that mitigation and enhancement measures are implemented.

The monitoring shall be viewed in three phases: monitoring compliance, impact monitoring, and cumulative impact monitoring. The National Environment Agency (NEA) is responsible for monitoring compliance. The project's resources should be available for the NEA to execute this task, followed by reporting. However, to facilitate an excellent working environment, it is recommended for NEA and MoCDE to have a MoU just like other World Bank-financed Projects in the Gambia such as GIRAV, GCAV, GESSP and GERMP. The project team will do impact and cumulative monitoring. Furthermore, the capacity-building needs of the various institutions and persons involved in implementing the ESMF/ESMPs are done to ensure that the project is environmentally and socially sustainable. The approaches and methods as required have been prescribed as well.

Grievance Mechanism (GM)

In line with ESSs, during the development of the WARDIP and its implementation, complaints may arise from national institutions concerning, for example, breach of laws; project affected persons on land ownership and land use issues; pollution nuisance and choice of beneficiaries, amongst others. To maintain stability, mechanisms will be put in place to redress any grievance and conflict emanating from the Project related activities. A Grievance Mechanism (GM) has been prepared and integrated into the Stakeholder Engagement Plan (SEP) (Annex 17).

Concerning the grievance at the contractor level and following the ESS2, a Labor Management Procedure (LMP) is also prepared. The LMP has considered the treatment of grievances for all project workers. Furthermore, a SEA/SH Action Plan and Code of Conduct (CoC) have been developed accordingly.

Institutional Framework for Environmental Impact Assessment and ESMF Implementation

The NEA has the legal mandate of being the custodian of the EIA process in the country. The Agency works closely with multi-sectoral EIA Working Group comprising relevant stakeholders from the public and private sectors and civil society. The roles of the various stakeholders in the EA process are as follows:

The National Environment Agency (NEA): The NEA is responsible for ensuring compliance with laid down EIA procedures in the Gambia according to the NEMA 1994 and its subsidiary legislation (EIA Regulations 2014, EIA guidelines 1999 and the EIA Procedures 1999). The Agency is expected to give environmental approval for Projects once they have undergone careening and are determined to be environmentally and socially viable. The EIA is applied locally as a planning tool. It is in line with the universally approved environmental principle of precautionary approach that allows for identifying potential and real negative impacts of project/development initiatives in advance. This enables the development of environmental management plans, outlining measures to deal with and mitigate or offset the negatives as well as enhance the positives, the adequacy of which plans is considered by the Agency for informed decision making. The NEA is represented in all five regions of the country and will support the project by exercising its permitting and monitoring role.

Essentially, the agency screens projects using the EA/EIA Screening Forms. The Agency supports the EIA Working Group to conduct scoping of projects requiring EIA/ESIAs. It also develops the terms of reference for the subsequent environmental study. Furthermore, the Working group coordinates public consultations on draft environmental and social impact statements submitted to the NEA; the same review is also its responsibility.

The EIA Working Group: Advises the NEA Executive Director on approval or otherwise of environmental impact statements. The team undertakes scoping exercises, public consultations and the review of draft environmental impact statements that developers or proponents submit to the NEA for the Executive Director's approval in place of environmental clearance before the project starts.

The Developer/Investor (MoCDE): Completes the EIA screening form and takes part in the scoping exercise. Conducts the environmental and social impact assessment and develops or formulates and environmental impact statement, which is submitted to NEA for consideration by the EIA Working Group and the public through public consultations and disclosures. The Working also is responsible for implementing that section of the impact statement on the remedial actions of the environmental management plan. In addition to the EIA and ANR Working Groups, the NEA has other cross-sector working groups that advise it and other government departments on specific environmental and natural resources issues in line with their specific mandates

Regional Coordinating team: The NEA regional team will collaborate with the ANR/EIA subcommittee (the regional version of the EIA Working Group at the national level) of the Technical Advisory Committee (TAC) located at the Office of the Governors of the Regions.

The Regional team will work with the MoCDE to provide technical backstopping and monitoring to the implementing communities.

Project Beneficiary Communities: The beneficiary communities are particularly the most important for implementing environmental and social safeguards for the community's benefits or otherwise.

Monitoring and Evaluation

The MoCDE will be responsible for monitoring progress towards achieving the PDO and intermediate indicators based on the Results Framework. It will do so by ensuring that MoCDE PIU is staffed with an M&E expert tasked with coordinating M&E regionally and nationally and ensuring that an adequate M&E system is established based on the M&E plan. The Safeguard Officer will monitor the implementation of environmental mitigation measures based on the contractor's work plan. The overall status of project implementation will be documented in progress reports prepared quarterly and submitted to the WB for review.

ESMF budget and ESMF disclosure

Upon the clearance of the ESMF by the World Bank, the Government of Gambia, through MoCDE and NEA, will locally disclose the ESMF and inform the Bank to disclose it through its external website. The estimated budget for ESMF implementation is US$ **500,000** and most of the budget will be used for the screening process, preparation of ESMPs, studies, consultation capacity building, training and awareness raising activities. Given the nature of the project, the potential adverse impacts associated with this project are moderate and can be managed through proposed mitigation measures in this ESMF and simplified ESMPs as appropriate. This framework will apply to all project activities under WARDIP–The Gambia.

Recommendations and Conclusion

MoCDE prepared this ESMF for WARDIP that will be implemented across all the project areas in the country to ensure the project implementation is in full compliance with national environmental legislation and World Bank environmental and social framework (ESF).

The policy, legal and institutional frameworks for this ESMF and the environmental, biological and socio-economic baseline project were reviewed; public consultations were conducted and results show positivity in increasing internet access.

Given the nature of the project, the potential social and environmental adverse impacts are moderate to substantial, respectively, and can be controlled through proposed mitigation measures. The proposed subprojects, Environmental and Social Impact Assessment and Environmental and Social Management Plan (ESIA/ESMP), will propose site-specific measures to mitigate adverse impacts.

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This ESMF has an inbuilt grievance procedure that will be used to address grievances that may arise during the project implementation. The estimated budget for the ESMF implementation is US$ **500,000.** Successful implementation of this ESMF will depend largely on the involvement and participation of all stakeholders, including the local communities.

1 BACKGROUND AND PROJECT DESCRIPTION

1.1 BACKGROUND

The Gambia is located on the West African coast and extends about 400 km inland, with 97 persons per square kilometer. The country's width varies from 24 to 28 kilometers and has a land area of 10,689 square kilometers. It is bordered on the North, South, and East by the Republic of Senegal and on the West by the Atlantic Ocean. The country has a tropical climate characterized by two seasons, the rainy season June-October and the dry season November-May.

Though the Gambia's GDP per capita fluctuated substantially in recent years, in 2020, GDP per capita for the Gambia was 791 US dollars. In the Gambia, like many African countries, containment measures introduced to limit the COVID– 19 pandemic helped cause the country's GDP to contract by an estimated 2.4% in 2020 after growing 6.2% in 2019.

Under the West Africa Regional Digitalization Integration Program (WARDIP), the Government of The Gambia (GoTG) plans to acquire a financial facility worth $45 million from the World Bank (WB). The proposed project aims to increase access to broadband and digital services by developing and integrating digital markets in the Western Africa region. The project will support The Gambia, ensuring an enabling environment for digital skills, innovation, and competitiveness in the regional single Digital Market. It will also ensure the achievement of national digital development objectives more effectively and rapidly while cognizant of regional digital transformation objectives. The development of the national policies, regulations and the implementation of strategic programs, that would need further enhanced and barriers to cross-border connectivity, data flows and digital services, allowing a seamless and competitive national and regional digital ecosystem to emerge. This would drive a reinforcing cycle of economic growth, investment, innovation, job creation and improved service delivery at national and regional levels. The WARDIP will focus on simultaneous integration of the connectivity, data, and online market layers. Advancement in each distinct market layer is expected to create a virtuous cycle as each segment builds on another, reinforcing the development, expansion and integration of national and regional digital markets. The project will be implemented by the Ministry of Information and Communication Infrastructure in the Greater Banjul Area and in five (5) local government administrative areas (Central River Region North (CRRN), Central River Region South (CRRS), North Bank Region (NBR), West Coast Region (WCR) and Upper River Region North (URRN)).

1.2 THE PROJECT DEVELOPMENT OBJECTIVE

The proposed Project Development Objective (PDO)-level results in indicators for the WARDIP are categorized according to the two leading cardinals of the PDO and may include:

1. Increase access to and use of broadband
    a) People provided with new or enhanced access to broadband internet (of whom, female users are key);

b) Increased volume of international traffic (Kbit/s per person)

2. Advance the integration of digital markets in Western Africa
    a) Increased Volume of transactions in domestic retail payment system (Percentage)
    b) Users accessing e-services promoting regional integration supported by the project (Number), of which female

1.3 PROJECT COMPONENTS DESCRIPTIONS

There are four proposed project components to be implemented in The Gambia:

Component 1: Enabling environment for the establishment of a continental SDM (To be implemented by AU Commission and Smart Africa)

Component 2: Connectivity Market Development and Integration (indicative US$28.65 million)

This component would support reforms to reduce barriers to the provision of cross-border telecom services through open markets and broadband connectivity infrastructure deployment under an MFD approach. It will entail the installation of major infrastructure in a submarine cable and associated fiber optic lines on land that will be a subject of the ESIA.

Component 3: Data Market Development and Integration (US$2.74 million)

This component aims to enable the secure exchange, storage and processing of data across borders to support regional deployment and access to data-driven services, innovation and infrastructure, including reducing regional restrictions on the free flow of data and increasing investments into data infrastructure. This component is largely about the development of policies, programs to increase capacities, and purchase of hardware and software, and will not be considered in the ESIA.

Component 4: Online Market Development and Integration (US$12.89)

The component aims to support the development and integration of the online market, which would enhance the enabling environment for the cross-border delivery and access of digital goods or services. This component is largely about the development of tools, policies and programs and will not be considered in the ESIA.

Component 5: Project Management and Implementation support (US$5.72 million)

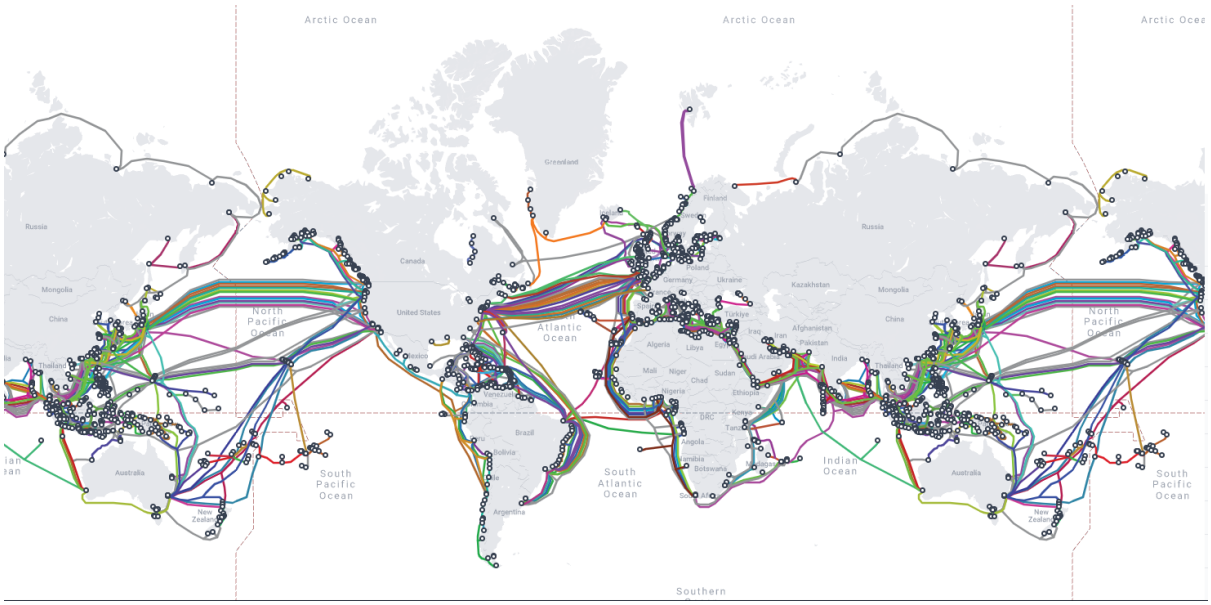
Component 5 would provide technical assistance and capacity support for program preparation and implementation. As the name implies, this component refers to the key personnel for the day-to-day management of the Project hence will not be a subject of the ESIA.

Component 6: Contingent Emergency Response Component (CERC) (indicative US$0 m, IDA)

In the context of the COVID-19 crisis, a Contingent Emergency Response Component (CERC) is added to the project structure to provide support to the participatory countries to respond to emergencies, including the COVID-19 crisis.

1.4 Submarine Cables and Basic Support Elements

Submarine cables are connections submerged in the ocean between terrestrial network stations that are used to transmit telecommunication signals. For most of their length these cables are laid on the ocean floor, and when approaching land and coastal areas the cables are buried to ensure their protection and integrity from human activities, such as fishing, boat anchoring, and others. Without them the internet would not be possible as it is known today. These are thousands of kilometers of cables and repeaters that cross the seas and interconnect the planet. It is estimated that at the beginning of 2023, there were approximately 552 undersea cables in service around the world (TeleGeography, 2023).



These are constantly changing numbers as new operators and lines transmission lines come into service and older cables are decommissioned for various reasons such as retirement, breakage and/or other accidents (e.g. damaged by marine animals with sharks and/or by anchors and other artifacts) and factors. Just to illustrate illustration, Figure x attempts to give an overview of what such interconnections might be.

The construction of subsea cables varies with manufacturer and seabed conditions. Cable engineering specifications for the proposed Project will be based on cable industry standards. Cables normally consist of an inner optical fiber, surrounded by a polyethylene or fiber-glass core for strength and fiber separation. The core is normally surrounded by two polyethylene jackets and copper conductor layer and the outer layers comprise a steel wire protective armor layer and an outer protection and wire containment (polypropylene yarn).

Main characteristics of power submarine cables are:

- Conductor: Copper or aluminum. In case that the conductors are going to be used in long depths and if requested the conductor is sealed with special material which prevents the water penetration in case of cable damage.
- Insulation: XLPE, EPR or MIND (mass impregnated paper).
- Screening: Copper wires or tapes and lead sheath where required.
- Armoring: The protection of the cable from mechanical stresses is achieved by the armoring consisted of steel wires (for single core cables armoring must be of non-magnetic material – usually aluminum – to avoid overheating of armoring due to Foucault currents[2] – Joule effect), which provide also to the cables the required mechanical strength which during laying or pulling. The steel wires are of different categories of breaking load and they are heavily galvanized.
- Outer protection: The outer protection of the cable, according to the conditions and requirements of the installation, is achieved by PVC or PE sheath and layers of polypropylene yarns or jute.

Description of Marine Operations

Marine operations required to install submarine systems include:

- Cable Route Survey;
- Route Clearance;
- Pre-Lay Grapnel Run;
- Cable Surface Lay;
- Cable Burial;
- Post Lay Inspection and Burial; and
- Shore End Landing

All cable ships and other vessels used in the installation of submarine systems will be MARPOL compliant and fully certified and accredited.

Cable Route Survey

The marine cable route survey, in conjunction with desktop studies and local consultations, not only identifies the optimal route for a submarine cable in terms of cable security and protection, but also highlights the existence of sensitive habitats such as coral reefs and other important littoral ecological complexes including seagrass, mangrove and dune formations. The desktop study component of the survey also identifies protected areas, nesting sites, migratory routes and the presence of threatened and endangered species. Overall, properly executed surveys result in routes that to the greatest extent possible avoid sensitive habitats. The survey determines cable length and type (including the appropriate level of cable armouring), which are essential inputs to the system design and cable manufacturing processes, and also establishes the methods to be followed for cable deployment. The survey also generates a reference record that supports subsequent maintenance and repair of the cable.

In water of depths less than 1000m, swath bathymetry, side scan sonar, seismic profiling and a geotechnical survey are performed. In water of depths greater than 1000m, multibeam

bathymetry only is required. The nominal corridor to be surveyed is 500m wide, which allows adjustment of the cable location if unfavorable conditions are found. The final installed cable will lie within the survey corridor. At water depths between about 15m and 1000m, it is common practice to bury the cable to a depth of about 1m in the seabed, to protect it from hazards such as deep sea fishing trawls. This is only done where conditions allow, generally in sandy and muddy sediments. Cable route survey therefore incorporates burial assessment, which is achieved by testing the mechanical properties of the seabed along sections of the proposed route. The sediments are investigated by geophysical means (side scan sonar and subbottom profiler), and by intermittent physical samples (grab samples and/or penetrometer tests). Additionally, an inshore cable route survey (generally between 0 and 15m water depth) is conducted using small boats and divers to perform visual checks of the seabed and map an optimized route for the cable as it approaches the shore. The inshore survey is normally conducted along a corridor about 200m wide, providing flexibility to adjust the cable route to avoid hazards and minimize threats to marine habitats. If necessary, the survey may incorporate video footage or mapping of important ecological zones, habitats, and features, to ensure that they will not be damaged, or to support planning of mitigation and compensation measures where impact is unavoidable.

Where survey operations take place in and around sensitive sites, habitats are protected by careful anchoring of survey and support vessels, and by instructions to divers to avoid contact with corals and other sessile organisms.

Route Clearance

The purpose of route clearance (RC) is to clear the cable path of all linear obstacles such as out of service (OOS) cables identified during the cable route survey, since these can be hazardous both to the vessel's burial equipment and to the cable itself. RC is only carried out in areas where burial is deemed necessary.

- The vessel positions itself perpendicular to, and in close proximity to, the OOS cable identified during the survey.
- The Grapnel (either a Deep Trenching Grapnel or DTG for buried OOS cables, or a normal grapnel for surface-laid OOS cables) is lowered off the stern of the vessel using the A-frame.
- The vessel then moves towards the OOS cable, allowing the fluke of the DTG to penetrate the seabed and unbury the cable.
- The vessel continues to move until the cable is broken, leaving the two ends on the seabed.
- The vessel performs grapnel runs to retrieve each end individually.
- Once on the deck, a portion of the cable is cut and clump weights are attached to the ends.
- The vessel then returns the ends to the seabed, leaving between them a space of approximately 1km through which the new cable will be installed
- The cut cable lengths are kept onboard and disposed of onshore at authorized waste disposal facilities.

Pre Lay Grapnel Run

A Pre-Lay Grapnel Run (PLGR) is carried out only along sections of the route where burial is intended. Undertaken just before ploughing commences, PLGR is intended to clear the route of obstacles and debris that could damage or obstruct the plough (rocks, fishing equipment etc). PLGR is achieved as follows using a series of linked chain grapnels:

- At the Plough Down position, the linked grapnels are lowered off the bow of the vessel.
- Once the Grapnels have landed on the seabed, with slack to ensure maximum coverage, the vessel will then move forward along the planned route
- The forward motion and design of the Grapnels creates a clear path by penetrating the seabed and hooking any linear obstacle
- The grapnels are retrieved to the vessel's deck at least every 20km, or when a large tension is registered by the vessel, as this will indicate that an unidentified obstacle has been hooked
- All retrieved debris is kept on board for safe disposal onshore at authorized waste disposal facilities. The grapnel will penetrate the seabed to a depth of 40-80cm. Potential impacts of the operation are minimized by avoidance of sensitive areas such as coral reefs, which are in any case often unsuitable substrates for cable installation.

Installation of the Submarine Cable

The marine cable installation proceeds along the selected route, which will have been optimized on the basis of the survey data to balance considerations of system cost, cable security/protection, and environmental and regulatory interests and constraints. In water depths typically exceeding 1000m the cable is laid on the surface of the seabed. Where geology and environmental considerations allow, the cable is buried in the seabed to a burial depth of approximately 1m in water depths of less than 1000m. An industry-standard cable plough weighs approximately 24 tones in water. It is deployed from the stern of the installation vessel and towed behind the ship, burying the cable into the seabed as it progresses along the route. Burial is achieved using a share blade: as the plough is towed through the seabed, it lifts a triangular wedge of soil and depresses the cable into the cut trench; as the plough progresses forwards, this sediment is dropped back into the trench to cover the cable The process of lifting and replacing the wedge of sediment is continuous and results in very little disturbance to the soil inside the wedge.

Post Lay Inspection and Burial - Remedial Burial Operations

Post-lay burial is undertaken to bury sections of cable where plough burial has not been possible, but where burial is nevertheless needed to protect the cable.

Water-jetting ROVs (remotely operated vehicles) are used typically between 15-1500m water depth. They may be either tracked or free-swimming vehicles. Free-swimming ROVs are

neutrally buoyant and have very little contact with the seabed. Tracked vehicles leave minor depressions in the seabed, due to the action of their caterpillar-tracks.

Post-lay burial in shallower water (0-15m) is undertaken by divers using jetting machines. Diver assisted jetting uses a hand-held device in which the pressure is low, so the physical effect on the seabed is limited.

Shore-end Landing

Shore-ends are generally landed from the main-lay cable ship. The cable is buried across the beach, both for system security and for environmental and public safety reasons. The cable trench is dug using hydraulic digging machinery and the beach is returned to its pre-installation state after cable burial. Shore-end operations are usually completed within one day, although some preparations may be made on the previous day:

- The cable ship is dynamically positioned at a water depth between 12m and 14m (depending on sea conditions). This is typically between 500m and 1500m from the coast.
- The vessel sends a floating line to the beach.
- The shore end crew will attach this line to a pulling device (an excavator, winch, or similar).
- The line is then attached to the cable (kept afloat by buoys) and pulled up the beach into the beach manhole (BMH).
- The cable is jointed in the BMH and the offshore cable floats cut away by divers, allowing the cable to fall to the seabed and to be positioned along the optimized route.
- Diver jetting and/or articulated piping may be used to immobilize the cable, protecting it and the seabed from risk of abrasion or “cable strumming”. The buoys are returned to the vessel.
- An inspection of the inshore as-laid cable route is carried out by divers and recorded on video.

Post lay Inspection

At water depths inaccessible to divers, an ROV inspection of the cable is usually carried out to ensure that the burial operation has been successful. This operation is coincident with the postlay burial, utilizing the same vehicle. During inspection, the ROV in free-swimming mode merely tracks along the route, recording on video the position of the cable with respect to the seabed. Cable Protection Considerations/Articulated Pipe Cable protection considerations will be confirmed after the marine cable route survey has been carried out. In the near shore zone to the landing site, external protective measures such as articulated split piping will be considered to guard against cable damage due to surf zone wave action, local currents, and in high risk areas over rock and coral outcrops in water depths less than 20m. Articulated piping serves to increase cable protection against chafing caused by wave action and will be of particular importance where the cable cannot avoid routing over rock or coral in areas of shallow water wave action. Repeaters and Branching Units Repeaters are installed along the

cable to boost the signal because the signal loses strength en route. Branching Units (BUs) are pieces of equipment used in submarine telecommunications cable systems to allow the cable to split to serve more than one destination.

Major facilities/Infrastructure

The major facilities/infrastructure to be installed at land sites include the CLS (building), Zero manhole, BMH, connections conduits and ducts, generators, fuel tanks, transformer, switch board and cable drums.

1) Cable Landing Station (CLS)

The cable station building usually has the following:

- An equipment room for the submarine cable equipments;
- A control room (supervision, monitoring);
- An energy room (batteries, rectifiers, UPS, transfer switch board;
- Two separate cable entrances;
- A storage space;
- An office and work facilities; and
- A training/meeting /crisis room.

The following are usually provided outside the building:

- A diesel generator;
- Fuel tank;
- A transformer and the main switch board; and
- A spare land cable drum.

Manholes: BMH, Zero Manhole, Intermediate Jointing and Intermediate Pulling Manholes

The BMH is constructed to international standard (the existence one in the Gambia has the following dimensions: Length = 4m; Width = 2m; and Height = 2m). The manhole structure is built with reinforced concrete with a lockable cover. In the case of the Gambia ACE cable from the BMH toward the sea, two pipes of 150mm/ 200mm diameter were installed and from the BMH toward the zero manhole of the landing station, a conduit of three pipes of 45mm/ 50mm diameter were installed.

The zero manhole is the land cable entry in the building. The manhole is usually a reinforced concrete structure with a lockable cover.

1.5 POSSIBLE LOCATION OF PROJECT COMPONENTS

Details on the possible location of the components described above in the Gambia's geographic space, as well as on the specific types of components to be used, are still at the design stage, and it is therefore not yet possible in this ESMF to present and consider them in general.

The cable is expected to land on the greater Banjul area in The Gambia, in the vicinity of the same place where a ground station currently exists. The Greater Banjul area is one of the only points in favorable conditions to allow such a landing to be done near the other amenities essential to the establishment and operation of the station and itself supporting elements (boxes, manholes, etc.). Specific locations and other configurations, including potential impacts and management measures are addressed in this ESMF whose details are discussed in Chapter X.

1.6 PURPOSE AND RATIONALE OF THE ESMF

The major activity of the WARDIP-Gambia includes laying of submarine cable, civil works in the construction and/or upgrading of GAMTEL facilities for a new landing station and data centers across the country. Thus, as per the requirements of the World Bank, it must be subjected to Environmental Assessment which is also a requirement by the national environmental laws. The specific environmental assessment tool required to be used dependent on several factors, but most importantly, the project location and details of specific project activities. In situations where the sub-project's specific details, including their specific locations, are unknown, an Environmental and Social Management Framework (ESMF) is the most appropriate tool to use**.** The ESMF is three-fold as explained below.

- **Environmental and Social Impact Assessment (ESIA)** assesses the potential impacts of a project and proposes mitigation, and enhancement, measures accordingly
- The **Environmental and Social Management Plan** basically provides a timeline, with defined responsibilities, for the implementation of the mitigation and enhancement measures identified by the ESIA
- The **Environmental and Social Management System** is the set of procedures, guidelines, principles as well as the monitoring and reporting system that ensures that mitigation and enhancement measures are implemented as planned in the ESMP.

As provided in subsection 1.3 above, the impact assessment will be limited to the following activities of the Project.

1. Installation of the submarine cable
2. Installation of optical fiber cable lines on land

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These activities will involve noise and dust pollution, waste generation particularly e-waste and hazardous materials, health and safety of workers including risk of disease transmission, disruption of marine fishing activities, disruption economic activities due to laying of terrestrial cable and the landing station among others.

Overall, this ESMF ensures that the implementation of WARDIP-The Gambia is carried out in an environmentally and socially responsible manner. The ESMF has pointed out the World Bank Environmental and Social Standards applicable for WARDIP projects. The national legal and institutional arrangements, environmental screening and assessment guidance, monitoring

and reporting formats, and capacity requirements for its effective operationalization ensure that the proposed projects will take an environmentally and socially sustainable path.

1.7 APPROACH FOR THE PREPARATION OF THE ESMF

Environmental Assessment is multifaceted, requiring many methods and approaches. The methodology used to prepare this ESMF included a desk review of WB ESF Requirements, Environmental and Social Standards, and Environmental Health and Safety Guidelines, National Policies, institutional and regulatory frameworks, different laws and ministerial orders applied to this project. Institutional and community consultations/engagements were also held across all regions of the country through interviews in the form of Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) with National, Regional, District and village authorities. The questionnaire and Environmental and Social (E&S) screening form were designed on Survey Solutions, a Computer Assisted Personal Interview (CAPI) tool used for data collection; the use ensured that the data collected was coherent and reliable. The information from the desk-reviewed documents and the baseline information reviewed and interviews with stakeholders were analyzed and put together to prepare this ESMF.

1.8 LITERATURE REVIEW

The existing baseline information was reviewed to understand the proposed project with information collected from lessons learned from the previous WB-financed project, including the ESIA reports. All relevant available literature on bank-financed projects in The Gambia were duly reviewed, including the Gambia Commercial Agriculture and Value Chain Management Project (GCAV), The Gambia Inclusive and Resilient Agricultural Value Chain Development Project (GIRAV), West Africa Regional Fisheries Program (WARFP) – Phase II, Gambia Education Sector Support Project (GESSP), The Gambia Electricity Restoration and Modernization Project (GERMP) ESMFs; Project Appraisal Document (PAD); the Project Operational Manuals for GCAV Components, and GCAV Quarterly Reports. Other relevant documents reviewed included World Bank's new Environmental and Social Framework and Environmental and Social Standards guidance documents; various National Environmental Policies, Laws, and Guidelines. Among the laws reviewed were: the 1997 Constitution of The Gambia; Communication and Information Act (2009), ICT policy Statement, PURA Act, Labour Act, 2007; Environmental Impact Assessment Regulations (EIA) 2014; The Gambia Environmental Action Plan (GEAP); Biodiversity and Wildlife Policy (2013), and Biodiversity and Wildlife Act (2003); Agriculture and Natural Resources (ANR) Policy; Climate Change Policy 2016; Fisheries Policy and Act 2007; Forestry Act (1998) and Forest Policy (2009-2019); National Environmental Management Act 1994; Local Government Act, (2002); the Sexual Offenses Act 2013; Domestic Violence Act 2013; Women Act, 2010; Children's Act, 2005 and National Policy Guidelines on HIV AND AIDS 2014 – 2020, The Gambia National Development Plan 2018- 2021 among others were also reviewed and inform this ESMF.

1.9 PUBLIC CONSULTATIONS/ENGAGEMENTS WITH STAKEHOLDERS

Since project-affected people and communities are not yet identified, initial consultations were held. Additionally, in compliance with National regulations and international standards, Stakeholder engagement was key to preparing this ESMF. Stakeholder engagement involved stakeholder analysis and planning and consultation with stakeholders. The team organized consultations with stakeholders at the central level including government officers and private sector operators on ICT. At the central level, consulted institutions included the Ministry of Communication and Digital Economy (MoCDE), Ministry of Environment and Climate Change, Ministry of Lands and Regional Governments, Ministry of Trade and Regional Integration, National Environment Agency (NEA), Public Utilities Regulatory Agency (PURA), Ministry of Gender, Children and Social Welfare, Ministry of Fisheries, Water Resources and National Assembly Members, Department of Forestry, GAMTEL/GAMCEL, Africell, Comium, Department of Water Resources, Department of Planning at Ministry of Agriculture, Department of labour, Department of Gender Children and Social welfare, Department of Forestry, Department of Fisheries, Department of Parks and Wildlife Management, Department of Community Development (DCD), Gambia ICT Agency, The Gambia Standards Bureau, National Nutrition Agency, The Gambia Chamber of Commerce (GCCI), The Gambia Broadcasters Association, The Gambia Submarine Cable, Local Television and Radio Stations including the National State Television & radio, and several electronic and print media houses. At the regional and district levels, the consultant consulted with GAMTEL/GAMCEL Regional Managers, Regional National Environment Agency (RNEA) officers, Regional Governors, Regional Technical Advisory Committees (TAC), District Chiefs, Village Alkalos, Village development committees, representatives of women, youth, vulnerable people, and people living with disabilities and local businesses/institutions on ICT such as SUNA Institute of Science and Technology, Real-Time Stationary Record and Printing Shop, Flashtech, RAFEW Technologies, Niumi Cafe Multi-Purpose Center, DK telecom, SomaTech Humanitarian IT Center for Excellence, and Unique Solutions.

During the public consultation, stakeholders were informed about the proposed project. Using the guiding questionnaires, the consultant obtained relevant information on the likely impacts of the project activities and suggestions from stakeholders. This was also an opportunity for data collection using questionnaires and guiding questions developed at the inception phase using the Survey Solution Application with tablets. The consultation lasted 11 days on March 14th – 30th 2022. (Refer to Table 11 and Annex 6).

1.10 DISCLOSURE

The NEA and World Bank policies require that environmental and social reports for projects be made available to project-affected groups, local NGOs, and the general public. Following clearance from the World Bank, regional disclosure meetings will be held in selected beneficiary communities, particularly in areas where there will be many potential beneficiaries. Additionally, copies of the ESMF will be made available in selected public places for information and comments coordinated by MoCDE and NEA.

1.11 PROJECT DURATION AND SCOPE

The WARDIP project will be implemented by the Ministry of Communication and Digital Economy for five (5) years in the Greater Banjul Area (GBA) and in five (5) local government administrative areas (Central River Region North (CRRN), Central River Region South (CRRS), North Bank Region (NBR), West Coast Region (WCR) and Upper River Region North (URR)). Of the main infrastructure of the Project, a new landing station will be constructed in the coastal area of GBA and the data centers are expected to be constructed or upgrade existing GAMTEL/GAMCEL facilities in regions across the country. The beneficiary LGAs of the project is indicated in Figure 1 below; the GBA comprises BCC and KMC.

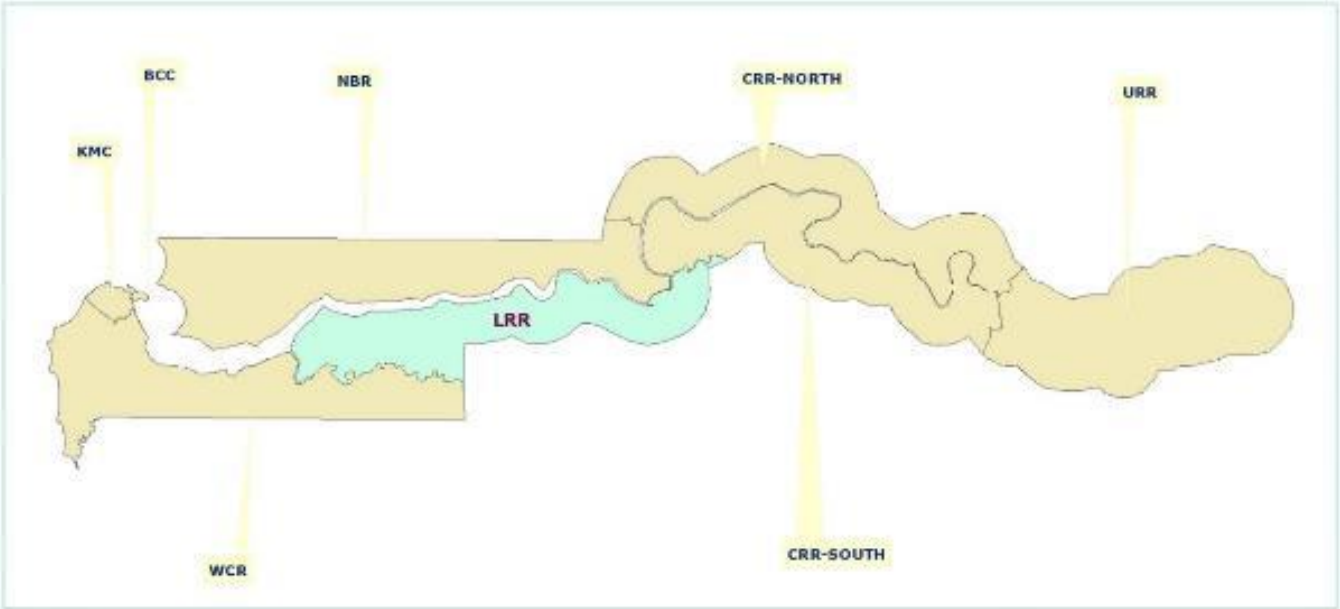


Figure 1: location map of project LGAs

2 LEGAL AND INSTITUTIONAL FRAMEWORK

The Environmental Policy and EIA legislation and procedures of the Gambia and those of the World Bank, which are relevant to the project, are outlined in this chapter. In principle, the two sets of policies and procedures on environmental and social assessment are similar.

This section looks at the key national policies and legal and regulatory frameworks and some international conventions, treaties and protocols relevant to the proposed project.

The specific objectives of the regulatory framework review are:

1. To identify policies, Acts, and regulations relevant to the environmental, health, safety, human rights, and social aspects of the Project and the conduct of the ESIA
2. To identify environmental standards prescribed under national legislation that are relevant to the Project (such as pollution control, waste management, wastewater discharge, and air emissions)
3. To identify international conventions, treaties and protocols to which The Gambia is a signatory that is relevant to the Project
4. World Bank's ESF policies and standards. Specifically, ESMF for the proposed project has been established based on the WB Environmental and Social Framework (ESF) requirements

The project EMSF has been designed to align with requirements set out in national policies, Acts and regulations, institutional arrangements and the capacity required to implement the framework. The objective of the WARDIP-ESMF is to provide a framework for environmental and social management of the planned project activities under the WARDIP and to identify the positive and negative aspects occasioned by the project implementation, propose ways of managing each of the elements and present what should be used as a practical tool during project implementation. As such any identified negative environmental and socio-economic impacts can be managed appropriately. The ESMF ensures that the implementation of the WARDIP adheres to an environmentally and socially sustainable pattern. It also provides a framework to assist communities/beneficiaries in screening sub-projects and institutional mechanisms and responsibilities to address adverse environmental and social impacts.

2.1 RELEVANT NATIONAL POLICY FRAMEWORKS FOR ESMF

The table below summarizes the relevant national policy framework pertinent to the WARDIP. The government is also developing key ICT policies in a drive to supplement the above policies. When these are finalized, they will also play a vital role in implementing the WARDIP.

Table 1: National Policy Framework of WARDIP

Policy	Description	Implications to WARDIP-Gambia
Gambia Environment Action Plan, GEAP (2019-2029)	The Gambia's Environmental Action Plan provides the overall policy framework for sound environmental management in The Gambia. It seeks to promote and implement sound environmental policy. The GEAP emphasizes environmental management, pollution and nuisances and the necessity to safeguard the well-being of the populations. The country's first integrated environmental and natural resources management policy framework provides an overview of the existing environmental situation. It outlines approaches to deal with the problems, including institutional changes and other required actions. National Environment Agency implements the Gambia Environment Action Plan, Ministry of Agriculture and all relevant institutions including the Private Sector and NGOs. All the Environmental Laws operate under the GEAP.	WARDIP will trigger the GEAP and it will help to guide general environmental planning and natural resources management.
National Energy Policy 2014 – 2018	This policy sets forth a framework and guidance to improve and expand existing energy supply systems, including private sector partnerships with the public sector. It provides an impetus to socio-economic development through enhanced productive use of energy in industry and rural areas. It also seeks to minimize environmental impacts of the energy supply by promoting more environmentally-friendly energy supply sources such as renewable energy and increased energy security through diversity of supply and regional integration of supply and markets.	WARDIP-Gambia will directly and indirectly need the use of various energy sources for the activities to function accordingly .

Policy	Description	Implications to WARDIP-Gambia
The Gambia ICT for Development (ICT4D) Policy Statement (2018-2028)	The Policy Statement sets out the road map for the development of Gambia's information society and economy. It provides a basis for facilitating the socio-economic development of the country in the emerging information, knowledge and technological age to be dominated by information and knowledge-based economies.	This policy statement is relevant to the WARDIP since it supports all its objectives.
The National Health Policy, 2012-2020	The vision of the policy is to attain accessible quality health care for the Gambian population. It has the mandate to protect the public and environmental health, including nuisance and other risks associated with this Project. It has a mission to ensure the provision of quality health care services within an enabling environment, delivered by appropriately trained, skilled and motivated personnel at all levels of care. The mission will be accomplished with the involvement of all stakeholders to ensure a healthy nation. The fundamental guiding principles of the policy are: equity, health system reform and partnerships	The WARDIP triggers this policy as it will ensure the health of every person within the project area. Health Promotion activities and the enforcement of health-related Laws will also be applied in prospective project sites. The Ministry of Health implements the policy in collaboration with allied health-related Institutions and Programs.
Forestry Policy (2010-19)	The forestry policy emphasizes the ecological and socio-economic importance of protecting the country's forest resources. The policy promotes state and community forest development and provides guidelines for managing forest reserves and community forests. It entails provisions for safeguard and conservation of forests to ensure sufficient supplies of forest products, protect water resources in watersheds, soils, fauna and flora. The policy also mandates the government to control unsustainable forest exploitation practices.	Since the construction of another landing station might be located along the seashore or coastal areas, there are possibilities it will affect reserved forest covers including mangroves and indigenous trees.

Policy	Description	Implications to WARDIP-Gambia
The National Biodiversity Strategy and Action Plan (NBSAP), 2015	The NBSAP provides the framework for the conservation and sustainable use of biodiversity	Seven gazetted national parks and wildlife reserves located along wetlands and coastal areas in various parts of the country that the Project could impact. In addition, other ex-situ biological diversity could be impacted as well. The NBSAP is relevant if construction workers carry out illegal activities such as encroachment in conservation areas along highways where optical fibre cables will be laid.
National Policy for the Advancement of Gambian Women and Girls (1999-2009)	The policy provides a legitimate point of reference for addressing gender inequalities at all levels of government and all stakeholders	Relevant to this Project since it will benefit both men and women equitably
Gambia National Gender & Women Empowerment Policy (2010–2020)	To mainstream gender issues in the national development process to improve the social, legal/civic, political, economic and cultural conditions of the people of the Gambia, particularly women. In the context of infrastructure development, this policy aims to redress imbalances that arise from existing gender inequalities and promotes participation of both women and men in all stages of the project cycle, equal access to, and control over significant economic resources and benefits. The policy aims to contribute significantly to improving the status of Gambian women and ensure gender equality and thus help achieve the SDGs.	This policy would especially apply to the recruitment of labour for WARDIP activities, where women should ideally have equal opportunities as men for available jobs. It is also noted that women predominate or are significantly involved in roadside markets selling fruits, vegetables, art and craft along most highways in the Gambia. Thus, disruption of their businesses when laying optical fibre cables would notably affect the incomes of women traders. Successful implementation of the Project will promote gender equality and promote women in the ICT and Communication business. Essentially, an enabling environment will be created for the elimination of gender disparities in access to training,

Policy	Description	Implications to WARDIP-Gambia
		credit, appropriate ICT technologies, value adding, and markets for the expansion of ICT development and accessibility and Micro Small and Medium Enterprises (MSMEs).
National Development Plan (2018-2021)[1]	This is the principal national Policy blueprint that provides the overall direction for the country from 2018-to 2021. It emphasizes priority areas for development within this planned period, including building and expanding ICT infrastructure.	The project aims to develop sustainable ICT for improved livelihoods. The implementation of the WARDIP is in line with helping cover this ICT infrastructure gap in line with the expectation of the NDP.
National Youth Policy (2009–2018)	The policy aims to mainstream youth issues into the advancement of all sectors	Successful project implementation will enhance the youths' engagement in ICT and related activities, which could reduce youth underemployment
National Climate Change Policy 2016	This policy steers the transition to a climate-resilient society, within a thriving low-emissions economy, which provides the framework for managing climate risks, building institutions and capacities, and identifying new opportunities for climate-resilient sustainable development in The Gambia.	The project will directly and indirectly need the use of various energy sources for the activities to function accordingly. The use of renewable energy solutions combined with energy efficiency strategies constitute safe, reliable and affordable pathways capable of achieving significant energy-related carbon-dioxide (CO_2) emission reductions required to meet nationally pledged climate goals.

[1] The Government of The Gambia is in the process of formulating the successor of current NDP namely Green Recovery-focused National Development Plan (2023 - 2027) and also successor of Vision 2020 - Long-Term Development Vision (Vision 2050)

2.2 NATIONAL LEGAL AND REGULATORY FRAMEWORKS

National Environment Management Act (NEMA) 1994

The NEMA, 1994, was promulgated as the primary legislation in environmental management, providing a structured institutional and legal framework for sound management of the environment and natural resources in The Gambia. It empowers the National Environment Agency (NEA) with powers to:

- Establish criteria and set standards for environmental quality for effluent discharges and solid waste disposal. Identify materials, processes and wastes that are dangerous to human or animal health and the environment, and recommend regulations and guidelines for managing materials, processes, and wastes.

- Prepare guidelines for managing environmental disasters, including major oil spills, gas leakages, and spills of other hazardous substances. The NEA has the power to decide who would be responsible for any clean-up and generally what should be done when such discharges occur.

- Appoint environmental inspectors who are empowered, among other things, to take samples of articles or substances that the Act prescribes and submit them for testing or analysis; and to carry out periodic inspections of establishments whose activities are likely to impact the environment significantly.

- Part V of the NEMA stipulates the requirements for EIA of proposed projects, and for more specific EIA guidance, regulations were passed under this Act.

Environmental Impact Assessment Regulations (EIA) 2014

These Regulations make provision for the regulatory framework as it relates to projects requiring environmental impact assessment by virtue of their environmental and social impacts. It took into account the processes and procedures that should be undertaken by project proponents, on the one hand, and the Agency on the other hand, to making sure those projects are thoroughly screened for their environmental and social viability prior to their implementation. Consequently, MoCDE is required to submit a project brief to the NEA accompanied by a duly completed EIA Screening Form for Environmental Approval. Based on the brief and screening form information, NEA will decide if a complete environmental impact study is required. The EIA Regulations, 2014 state exactly which projects require EIA, the procedure, responsibilities of stakeholders and fees. Furthermore, regulation Section 3 (1) (b) of the EIA Regulations, 2014 states the scope of application including the Regulations apply "to any major repairs, extensions, alterations, or non-routine maintenance for any existing project" such as electricity generation, transmission, and distribution. The Regulations also makes provision for the different classification for projects as follows:

- Projects are classified as 'A', meaning a full EIA study is required; because there will be a significant impact;

- Temporarily, projects are classified as ‘B’ because the impacts are not as significant as those of the A class; however, a limited impact study will be required and an environmental management Plan formulated; and when more information is needed to decide; and
- Projects are classified as ‘C’ the anticipated impacts are all but negligible

Table 2: National Legal Framework of WARDIP

Legislation	Description	Implications to WARDIP-Gambia
National Environment Management Act, 1994	The most relevant legislation for this study is the Law on Environment. The legislation sets out the general legal framework for Environment protection and management in the Gambia. Principal legislation in environmental management; Part V of the Act provides for specific projects listed under Schedule A to be considered for ESMF/ESIA. It centers on avoiding and reducing disastrous consequences on the environment. National Environment Agency (NEA) is responsible for approving ESIA reports.	This Project falls under Schedule A which requires an ESMF/ESIA. The project will observe the law on the environment by preparing Environmental and Social Impact Assessment (ESIAs) or Environmental and Social Management Plans (ESMPs) to ensure the reduction of disastrous consequences on the Environment in its activities. The project will also monitor compliance with environmental safeguards at all sites.
Environmental Impact Assessment Regulations, 2014	The EIA Regulations elaborate on the requirements for EIA procedure, environmental impact statements, approval, environmental monitoring, etc.	The Regulations provide more details for the ESIA and implementation of the ESMPs
Hazardous Chemicals and Pesticides Control and Management Act,1994	The act provides for the control and management, manufacture, distribution and use of hazardous chemicals and pesticides and makes provisions for the matters connected therewith It also protects human health and the environment through the control of hazardous chemicals	Hazardous chemicals could be used in the construction /rehabilitation of stations and also the some of the electronic pieces of equipment can contain hazardous chemicals
Ozone Depleting Substances (ODS) Regulations 2000	Sets out rules on the production, import, export, placing on the market, use, recovery, recycling, reclamation and destruction of substances that deplete the ozone layer	This Regulation will guide the potential for the Project to use ODS. It is essential to consult with NEA to comply with the national phase-out in line with the Kigali Agreement regarding installing certain gadgets

Legislation	Description	Implications to WARDIP-Gambia
		at the construction/rehabilitation phase and using different ICT pieces of equipment.
Local Government Act, 2002	make provisions for decentralized administrative structures, including devolution of functions, powers and duties to local authorities	Implementation of the Project will require the participation of decentralized institutions, including the Offices of the Governors as well as their respective Technical Advisory Committees (TACs)
The Forest Act, 2018	Provides the framework for implementing Forestry Policy and framework for preserving and managing forests. The Forest Act entails provisions for safeguarding and conserving forests to ensure sufficient supplies of forest products and protect water resources in watersheds, soils, fauna, and flora.	Since the construction of another landing station might be located along the seashore or coastal areas, there are possibilities it will affect reserved forest covers including mangroves and indigenous trees.
Fisheries Act 2007	The provisions in this Act ensure the management and conservation of fisheries resources in The Gambia, regulates fishing by nationals of The Gambia on the High Seas and prescribe rules relative to aquaculture, fish processing and import and export of fisheries products. The Act, among other things, comprises fisheries conservation, management and development; Fisheries Fund; General license requirements; Local licensing requirements; Foreign licensing provisions; High Seas fishing; Aquaculture; Fish processing, import and export; Prohibitions; Powers of authorized officers; Fisheries observers ; Sale, release and forfeiture of retained property and Jurisdiction and evidence.	Since the WARDIP-Gambia will require submarine works, this Act, therefore, has aspects of monitoring controls and surveillance, among other things as triggered by the WARDIP.
Biodiversity and Wildlife Act, 2003	Provides for the protection of biodiversity and the establishment of protected areas.	Seven gazetted national parks and wildlife reserves are in various parts of the country that the Project

Legislation	Description	Implications to WARDIP-Gambia
		could impact. In addition, other ex-situ biological diversity could be impacted as well
Gambia Roads Technical Services Authority Act, 2003	Empower National Roads Authority to be responsible for the maintenance, construction, and safety of the national road network, including feeder roads.	Any of the road networks within the country should abide by the provisions of the Act.
Public Health Act, 1990	Protects public and environmental health, including abatement of nuisances and any condition that may be detrimental to health.	The Public Health Act is relevant because WARDIP will have social and environmental issues that will trigger the Public health Act going by the foregoing functional operational areas.
Labour Act (2007)	Provides the legal framework for the administration of labor, recruitment and hiring of labor, and protection of wages.	The project hiring and management of its labour force should adhere to this framework.
The Children's Act 2005	The act sets out the rights and responsibilities of children and provides for their care, protection, and maintenance.	The rights of children impacted by the Project need to be protected.
The Women's Act 2010	It aims to advance women's rights to resources and services to promote economic and social empowerment.	Relevant to this Project because of the potential impact of ICT development and related matters, which is a source of livelihood for women; they need to avoid gender-based violence (GVB) and sexual exploitation and abuse (SEA)
Anti-littering Regulations, 2007	Addresses waste management and pollution issues concerning environmental health and hygiene.	The Project must ensure that all waste produced during all phases is well managed including e-waste
Environmental Quality Standards Regulations 1999	Regulations declare standards set out in Schedule 1 in respect of ambient air, saline waters, surface freshwaters and groundwater.	Project implementation can generate dust and pollute surface freshwaters and groundwater found within the project's area of influence.

Legislation	Description	Implications to WARDIP-Gambia
Environmental Discharge (Permitting) Regulations 1999	Regulations require that a permit is obtained for most discharges of potentially polluting liquids into or onto the ground (i.e., to groundwater) or into surface waters (such as rivers or streams)	Project implementation has the potential to discharge potentially polluting liquids into the tributaries and other surface water bodies, as may be found in the project's area of interest
States Land Act 1995	This Act clearly and unambiguously makes the State the owner of all land. Provisions in the Act also state that where customary land is designated under the act, occupiers shall be deemed to be lessees of the land for a renewable term of 99 years.	The project implementation must adhere to these provisions to avoid land conflicts in project sites.
Physical Planning and Development Act, 1990	The Physical Planning and Development Act provides under the Ministry of Lands and Regional Administration for the systematic preparation and approval of physical development plans and control of developments in Greater Banjul and other growth areas in The Gambia. Guidelines regarding the location of urban and rural settlements, traffic and transportation routes, resource utilization and economic activities, and the preservation of national and environmental reserves are spelt out in this Act.	Since WARDIP-Gambia will require some infrastructural development as in the construction of a new landing station in the prospective project sites, this Act is triggered.
Hazardous Chemicals Regulations 1999	These Regulations make provision for the control of manufacture, trade-in, importation of, and handling of hazardous chemicals. They provide for the registration of hazardous chemicals and the licensing of persons wishing to carry out such activities.	Relevant to Project since some chemicals in ICT development and related activities may be used and associated with human and environmental health.
Sexual Offences Acts 2013	The provision of this Act applies to the trial of rape and other sexual offenses under this Act and any other enactment.	The Projects can potentially increase the risk of GBV in different settings and ways in various project sites.

Legislation	Description	Implications to WARDIP-Gambia
		Thus, preventive measures must be in place to avoid such occurrences.
National Council for Arts and Culture Act, 2003	This Act provides for preserving and protecting historical monuments and objects of archaeological, paleontological, ethnographical, and traditional interest. The Act prohibits any person from carrying out activities on or concerning any object declared to be preserved or protected.	The Act requires that any chance finds encountered during project construction shall be preserved by the National Council for Arts and Culture. There is a possibility of finding cultural heritage by chance, particularly during land clearing and preparation for works at the new landing station. These may be disturbed or lost due to a lack of knowledge in managing cultural heritage discovered by chance.
Land Acquisition and Compensation Act, 1990	This Act makes provision for the acquisition of land for public purposes and the payment of compensation for such land and makes provision for connected matters	Project implementation can cause land ownership and transfer problems in project implementation sites. Thus, it is recommends that land transfer certificates be acquired for project sites. Land transfer certificates must be acquired before work begins in any project site as may be required

2.3 THE RELEVANT INTERNATIONAL CONVENTIONS AND PROTOCOLS

In joining the global world in addressing environmental issues, human rights, and other emerging issues, The Gambia is a signatory to several international, regional, and sub-regional conventions, treaties and agreements. In table 4 are some of the relevant the following international, regional, and sub-regional laws and conventions, treaties and agreements in which The Gambia is a signatory and are considered applicable to this proposed WARDIP.

Table 3: relevant international conventions and protocols

Convention/Protocols	Objective	Implications to WARDIP-Gambia
United Nations Convention on Biological Diversity (CBD)	Convention has three main goals, including the conservation of biological diversity; the sustainable use of its components;	Land clearing and potential burning in preparation to construct relevant infrastructure (landing stations.) will impact existing biodiversity in Project affected areas. Includes the possible loss of trees/vegetation and dependent biodiversity. Measures need to be taken for the protection of the environment
United Nations Convention to Combat Desertification (UNCCD)	To combat desertification and mitigate the effects of drought	Project activities such as potential land clearing and burning in preparation for the construction of relevant infrastructure could create environments prone to encouraging desertification
UN Framework Convention on Climate Change (UNFCCC)	As a party to the convention, Gambia seeks to contribute to stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system	Relates to the ICT development activities of the Project especially inland and vegetation clearing. The loss of trees and vegetation will mean loss of "green cover" and loss of carbon capture footprint; Gambia is vulnerable to sea level rise and therefore, adaptation is a priority.
Convention on Wetlands of International Importance (RAMSAR Convention**)**	Aims for national action and international cooperation for the conservation and wise use of wetlands and their resources	The project may be implemented in wetland areas in the country such as the coastal areas. The project must ensure wise use of these wetlands.
United Nations Convention on the Elimination of all Forms of Discrimination Against	Convention highlights the right of women to be protected and given equal opportunities and central to their financial independence and may be critical to their ability to earn a livelihood in the ICT sector	Women are one of the main targets of the Project and will ensure that they have access to the benefits of this Project in the same way as men

Convention/Protocols	Objective	Implications to WARDIP-Gambia
Women (CEDAW) and the Optional Protocol to the Convention on the Elimination of All Forms of Discrimination against Women (OP-CEDAW)		
Basel Convention of trans boundary movement of hazardous waste	Sought to control illegal movement of waste across frontiers to prevent environmental pollution, contamination of ground and water bodies to prevent and/or reduce the impact on the environment and public health	The issue of electrical and electronic wastes and their potential illegal; transport across the border is a significant concern that the project should guard against to help safeguard the national obligation to protect such hazardous materials and follow through on the established protocols concerning notification as part of the Prior Informed Consent procedures
Stockholm convention on (POPs)	Deals with Persistent Organic Pollutants (POPs)	The Project could potentially affect the right to health of the child, women, and men through the release of hazardous chemicals, e.g., POPs. Appropriate measures should be taken for proper waste management for the protection of the environment and human health
Vienna Convention (Convention on the protection of the Stratospheric Ozone layer)	Deals with the protection of the Stratospheric Ozone layer	The potential for the Project to use ozone-depleting substances (ODS) will be guided by this convention as the Gambia is a party

Bamako Convention on import into Africa and Trans boundary Movement and Management of Hazardous Waste	Sought to prevent dumping in Africa of Hazardous waste products that mainly come from overseas as well as prevent their movement across borders within Africa	Import of electrical gadgets and electronic materials and their installation as part of the lines will likely result in significant quantities of disused and discarded materials, which is anticipated to increase down the line in communities with a heightened risk of injury and environmental damages.
Abidjan Convention	Sought to protect and preserve the regions of west, central and south Africa area and its resources for the benefit and wellbeing of its people.	There is a huge potential for hazardous waste materials such as electrical and electronic waste materials to find their way into the marine environment, especially as these materials reach their end of life.
African Convention on Conservation of Nature and Natural Resources	Sought to harness the natural and human resources of the African continent for the total advancement of African people in spheres of human endeavor, and calls for joint action for the conservation, utilization and development of these assets by establishing and maintaining their rational utilization for the present and future welfare of mankind	The project`s introduction of internet connectivity in the proposed intervention sites will allow for the harnessing of all meaningful opportunities for improved livelihood.
International Convention for the Prevention of Pollution from Ships (MARPOL)	The Convention includes regulations aimed at preventing and minimizing pollution from ships - both accidental pollution and that from routine operations.	The project will involve submarine cable. As such it will ensure that ships involved in project activities related to the submarine cable activities, adopt and implement MARPOL provisions including measures in its technical annexes to address potential source of pollution as well as ensuring they are in compliance with national legislation and GIIP.

2.4 THE WORLD BANK'S ENVIRONMENTAL AND SOCIAL STANDARDS (ESS)

The World Bank launched the Environmental and Social Framework in 2018 to be applied to all investment projects commencing on or after October 1st, 2018. The ESF re-enforces the vision of the Bank to pursue sustainable development and poverty reduction. It also sets out the policy of the Bank to support borrowers to develop and implement environmentally and socially sustainable projects and build capacity in the assessment and management of environmental and social impacts and risks associated with the implementation and operation of projects. As part of the new framework, the World Bank also has environmental and social standards that borrowers must comply with for projects to be sustainable, non-discriminatory, transparent, participatory, environmentally and socially accountable and conform to good international practices. There are ten (10) Environmental and Social Standards under the new World Bank Environmental and Social Framework that all projects/investments supported with Bank Financing must conform to. Eight (8) of these standards are relevant to WARDIP. Table 4 below gives a summary of ESSs relevant to the WARDIP project.

Table 4: World Bank's ESSs relevant for WARDIP

World Bank ESS and their relevance to the current project	Relevance to the project	Key requirements	Project Compliance Plan
ESS 1. Assessment and Management of Environmental and Social Risks and Impacts	Relevant	ESS1 sets out the Client's responsibilities for assessing, managing, and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank through Investment Project Financing, to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESSs)	Overall, the project assessment shows that the project will provide a series of positive social and environmental impacts. It would support technical assistance and capacity-building activities on improving the quality of ICT development and infrastructure, among others, all of which would reduce environmental and health risks in ICT development in the country while at the same time creating new economic opportunities.
ESS 2: Labor and Working Conditions	Relevant	ESS 2 sets out for the client to promote sound worker-management relationships and enhance the development benefits of the project by treating workers in the project fairly and providing safe and healthy working conditions.	The project should adopt and follow the labour management procedure, which documents labour requirements and identify the risks associated with project activities together with aspects of welfare in line with legal requirements and good international and industry practices
ESS 3: Resource Efficiency and Pollution Prevention and Management	Relevant	ESS3 sets out the client's and subcontractor's obligation to apply technically and financially feasible measures to improve efficient consumption of energy, water, raw material, and other resources. Such measures shall integrate cleaner production principles into the product	From assessment, the WARDIP project activities will produce non-hazardous and hazardous waste materials. They could contaminate precious natural resources such as freshwater and damage natural landscapes, vegetative land cover, topsoil and pollute groundwater and surface water

World Bank ESS and their relevance to the current project	Relevance to the project	Key requirements	Project Compliance Plan
		design and production processes to conserve raw material, energy, water and other resources. This also includes addressing project-level impacts of climate change and considers the impacts of climate change on the selection, siting, planning, design, and implementation of projects.	through leachate from batteries and other heavy metals electronics. Particularly if the E- waste is not managed properly. E-waste management should be integrated into the project design. Appropriate Waste management practices should be upheld throughout the project cycle. ESIA and ESMPs should include areas of resource efficiency. seek guidance from relevant authorities such as the National Environment Agency. It is also important that project activities such as the data centers are assessed for their water and energy use efficiency, which in turn will advise the Project on the potential risks within the context of climate change knowing how inefficient resource use could aggravate climate change.
ESS 4: Community Health and Safety	Relevant	ESS4 sets out the client's obligation to address the health, safety, and security risks and impacts on project-affected communities to avoid adverse impacts on the health and safety of community members. The influx of labor could also expose local communities to public health risks and communicable diseases, such as sexually transmitted infections.	During consultations, there is evidence of unavoidable impacts on project-affected communities regarding health, safety, and security risks. Accordingly, mitigation measures will be proposed broadly announced and disclosed among local stakeholders, particularly local communities, to raise their awareness.

World Bank ESS and their relevance to the current project	Relevance to the project	Key requirements	Project Compliance Plan
ESS5: Land acquisition, Restriction of land use and Involuntary Resettlement	Relevant	ESS5 aims to avoid involuntary resettlement and forced eviction and mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use.	The only project activity with potential of land acquisition is the laying of the fiber optic cables; however, as indicated under subsection 1.4, land acquisition is not foreseen in this case hence a *resettlement action plan* is not necessary. However, the ESMF outlines screening procedures and voluntary approaches should there be a possibility of land acquisition, other safeguards such as Resettlement Framework is being prepared to provide guidance on the preparation of Resettlement Action Plans when site locations will be defined.
ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant	ESS6 sets out the client's responsibilities to protect and conserve biodiversity and habitats, promote sustainable management of living natural resources and support the livelihoods of local communities.	The two activities that have potential to affect biodiversity are the submarine cable and the underground on-land fiber optic line connecting to the landing station. The latter has no significant potential to affect biodiversity with the understanding that they will be laid along the road corridor that is already devoid of any vegetation. On the other hand, the lack of information on the path of the submarine cable means a *biodiversity impact assessment* can be performed to predict of impacts in this case and

World Bank ESS and their relevance to the current project	Relevance to the project	Key requirements	Project Compliance Plan
			provide guidance on the preparation a Biodiversity Action Plan
ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not relevant		The Republic of The Gambia does not have such groups of people and thus it is not relevant to this project.
ESS 8: Cultural Heritage	Relevant	ESS8 sets the client's obligation to protect cultural heritage from the adverse impacts of project activities and support preservation and promote equitable sharing of benefits from the use of cultural heritage.	From consultation with project stakeholders, the risks are considered not very likely. However, any activities, such as civil works will be made available and communicated to all involved actors will be done
ESS 9 (Financial Intermediaries):	Not Relevant	Not Applicable	Not Applicable
ESS10: Stakeholder Engagement and Information Disclosure	Relevant	ESS10 sets out the client's obligation to engage in open and transparent consultation with project stakeholders to ensure the project's inclusive process and sustainability.	The client will engage with and provide sufficient information to stakeholders throughout the project's life cycle in a manner appropriate to the nature of their interests and the potential environmental and social risks and impacts of the project.

2.5 WORLD BANK ENVIRONMENT, HEALTH, AND SAFETY GUIDELINES (EHSG)

The following EHSG of the World Bank will be relevant to this project:

Air Emissions and Ambient air quality. This guideline applies to facilities or projects that generate emissions to air at any stage of the project life cycle. It complements the industry-specific emissions guidance presented in the Industry Sector, Environmental, Health, and Safety (EHS) Guidelines by providing information about common techniques for emissions management that may be applied to a range of industry sectors. This guideline provides an approach to managing significant sources of emissions, including specific guidance for the assessment and monitoring of impacts. It is also intended to provide additional information on approaches to emissions management in projects located in areas of poor air quality, where it may be necessary to establish project-specific emissions standards. Construction and rehabilitation work at different sites to be undertaken under the project are expected to generate some level of dust.

Hazardous material Management: These guidelines apply to projects that use, store, or handle any quantity of hazardous materials (Hazmats), defined as materials that represent a risk to human health, property, or the environment due to their physical or chemical characteristics. Hazmats can be classified according to the hazard as explosives; compressed gases, including toxic or flammable gases; flammable liquids; flammable solids; oxidizing substances; toxic materials; radioactive material; and corrosive substances. The potential use of chemicals in implementing some project activities makes this guideline relevant to the project.

Waste Management: These guidelines apply to projects that generate, store, or handle any quantity of waste across a range of industry sectors. It is not intended to apply to projects or facilities where the primary business is the collection, transportation, treatment, or disposal of wastes. Construction (stations construction and rehabilitation) and domestic waste (from the numerous beneficiaries to be engaged) expected to be generated from various sites make this guideline relevant to the project's implementation.

Noise Management: This guideline addresses the impacts of noise beyond the property boundary of the facilities or projects being implemented. Thus, it seeks to address the public health risks of noise generated from the project, not occupational health risks—using the handheld compactor at both the landing sites.

Occupational Health and Safety: This guideline provides guidance and examples of reasonable precautions to manage principal occupational health and safety risks. Although the focus is placed on the operational phase of projects, much of the guidance also applies to construction and decommissioning activities. Activities at labour intensive public works (LIPW) at WARDIP implementation sites, such as land clearing, excavation, hauling, etc., expose beneficiaries to one form of occupational risk. The guidance provided under this guideline will help manage such risks.

Community Health and Safety: Specific guidelines under traffic safety, water quality and availability, disease prevention and construction and decommissioning presented in this

guideline are relevant to implementing the project's sub-project activities, such as rehabilitation/construction works. The project management should consider appropriate measures concerning COVID-19 to prevent project activities from being a source of contamination or a vector for the spread of the virus by considering WHO recommendations and Gambia's requirements regarding measures to combat the spread of the COVID-19 virus and other infectious diseases. Additionally, the project should put the mechanism to promote a healthy and safe environment for all, including beneficiaries.

Table 5: gap analysis - comparison of national laws and policies with that of the WB's ESF for handling environmental and social risks

Scope/Objective	Description of Bank Policy	Description of the National Regulation	Gaps and Bridging Actions	
ESS 1: Assessment and Management of Environmental and Social Risks and Impacts				
Identify, evaluate, and manage the project's environmental and social risks and impacts consistent with the ESSs. To adopt a mitigation hierarchy approach to: • Anticipate and avoid risks and impacts • Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels; • Once risks and impacts have been minimized or reduced, mitigate; and • Where significant residual impacts remain, compensating	The standard guides assessing the Project's potential environmental and social risks and impacts and addressing potential impacts through a planning and mitigation hierarchy approach.	National Environmental Management Act, 1994 and the Environmental Assessment. Regulations (EIA) of 2014 mandates that no person shall commence an undertaking which in the opinion of the Agency, has or is likely to have adverse effects on the environment or public health unless, before the commencement, the undertaking has been registered by the NEA and an environmental permit has been issued by the Agency in respect of the undertaking.	Although legislation seeks to anticipate and mitigate/avoid risks and impacts, it does not fully address potential impacts and mitigation hierarchy approach e.g., content-wise it does not address impacts on the vulnerable	Assistance/compensations to be provided for the affected parties by the government as in with Land Acquisition & Compensation Act if required The stakeholders at all levels, both regional and national, are consulted in the preparatory project stage through consultations to become abreast with project components' roles they will play during implementation. The capacities of the stakeholders particularly MoCDE staff and partners on world bank ESF will also be built at the early stage of project implementation to enable them to collaborate effectively in addressing this gap

Scope/Objective	Description of Bank Policy	Description of the National Regulation	Gaps and Bridging Actions	
for or offsetting them were technically and financially feasible.				
ESS2: Labor and Working Conditions				
• To promote safety and health at work, fair treatment, non-discrimination and equal opportunity for project workers, including vulnerable workers such as women, persons with disabilities, and children. • To prevent the use of all forms of forced labor and child labor. • To support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law.	As appropriate, working-age and migrant workers, contracted workers, and primary supply workers. It provides certain requirements that the project must meet in terms of working conditions, protection of the workforce (especially the prevention of all forms of forced and child labor), and provision of a grievance mechanism that addresses concerns on the project promptly and uses a transparent process that provides timely feedback to those concerned.	The Labour Act 2007 provides for the rights and duties of employers and workers, guarantees trade unions the freedom of associations, and establishes a Labour Commission to mediate and act in respect of all labor issues. The Labour Act seeks to address the necessary compensations needed to be awarded to workers for personal injuries arising out of and in their employment. Labour Act 2007 details the duties of persons employed. it is not part of the duties of persons employed to remove themselves from such unsafe	Although the Labor Commission makes provisions for anticipated labor-related complaints and redress, beneficiaries' access to the commission is a challenge at the regional level because its office is located in an urban area with no regional representation	The stakeholders at all levels, both regional and national, are consulted in the preparatory project stage through consultations for them to become abreast with project components roles they will play during implementation, including potential construction/technical workers. The capacities of the stakeholders, particularly MoCDE staff and partners on world bank ESF, will also be built at the early stage of project implementation to enable them to collaborate effectively in addressing this gap

Scope/Objective	Description of Bank Policy	Description of the National Regulation	Gaps and Bridging Actions	
To provide project workers with accessible means to raise workplace concerns. OHS Hazard identification and right of employees to remove themselves from such workplaces without being punished.	Under ESS 2, workplace processes will be put in place for project workers to report work situations that they believe are not safe or healthy and remove themselves from a work situation that they have reasonable justification for believing presents an imminent and severe danger to their life or health. Project workers who remove themselves from such situations will not be required to return to work until necessary remedial action to correct the situation has been taken. Project workers will not be retaliated against or otherwise subject to reprisal or negative action for such reporting or removal.	working places and also silent on they not being retaliated against	The law does not explicitly mandate workers to remove themselves from such unsafe working places and is also silent on reprisal	

Scope/Objective	Description of Bank Policy	Description of the National Regulation	Gaps and Bridging Actions	
ESS3: Resource Efficiency and Pollution Prevention and Management				
To achieve the sustainable use of resources, including implementing measures that avoid or reduce pollution resulting from project activities and minimizing and managing the risks and impacts of pesticide use.	The ESS3 provides requirements for projects to achieve the sustainable use of resources, including energy, water and raw materials, as well as implement measures that avoid or reduce pollution resulting from project activities. The standard places specific consideration on hazardous wastes or materials and air emissions (climate pollutants) given that the current and projected atmospheric concentration of greenhouse gases (GHG) threatens the welfare of present and future lives.	The NEMA mandates the NEA to enforce compliance with established EIA regulations and procedures among companies and businesses to plan and execute development projects, including existing projects. The act also mandates the Agency to register and manage all pesticides to ensure that the approved ones are used. The Hazardous Chemicals and Pesticide Management Act, 1999 provides for the registration and use of pesticides and related matters	The Legislation ensures that measures are put in place by polluters through routine monitoring by regulatory agencies and institutions i.e., NEA, etc. However, it does not address the risks associated with the use of pesticides by prospective users	The capacities of the stakeholders, particularly MoCDE staff and partners on world bank ESF will also be built at the early stage of project implementation to enable them to collaborate effectively in addressing this gap
ESS4: Community Health and Safety				

Scope/Objective	Description of Bank Policy	Description of the National Regulation	Gaps and Bridging Actions	
To anticipate and avoid adverse impacts on the health and safety of project-affected communities during the project lifecycle from both routine and non-routine circumstances. • To promote quality, safety, and considerations relating to climate change in the design and construction of infrastructure, including buildings and related infrastructure. • To ensure that safeguarding personnel and property are carried out to avoid or minimize risks to the project-affected communities.	This standard recognizes that project activities, project equipment and infrastructure increase the exposure of project stakeholder communities to various health, safety and security risks and impacts and thus recommends that projects implement measures that avoid or limit the occurrence of such risks. It provides further requirements or guidelines on managing safety, including the need for projects to undertake safety assessments for each phase of the project, monitor incidents and accidents and prepare regular reports on such monitoring. ESS4 also guides emergency	In place for the prevention of disease, the Public Health Act promotes safeguards, maintains and protects humans and animals' health and provides for related matters. The Act enjoins the provision of sanitary stations and facilities, destruction of vectors including mosquitoes, protection of water receptacles, and promoting environmental health and sanitation.	The Act does not consider the assessment of workplace safety. Additionally, not adequate measures are in place to deal with occurrences and emergencies	The law provides the platform to engage with stakeholders. A stakeholder engagement plan is prepared and will be in place for project implementation. Community needs concerning project activities will be assessed and necessary measures will be taken. The project will take into consideration the emergency and COVID-19 Response Plan to guide project implementation on site.

Scope/Objective	Description of Bank Policy	Description of the National Regulation	Gaps and Bridging Actions	
	preparedness and response.			
ESS 5: Land Acquisition, Restriction On Land Use And Involuntary Resettlement				
This aims to avoid involuntary resettlement, and forced eviction and aims to mitigate unavoidable adverse social and economic impacts from the land acquisition or restrictions on land us	-PAPs with the formal legal rights to land or assets have to be compensated for any losses. -PAPs who do not have formal legal rights to land or assets but have a claim to land or assets that are recognized under national law, including claims derived from customary or traditional tenure arrangements, are eligible for compensation. - PAPs with no recognizable legal right or claim to land or assets are compensated for lost non-land assets and provided	None in the Land Acquisition & Compensation Act -Use of Project GRM as the first stage - use of the legal system as the final resort -PAPs with a formal title are compensated for lost land/other assets. -PAPs with legal or no legal title: Legal is not distinguished and considered non-legal PAPs have no right to be compensated for land and non-land assets.	-Same in principle /application. -WB policies will apply as indicated in the RPF.	-Project level GRM Use legal system

Scope/Objective	Description of Bank Policy	Description of the National Regulation	Gaps and Bridging Actions	
	with resettlement assistance.			
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources				
To protect and conserve biodiversity and habitats. • To apply the mitigation hierarchy and the precautionary approach in designing and implementing projects that could impact biodiversity. • To promote the sustainable management of living natural resources. • To support livelihoods of local communities, including Indigenous Peoples, and inclusive economic development, by adopting practices that integrate conservation	ESS6 promotes the conservation of biodiversity or natural habitats. supports the protection and maintenance of the core ecological functions of natural habitats and the biodiversity they support. It also encourages projects to incorporate into their development. These environmental and social strategies address any major natural habitat issues, including identifying important natural habitat sites, their ecological functions, the degree of threat to the	The Forest Act and Wildlife Act & Policy aim at the conservation and sustainable development of forest and wildlife resources for the maintenance of environmental stability and continuous flow of optimum benefits from the socio-cultural and economic goods and services that the forest environment provides to the present and future generations, whilst fulfilling Gambia's commitments under international agreements and conventions.	Not adequate provisions are made under national laws and policies.	The project will take measures to protect and conserve biodiversity and habitats and all requirements specified in the ESS6

Scope/Objective	Description of Bank Policy	Description of the National Regulation	Gaps and Bridging Actions	
needs and development priorities.	sites, and priorities for conservation.			
ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities				
Not relevant to the WARDIP project				
ESS8: Cultural Heritage				
• To protect cultural heritage from the adverse impacts of project activities and support its preservation. • To address cultural heritage as an integral aspect of sustainable development. • To promote meaningful consultation with stakeholders regarding cultural heritage. • To promote the equitable sharing of	This standard requires that the ESA considers direct, indirect and cumulative risks and impacts on tangible or intangible cultural heritage. Impacts on cultural heritage are to be avoided and the mitigation hierarchy applied. A chance finds procedure will be designed to ensure that any encountered, previously unknown cultural heritage is appropriately managed.	The Gambian Constitution (1997) recognizes culture as a necessary tool for national integration and development. The State shall take steps to encourage the integration of appropriate customary values into the fabric of national life through formal and informal education and the conscious introduction of cultural dimensions to relevant aspects of national planning. The government shall ensure that appropriate customary and cultural values are adapted and developed as an integral part of the growing	The regulations and policies do not address cultural heritage as an integral part of sustainable development and promotion of equitable sharing of benefits	The National Centre for Arts and Culture provides a platform for collaboration with opinion leaders, community representatives, and other institutions to protect cultural assets. The project will go the extra mile to complement the stakeholder engagement plan (SEP) to educate communities to appreciate the role of cultural values and assets in sustainable development.

Scope/Objective	Description of Bank Policy	Description of the National Regulation	Gaps and Bridging Actions	
benefits from the use of cultural heritage.		needs of the society as a whole; and in particular, that traditional practices which are injurious to the health and well-being of the person are abolished. (3) The State shall foster the development of the Gambian culture.		
ESS9: Financial Intermediaries				
Not Applicable				
ESS10: Stakeholder Engagement and Information Disclosure				
To establish a systematic approach to stakeholder engagement that will help Borrowers identify stakeholders and build and maintain a constructive relationship with them, particularly project-affected parties. To assess the level of stakeholder interest and support for the project and	The standard establishes a systematic approach to stakeholder engagement that potentially helps the Borrower to identify stakeholders and build and maintain a constructive relationship with them; as well as disclose information on the environmental and social risks and impacts to	• The essential laws most relevant to stakeholder engagement are: • The 1997 Constitution recognizes the right to information for all citizens as a fundamental human right. To fully operationalize the right to information, people need to be effectively engaged and provided with	The NEMA and EIA regulations have not been developed to fully operationalize mechanisms for disclosing or disseminating information and grievance redress.	• The project will develop a stakeholder Engagement Plan. The SEP also includes a GRM based on an existing grievance redress mechanism for resolving grievances for the WARDIP. • The GRM is a transparent system that is expected to ensure quick resolution of complaints and disputes; it also has the structure for disclosing vital information to requisite stakeholders

Scope/Objective	Description of Bank Policy	Description of the National Regulation	Gaps and Bridging Actions	
to enable stakeholders' views to be taken into account in project design and environmental and social performance • To promote and provide means for effective and inclusive engagement with project-affected parties on issues that could potentially affect them throughout the project life cycle. • To ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format.	stakeholders in a timely, understandable, accessible, and appropriate manner and format. It recommends that stakeholder engagements are commenced as early as possible in the project development process and continued throughout the lifecycle of the Project. This allows stakeholders' views to be considered in the project design and environmental and social performance. The Borrower is also expected to implement a grievance mechanism to receive and facilitate the resolution of concerns and grievances.	information on issues that affect their lives. • The Access to Information Act, 2020 which was also passed into law in 2021 by the Gambian parliament • Stakeholder engagement is an integral part of the Environmental Assessment process. Gambia Environmental Assessment Regulations (2014) and National Environmental Management Act (NEMA) require effective public consultation and participation as an integral component of Environmental and Social Impact Assessment (ESIA) procedures		• It also provides means for effective and inclusive engagement. This instrument which satisfies almost all the requirements of ESS 10, will be applied during project implementation to bridge the gaps in national regulations and policies

Scope/Objective	Description of Bank Policy	Description of the National Regulation	Gaps and Bridging Actions	
• To provide project-affected parties with accessible and inclusive means to raise issues and grievances and allow Borrowers to respond and manage such.				

2.6 WORLD BANK COVID-19 GUIDELINES

The World Bank COVID-19 guidelines emphasize the importance of careful scenario planning, clear procedures and protocols, management systems, effective communication and coordination and the need for high responsiveness in a changing environment due to the COVID 19 pandemic. It recommends assessing the current situation of projects and putting in place mitigation measures to avoid or minimize the chances of spreading the virus. Recommendations are made to cover cleaning and waste disposal, medical services and general hygiene for the workforce, the management of site entry and exit points, work practices, and medical supplies for site workers. The guidelines acknowledge that national and local laws may impose social distancing, restrictions on movement and large gatherings as measures to minimize the spread of COVID 19, together with the fact the general public may be averse to large crowds as they protect themselves from COVID 19. The Bank further acknowledges that COVID-19 spread and restrictions can adversely affect the extent to which the project can meet the requirements of ESS10.

3 BASELINE -PROJECT DESCRIPTION

3.1 LOCATION OF THE PROJECT AREA

The project sites that are the beneficiary *Local Government Areas (LGAs)* are given in Figure 1 under subsection 1.9 above. The project will be implemented by the Ministry of Communication and Digital Economy in the Greater Banjul Area and in five (5) local government administrative areas (Central River Region North (CRRN), Central River Region South (CRRS), North Bank Region (NBR), West Coast Region (WCR) and Upper River Region North (URR) and will focus on increasing access to broadband and digital services through developing and integrating digital markets in the Western Africa region. The project will consist of five interlinked technical components, in addition to the Project Implementation and Coordination Component, organized to address the key binding constraints for the development and attainment of a digital economy.

3.2 ENVIRONMENTAL AND SOCIAL BASELINE CONDITIONS OF THE PROJECT AREAS

This section describes the general environmental baseline conditions of the potential areas to host the various Project activities within the administrative regions identified. Looking at the size of the country where most environmental and social conditions have marginal differences; as a result, the report describes the general baseline environmental and social conditions of the country. In this regard, the description will be general, but where an issue of critical environmental, social and cultural significance to the Project is known to exist, it will be highlighted as required.

3.3 THE PHYSICAL ENVIRONMENT

3.3.1 CLIMATE AND WEATHER CONDITIONS

The climatic condition in The Gambia is of the Sudano-Sahelian type, with two distinct seasons: a hot rainy season from May/June to October and a dry season from November to May with a rare occurrence of rainfall in May. Rainfalls are typically heavy nationally, but the southwestern part of the country (mainly in the WCR) records more rain than the eastern portion. Information from Department of Water Resources, shows that the annual rainfall in six Regions; all within the three Agro-Ecological Zones of The Gambia. July, August and September are the highest rainfall months. In order to have a good understanding of climate change in the country the mean of monthly values of two variables, precipitation and rainfall, for two thirty-year periods, 1901-1930 and 1991 to 2020, are provided in figures below; all the figures are sourced from the [2]*climate change knowledge portal* (CCKP).

[2] Source :climate change knowledge portal (CCKP)

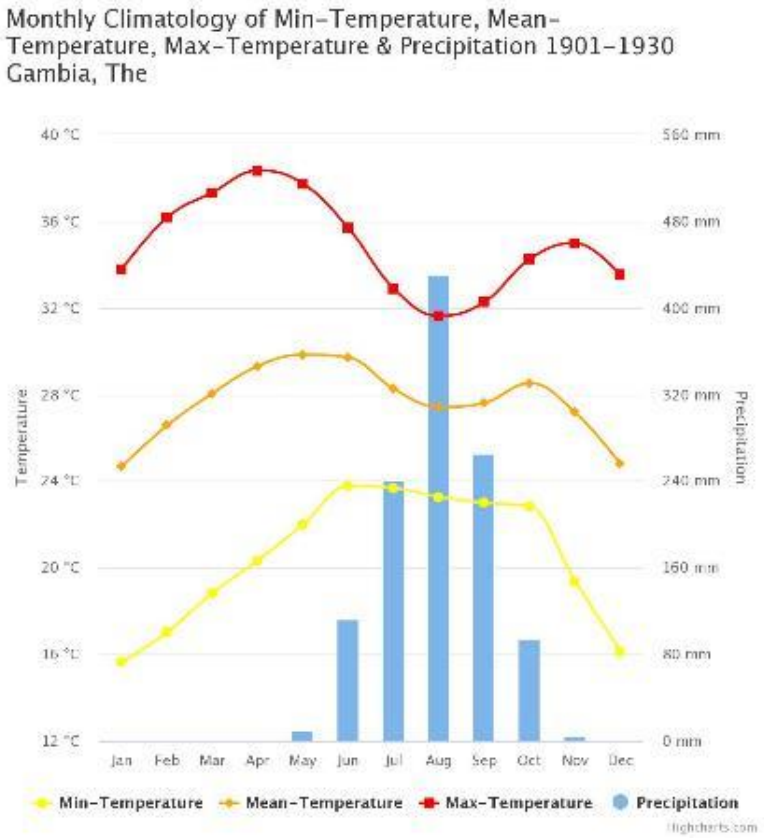


Figure 2: observed climatology of rainfall and temperature for 1901 – 1930

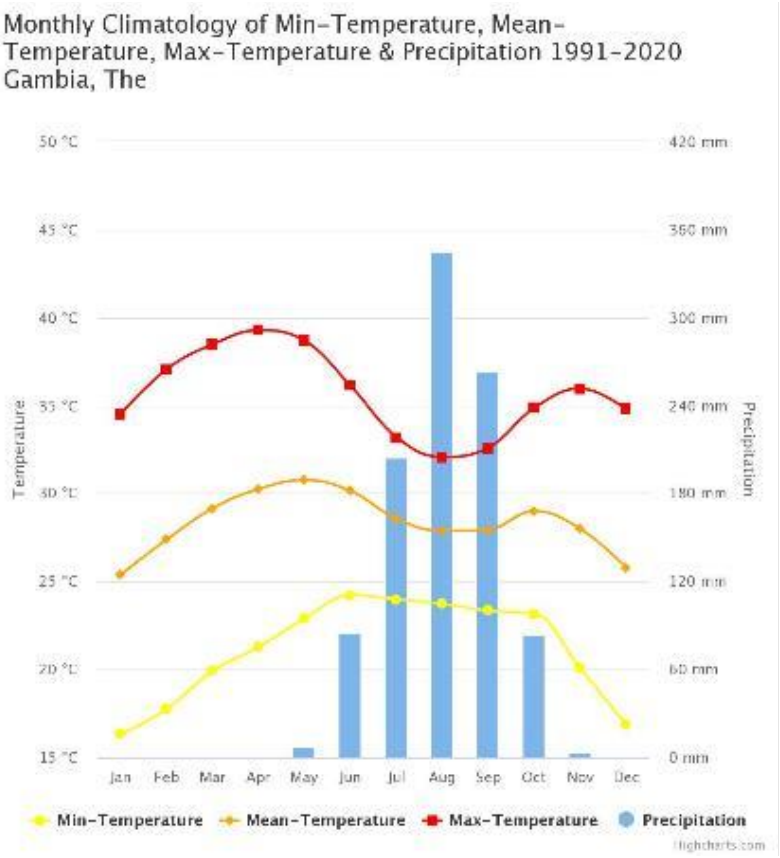


Figure 3: observed climatology of rainfall and temperature, 1991 - 2020

To begin with rainfall, it is observed that rainfall is highest in the three months of July to September and that the amount of rainfall over the same period has declined in the 1991-2020 climatology. The maximum monthly temperature has increased to nearly 40^{o}C in the second thirty-year period. A better view of the rainfall pattern is given in Figure 4 below where, as observed, that annual mean rainfall is on an overall decline from early 1950s to present that is supported by the observed annual precipitation trend in Figure 5**.**

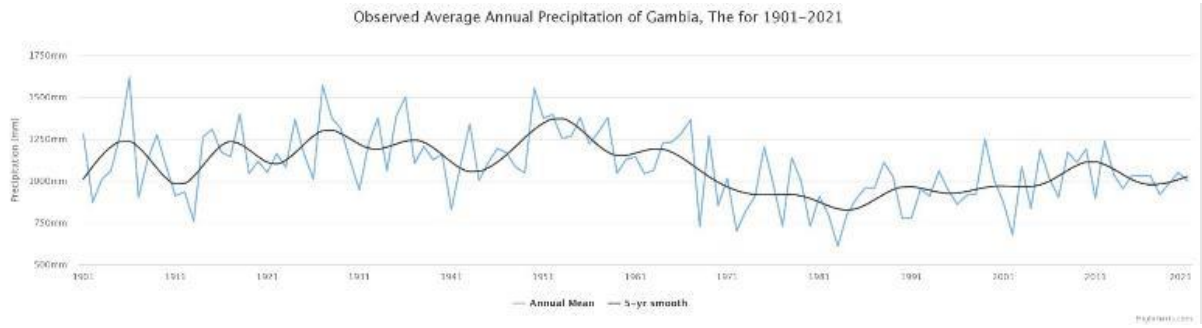


Figure 4: observed mean annual rainfall, 1901 - 2021

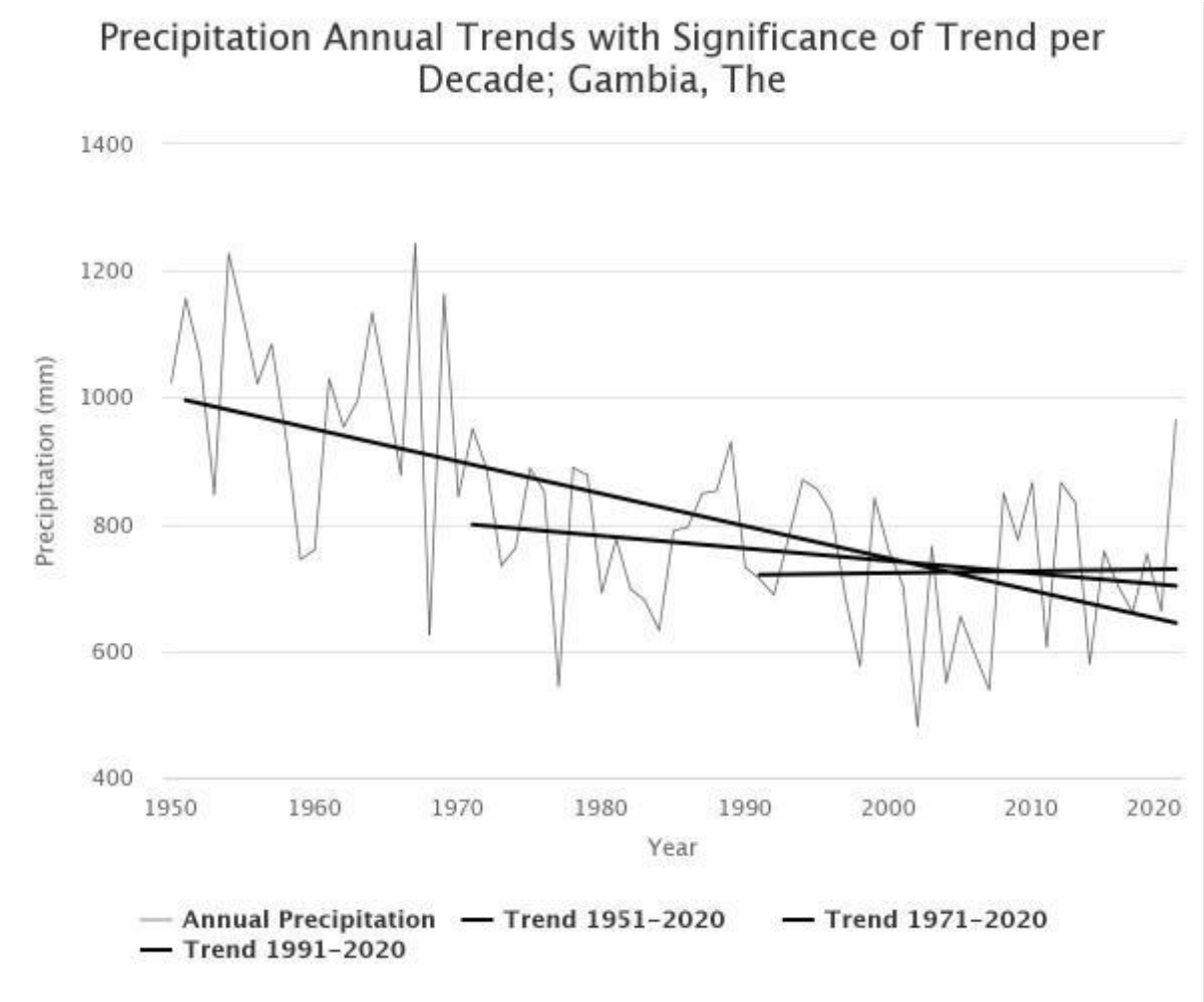


Figure 5: annual trend in rainfall, 1950 - 2020

While temperature remains important, it cannot be argued that rainfall is the more important determinant of climate change in the country considering the dependence on rain-fed

agriculture. In this regard, projections in rainfall are provided in Figures 6, as best-case scenario, where global warming is expected to be kept below 1.5^{o}C and in Figure 7**,** as worst-case scenario, where emissions will not peak but continue to rise throughout the 21st century.

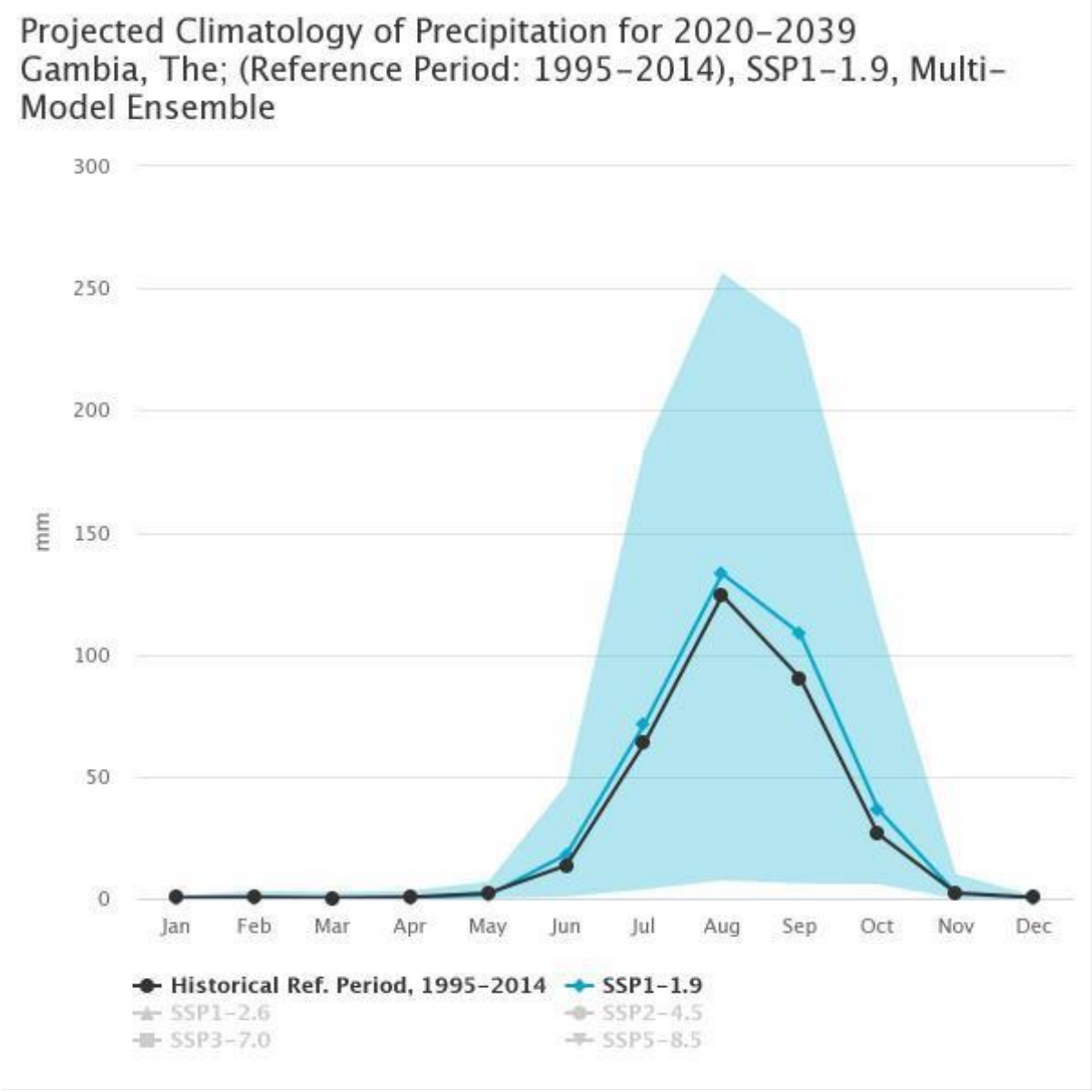


Figure 6: projection of mean monthly rainfall, 2020 - 2039, in best-case scenario

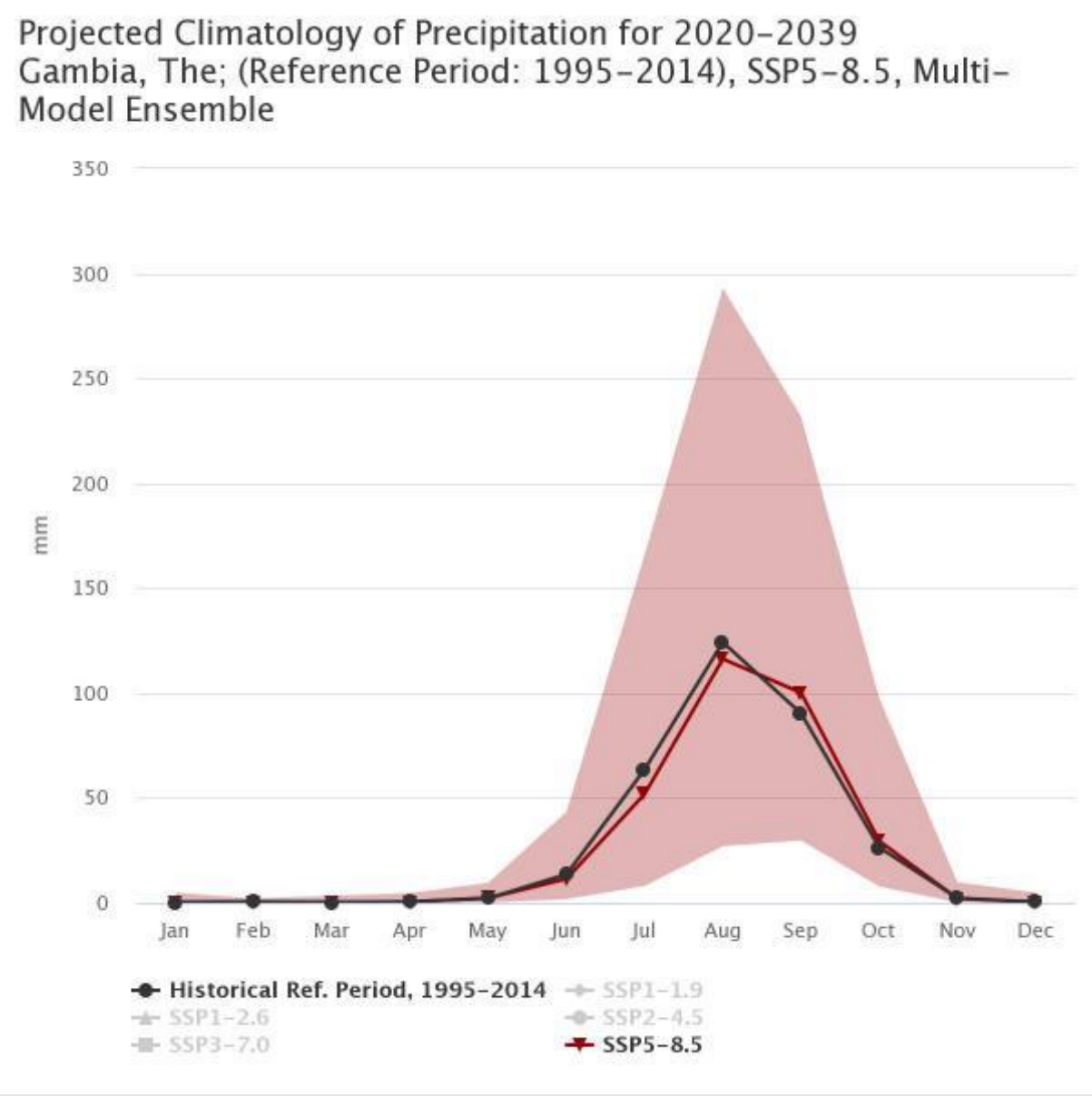


Figure 7: projection of mean monthly rainfall, 2020 - 2039, in worst-case scenario

In the best-case scenario, the projected rainfall is expected to be largely higher than that of the reference period of 1995-2014 but lower in the case of the worst-case scenario. It is a common understanding that the pathway to keeping global warming below 1.5^{o}C is far from realistic; in other words, it is highly likely that rainfall will continue to decline during the period 2020-2039.

3.3.2 TOPOGRAPHY

Generally, the topography of The Gambia is flat with little difference in altitude between the east and west, although the eastern part is more hilly (elevation ranging between 50-60 meters) than the western portion; this is due in part to the River Gambia, which runs through the entire length of the country cutting deep valleys in the upper reaches as it flows towards the west. The western part is flatter, the deep valley giving way to wider flood plains as it empties into

the Atlantic Ocean. The generalized topographic map, derived from a *digital terrain model* is shown in Figure 8 below with indications of the major road network and headquarters of the LGAs. As said the higher elevations are more in the east of the country with the maximum height reaching 55m.

Figure 8: generalised topography of the country

3.3.3 WATER RESOURCES

The Gambia has abundant water resources, which comprise seasonal rains, storage in temporary ponds and depressions, the River Gambia, and two aquifer systems underlying the entire country. The country is further distinguished by its location in the central part of the coastal sedimentary basin known as the Mauritania-Senegal-Gambia-Guinea-Guinea Bissau Basin, making The Gambia a focal point of extensive regional surface and groundwater systems. These water resources provide the basis for sustaining life and promoting socio-economic development.

The River Gambia is the major river that meanders 1,130 km from the Fouta Djallon plateau in north Guinea westward through Senegal, entering The Gambia at Fatoto continue down to the Atlantic Ocean. River ecology is divided into two different zones, estuarine and freshwater, largely determining the riparian vegetation pattern. In the lower estuary, mangroves dominate the riverside, with extensive reed belts in the in-between zone, while where the water is fresh; the banks are lined with gallery forest.

The River Gambia bisects the country into two narrow strips of land, which vary in width from 48km on the Atlantic Coast to 24km in the eastern region. The river has a surface area of approximately 2,000 km2, representing about 20% of the total surface of the entire country.

Groundwater resources are stored in the aquifer. The Shallow Sandstone Aquifer is estimated to hold 125 million m^3 of good quality water. The sandstone aquifer is estimated to hold reserves of good quality water in the order of 80,000 m^3. Recharge of the aquifers is mainly by infiltration from rainfall and lateral flow from Senegal. Infiltration from rainfall greatly exceeds potential evapotranspiration during the wet season and the land slopes are generally low, limiting runoff, and the soils are coarse with high potential infiltration intakes.

Groundwater in The Gambia tends to be slightly acidic with pH values mostly ranging from 5.0 to 6.5. Iron could be a localized problem around parts of the WCR, LRR and URR and recent increases in the iron content of groundwater nationwide are thought to be due mainly to diffusion from the aquifer to the boreholes. The bacteriological quality of groundwater varies with the source.

Energy Source

Energy is a critical element in the development and functioning of The Gambia's economy. As an essential input to households, agricultural production, ICT, transportation, industry, commerce and the knowledge industry, the country's reliance on energy will continue to grow as the population increases and living standards improve. The Gambia has a dual energy system where traditional and modern energy systems co-exist. The main energy source in The Gambia is fuel wood, followed by petroleum products and a small growing fraction of renewable energy (solar and wind). Liquefied Petroleum Gas is also an important energy source, although its use is higher among the affluent segment of urban households. The biggest consumers of energy in The Gambia are households and the transport sector, with a steady and consistent increase during the past decade in the consumption of petroleum products. Residential consumers consume approximately 44% of the electricity produced. The small-scale industries, including hotels and larger industries, use about 39%, while commercial entities use about 8%. Government and NAWEC consume the remaining 9%[3]. The electricity supply in The Gambia is insufficient and is among the most expensive in Sub-Saharan Africa. It is unreliable and costly due to the high cost of fossil fuel, the high cost of installing the transmission infrastructure, and the 24% average electricity loss during transmission and distribution[4]. Renewable energy represents an area of tremendous opportunity for The Gambia.

Air Quality

Ambient air pollution is a global health threat that causes severe mortality and morbidity from respiratory, cardiovascular, and other diseases. In the Gambia, burring of waste in dumpsites, manufacturing industries, felling of firewood for charcoal; fish smokers; dust emanating from earthworks, reloading of paths and quarrying exploitation, and vehicular movement locally affect the air quality. The energy and heavy construction machines using oil gas as fuel cause combustion gas discharge in the atmosphere rich in heavy metals and hydrocarbons that also affect air quality. There exist laws that govern air quality in the Gambia. Specially, the NEMA Section 28 (2) provides for the establishment of minimum standards for air quality. The Environmental Quality Standard Regulations, 1999, set out in Schedule I thereof environmental quality standards which are to apply in respect of ambient air. Section 28, sub-section (1) of NEMA 1994 states that The Agency shall establish criteria and measurement of

[3] Public Utility and Utility Regulatory Authority. (n.d.). Retrieved from www. pura.gm. Accessed 21 Aug 2022.

[4] LOW EMISSIONS CLIMATE RESILIENT DEVELOPMENT STRATEGY OF THE GAMBIA (LECRDS) 2018 – 2030.

environmental quality in general and, in particular, air quality[5]. The potential impact of project activities on the quality of the air is expected to be low if any will be localized and temporal.

3.3.4 GEOLOGICAL CHARACTERISTICS

The Gambian subsurface geology is said to consist almost entirely of nearly flat-lying sedimentary beds, dipping gently and also thickening gradually to the west. Most of the beaches consist of medium to fine, white, well-sorted sand comprised of nearly pure quartz grains. Cockle (Acra senelis) shells are also found on some Gambian beaches. Beaches are often bounded by rocky headlands composed of sandstone and laterite rock.

The geological feature described above can be applied to most Gambian beaches where this project will most likely be located. In addition, some areas along the Gambian beach such as Batukunku, Kartong, and Sanyang are known to contain some heavy-mineral assemblage of commercial value[6]. These minerals have been exploited in the fifties at the village beach location by international companies and as well recently Batukunku, Kartong, and Sanyang have been exploited. Most of these sites have been mined and the cited quantity has now been significantly reduced.

3.4 BIOLOGICAL ENVIRONMENT

3.4.1 MANGROVE ECOLOGY

Mangroves are complex inter-tidal forests that thrive at the interface between dry-land and open seas, in tropical and subtropical regions. This ecosystem is the mainstay of enormous biological and abiotic resources. The management of forested wetlands has received considerable attention in the last 15 years because of increased human exploitation of these wetlands as a forest resource. Natural resource managers have also become more cognizant of the importance of these plant communities to the ecology of adjacent aquatic ecosystems. Mangroves are important in the nutrient and sediment dynamics of estuaries and contribute to erosion and flood control in coastal areas. The exploitation of mangroves for forestry products includes saw timber, building material, fence posts, fuelwood and charcoal.

The coastal area of the Gambia is a suitable estuarine zone sheltering several mangrove hot spots. These habitats include DuaDula to Kartong Point, Allahein river mouth, Tanbi Wetland National Park, River Kakima Delta-Kachuma Forest, Solifor Point, Tanji Bird Reserve, Toll Point to Cape Creek and Tujereng Lagoons. Only these habitats are protected: Tanbi Wetland National Park, Tanji Bird Reserve, and Toll Point to Cape Creek. Five protected areas: Bolong Fenyo Community Reserve, Niumi National Park, and Tanbi Wetlands National Park, Tanji Bird Reserve (including Bijol Islands) are situated in the coastal and marine areas. All of the six species of mangroves found in West Africa occur in The Gambia and have been recorded.

[5] NATIONAL ENVIRONMENT MANAGEMENT ACT, 1994. ENVIRONMENTAL QUALITY STANDARDS REGULATIONS, 1999.

[6] Carnegie Corporation Ltd., 2005, p. 7-9; Industrial Minerals, 2005a,

These include Avicenia Africana, Conocarpus erectus, Laguncularia racemosa, Rhizophora harrisonii, Rhizophora mangle and Rhizophora racemosa. The mangrove serves as habitats for many species of small fish, invertebrates as well as large birds. They are major producers of detritus through leaf shedding that contribute to enhance the food supply for species such as the manatee. Behind the mangroves stands are inter-tidal salt marshes with an assemblage of heterogeneous halophytic species such as Borassus aethiopum, Elaeis guineensis, Cocos nucifera, Eucalyptus and patches of invasive Eleocharis spp.

The drought that affected Africa in the 1970s caused the deterioration of many mangroves in The Gambia, especially along the Bintang Bolong, the largest tributary of the Gambia River. It led to deeper tidal penetration and increased water and soil salinity which was the main cause of the dieback. Climate change and sea-level rise will increase hyper-salinity in mangroves and other wetland ecosystems in the marine coastal areas and affect fish habitats. Increased water and soil salinity are considered to be the leading causes of the dieback of the mangrove forest. The mangroves of the Tanbi Wetland National Park (TWNP) connect the Atlantic coast with the estuary of the River Gambia and as such, play an invaluable role in the agriculture, tourism and fisheries sectors of The Gambia[7]. An important threat to mangroves in the Banjul area is the oyster harvest, which cuts the branches and roots where oysters anchor. The construction of access roads allows people to easily access the inner parts of the forests, applying further pressure on the ecosystem. In the coastal areas, sand mining for construction is another indirect cause of mangrove degradation[8]. This will result in the alteration of habitats with potential spawning and recruitment failures and consequent reduction in populations of fishery species of economic importance to communities who depend on them for their livelihoods. The protection and the management of mangroves are the responsibilities of the Forestry Department and protected areas (including mangroves} – with the Department of Parks and Wildlife Management (DPWM).

3.4.2 FOREST AND VEGETATION

Estimated at approximately 505, 300 hectares (about 43 percent of the country's total landmass) and includes the mangrove forests. It is confirmed that the country lost over 13 species of mammals and an unknown number of floral species. Human population growth coupled with the decline in annual average rainfall of 25-30%, high consumption rate and technology used continues to be a major driving force for environmental and natural resource degradation. The Gambia's total forested area is under threat due to the increased number of chainsaws and sawmills, and weak timber re-export policy coupled with ever-increasing exploitation of the forest for firewood attributed significantly to forest biodiversity loss. Generally, the vegetation is dominated by savannah woodland, with the Guinea savannah, characterized by broad-leafed trees, being dominant in the west of the country.

The Gambia's forest cover includes woodlands, savannah woodlands, mangroves, and plantations. These forests supply most of the Gambian population with much-needed forest products for domestic and commercial use, including environmental protection. The country's

[7] Mangrove Vegetation Dynamics of the Tanbi Wetland National Park in The Gambia - Environment and Ecology Research 5(2): 145-160, 2017

[8] UNEP (2007)Mangroves of Western and Central Africa - http://www.unep-wcmc.org/resources/publications/

total forest cover is about 350,000ha, of which approximately 32,734ha are Forest Parks, 30,000ha mangroves, and the rest are natural forests. They are broadly categorized into the following:

- State forests, which include sixty-six gazetted Forest Parks and natural forests
- Participatory managed forests include Community forests
- Private forests, which include remote natural forests and private plantations

Their environmental functions include soil erosion control and water quality and flow regulation in watersheds, thereby moderating floods from heavy rain. Forests also have a unique potential to contribute to climate change mitigation by reducing emissions and enhancing carbon sinks. Depending on deforestation, reduced tree cover may result in reduced cloud cover and rainfall.

3.4.3 COASTAL ENVIRONMENT

The coastal environment of the Gambia is technically defined by the area covered by the 80km-long shoreline and the area from the coastline to the *mootah* point in the LRR. The Gambia's coastline runs along the West African coast from the mouth of the Allahein River (13”4’N) to 13’3 1’56” N between Buniadu Point and the Karenti Bolon; a total length of 80 km. The west coast, between the Allahein River and Cape Saint Mary (56 km), faces the North Atlantic Ocean. The sections of Cape Saint Mary to Banjul (13km) and Barra Point to Buniada Point (1 km) border the bar area of the Gambia River estuary, which enters the picture between Banjul Point and Barra Point.

The coastal region is a flat and monotonous area of loose marine sands, low dunes being common. These Holocene mineral deposits are underlain by tertiary ferruginous sandstone of the "Continental Terminal", which is occasionally laid bare along the coast as rocky platforms or cliffs. The continental shelf is relatively narrow, the 200 m isobath being about 80 km offshore[9]. The Saloum River, with its tributaries, debouches directly North from the northern border with Senegal, forming the delta-shaped north-eastern shore of the Gambia estuary; the latter enters its bay-mouth between Banjul and Barra Point. A tidal channel runs North and West across the bar with Shallow sandy banks North of Banjul. The channel and the eastern bars of the bay have a muddy bottom.

The adjacent coastal arc between Buniadu Point and Barra Point consists of sandy beach barriers based on finer estuarine deposits, partly sheltered from the ocean waves by the shallow bar of the estuary. This equally holds for the fine sandy beach barriers of the western bay-shore between Banjul and Cape Saint Mary. The parks and wetlands within the coastal environment are shown in Figure 10 below. It is worth reminding that the on-land fiber cables will be laid along the main road, which has generally avoided the parks and wetlands; this means the project will, potentially, have a very minimal impact on biodiversity.

[9] The Gambia Information site:- https://www.accessgambia.com/information/coastline.html

3.4.4 MARINE AND WETLAND BIODIVERSITY

Despite their ecological significance, the coastal and marine areas of The Gambia are threatened by both natural and anthropogenic factors. Natural threats include sea level rise and wave action. Anthropogenic threats are mainly the results of a large proportion of the population being concentrated in the coastal and marine areas. This has resulted in increased pressure on natural resources. Anthropogenic threats include uncontrolled sand/gravel mining, destructive mangrove cutting, random inappropriate methods of shrimp fishing and oyster harvesting, contamination of marine ecosystems by domestic and industrial waste and solid waste disposal. The wetland biodiversity is relevant to the project since optical fiber cables will be laid in road reserves adjoining wetlands of national ecological importance in several places along major highways.

2.4.5. Fauna:[10]

Reptiles

The Gambia is home to approximately 67 reptile species and most of these are land based. Both the Nile crocodiles (*Crocodylusniloticus*), and Dwarf crocodiles have been recorded in the kotu creek. These crocodiles are seldom to be spotted and it is believed that they migrate from the waters of Tanbi Wetland National Park. Already, the dwarf crocodile (*Osteolaemus tetraspis*) has been classified as Vulnerable on the IUCN Red List of Threatened Species. In addition to crocodiles, turtles are other reptile inhabitants of the ecosystem of the stream. In The Gambia, four identified species are known to exist, namely: Green, Hawksbill, Leatherback, Olive ridley and possibly also Loggerhead turtles. The Green, Loggerhead and Olive ridley turtles are listed as endangered on the IUCN Red list and Hawksbill and Leatherback turtles as critically endangered (IUCN 2000). The recorded turtle species in the Kotu Stream area are the leatherback turtle (Dermochelys coriacea) and the Green turtle (Chelonia mydas) which are both on the IUCN Red list of endangered species. The project will prepare a fine-scale map for turtle nesting including other habitats within at least 25 m depth to inform the technical design studies.

Birds

The Gambia's location puts it in the flight path of two bird migrations. The first Palearctic migrations from Europe in October, which returns March / April of the following year. For these migratory European birds, it is the first life-sustaining strip of green after the long flight south along the arid coast of northwest Africa. The second migration is from the south at the start of the rains, June / July, of birds from the equatorial regions of Africa, which come to the Senegambia Valley in time for the breeding season. These birds from the equatorial regions exit The Gambia at the end of the rainy season. The country's local species population is therefore given a boost during these months, though the rise due to the Palearctic visitors is usually only a matter of a few days or weeks. On the other hand, the June to July influx lasts

[10] The Gambia WEST AFRICA COASTAL AREAS (WACA) RESILIENCE INVESTMENT PROJECT 2 (WACA ResIP2) (P175525) Environmental and Social Management Framework (ESMF)

the whole of wet period, with migratory species coming in to settle to find a mate and reproduce.

With respect to water birds, The Gambia has conducted water bird census since 1998 mainly between January and March and the colony of species identified include shoreline seabirds, osprey and migrant birds. Colonies of species-specific congregation of Terns, Gulls, Pelicans, Cormorants, Spoonbills, Herons and Warders are found year round for purposes of nesting, roosting, feeding and shelter.

Coastal ecosystems such as Kotu Stream provide important feeding and breeding for some of these Palearctic migratory species, inter-African and resident species. Egrets, Herons and Ibis are particularly well represented. An area of just a few acres provides a nesting site for many thousands of breeding herons, cormorants, terns, gulls, weavers and doves all of which nest in close proximity to each other. Water birds feed in the low tidal mud and smaller streams, resting in marshy parts of the area, roosting in the mangrove and breeding in the small islands. There is a dedicated bridge, Kotu Creek Bridge, for bird watching.

Presently, this ecologically sensitive area is threatened by encroachment of human settlement, pollution from the waters coming from upstream, sewage from the Treatment Plant and the occasional oil spills from the Kotu Power Station.

Fish

Fishes belonging to at least five (5) families have been recorded in the area. The most abundant of these species are tilapia species, followed closely by mullets. Although the Atlantic mudskippers are also present in large numbers and are very widespread. The mangrove ecosystem serves as breeding ground for most pelagic fish species and their juveniles remain in the habitat until they reach maturity before finally making their way into the open ocean

Since The Gambia is part of the West Africa Marine Eco region (WWF), the submarine cable routing should avoid marine biodiversity fertile zones ecosystems hosting potentially endangered species in such environments. This will also prevent damages to the submarine cable by fishing activities in those marine fertile zones. As per the Gambia Fisheries Regulations, controlling excessive fishing and destructive fishing practices will be continuously monitored.

Figure 9: local communities in mangrove restoration[11]

Figure 10: parks and wetlands in the coastal environment

3.5 THE SOCIO-ECONOMIC ENVIRONMENT

3.5.1 THE GAMBIA POPULATION

According to the 2013 population and housing census of The Gambia, the national population is estimated at 1.8 million (GBoS, 2013). The 2013 Population and Housing Census indicated that females constituted 50.8 percent and males 49.2 percent of the population (1,882,450), indicating a sex ratio of 97 males to every 100 females[12]. Regionally, the population of Banjul is 31,301, 382,096 in Kanifing, 699,704 in WCR, 82,361 in LRR, 221,054 in NBR, 226,018 in CRR, and 239,916 in URR.

The Gambia has a youthful population, with 58% less than 24 years or within this age bracket. [13]Among those ages, 52.4 percent are female, while 47.6 percent are male. This trend is likely to continue due to a high fertility rate (nearly 5.67 children per woman in 2015) and a declining mortality rate. This has implications for the social and economic environment. The population age structure and the demographic growth rate do not support economic growth and lead to dependence.

[11] THE NATIONAL BIODIVERSITY STRATEGY AND ACTION PLAN (2015 – 2020). https://www.cbd.int/doc/world/gm/gm-nbsap-v2-en.pdf

[12]Gambia Bureau of Statistics (GBoS).2013. The Gambia Population and Housing Census, Gender Report, Banjul, The Gambia: GBoS.

[13] Gambia Bureau of Statistics (GBoS).2018. The Gambia Labour Force Survey 2018, Banjul, The Gambia: GBoS.

In the Gambia, the ethnicity is composed of mainly eight officially recognized groups; Mandingoes (36%), Fulani (22%), Wolofs (15%), Jolas (11%), Sarahuley (8), Serer (2.5%), Manjago (1.7%), Aku (0.8%) and others 4% (GBoS, 2003). About 90% of the population practice Islam in terms of religious affiliation, while the remaining 10% practice Christianity or traditional beliefs.

3.5.2 ECONOMY

The Gambia is classified among the poorest countries in the world (UNDP's HDI for 2019). This put the country in the low human development category and positioned it at 173 out of 188 countries and territories globally. The Gambia's economy depends a lot on agriculture which has key implications for poverty reduction and food security. The latest GDP figures released by the *Gambia Bureau of Statistics* (GBoS) for 2021 provided for only three categories as follows: *agriculture that includes fisheries and livestock at 24.1%; services at 57.5%* and *industry at 18.4%*. Tourism is vital to The Gambia, second to agriculture in its place in the economy. It is a major source of foreign exchange, comprises a significant proportion of GDP (12% - 16%), and is an important source of wage-earning employment, supporting over 35,000 direct and 40,000 indirect jobs and generating US$ 85 million in foreign exchange earnings[14]. It has attracted US$ 45 million in foreign investment over the last five years while also providing the necessary air cargo opportunities to support the development of some of The Gambia's other sub-sectors such as shellfish, horticulture, and other international business activities. Tourism has a catalytic role in accelerating growth and employment opportunities (along the value chain) to improve the population's welfare. Although it is a major employer and income earner, the economy has been affected by the effects of COVID-19 that halted the tourism industry since 2020.

The contribution of *services* to more than half of the GDP adds more significance to the importance of WARDIP to the Gambia, knowing that improved communication systems is central improved service deliveries. Petty trading is also common in The Gambia, particularly with women and youth selling items such as food, clothing, telephone credit, mobile phones, and accessories among others in the streets. Therefore, the WARDIP focusing on ICT infrastructure will make a big difference in regions for marketing to ensure sustainable social economic development. The potential project sites in the regions visited were ICT infrastructure, IT institutions, individuals using ICT for business and other services users such as petty traders and farmers.

3.5.3 AGRICULTURE

Agriculture is a major economic activity in the Gambia, contributing 25% of the gross domestic product (GDP) and employing about 70% of the labour force with 32% in active primary agricultural production with 54% women and 46% men[15]. Agriculture is the main source of

[14] Tourism, Culture, and Hospitality Strategy Plan, 2015-2020

[15] GNAIP. 2015. Republic of the Gambia National Agricultural Investment Plan (GNAIP). Banjul, the Gambia. Available at https://www.gafspfund.org/gafspmapcountry/ GMB

income for about 72% of the impoverished rural households across the regions (Farming NBR, LRR, CRR, URR and parts of WCR)[16]. The sector is characterized by small-scale, subsistence rain-fed crop production (mainly groundnuts, coarse grains, rice, and cassava), traditional livestock rearing, semi-commercial groundnut and horticultural production, and small-scale cotton farming, and a significant artisanal fisheries sub-sector. Men are primarily involved in cash crop production such as Groundnut, Coos, and Millet.

Women produce 80% of vegetables and 99% of the staple food, Rice. Both men and women are involved in fish processing and livestock rearing. Women's access to credit has improved but is still below that of men. In some situations, particularly in rural areas, a woman may access credit but not control its use. As for the youths, the agriculture sector is described as the key to investing in the youth and accounts for 41.5 percent of employed youth aged 13-30 years, with 30.7 percent male and 52.2 percent female. More than half of young workers are engaged in agriculture, predominating in rural areas (66.3 percent, versus 7.5 percent in urban areas). The services sector is the most important source of youth employment in cities and towns, accounting for almost 65 percent of employed youth. Female youth are less likely to be employed or educated and more likely to be inactive (31 percent, against 27 percent) than male youth[17].

Agriculture in the Gambia is dependent mainly on rainfall, with only 5% of land under cultivation equipped with irrigation. Production systems generally have low input of fertilizers and pesticides. Climate changes, loss of soil fertility, and traditional farming methods have reduced agricultural productivity. The communities within the potential Project area mainly rely on agriculture for subsistence, but marketing agricultural commodities has long been a challenge in the Gambia. Until recently, the sector was subsistence-based, with a larger majority of smallholder farmers lacking knowledge and skills in aligning agricultural value chains to marketing and commercialization.

The rapidly growing population has increased the demand for forest products in the Gambia, particularly fuelwood, construction poles and timber, and fence posts. Besides, the natural forests provide for the rural and urban population a variety of other, mainly non-wood products such as honey, fruits and nuts, palm oil and wine, meat, fibers, leaves, grass, medicine, for personal consumption or economic purposes value. These non-wood products include honey, the African locust bean, "neto," Chinese date "tomborong," and bush mango "wulakono duto," and other species available. The fruits are sometimes sold at the community level to supplement the household income.

Currently, in the Gambia, wood products such as fuelwood, firewood, and charcoal, are still cheap, and no other energy source is as economical under present conditions. It is estimated to provide more than 80% of the country's energy and more than 95% of the household energy

[16] FAO; ICRISAT; CIAT. 2018. Climate-Smart Agriculture in the Gambia. CSA Country Profiles for Africa Series. International Center for Tropical Agriculture (CIAT); International Crops Research Institute for the Semi-Arid Tropics (ICRISAT); Food and Agriculture Organization of the United Nations (FAO). Rome, Italy. 20 p.

[17] GoTG (2019) Youth Policy of The Gambia 2019 – 2028

for domestic use. [18]Previous surveys indicated that fuelwood consumption varies from 0.34 to 1.44 m3 per capita per capita and year. A recent study reported that fuelwood consumption is 0.45m^3 or an annual fuelwood consumption of some 615,000m^3, which is more than the estimated yearly increment of the country's forest cover of about 523,000m^3. Sustainable wood supply becomes much more critical by taking into account that an essential quantity is annually consumed by bush fires and used for other domestic and commercial purposes such as fencing, construction, fish smoking, carpentry, lime and salt production, and heating [19]. The recent Illegal and/or unsustainable logging and harvesting of forest products seriously undermine national efforts to improve sustainable forest management. There is a significant loss of revenue a year due to uncollected taxes and royalties. From 2010 to 2013, The Gambia exports of Rosewood increased from 0m^3 to 317,466 m^3 valued at US$165 598,6447. Records estimates suggest that up to 98% of the traded Pterocarpus Erinaceus ("KENO") might originate from illegal sources, blaming the weak forest governance. Rare tree species and those with high value for timber or non-timber forest products are often in danger of becoming locally extinct.

Given the local use of these forest products, it will be recommended that the trees that bear these products are not felled unnecessarily in the course of Project implementation. Loss of access to these products would impact their cultural use and associated impacts on culture and social norms. In addition, it will result in the loss of economic and financial benefits to the communities, consequently impacting the people's livelihoods, given the economic value in generating income support from harvesting and selling these products.

3.5.4 EMPLOYMENT

The agriculture sector dominates the employment sector in the Gambia; this area has been characterized by subsistence production of cereals (early millet, late millet, maize, sorghum and rice); semi-intensive cash crop production (groundnuts, cotton, sesame and horticulture) and traditional livestock. Mixed farming remains the dominant practice of agriculture, although a more significant percentage comes from crop production. At the national level, sectoral employment stood as thus: 75% agriculture, 19% industry, commerce, services and 6% government. According to the UNDP National Human Development Report 2016, about 60 % of the Gambian population is not economically active. This is mainly because large segments of the population are relatively young and family responsibility, accounting for 49.3 percent of the inactive, 21.7 percent and 11.5 percent, respectively. According to the report, the total number of employed persons in The Gambia stood at 522,670 (71.1%) of the labor force while unemployed persons stood at 221,414 (28.9%) in 2012. There was a significant difference in male and female unemployment, with close to 20.9%t and 38.3%, respectively.

[18] FAO. 2004. Field Facilitator Guidelines: Community Based tree and ofrest product enterprises: Market Análisis and Development. By Isabelle Lecup and Ken Nicholson. Rome, Italy. See also http://www.fao.org/forestry/site/25491/en

[19] Salif babaucarr Gueye; 2014. The Gambia‟s Exports of Rosewood, Forest Trends, Minstry of Environment and sustainable development.

3.5.5 FISHERIES

The Gambia has an 80 km long coastline and an Exclusive Economic Zone (EEZ) extending 200 nautical miles from the low watermark. The sector's contribution to employment is significant. It is estimated that the artisanal fisheries sub-sector provides direct and indirect employment to 25-30,000 people and the industrial fisheries sub-sector provides employment to between 1,500 − 2,000 people. The livelihoods of an estimated 200,000 people are critically dependent on fish and fisheries-related activities. By this figure, the sector employs around 7 percent of the total population of about 1.9 million people. The internal economy of The Gambia is dependent upon fish. The livelihoods and financial strength of fisher folks in several major fishing land sites in the country such as Brufut, Gunjur, Tanji, Sanyang Bakau, and Banjul, Barra are derived from fish and fish related activities ranging from fishing, smoking, drying and marketing of fish, repairing of boats

Fisheries resources are provided from two sources, the river covering an area of 2,000 km^2 and the ocean covering the continental shelf to an area of 5,000 km^2. The estimated total biomass of demersal and pelagic fish resources in Gambian waters is as follows: Demersals 22,000 tons and pelagics 284,000, giving a total figure of 302,000 tons[20]. The total fish potential from the maritime fisheries is estimated at about 88,000 tons with pelagic and demersals fish resources constituting 78% and 22%, respectively. There are over 500 different pelagic and demersal marine fish species in the marine waters of The Gambia, broadly classed as demersal (bottom-dwelling) and pelagics (free swimming in the water column). The demersals include shrimps, groupers, sea breams, grunts, croakers, snappers, etc., and small pelagics group consists of the two sardinellas (Sardinellaaurita and Sardinella maderensis), the bonga/shad (Ethmalosa fimbriata), horse mackerels (Trachurus trecae, Trachurus trachurus and Caranx rhonchus) and mackerel (Scomber japonicas). Total annual fish production was 49,911.30 tons in 2010, indicating surplus potential. Certain fish species, such as the lobster (Palinurus spp), shark, catfish (Arius heudeloti) and the white grouper (Epinephelus aetheus) are threatened as a result of unsound human exploitation strategies. Based on the current production levels, there is considerable scope for exploiting the marine pelagic fisheries and developing aquaculture. In contrast, there is a great need for tighter and more effective control of the threatened demersal resources. Wetlands, which include marine, coastal, inland waters, seasonal fresh water ponds/marshes, are distributed country-wide.

3.5.6 HEALTH

The health service delivery system in The Gambia is three tiers based on the Primary Health Care Strategy and covers the proposed project areas. The health delivery services are the same scenario in all the regions. There are five hospitals across the country, six major health centers and thirty-two minor health facilities. At the primary (community) level, there are 492 health posts. While health service provision is virtually free at the public health facilities, especially for women and children, proximity to major facilities remains a problem for the majority of the communities within the regions. NGO and privately run facilities complement

[20] The Gambia National Biodiversity Strategy And Action Plan (2015 – 2020)

the public service delivery. One of the health policy goals is to empower communities to be active partners in managing both their physical health and health services.

3.5.7 LAND TENURE

The Land Tenure System in the Gambia is complex and sensitive. The typical tenure system is communal in most communities; however, this kind of ownership can result in land fragmentation which does not support large-scale investment in production.

The land tenure system in The Gambia is generally based on a dual system due principally to the colonial past, which introduced the statutory title and customary tenure (UNDP).

The statutory system governs the freehold and leasehold titles introduced by the British and based on English law. At the same time, the customary tenure evolved from the traditions and practices of the indigenous communities. Freehold and leasehold are most prevalent in the Banjul and Kombo St. Mary Region, while customary tenure is most common in the Provinces. The different statutory instruments regulating statutory land ownership are the State Lands Act, 1991 and the Lands (Regions) Act, 1991.

The States Land Act grants lease up to 99 years in areas the statute is applicable (Greater Banjul Area). On the other hand, the Lands (Region Act) provide for the proper upkeep of lands in the regions for public goods and accords the Minister Powers to designate lands in any part of the provinces as state lands.

The customary land tenure system, on the other hand, is based purely on the traditional system of ownership, which is entirely dictated by the custom and traditions of the people. According to the customary laws, where an original piece of land is cleared by a Kabilo (a collection of families) the ownership of land is vested in the head of the Kabilo. This is the basis of the customary land tenure system, which has evolved. Customary land tenure exists mainly in rural areas. The women folks are particularly discriminated against by the customary laws, which are male-dominated, and this is common in the entire rural Gambia.

This is true of most of the potential project sites. The women typically have user rights and can cultivate the land but can never own it to have the right to dispose of it anyhow but done communally with each receiving shares accordingly. The land belongs to the clans (Kabilo) and those clans are headed by males, who are the ultimate decision-makers regarding the land and related matters.

3.5.8 EDUCATION

According to a UNESCO report, the adult literacy rate in The Gambia stands at 41.95%, with 51.4% for males and 33.6% for females showing a gender disparity. In the past decade, basic education has been recognized by The Government of The Gambia as a key to national development.

The government has embarked on several educational reforms and instituted policy measures toward making education more accessible to all from basic to secondary education. Access to education is also largely through public schools, particularly in the rural regions.

Notwithstanding, the majorities of the beneficiaries across the five administrative areas are non-literate. The Gambia has its Education Sector Strategic Plan (ESSP), which is aligned to the Education Policy 2017-2030, which supports the SDG4-Education 2030-time frame. It should be noted that the high rate of illiterates, especially among women and girls in all the project regions, is a challenge for sustainable development.

In addition, endemic poverty restricts education opportunities for others, especially the girl child. Families with limited means cannot afford to buy books and other necessary learning materials for their children, who often drop out of school. Similarly, to utilize the limited family resources on education, the boy child is often preferentially treated against their girl counterparts, limiting such opportunities to the latter.

3.6 GENDER EMPOWERMENT

The National Gender Policy has identified emerging development issues of the Gambia such as poverty reduction, sector-wide approach to planning, effective service delivery through decentralization, public-private partnership, and civil service reform, all necessitating a shift in policy direction from women empowerment to the promotion of gender equality and equity. This National Gender Policy 2010-2020 aims to guide and direct all levels of planning and implementation of development programmes, with a gender perspective, including resource allocation geared towards equitable national development. The policy will contribute to realizing PRSP II, MDGs and Vision 2020.

The ultimate focus is on addressing the vast disparities between women and men in terms of work opportunities in the economic and social sphere. The womenfolk have been left out in many areas competing with their male counterparts. There are gender gaps observable in ICT access, skills and leadership. A number of the barriers to gender digital equality generally relate to the state of availability of infrastructure, financial constraints, the ICT ability and aptitude of the women, the interest and perceived relevance of ICTs, issues of safety and security and the socio-cultural and institutional contexts. The strategic actions for addressing some of these findings relate to measures for addressing affordability, education on digital skills and online safety measures.

This project will enhance Gambian women's current status by undertaking digital technology and using ICTs to boost the business and marketing of agricultural produce. In addition, WARDIP uplift the status of women through the enhancement of their access to e-health services and optimal utilisation of ICTs for their development and empowerment

3.7 DISADVANTAGED AND VULNERABLE GROUPS

During Project implementation, it should be noted that specific individuals or groups may be favored in participating in Project activities or benefitting from Project inputs due, among other things, to their gender, economic status, ethnicity, religion, cultural behavior, language, or physical and psychological inabilities health conditions. These, according to the Bank’s ESS, are regarded as vulnerable individuals or groups; they are particularly marginalized or

disadvantaged and might thus be more likely than others to experience adverse impacts from a project. Vulnerable groups may also include female-headed households, those below the poverty line, the landless, those without legal title to assets, ethnic, religious, and linguistic minorities, Indigenous Peoples, etc.

According to the Household census, women form more than 50% of the communities' population; however, they are generally often marginalized in the decision-making process, especially regarding land allocation for livelihood activities. The impact of this marginalization is compounded by cultural norms and customs which tend to privilege men and boys over women and girls. In this regard, women benefitting from the project could be jeopardized in that land use and tenure rights tend to disfavor women as essential decisions relating to land are made by the men, including inheritance and ownership.

Given the above description of women, they should be considered a disadvantaged and vulnerable group in the WARDIP. As indicated above, the service economy and agriculture that includes fisheries and livestock are the leading contributors to GDP. The labor force survey conducted by GBoS in 2019 indicated that females make up 50.4% of the 'service & sales workers' that includes tourism; the same report also indicated that the same group makes up 45.1% of the population in the 'skilled agricultural, forestry and fisheries workers'. These are undoubtedly very significant figures that support the need to consider, and support, women as a vulnerable group under the project.

According to the Bank's ESS, special attention must be made during consultations to involve vulnerable groups such as women. To ensure that they are not left out in the process, special efforts should be made to meet and discuss with them, especially bearing in mind that some of them (especially women) will potentially be impacted negatively when it concerns resettlement benefits. In this regard, all necessary assistance and support to these groups, particularly women and youths will be ensured in the implementation of the Project.

3.8 GENDER AND GENDER-BASED VIOLENCE (GBV)

Gender-based violence (GBV) is the term used to denote harm inflicted upon individuals and groups that are connected to normative understandings of their gender. This connection can be in the form of cultural awareness of gender roles, both institutional and structural forces that endorse violence based on gender and societal influences that shape violent events along gender lines. While the term is often used synonymously with 'violence against women, it can and does occur for people of all genders, including men, women, male and female children and gender diverse individuals.

Nonetheless, in traditional Gambian society, women are more often subjected to GBV based on their cultural roles and responsibilities, perpetuating inequality between men and women. In 2018, The Gambia was ranked 150th out of 189 countries with a score of 0.620, according to the UNDP Human Development Report's Gender Inequality Index. It will be noted that the majority of the poor and extremely poor in the country are made up of women; generally, their access to land is based mainly on customary law where the land belongs to founding families, and the user rights of in-married women depend on the continuation of their marriage within

the family. Furthermore, women often lack access to credit for income-generating activities and generally have a limited role in decision-making that affects their lives. This disadvantaged position of women in the family is deeply rooted in gender inequality, contributing to gender-based intimate partner violence.

Therefore, GBV can cause economic harm to an individual through, for example, property damage and restriction of access to resources; by impacting the person's health and safety, leading to social exclusion; and by fostering dependency on their partners for all material needs which can often perpetuate the cycle of violence. It is essential to pay special attention to women, children, and youths during project implementation.

3.9 VIOLENCE AGAINST CHILDREN (VAC)

Violence Against Children (VAC) is defined as physical, sexual, emotional and/or psychological harm, neglect, or negligent treatment of minor children (i.e., under the age of 18), including exposure to such harm,[9] that results in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power. The use of children for profit, labor[10], sexual gratification, or other personal or financial advantage is VAC. This also includes other activities such as using computers, mobile phones, video, digital cameras, or any other medium to exploit or harass children or access child pornography. During Project implementation, the potential areas where this can be manifested may include:

- Employing children under the age of 18 years
- Using children for personal or financial advantage by both contractors and employees
- Any other way to harass children, including sexual exploitation and physical or sexual violence

In this regard, the MOCDE and Contractors must ensure that no aspects of the Project work involve children under the minimum age of 16 for light work (as per *The Children's Act*, 2005) and none under the age of 18 for hazardous work, and work that impacts their schooling and social or moral development. Please refer to Labour Management Procedures which is a standalone document.

The Labour Act, 2007 prohibits children under 18 from engaging in agricultural, industrial, or non-industrial work for economic gains. In addition, to strengthen and protect workers against possible violence and exploitation, the Bank's **ESS 2** on Labor and Working Conditions establishes that workers' conditions, rights and protection from abuse or exploitation must be protected.

Given the above, it will be emphasized that the *Labour Management Procedures and SEAH/SEA Preventing Gender-Based Violence (GBV) and Violence against Children (VAC) (*see the separate report) will be included in the Contractors ESMP, rigorously applied, and monitored for compliance.

3.10 INFORMATION, COMMUNICATION AND TECHNOLOGY (ICT) SECTOR

The information and communications industries (ICT) sector has seen remarkable growth during the past decade because of various policies, programs, and private sector investments. The key government initiatives are the National Information and Communications Infrastructure (NICI) policy, the ICT for Development (ICT4D) Action Plan, and the Telecommunications Act. In addition, the government liberalized the ICT sector, thereby increasing the number of radio stations, Internet Service Providers (ISPs), and mobile phone operators. A public-private partnership (PPP) venture was recently launched to operate the country's first direct fiber optic gateway via the Africa Coast to Europe (ACE) fiber optic cable project. On the other hand, the private sector has made massive investments in ICT development. This, coupled with increased competition, has reduced prices for mobile phone services, improved the quality of services, and increased the variety of services available. In addition, mobile phone penetration significantly increased from 17.23 percent in 2005 to 99.98 percent in 2013.

Similarly, Internet access increased 15-fold from 0.92 per 100 individuals in 2000 to 14.0 individuals per 100 in 2013. There also has been an increase in the number of FM radio stations in the country, although only one television station, owned by the national broadcaster, operates in the country. Gambia's Telecom sector has grown at full throttle over recent decades. This has resulted in a relatively high level of mobile penetration. The sector's growth is characterized by a highly competitive market and a vibrant environment in which innovative products and services quickly move to the marketplace.

There are four mobile network operators (MNOs) in The Gambian market: **GAMCEL** (State Owned), **AFRICELL** (foreign investor-owned), **COMIUM** (foreign investor-owned) and **QCELL** (owned by a Gambian). The total number of active subscribers in the Gambia as of December 2020 is approximately 2.7 million subscribers. Africell, the largest mobile network operator, secured 1.7 million customers, of which about 62% are active subscribers. The subscriber base of QCell is 738,000, representing 28% of the market share while Gamcel and Comium compete closely for third place with each having an approximate market share of 5%[21].

The telecommunication sector is an active market for foreign investors. The four main telecommunication companies are Africell (foreign-owned), Comium (foreign-owned), Gamtel (state-owned) and Qcell (private, domestic). The penetration rate of mobile phones is well over 100 percent. The largest mobile phone company (Africell) has about 1.5 million customers, approximately 65 percent of the active subscribers. Gamcel, Comium, and Qcell have 10 percent, 11 percent, and 14 percent of the market in terms of subscribers[22]. The regulatory authority for the telecommunication industry is the Public Utilities Regulatory Agency (PURA), which was created in 2001. The government imposes a 40 percent tax on telecommunications companies.

[21] THE GAMBIA PUBLIC UTILITIES REGULATORY AUTHORITY. https://pura.gm/ict/sub-sectors/mobile-network-operators/

[22] Gambia – Telecommunications. https://www.privacyshield.gov/article?id=Gambia-Telecommunications-Sector

These MNOs are internet service providers. With the launch of the Africa Coast to Europe (ACE) submarine cable in 2011, the quality of connectivity has improved significantly. However, reactions from the public consultations, especially in the rural areas of the Gambia, many have highlighted and emphasized difficulties faced in the ICT, particularly the constant poor internet connectivity.

3.11 GENDER DIGITAL EQUALITY

Gender inequality impedes efforts toward the attainment of sustainable national development. The use of ICTs to reduce gender inequality is critical for improving marginalized groups' social and economic situation through access to social services, wage employment, and control over productive resources.

Regardless of the country's progress, especially in mobile communications service delivery, the gender digital divide persists. This divide is widening as technologies become more sophisticated and expensive, creating more transformational use and impact opportunities. As there are measures for creating basic digital access and literacy for women and youths, these are not sufficient conditions for youth and women to use ICTs meaningfully. There is a big difference between 'use' and 'ownership'. As the ITU began collecting gender-disaggregated data around mobile phone use and ownership, the disparity between the two indicators revealed a basis for understanding women's disadvantages in accessing ICTs.

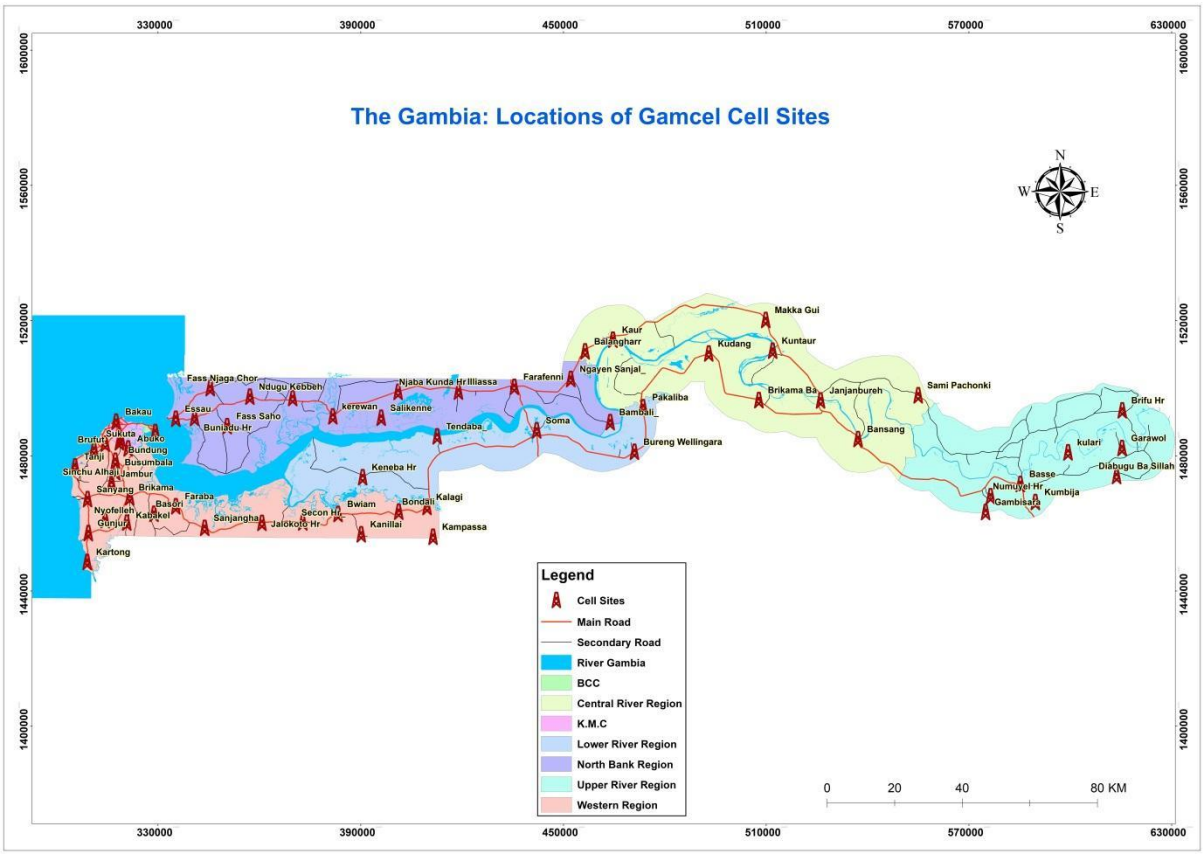


Figure 11: locations of GAMTEL/GAMCEL cell sites across the country

3.12 E-WASTE STATUS AND MANAGEMENT IN THE GAMBIA

Recognizing the ICT's relevance to socio-economic growth in The Gambia, one of the anticipated environmental impacts of the proposed project is E-waste. The project is expected to significantly increase the circulation of smart devices and purchase a substantial amount of IT equipment (e.g., computers, servers). Mobile phones, end-of-life backup power batteries, and old IT equipment will need to be safely disposed of.

Currently, there is no active legislation or policy on e-waste handling. However, through NEA, the country has already made a step ahead in Managing e-waste, including consultations and prepared concept notes for working towards having an e-waste management Policy and strategy, e-waste regulations, and related framework.

3.13 ASSESSMENT OF PROJECT ALTERNATIVES

As a reminder, the project activities that are the subject of this impact assessment are as listed below.

1. Installation of a submarine fiber optic cable
2. Installation of fiber optic cables on land

This section compares the implementation options chosen by the project for the above it looks at the routing for the cables and the use fiber optic cables as opposed to other technologies. In the case of data centers, the main concerns are with use of energy and generation, and management of e-waste hence a subsection how these could be improved for a minimum negative impact.

3.13.1 ROUTING OF CABLES

The use of cables in the country for telecommunication is not new. The current telecommunication system is based on a network of on-land underground fiber optic cables centered on a landed submarine cable. As described on annex 5 of the PAD (Country Annex: The Gambia), the project will finance the deployment of a second cable landing in the Gambia to increase redundancy of the overall network and thereby increase availability of Internet services. This includes (i) the recruitment of a transaction advisor to among others, conduct technical feasibility studies including the development of a high-level design of the new technical solution, analyze potential environmental and social impacts of the solution chosen, including a full biodiversity survey which will constitute the marine and coastal biodiversity baseline situation of the project prior to selection of routine of cable and location of landing site, and support the country in the overall transaction with the future provider, and (ii) financing of the public part of the investment to deploy the new infrastructure (including the new submarine cable and the new landing station)., .

Table 6: summary comparisons between buried and overhead cable installations

Buried cable	Overhead cable
Requires trenching, which is tedious and may trigger land ownership and land use issues, poses health risks to some vulnerable groups.	May require wood poles, in addition to existing electricity transmission lines, would cause cable crowd along and across roads and deplete forest resources. Furthermore, affecting the landscape.
It requires longer time and more labor to excavate a continuous trench for several kilometers over the project area.	It requires less time and labor to erect poles at intervals over the project area.
Cable fault/ damage is not common and protected against weather conditions.	Cable fault/damage due to harsh weather conditions, pole fall, etc.
Cable has a passive influence on the environment.	Cable crowding would cause visual blight.
Repair/ maintenance is occasional, usually due to the aging of cable and accessories.	Repair/ maintenance is frequent due to cable damage pole, falls or cable or pole aging

This section will identify and compare alternative options that could be considered for integration into the Project's design to make WARDIP more environmentally and socially friendly and sustainable. Specifically, it will compare alternative technologies or processes in terms of their potential environmental and social impacts, costs, and suitability under local conditions. This will include the need to use existing GAMTEL/GAMCEL land for WARDIP implementation. Currently, GAMTEL/GAMCEL has an existing communication infrastructure that can be used for the project as may be required. Furthermore, they are also actors and beneficiaries of the WARDIP being the main national communication institution.

3.13.2 TECHNOLOGY ALTERNATIVES

Here the comparison is between the project's choice of fiber optic cables as means of transmission as compared to other methods of satellite, microwave and radio transmission mechanisms. First, radio transmission has largely been phased out due to restricted bandwidth and poor data transmission. Satellite transmission, for its part, experiences high latency due to the signal having to travel long distances to a satellite in geostationary orbit and back to Earth again; additionally, satellite communications are affected by moisture and precipitation in the signal path between end users or ground stations and the satellite being utilized[23]. Modern optical fiber networks transmit high volumes of voice and data traffic

23 http://en.Wikipedia.org/wiki/Satellite_Internet_access

with higher security and reliability and at a lower cost than satellite systems. Besides, fiber optic networks offer several security advantages over satellite communications; they are thought to be much harder to "eavesdrop" on than satellites and have more dependable installation and repair practices[24].

Furthermore, over the past decade, there has been an increased demand for bandwidth driven by the use of the internet and continuing international trend of privatization of national telecommunications industries, which have outstripped by far the resources offered by satellite transmission of voice and data[25]. In the Gambia, significant strides have been registered in the recent years in terms of developing the information and communications (ICT) sector for the provision of affordable communications and internet services to the Gambian people, The Gambia has a growing mobile voice and data market, which is increasingly becoming an "enabling sector" and an input to growth. The penetration rates for mobile services, fixed lines, and internet subscriptions exceed 130%,2%, and 28%, respectively[26].

3.13.3 ENERGY CONSUMPTION BY DATA CENTERS

Computer centers of the magnitude being planned by the project are generally known to be huge energy consumers, both for the round-the-clock operations of the machines and their cooling in the process. The current power supply in the country is largely on fossil fuels and the issues attached to this need not be reiterated here. The data centers should be run on renewable energy sources and within the context of the Gambia, solar power is the most feasible. Indeed there are issues with solar cells when it comes to the space required for, usually, the large number of panels in such a case; to deal with space requirement, it is advised that the data centers be purposely-built with the panels on the roofing of the buildings.

3.13.4 PROMOTING THE USE OF RENEWABLE ENERGY IN THE WARDIP ACTIVITIES

WARDIP should promote and provide access to and wide-scale adoption of improved technologies to the needs and scale of service providers and SMEs, particularly women, to increase productivity, competitiveness, and resilience. This can be achieved by using off-grid solar energy systems as most communities may not be connected to the main national electricity grid - NAWEC. This will reduce the Project' Carbon footprint and contribute to the project's environmental sustainability. Overall, adopting renewables other than fossil fuel-based sources reduces carbon dioxide emissions and helps mitigate global climate change.

3.13.5 DEALING WITH E-WASTE FROM THE DATA CENTERS

The generation of e-waste is undoubtedly a major issue associated with data centers and they are unavoidable so long as the conventional computers remain the only choice. Therefore, efforts in this regard should be geared towards reducing the waste from the computers as well

24 Mandell,Mel,"120,000 Leagues Under the Sea", IEEE Spectrum, Vol.37, No.4, April 2000

25 Petit, Charles W., "Spaghetti Under the Sea", U.S News & World Report, Vol.127, No.8, August 30,1999.

[26] THE GAMBIA NATIONAL DEVELOPMENT PLAN (2018-2021)

as the proposed solar-power supply system. The first step towards this objective is the procurement of durable equipment that will last very long and require minimal maintenance. The second step is to have in place a robust e-waste management strategy that identifies all possible sources, storage of the waste and disposal of the waste with recycling the primary choice.

4 POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS AND MITIGATION MEASURES

Although this project will create more opportunities in line with improved access and availability of internet connection, it is without potential environmental and social risks. Based on the institutional and community engagement across the country, environmental and social risks and impacts could occur in two ways; potential impacts of prevailing baseline environmental conditions on the proposed projects; and potential environmental and social impacts of the proposed project on the baseline environmental and social conditions.

As indicated previously, WARDIP will have five components. Project activities include construction works of infrastructures, and associated handling and storage of construction material. These activities may lead to potential environmental and social risks and impacts.

4.1 EXPECTED POSITIVE EFFECTS OF WARDIP IMPLEMENTATION

The overall WARDIP Project impacts are anticipated to be mostly positive. The positive impacts are expected to be significant and widespread. The project will have immense positive environmental and socio–economic benefits through the connection of clients from various spheres of life and government arms that would benefit from improved communication. The key positive environment and social impacts associated with the projects include:

Home based work can be promoted. This can reduce the need for travel, thereby minimizing the emission footprint. The use of ICT will reduce the need for movement of people from one location to another, which helps increase efficiency as potential time spent on movement is reduced. Virtual meetings will be enhanced because video/ teleconference is possible. Additionally, the collection of examination results from schools will be digitalized because they can automatically be sent as a short message to a student's cellular phone. The same applies to document pick up because can be emailed. All these above can reduce movement and minimizes traffic-borne air and noise emissions.

Dematerialization and Reduction of resource needs in records storage: This refers to replacing the physical production and distribution of music, video, books, software, etc., by delivering digital information over the network. Dematerialization reduces resource consumption and waste generation. Essentially, storage of records in electronic form will reduce paper needs and building space in all beneficial entities, mainly schools, hospitals and government agencies.

Enhanced education systems, including environmental training and the new job categories that come with it: New ways of learning, e.g., interactive multi-media and virtual reality, could mean schools would be able to undertake practical lessons in virtual laboratories or even share virtual laboratories with training institutions overseas, particularly during the current COVID19 pandemic globally. ICT also provides new job and working opportunities, e.g. flexible and mobile working, virtual offices and jobs in the communications industry.

Improved access to healthcare services through telemedicine*:* With ICT, a doctor in the Gambia would easily consult a specialist colleague overseas when executing a complex medical/surgical procedure.

New tools, new opportunities: The second big effect of ICT is that it gives access to new tools that did not previously exist. A lot of these are tied into the access to information mentioned above. Still, there are many examples of stand-alone ICT systems, such as photography, where digital cameras, photo-editing software, and high-quality printers have enabled people to produce results that previously required a photographic studio. Additionally, ICT can be used to help different abled persons overcome disabilities. e.g. screen magnification or screen reading software enables partially sighted or blind people to work with ordinary text rather than Braille.

***The market for raw materials*.** Some of the construction materials will be procured locally and this will provide revenue to the local economy. Some of the materials that will be procured locally will include sand, bricks, poles and aggregate stones. The proceeds from the sale of the raw materials to the construction activities at the proposed project sites will boost the local economy in the form of increased earnings

Improvement in Rural Economy: Money earned by beneficiaries is expected to engender increased demand for goods and services. Increased demand is expected to increase production and, hence, improve the economy of rural and peri-urban areas where implementation occurs. In addition, improvement in accessibility to ICT and related facilities in the project communities is expected to facilitate the integration of economic and social activities.

Access to information: Possibly the greatest effect of ICT on individuals is the huge increase in access to information and services that has accompanied the growth of the Internet. Some of the positive aspects of this increased access are better, and often cheaper, communications, such as phone and Instant Messaging. In addition, the use of ICT to access information has brought new opportunities for leisure and entertainment, making contacts and building relationships with people around the world, and the ability to undertake online transactions and obtain goods and services (e.g. online courses) from a wider range of suppliers outside The Gambia without the use of middlemen.

Increased digital literacy service delivery: The proposed project will enhance the capacity of ICT users to effectively engage in local and national development processes as well as in their becoming promoters of social accountability and innovative development solutions or applications.

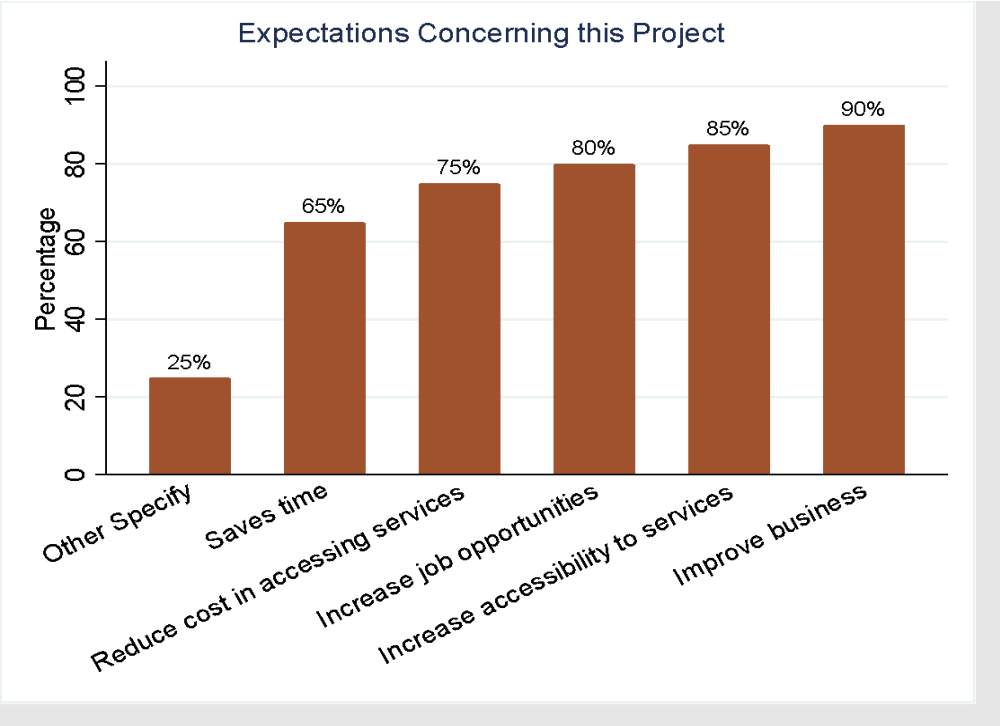


Figure 12: responses from consultations on the expectations fro WARDIP

4.2 GENERAL POTENTIAL RISKS OF WARDIP IMPLEMENTATION

4.2.1 POTENTIAL NEGATIVE IMPACTS DURING THE CONSTRUCTION/INSTALLATION PHASE

4.2.1.1 EXPERIENCES FROM PREVIOUS INTERVENTIONS

The Gambia has already had other interventions of a similar nature, especially when in 2012 the WB financed the digital project that resulted in the installation of the submarine cable but also through other interventions the bank in other sectors and which include both works in locations that resemble the ones that will be the context of this project (with the exception of cable laying at sea) and other social processes. other social processes.

As the WARDIP project is practically a continuation of previous interventions, it will, among other things, make use of previous interventions, including use of the lessons learned.

4.2.1.2 IMPACTS FROM INSTALLATION OF ON-LAND FIBER OPTIC CABLES

Increased susceptibility to soil erosion due to changes in land use: Site excavation for terrestrial fiber optic installation and manhole connection to the landing station can result in soil erosion and landslides on steep slopes. This is already the case with current ACE cable manhole along the beach.

Natural Habitats: Works on installing or laying submarine cable can disrupt marine life and by extension affecting fishing activities consequently affecting income and livelihood.

Impacts related to rehabilitation or construction of new landing stations. Currently, only one landing station is identified to accommodate the IT system in the Gambia but may need

construction of new landing stations and/or rehabilitation/extension. Thus, construction and rehabilitation works may cause environmental, occupational health, safety, and social impacts.

Child labour: During project implementation, local council leaders in communities often announce employment opportunities. Therein are loopholes in child labour if controls are not effectively enforced. There are also scenarios where children are forcefully used during project implementation, depriving them of their opportunity to enjoy school and exposing them to occupational hazards associated with the project.

Social Order Disruption, Family conflict, promiscuity and Gender Based Violence. The influence of the workers earning better than the majority of the community members cannot be underestimated in causing gender-based conflicts, sexual exploitation and harassment among the host community, causing family breakdowns. There is also a potential for increased alcohol consumption, thus leading to higher chances of confrontations among the host community, thus disrupting their peace. The project's search and provision of job opportunities can be a source of promiscuity, family conflicts, Gender-Based Violence, including child abuse and abuse of labor laws by the contractor.

Noise and vibrations. Noise and vibration may generate unacceptable disturbance to the local communities where fiber optic cables are to be laid. Vibration from compacting trenches can crack walls of structures adjoining work sites.

Dust and air pollution. Site clearance, raw material extractions and transport, and rehabilitation works may generate dust that affects workers and the immediate surrounding locality.

Water Pollution. During submarine cable installation there could be spillage or leakage of oil and other hazardous chemicals to sea which could pollute the sea and affecting marine life.

Improper Waste Management. Trenching for the terrestrial cable to the landing station will create stockpiles, which have the potential to affect free movement of people and vehicles in the streets and along roads.

Occupational health and safety risks like injuries, equipment damage and fatalities. The construction activities on-site could pose several occupational health and safety risks, including body injuries, Work-related upper limb disorders, the spread of sexually transmitted diseases and equipment damage.

Community Livelihood Disruptions. The proposed development may cause some temporal community business disruptions through the need to temporarily remove their business premises such as, signposts, pavements, and temporal garage structures, possibly due to excavation works to pave the way for transmission lines underground as designed within the urban areas. Similarly, the project may cause temporary disruptions in rural areas on open markets where businesses are also done within road reserves.

Possible injuries to children and the elderly: the open trenches pose danger to the free movement of children and the elderly who could easily fall in them leading to serious injuries including fractures.

Community health and safety risks/impacts. During project implementation, interaction with communities is inevitable but not uncontrollable. It is important to note that 60% of the workforce will be recruited from host communities/project locations during project implementation. With many workers from the community, there is a risk of transmission of communicable diseases, especially COVID-19, within the workers and across the community.

4.2.1.3 IMPACTS FROM INSTALLATION OF SUBMARINE CABLE

Disturbance of artisanal fishing traffic: the project will finance the deployment of a new submarine cable taking into account 1) need for redundancy, 2) need for future additional capacity, and 3) ACE cable is entering its "final" life expectancy. This activity could affect the movement of artisanal fishing boats as its operations are expected to be close to the shoreline.

4.2.2 POTENTIAL NEGATIVE IMPACTS DURING THE OPERATIONAL PHASE

As highlighted above, the impacts of the project during the operational phase will mainly come from operations of established data centers as presented in the two paragraphs below.

Large volumes of e-waste: the data centers will host large number of computers and accessories that will be become waste at the end of their lifespan; this waste will be a huge problem considering the expected volumes and difficulty in dealing with e-waste in the country.

Excessive energy consumption for cooling and operations: the data centers are expected to run around the clock that means a huge amount of energy consumption for the operations of the machines and their cooling in the process; this is a major problem because it has strong potential to increase operational cost of the project if not well managed.

Increase of E-waste generation. The project is expected to significantly increase the circulation of smart devices and purchase a substantial amount of IT equipment (e.g. computers, servers). Mobile phones, end-of-life backup power batteries, and old IT equipment will need to be safely disposed of. This will increase the amount of e-waste generated, which calls for proper handling.

4.2.3 THE GENERAL POTENTIAL NEGATIVE IMPACTS

- Cutting of trees is possible for identified proposed landing station construction sites
- Routes for water run-off may be affected due to the excavation of fiber optic cables
- Potential conflicts with land allocation for landing station construction among communities
- Land-use changes may affect vegetation cover
- Potential conflicts for project site selection
- Unequal access to employment at project activity sites for women
- Low women empowerment in land allocation decision making
- Increase the need for security, e.g., for solar equipment and other related construction materials.

- Installation of the submarine cable can increase noise, pollution, turbidity and physical disturbance which could affect fishing activities if the project decides to have a separate submarine cable different from the ACE.

4.2.4 ON SEA/SH, THE RISK ASSESSMENT HIGHLIGHTED THE FOLLOWING AS THE MAJOR RISK FACTORS:

Implementation of policies and enforcement of laws is always a major challenge. Limited resource allocation to GBV activities and programs is sometimes difficult. Limited gender statistics is a key challenge to evidence-based gender-responsive policy-making and programming. There is the presence of gender inequality in the secondary, tertiary, and vocational training institutions where men make up 71% of all enrolments. Women's literacy levels are very low at 40% (64% for men), and they are a barrier to women's economic and social empowerment. However, no labour influx or worker's camps are expected as most of the local labour force will come from the project locations. Projects with a minor labour influx of workers may increase the demand for sex work, including the risk of trafficking of women for sex work; or the risk of forced early marriage for girls. Furthermore, higher wages for workers in a community can lead to an increase in transactional sex.

The risk of incidents of sex between workers and minors, even when it is not transactional, can also increase. Risk of SEA/SH by project personnel, e.g., officials who may ask for sexual favors from women and girls to be included in the project economic supported activities, women groups, and other beneficiary groups or to receive cash for compensation. Additionally, project support can create a backlash and unintentionally heighten the risk of GBV amongst female participants especially given the existing high gender inequality and norms that do not promote women's economic independence. Rates of household violence can increase when a partner or family members feel threatened by or resentful of a woman's financial independence. The project sites may be near routes or roads frequently traversed by local women and girls, increasing exposure to project workers and risks of sexual exploitation and abuse (SEA).

4.2.5 MITIGATION MEASURES

- Encourage tree planting on selected project sites to serve as food and protection for erosion
- Employ measures to prevent or minimize air pollution from civil works through regular water spraying and construction sites/residential areas.
- Community sensitization on waste management especially plastic and E-wastes
- Provide and communicate standard operation procedure (SOP) in handling and managing e-wastes and other construction materials.
- Carryout public consultation to avoid conflicts in project site selection
- As part of the Bank's initiative to integrate GBV in WARDIP, GBV risk mitigation measures should be planned.
- Create awareness of SEA/SH mitigation and response mechanisms within the implementing agency (IA) and contractors.
- Monitor GBV Risks and ensures it is adequately addressed in safeguard instruments.

- Preparation and updating ESMPs and C-ESMPs to consider the SEA/SH prevention and response Action Plan.
- Stakeholder consultations, including the participation of the communities that will take place throughout the project's life, every six months, will help inform GBV risks mitigation in the project.
- In collaboration with regional social welfare focal points, MoCDE Social safeguard specialist will conduct a GBV service providers mapping.
- Organize regular mentoring sessions for multi-sectoral service providers (Health, case management and psychosocial support, safety/police, and legal service providers) on GBV guiding principles.
- MoCDE Project Implementation Unit (PIU) Social Safeguard Specialist to work with Ministry of Gender, Ministry of Health, GBV networks and other Multi-sectoral service providers to develop GBV referral pathways.
- Publicly post or otherwise disseminate messages prohibiting SEA/SH at project intervention sites, whether the project workers are perpetrators or survivors.
- To include the development, adaptation, translation and dissemination of communication materials (through local and community radio, posters, banners, community forums, etc.) outlining unacceptable behavior on SEA/H and, where relevant, referencing existing staff rules for civil servants, NGOs, and other actors in the project activities that may already be in place. Key messages should be disseminated focusing on i) No sexual or other favor can be requested; ii) Project staff are prohibited from engaging in sexual exploitation and abuse; iii) Any case or suspicion of sexual exploitation and abuse can be reported to the relevant authorities and; iv) the importance of timely services/services available.
- Project staff and contractors' workers will sign Codes of Conduct (CoC); CoC can be mentioned in routine project protocol briefings for project staff but must be discussed often on the worksite by contractors.
- Include a session on SEA/SH awareness training in the training and capacity building of the project team. The focus will be on sharing key messages (as above) with project staff, including contractors and their staff.

4.2.6 POTENTIAL IMPACT AND MITIGATION MEASURES

All the anticipated potential Environmental and Social risks are expected to be generated predominantly by two project components, particularly components 1 (Connectivity Market Development and Integration) and 2 (Data Market Development and Integration). The table below summarizes anticipated Environmental and Social Impacts, proposed mitigation measures and responsibilities associated with WARDIP, The Gambia.

Table 7: summary of potential project impacts and mitigation measures

Impact Issue	Potential Impact	Proposed Mitigation Measures	Responsibility
Potential Negative Impacts During Construction/Installation Phase			
1.Installation of on-land fiber optic cables			
Increased susceptibility to soil erosion and landslides	Site excavation for terrestrial fiber optic installation and maintenance Hole connection to the landing station can result in soil erosion and landslides on steep slopes. This is already the case with the current ACE cable manhole along the beach.	Restrict vegetation stripping to project sites to minimize project footprint and soil erosion. Avoid ground and vegetation stripping in steeply sloping areas to minimize soil erosion and the risk of landslips. Use above ground/aerial pole to pole transmission in such prone areas	Environmental and Social Specialist of the PIU (WARDIP-Gambia), Project coordinator and NEA regional officers
Natural Habitat	Works on installing or laying submarine cable can disrupt marine life and, by extension, affect fishing activities, consequently affecting income and livelihood.	Cable should be routed in an area with limited fishing activities and should be buried deeper to avoid hooking by fishing activities.	Environmental and Social Specialist of the PIU (WARDIP-Gambia), Project coordinator and NEA, Ministry of Fisheries, and Department of Water Resources
Impacts related to rehabilitation or construction/extensions of landing facilities	Some of the facilities identified to accommodate IT systems are newly constructed but may need minor rehabilitation or extensions. Rehabilitation workers may cause environmental, occupational	Environmental and Social Management Plans will be prepared and implemented.	Environmental and Social Specialist of the PIU (WARDIP-Gambia), Project coordinators and contractors

Impact Issue	Potential Impact	Proposed Mitigation Measures	Responsibility
	Health and safety and social impacts.		
Child labour	During project implementation, local council leaders in villages often announce employment opportunities. Therein are loopholes in child labour if controls are not effectively enforced. There are also scenarios where children are forcefully used during project implementation, depriving them of their opportunity to enjoy school, and exposing them to occupational hazards associated with the project, among others.	The policy shall work with a no child labour commitment, which shall be communicated to the local leaders and enforced in collaboration with the regional government's Management. To do due diligence to avoid child labour. The minimum work age adopted for this project is 16 years	Environmental and Social Specialist of the PIU (WARDIP-Gambia) and Project coordinator and the Department of Labour
Social Order Disruption, Family conflict, promiscuity and Gender-Based Violence	The influence of the workers earning better in comparison to the majority of the community members cannot be underestimated in causing gender-based conflicts, sexual exploitation and harassment among the host community,	The Contractor shall develop (i) Gender Based Violence (GBV) and Child Abuse/Exploitation (CAE) Codes of Conduct; and (ii) an Action Plan to mitigate and respond to GBV and CAE within the company and the community. The Code of Conduct will outline the responsibilities of: (i) the company to create a	Environmental and Social Specialist of the PIU (WARDIP-Gambia) and Project coordinator and Department of Labour and contractors

Impact Issue	Potential Impact	Proposed Mitigation Measures	Responsibility
	causing family breakdowns. There is also a potential for increased alcohol consumption, thus leading to higher chances of confrontations among the host community, thus disrupting their peace. The project's search and provision of job opportunities can be a source of promiscuity, family conflicts, Gender-Based Violence, including child abuse and abuse of labor laws by the contractor.	positive culture for its workplace and employees; (ii) managers to ensure that culture is implemented; and (iii) individuals to adhere to the principles of that culture and not to engage in GBV and/or CAE. All employees (including managers) will be required to attend training before commencing work to reinforce their understanding of HIV/AIDS, GBV and CAE. Subsequently, employees must attend a mandatory training course at least once a month for the duration of mobilization. Codes of Conduct for workers and employers will be prepared, signed and complied with.	
Noise and vibrations	Noise and vibration may generate unacceptable disturbance to workers and local communities where fiber optic cables are to be laid. Vibration from compacting trenches can crack walls of structures adjoining work sites.	The Project should require contractors to use equipment and vehicles in good working order and well maintained. As much as possible, the construction activities will be restricted to daytime only when noise pollution is least felt to avoid nuisance to the residents.	Environmental and Social Specialist of the PIU (WARDIP-Gambia) Project coordinators and contractors
Dust and air pollution	Site clearance, raw material extractions and transport, and rehabilitation works may	Water should be spayed regularly-at least twice a day; Workers will be provided with masks when working in the dusty area;	Environmental and Social Specialist of the PIU (WARDIP-

Impact Issue	Potential Impact	Proposed Mitigation Measures	Responsibility
	generate dust affecting workers and the immediate surrounding locality.	Trucks carrying construction materials such as sand, quarry dust, laterite etc., will be covered with tarpaulin or appropriate polythene material from or to the project site.	Gambia) and Project coordinator and contractors
Water Pollution	During submarine cable installation, there could be spillage or leakage of oil and other hazardous chemicals to sea, which could pollute the sea and affect marine life.	To check run-off and siltation-related outcomes, prompt backfilling shall also be carried out. Routine monitoring should be done and detect oil leakage or other hazardous material into the sea	Environmental and Social Specialist of the PIU (WARDIP-Gambia) Team and Project coordinator, contractors, NEA – EIA working group, Gambia Maritime Administration
Improper Waste Management	Trenching for the terrestrial cable to the landing station will create stockpiles, which have the potential to affect free movement of people and vehicles in the streets and along roads.	The contractor will prepare a site waste management Plan Trenching wastes shall be used for backfilling Waste management shall form part of the induction process for all project implementation teams. E-waste will be collected and stored at project sites before transportation to an e-waste disposal site. Waste bins should be provided for construction workers to avoid littering waste.	Environmental and Social Specialist of the PIU (WARDIP-Gambia), contractors and NEA
Occupational health and safety risks like injuries,	The construction activities on-site could pose several occupational health and safety	Only experienced drivers/operators should be employed to manage project vehicles /trucks /equipment.	MoCDE and Contractor Safeguards team

Impact Issue	Potential Impact	Proposed Mitigation Measures	Responsibility
equipment damage and fatalities	risks, including bodily injuries, Work-related upper limb disorders, the spread of sexually transmitted diseases and equipment damage.	All manual equipment such as a pickaxe, Pick Mattock, Cutter Mattock, etc. should be sturdy and firmly fixed Except for areas secured by fencing, all active construction areas should be marked with high-visibility tape to reduce the risk of accidents involving pedestrians and vehicles. All open trenches and excavated areas should be backfilled as soon as possible after cable laying and construction have been completed. Construction workers should be provided with and forced to wear suitable Personal Protective Equipment (PPE), including hard hats, overalls, high-visibility vests, safety boots, earplugs, gloves etc. Collective Protective Equipment will be used. Clear signage should be used near project sites. First Aid kits will be provided at each site. Awareness creation and training on health and safety will be integrated all through. Documentation and record-keeping for all accidents will be a must. The contractor will appoint occupational health and safety officer	

Impact Issue	Potential Impact	Proposed Mitigation Measures	Responsibility
Traffic related accidents and traffic interference	The installation of terrestrial cables might cut across existing roads and will be done along existing roads. Affect existing traffic and cause traffic jams and accidents.	Employ safe traffic control measures, including temporary road signs and flag persons to warn of dangerous conditions and children crossings. Where road use is restricted, signage and alternatives should be provided to the public	WARDIP-Gambia Environment Health Safety and Social (EHSS) safeguards Team and contractors
Community Livelihood Disruptions	The proposed development may cause some temporal community business disruptions through the need for temporary removal of their business premises such as Kiosks, signposts, pavements, and temporal structures possibly due to excavation works to pave the way for cable lines underground as designed within the urban areas. Similarly, the project may cause temporary disruptions in rural areas on open markets where businesses are also done within road reserves.	The implementation design of the project for sections of open markets will strictly be done on non-open market days after prior consultations with local authorities to avoid any envisaged impacts. Construction activities within urban areas in such specific sections of potential economic disruptions will be undertaken over the weekend. This will be done in consultation with the respective urban authorities and the business owners. Arrangements will be made to ensure the participation of business owners and representatives of the urban authorities during implementing hours to guarantee the security and safety of their businesses.	WARDIP-Gambia Environment Health Safety and Social (EHSS) safeguards Team

Impact Issue	Potential Impact	Proposed Mitigation Measures	Responsibility
		For proper handling of grievances, a Community GRM has been developed under the SEP	
Possible injuries to children and elderly	The open trenches pose a danger to the free movement of children and the elderly who could easily fall in them, leading to serious injuries, including fractures.	All open trenches will be marked with high-visibility tape to reduce the risk of accidents involving children, disabled and elderly persons. There shall be alternative routes provided for road users during project implementation and these shall be communicated to the community prior to and during project implementation. All open trenches and excavated areas should be backfilled as soon as possible after cable laying and construction have been completed. Access to open trenches and excavated areas will be restricted to prevent falls and entrapments.	WARDIP-Gambia Environment and Social (ESS) safeguards Team, the Project coordinator
Community health and safety risks/impacts	During project implementation, interaction with communities is inevitable but not uncontrollable. It is important to note that 60% of the workforce need to be recruited from host communities	Awareness sessions and meetings with community leadership, including the elderly, women, and the disabled, shall be carried out along the route. Project Safeguard teams shall also be inducted on best practices while dealing with communities and aspects of community health captured in a particular location.	Environmental and Social Specialists of the PIU (WARDIP-Gambia) and contractors

Impact Issue	Potential Impact	Proposed Mitigation Measures	Responsibility
	/project districts during project implementation. Appropriate measures will be taken in line with WHO COVID 19 guidelines	The WHO guidelines establish good international industry practices for COVID-19 response. Shall apply to all personnel in the project areas, including independent monitors. These shall include aspects of minimum PPE inactive areas, attendance of toolbox talks, and conduct with fellow project teams and the community. Excavations in busy community areas shall have to be immediately backfilled after the installation of ducts. Unfilled sections shall have to be barricaded off and watch personnel provided during (please complete the sentence). Alternative routes shall be created for communities to utilize their areas still. To mitigate the risk of COVID-19, the World Bank Technical note on Public consultation and Stakeholder engagement when there are constraints on conducting public meetings and the MOH COVID-19 SOPs shall be observed during the project construction period by inspecting all staffing quarters for workers for COVID-19 safety and EHS compliance before and during the occupation, ensuring that all workers and the community are sensitized on these SOPs including avoiding touching the soft	

Impact Issue	Potential Impact	Proposed Mitigation Measures	Responsibility
		parts (mouth, eye and nose), frequent handwashing with soap (or sanitizing), screening of workers with temperature guns before boarding the truck in the morning and after work daily basis, masking, social distancing, among others measures. Further, an emergency response system shall be established with COVID-19 treatment facilities for safe evacuation and treatment of those suspected or tested positive for COVID-19.	
Extreme climate events.	The activities of marine cable installation could lead to the following risks: o exposure of workers to hazardous waste from sediment disturbance, o biodiversity destruction or disturbance (seagrasses and mangroves as well as marine and wetlands biodiversity) o disturbance of socioeconomic activities	Hourly weather conditions reports should be available to avoid the effects of extreme weather conditions. The cable will be routed to areas not common for fishing activities	Environmental and Social Specialist of the PIU (WARDIP-Gambia) and contractors

Impact Issue	Potential Impact	Proposed Mitigation Measures	Responsibility
	for the fisher folks and the tourism industry		
Potential Negative Impacts During Construction/Installation Phase **2. Installation of Submarine cable**			
Disturbance of artisanal fishing traffic	From the project document, it is expected that there will construction of a new landing station. This will involve laying a submarine cable which could cause disturbance of the seabed and related habitat. Installation works is expected to involve the movement of a maintenance ship, which could affect the movement of artisanal fishing boats as its operations are expected to be close to the shoreline.	Fisher folks to be sensitized on location of the submarine cable	Environmental and Social Specialists of the PIU (WARDIP-Gambia) and contractors
Pollution of the marine environment due to hazardous product spills, effluent discharge, or waste disposal during the installation of the submarine cable.	The burial of the submarine cable will be done using specialized ships. Both their circulation and anchoring have the potential to spill fuels, oils and lubricants that may interfere negatively with habitats and ecosystems.	Any vessels operating under the project will be licensed and operated in accordance with the government of the Gambia's commitments under MARPOL. Ensure that the vessels and equipment to be used are in good condition and meet the quality requirements for this type of operation.	PIU Contractors

Impact Issue	Potential Impact	Proposed Mitigation Measures	Responsibility
		The operating personnel must also be qualified for the operations to be performed. The EIAS and respective ESMPs related to this activity will determine the standards to be followed.	
Disturbance of terrestrial and marine ecology in the cable route and of placement and operation of support elements (cable landing of the cable, boxes/holes ground stations)	Subsea cables are relatively small and have little or no impact on marine ecology or marine species during operational activities. At depths of over 1,000m, the cable will simply sit on the seabed. Where the cable is in waters shallower than 1,000m, the cable will be buried wherever possible. During operation, whether or not the cable is buried, there will be little or no ecological impact on benthic biota, marine mammals or fish.	In the design and planning phase identify the best possible alignment for the cable routes in compliance with the requirements of this ESMF. In addition to adherence to the planning and action requirements recommended under ESS6 and captured in EIAS and ESMP formulation whose results will need to be adopted and followed consistently. While no significant impact is expected, additional baseline information and detailed studies will be needed during the preparation of the site specific environmental and social impact assessment, to confirm that this is in fact the case. A full biodiversity survey will be prepared as part of technical feasibility studies prior to selection of routine of cable and location of landing site.	PIU contractors
Occupational Health Risks health risks faced by workers in laying the cables at sea and on land as well as the construction of the other support elements	Occupational Health Risks health risks faced by workers in laying the cables at sea and on land as well as the construction of the other support elements (boxes and	The ships and especially the workers must comply with the provisions of the Gambia's adherence to IMO conventions (MARPOL) regarding their personal preparation and availability of means. Additionally: Workers shall receive the necessary	Contractors

Impact Issue	Potential Impact	Proposed Mitigation Measures	Responsibility
(boxes and stations land) and members of the community and other visitors	stations land) and members of the community and other visitors	training prior to the commencement of work activities to minimize the risks of accidents/incidents related injuries. Use of appropriate Personal Protective Equipment when handling machinery or at project sites to minimize accident risks improves safe protection/use. Systematic adoption of waste management measures. In accordance with the provisions of this QGAS and especially its PIGR, to guide the segregation, transportation, treatment and disposal treatment and disposal of used materials.	
Potential Negative Impacts During Operational Phase			
Large volumes of e-waste	The data centers will host large number of computers and accessories that will be become waste at the end of their lifespan; this waste will be a huge problem considering the expected volumes and difficulty in dealing with e-waste in the country.	Purchase highly durable computers and their accessories	WARDIP-Gambia Environment and Social (ESS) safeguards Team, contractors and NEA officers

Impact Issue	Potential Impact	Proposed Mitigation Measures	Responsibility
Excessive energy consumption for cooling and operations:	The data centers are expected to run around the clock that means a huge amount of energy consumption for the operations of the machines and their cooling in the process; this is a major problem because it has strong potential to increase operational cost of the project if not well managed.	Alternative use of solar energy to reduce operational cost	WARDIP-Gambia Environment Health Safety and Social (EHSS) safeguards Team
Increase of E-waste generation.	The project is expected to significantly increase the circulation of smart devices and purchase a substantial amount of IT equipment (e.g. computers, servers). Mobile phones, end-of-life backup power batteries, and old IT equipment will need to be safely disposed of. This will increase the amount of e-waste generated, which calls for proper handling.	Establish a working agreement with an e-waste recycling facility for E-waste collection, transport, recycling, and dismantling of generated E-waste under the project. Carrying out sensitization campaigns among local authorities, Operators of electronic devices, repairs for E-Waste collection, and transport to the e-waste collection centers under establishment in all districts.	WARDIP-Gambia Environment Health Safety and Social (EHSS) safeguards Team, contractors and NEA officers

5 ENVIRONMENTAL AND SOCIAL PROCEDURES FOR SUB-PROJECTS

This section discusses generic measures that can be taken to avoid, minimize, restore, or offset environmental and social impacts that might arise from implementing the proposed subprojects.

1. Good Employment Practices

To ensure recruitment terms are streamlined for the protection of the rights of community members, the following measures would be observed:

- Sensitization of the people before the commencement of sub-projects on their roles, contract specifications, mechanisms for addressing grievances, etc.
- The signing of the Beneficiary Agreement Form must be ensured
- Specification of work hours
- Formation of work teams and use of shift systems (to address fatigue and maximize benefits);
- Training of contractors (at the regional levels) in labor-based methods

2. Particulate Emission Abatement Measures

Implementation of sub-projects would factor the following measures in controlling air pollution (rehabilitation and other civil works, etc.):

- Enclosing all construction sites and activities, especially close to communities, to limit exposure to dust generation
- Ensuring effective use of water (dousing) to control or minimize dust emission
- Mounting speed control signals and ramps
- Contract specifications to include dust control measures
- Covering sand heaps (or hauling trucks carrying sand) to avoid dust emission

3. Waste Generation and Management

Management measures will include the following:

- Disposal of construction and related waste materials such as e-waste at designated/approved dump site;
- Adoption of waste minimization measures;
- Incorporation of waste management plan in contract specifications;
- Public officers covering project implementation sites to enforce appropriate sanitation and related laws; and
- Worker awareness program to observe proper waste management measures

4. Landscape Improvement Measures

Management measures to protect the soil and landscape would include:

- Minimizing the area of ground clearance along the construction corridor
- Avoiding sensitive alignments, including steep slopes

- Prompt reclamation of degraded lands (e.g. burrow pits)
- Progressive replanting of disturbed areas during construction
- Specifying as contractors' obligations - erosion control, spillage prevention and effective re-vegetation
- Erection of intercepting ditches at the tops and bottoms of slopes, with gutters and spillways used to control the flow of water down a slope
- Emergency response procedures for spillages

5. Water Resource Protection Measures

Mitigation measures to prevent, minimize and manage impacts on water resources would include:

- Avoiding alignments that are susceptible to erosion (as much as possible)
- Minimizing the number of water crossings through alternative route surveys
- Using clean fill materials around watercourses such as quarried rock containing no fine soil
- Constructing run-off channels, contouring, or other means of erosion control
- Compensating by providing an alternative source of water such as boreholes for communities adversely affected

6. Habitat Protection Measures

Mitigation measures to address habitat destruction and disruption would include:

- Avoiding environmentally sensitive areas to prevent severe impacts on flora and fauna
- Replanting in road rights-of-way and the adjacent area to accelerate re-vegetation and succession
- Re-engineering road cross-section designs by using narrower widths, lower vertical alignments, more minor cuts and fills, flatter side slopes, and less clearing of existing vegetation
- Installing roadside reflectors to scare animals away from the roadway when vehicles approach at night.

The recommendations below will, with high potential, enhance beneficial impacts of the project

1. Strong Gender Considerations

The project makes adequate provisions for women and the youth. As much as 60 percent of the income-earning opportunity is reserved for women and youth. Due to the role women generally play in most communities, it is expected that a high female-male ratio will generally enhance the positive rippling effect of income to be earned from the project.

2. Community Leadership

Selection of sub-projects needs to be done by the communities before the commencement of actual sub-project activities. The high community involvement in the sub-projects selection ensures that only projects deemed essential to the communities are implemented.

3. Provisions for Alternate Beneficiaries

The opportunity offered to beneficiaries to register people to work in their stead on days when they are not able will ensure that beneficiaries are to attend to other critical social functions without losing the opportunity to earn.

Table 8: environmental and social management requirements for sub-projects

Subproject phase	Environmental and Social Compliance Requirements	Documentation required	Responsibility
Pre- Approval	Preparation of relevant safeguards documents	ESMF, RPF, ESCP, SEP, LMP	MOCDE/ Consultants, WB
1. Sub-project Identification, Design and Appraisal	A full biodiversity survey as part of technical studies. In-house E&S screening of sub-projects, based on result of the studies.	An ESIA including a biodiversity monitoring plan as well as a fine-scale map for turtle nesting including other habitats within at least 25 m depth	ES &SS Consultants
	Register subproject with NEA for environmental screening and clearance (for sub-projects meeting eligibility criteria for registration)	Copy of forwarding letter and NEA EIA screening Form 1 (Annex 2), including further documentation as required	ES &SS
	Clearance of prepared E&S instruments by the World Bank	Screening report and prepared E&S instruments	WB
	Obtain clearance and environmental permits for subprojects and all the associated safeguard specific instruments screened by NEA	Copy of permit and environmental compliance schedule for subproject implementation	ES &SS
	Incorporate NEA screening and permit recommendations and E&S issues identified during In-house sub-project appraisal into subproject formulation and design and contracts.	Copy of contract specifications	MoCDE

Subproject phase	Environmental and Social Compliance Requirements	Documentation required	Responsibility
	Undertake field validation/verification on any land acquisition and crop/livelihood displacement and compensation issues identified during in-house screening	Completed guidelines for validating communal lands, pictures of meetings and signed list and addresses of people consulted during validation	ES &SS
2. Sub-project Execution (ESMP Implementation)	Community/ key stakeholder engagements and sensitization	sensitization reports (Community/ stakeholders)	Safeguard team consultant
	Undertake training of key project actors (National, Regional, and Community levels in the project's E&S requirements for subproject implementation) Train contractors/ supervisors on E&S requirements. Include safeguards issues on the agenda for community pre-commencement meetings	Training reports/picture	ES &SS consultant
	Put in measures for handling grievances/ complaints and accountability and widely publicize them. Make available hotlines for receipt of grievances and complaints. Constitute Community Grievance/ complaints committee and train them Appoint and train Community Facilitators expected to be focal persons for community/ project level grievances	Single Window Citizens Engagement Service toll-free hotline Transparency and Accountability Boards (TABs), Community complaints notebooks, complaints files and records	ES &SS

Subproject phase	Environmental and Social Compliance Requirements	Documentation required	Responsibility
	Institute and publicize measures for handling community exposure to diseases (e.g., malaria, HIV/AIDS, and COVID-19)	Education Flyers/ posters	ES&SS
	Labor and Working Conditions Enforce the under-listed E&S mitigation measures Provision of temporary latrines at environmentally acceptable locations Provision of adequate potable water to the workforce Ensure the availability of a well-stocked first aid kit	Site inspection reports/ pictures	ES&SS Contractors' focal points
3. Post-Subproject Execution	Constitute Community Facility Management Teams and train them	Training reports	ES &SS Consultant
	Prepare and implement Facility Management Plan	Facility Management Plans	ES &SS
	Maintenance of subproject	Facility Management Plans	Safeguard team

5.1 SUB-PROJECTS ENVIRONMENTAL AND SOCIAL MANAGEMENT PROCEDURE

The successful implementation of the ESMF depends on the commitment of the beneficiary communities, the contractors, the MoCDE team, and capacity within the institutions and the institutional arrangement to use the framework effectively.

The Project Environmental and Social Management (ESM) is linked to the project implementation activities. The ESM commitment originates from the Initial Assessment/ EA Screening Form requirement. The ESM phase comprises monitoring, management (of E&S impacts and mitigations) and reporting during implementation activities such as rehabilitation, maintenance, decommissioning of sites, etc. The ESM process will verify:

- Effectiveness of mitigation measures being implemented.
- Compliance with mitigation and other environmental and social requirements.
- Unanticipated or residual impacts that have arisen require remedial action.
- How far contractors are meeting or adhering to required environmental and social principles, standards, and commitments; and
- The extent to which project monitoring and reporting requirements are met.

5.2 WORKING CONDITIONS AND MANAGEMENT OF WORKER RELATIONSHIPS

The project will adopt and implement human resources policies and procedures appropriate to its size and workforce that set out its approach to managing workers consistent with the *Environment and Social Standard 2: Labour and Working Conditions* and national laws. A Labour Management Procedures prepared will be provided that will provide workers with documented information that is clear and understandable, regarding their rights under national labour and employment law and any applicable collective agreements, including their rights related to hours of work, wages, overtime, compensation, and benefits upon beginning the working relationship and when any material changes occur. Community workers and contractors will sign a code of conduct that will guide the onsite work environment.

The project will not make employment decisions unrelated to inherent job requirements based on personal characteristics. The project will establish the employment relationship on equal opportunity and fair treatment. It will not discriminate concerning any aspects of the employment relationship, such as recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, and disciplinary practices, where applicable. The project will prevent and address harassment, intimidation, and/or exploitation, especially regarding women.

The project will provide a grievance mechanism for workers to raise workplace concerns. The project will inform the workers of the grievance mechanism at the time of recruitment and make it easily concerns promptly, using an understandable and transparent process that provides timely feedback to those concerned without any retribution. The mechanism will also allow for anonymous complaints to be raised and addressed. The mechanism will not impede access to other judicial or administrative remedies available under the law or through existing arbitration procedures or substitute for grievance mechanisms provided through collective agreements.

5.3 PROTECTING THE WORKFORCE

1. Child Labor

The project will not employ children. Under the Gambia Labor Act, 2007, and Children's Act, 2005, the minimum age for employment is sixteen (16). However, persons between 16 and 18 years old have the right to work based on the local legislation and have the same rights as adult workers with some benefits due to their age. People under the age of 18 can be employed only for light works that have no risk to their health, safety, or moral and physical wellbeing, they are not allowed to lift and move heavy objects/equipment (Section 44 of the Children's Act, 2005). People under the age of 18 can be employed for light work only after medical examination and official documentation, which could include a birth certificate, national identification card, passport, or medical or school record. As set out in the World Bank's Environmental and Social Standards ESS2, the minimum age for all employees is age 14, however, since the national laws provide specifies that employment is permissible at 16, but the project will comply with The Gambia's minimum age.

To achieve this minimum age for employment in the project, repeated direct observations will be conducted to:

- identify child laborers and determine the risks to which they are exposed
- refer them to appropriate remediation services
- verify that they have, indeed, been removed,
- track them to ensure that they have satisfactory and sustainable alternatives in life. It involves direct action aimed at:
- protecting boys and girls
- enhancing better socio-economic planning of child labor-related activities at the community, district, regional and national levels
- a more effective national policy on child labor, and better monitoring of national and international laws and conventions on child labor.

Awareness-raising sessions will be regularly conducted in the communities to sensitize on prohibition and negative impacts of child and forced labor and procedures for preventing abuse of child labor. Such sessions will be organized in a culturally appropriate manner.

Suppose a minor under the minimum labor eligible age is discovered working on the project. In that case, measures will be taken to immediately terminate the employment or engagement of the minor in a responsible manner, taking into account the best interest of the minor.

2. Forced Labor

The project will not employ forced labor which consists of any work or service not voluntarily performed, but it is exacted from an individual under threat of force or penalty; this covers any kind of involuntary or compulsory labor, such as indentured labor, bonded labor, or similar labor-contracting arrangements. The project will not employ trafficked persons.

5.4 WORKERS ENGAGED BY THIRD PARTIES

The project will make reasonable efforts to ascertain that the third parties who engage contracted workers are reputable and legitimate organizations and have an appropriate labour

management procedure. The project will establish policies and procedures for managing and monitoring the performance of such third-party employers about the requirements of this ESMF.

In addition, the project will incorporate these requirements in contractual agreements with such third-party. Contracted workers will have access to a grievance mechanism. In cases where the third party employing or engaging the workers cannot provide a grievance mechanism to such workers, the project's grievance mechanism will be available to the contracted workers.

Contractors' labour management records and reports that may be reviewed would include representative samples of employment contracts or arrangements between third parties and contracted workers, records relating to grievances received and their resolution, reports relating to safety inspections, including fatalities and incidents, and implementation of corrective actions, records relating to incidents of non-compliance with national law, adherence to applicable contractor workers code of conduct and records of training provided for contracted workers to explain occupational health and safety risks and preventive measures.

5.5 INCIDENT AND ACCIDENT REPORTING

In case of occurrence of an incident or accident-related or having an impact on the Project which has, or are likely to have, a significant adverse effect on the environment, the affected communities, the public, or workers, the implementing agency shall:

As soon as reasonably practicable, but no later than five (5) calendar days after having been informed of the occurrence of such incident or accident, inform the Bank by any electronic means of its nature, or circumstance and any effect or impact resulting or likely to result there from.

As soon as reasonably practicable, but no later than twenty (20) days after such incident or accident, provide the Bank with a summary report that includes a description of the incident or accident, and the measures, if any, that the Borrower is taking or plans to take to address it and to prevent any future similar event; and

Keep the Bank informed of the ongoing implementation of the said measures and plans.

5.6 REGULAR REPORTING

Accidents and grievance logbooks will be placed in all construction and other work sites. The contractor's progress report will provide details on accidents. All regular progress reports to the Bank will include information on accidents and incidents. Any severe injury (requiring off-site medical care) or fatality incident shall be reported to the Bank within 24 hours with basic information and a detailed incident report including the following will be submitted within seven working days:

1. root cause analysis
2. corrective action plan
3. immediate mitigation measures in case of continuing danger (e.g., fencing, signboard, guards)
4. compensation to the affected family based on a clear rational

5. risk assessment and correct application of ESHS management procedures, and
6. Medium- and long-term mitigation measures include enhancement of safety measures, audits, and additional training.

5.7 CHANCE FIND PROCEDURES

Extensive consultations with regional leaders and community members in the potential project areas and many state institutions reveal that the proposed project area does not contain any critical cultural heritage site (i.e., a site protected by national and international laws). However, given that in some of the works of Labor Intensive Public Works (LIPW), there may be a rare possibility of chancing upon cultural heritage sites and/or materials, "Chance Find Procedures" will be incorporated during land clearing into programming. The primary objective of this Chance Find Procedure is to provide practical and step-by-step procedures for protecting any cultural heritage that may be accidentally discovered during the project implementation.

5.8 INITIAL IDENTIFICATION/ EXPOSURE

The project will educate all workers, especially those who will be involved in civil works at the new landing station and related infrastructural development to observe the following steps in the event of a discovery:

- The person or group (identifier) who identifies or exposes any such find must cease all activity near the site
- The identifier must immediately inform the site supervisor/ community facilitator (focal person) of the discovery
- The site supervisor/ community focal person must ensure that the site is secured and access is controlled

5.9 OTHER POTENTIALLY HELPFUL CONSIDERATION

1. Community Access

If a religious or cultural site is used by a community, the regional Authority in consultation with the community shall establish an appreciable buffer around the religious or cultural area.

The buffer shall be adequate to ensure that project-related activities do not negatively impact the site.

2. Social Accountability

The project will mainstream social accountability into its implementation processes, intended to: (i) ensure efficiency and beneficiary satisfaction with service delivery; (ii) promote transparency and accountability; (iii) encourage participation and citizen engagement; (iv) assist in reducing leakages; (v) promote community management and ownership; and (vi) provide a voice to the beneficiaries, which in most cases are deemed to be voiceless. Given the

nature of most activities where beneficiaries are mostly semi-literate or illiterate, the accountability tools employed will be simple and use as pictures as possible, so that semi-literate populations can understand them, but also tailored to the particular area, e.g., rural versus peri-

The starting point of social accountability under the project will be at the community entry and sensitization stage where managers take the opportunity during the sensitization exercise to fully disclose all relevant information on the project i.e. contract sum, percentage to be paid out as wages, frequency of wage payment, the mode and means of payment, the role of various stakeholders in the delivery process and other entitlements such as the asset that will eventually result from the intervention. This sensitization effort will transcend the entire duration of the sub-project, i.e., at project pre-commencement meetings, site meetings, and other outreach programs, to reinforce the message on entitlement. At all these engagements, participants will be allowed to ask questions and have their issues adequately addressed.

3. Community Fora

A key activity of the project's social accountability efforts will be creating a community forum during which all interested parties will be brought together to review the implementation process. The specific features of the interface will include:

- An account of resources released towards the execution of the sub-project
- A report on Fiscal Disbursement and Progress by the contractor
- Feedback from beneficiaries on their satisfaction with service delivery
- An interface (dialogue) aimed at improving the delivery process
- Major concerns resulting from the dialogue will be identified for possible redress. Timelines for their resolution will be agreed upon in a participatory manner.

6 ENVIRONMENTAL AND SOCIAL MONITORING AND REPORTING

Monitoring is a key component of the ESMF. It will be essential to continuously verify the basis for the choices and decisions made in the sub-project design and other E&S safeguard measures. Monitoring will ascertain the effectiveness of management, including the extent to which mitigation measures are successfully implemented.

Monitoring the general project and the specific sub-project activities will help to:

- Improve environmental and social management practices,
- Check the effectiveness of the ESSS's E&S oversight responsibility, and
- Provide the opportunity to report the results on E&S, impacts, and mitigation measures implementation.
- Establish the scientific reliability and credibility of the ESMF for the Project
- Keep informed on COVID-19 data to inform programming

6.1 TYPES OF MONITORING

The primary objective here is to ensure the Project has the least negative impacts on the physical and human environment. The Project, therefore, needs to conduct the following set of monitoring activities.

Baseline monitoring: this will record basic parameters for environmental and socioeconomic factors before project activities such as construction and rehabilitation works begin. Changes in these parameters will be monitored as the project progresses, and adjustments made in the project, if necessary, to ensure minimal negative consequences. Baseline monitoring will be a one-off exercise and shall be the responsibility of MoCDE to assign a competent body and coordinated by the MoCDE safeguard team. The report should be submitted to both NEA and World Bank.

Impact monitoring: this will ascertain whether the predicted impacts will come to pass. The frequency of monitoring during the project activities, such as the construction phase, will be based on work plans submitted by contractors, tied to the various stages of the works as will be provided by work plans of the assigned contractors. The EIA Working Group, a multidisciplinary body from various government institutions, led and coordinated by NEA shall perform the monitoring per EIA Regulations and consult with the MoCDE safeguard team; MoCDE will bear the cost for the associated logistics as the Project's proponent. The ensuing report shall be submitted to MoCDE for action on the recommendations.

Compliance monitoring: where impacts are established, it needs to be confirmed that the ESMP developed to deal with the implications and other conditions attached to the Project's implementation are being implemented as designed and planned. Again, the timeline of monitoring will be as defined in the ESMP; the exercise shall be performed by the EIA Working Group led by NEA under the responsibility of MoCDE.

6.2 REPORTING

The Safeguard specialists will be required to provide monthly reports on the progress of the ESMF implementation. These reports can be shared with the relevant parties, that is, the MoCDE management and WB. The reports should also be shared with the NEA for information sharing and documentation. Progress or lack of progress must be reported for necessary improvements on time. Table 11 shows the monitoring Plan.

Table 9: project's comprehensive E & S monitoring plan that will guide overall monitoring processes

Phase	**What** ***(parameter is to be monitored)***	**Where** ***(Is the parameter to be monitored)***	**How** ***(Is the parameter to be monitored)***	**When** ***(Is the parameter to be monitored)***	**Why** ***(Is the the parameter being monitored)***	**Who** ***(Is responsible for monitoring)***
Sub-project Preparation	All relevant permits (NEA, etc.)	Before the start of works	Check documentation	Once at the start of the project	Ensure compliance with ESMF and ESS 1	Safeguard team NEA-EIA working group
	Land Agreements	Before the start of works	Check documentation	Once at the start of the project	Ensure compliance with ESS5	Safeguard team
	Asset Management Agreement with DAs	Before the start of works	Check documentation	Once at the start of the project	Ensure compliance with ESMF & ESS 1	Safeguard team
Sub-project Implementation	Environmental impacts (dust, noise, erosion, etc.)	Construction Site	Observation	Daily	Minimize environmental impacts and ensure compliance with ESMF & ESS 1	Contractor team Communities,NGOs
	Social impacts (skill development, female empowerment, etc.)	Construction Site	Observation	Daily	Minimize social impacts and ensure compliance with ESMF & ESS 1	Contractor team
	PPEs, etc.)	Construction Site	Observation	Daily	Minimize OHS Impacts and ensure compliance with ESMF & ESS 1	Contractor team

Phase	**What** ***(parameter is to be monitored)***	**Where** ***(Is the parameter to be monitored)***	**How** ***(Is the parameter to be monitored)***	**When** ***(Is the parameter to be monitored)***	**Why** ***(Is the the parameter being monitored)***	**Who** ***(Is responsible for monitoring)***
	Burrow pit reclamation	Prior to the end of Construction	Observation	Project completion	Ensure compliance with ESMF & ESS 1	Safeguard team/NEA-EIA working group
	Accident & Grievance reporting	Construction Site	Observation	Daily	Ensure compliance with ESMF and RPF, ESS 1	Safeguard team Contractor team
Sub-project Operational Phase	Asset management (maintenance, erosion, siltation, flooding, etc.)	Operational site	Site visits, audits	Quarterly	Ensure compliance with ESMF & ESS 1	MOCDE and NEA-EIA working group

6.3 ENVIRONMENTAL AUDIT

This is a systemic review of the activities against the ESMF to ensure that it is implemented as planned and identify potential impacts that may have arisen due to any change in condition. PART VI of the EIA Regulations, 2014 prescribes an audit of the implementation of the Safeguards instruments

7 STAKEHOLDER CONSULTATIONS AND GRIEVANCE MANAGEMENT

Stakeholder and community engagements are a major component of the preparation of the proposed WARDIP project. It is a requirement for both World Bank and national environmental and social policies and regulations. The consultation and engagement process focuses on providing information on the proposed project in a manner that can be understood and interpreted by the relevant audience, seeking comments on key issues and concerns, sourcing accurate information, identifying potential impacts and offering the opportunity for alternatives or objections to be raised by the potentially affected parties, non-governmental organizations, members of the public and other stakeholders. Consultation has also been found to develop a sense of stakeholder ownership of the project and the realization that their concerns are taken seriously, and that the issues they raise, if relevant, are addressed in the environment and Social management process and will be considered during the project design refinement.

Given that project affected people and communities are not yet identified, initial consultations were held with stakeholders at the central level and district level with representatives of the administration, the private sector, women, youth and vulnerable people. Further, consultations are recommended during the implementation of activities and the preparation of site-specific instruments.

Public consultation and stakeholder engagement are the basis for building strong, constructive, and responsive relationships that are essential for successfully managing a project's environmental and social impacts. Stakeholder engagement is an ongoing process that involves the following elements; stakeholder analysis and planning, disclosure and dissemination of information, consultation and participation, grievance mechanism and ongoing reporting to relevant stakeholders.

Specifically, the objectives of stakeholder consultations were:

1. To prepare communities for potential emergency scenarios that could be caused by the project and can affect the community.
2. To build a trusting relationship with the affected communities and other interested stakeholders based on a transparent and timely supply of information and open dialogue.
3. To ensure effective engagement with local communities and other key stakeholders throughout all phases of the project.
4. To actively build and maintain productive working relationships based on principles of transparency, accountability, accuracy, trust, respect and mutual interests with affected communities and other stakeholders.
5. To collect input on impacts and mitigation design.
6. Community participation is vital in ensuring the success of any project. Communities to be targeted by the project may be among the most deprived in the country. This makes it more meaningful that they understand the project's various components to ensure successful implementation and reach maximum benefits.

7.1 PUBLIC AND STAKEHOLDER/COMMUNITY ENGAGEMENT AND CONSULTATIONS

Public participation and community consultation has been taken up and should continue to be an integral part of project implementation as well as the social and environmental assessment process of the project. Consultation is used as a tool to inform project affected people, beneficiaries and stakeholders about the proposed activities both before and after the development decisions are made. It assisted in the identification of the problems associated with the project as well as the needs of the population likely to be impacted. This participatory process helps in reducing the public resistance to change and enables the participation of the local people in the decision-making process.

Consultations were held with relevant stakeholders, consistent with best practices and following the WB and national environmental legislation in developing ESMFs. Key stakeholders have been identified and initial discussions held with decision making bodies, key stakeholders, sector institutions and specialist experts were made on the very concepts and nature of the proposed project, giving emphasis on levels of public participation, the role of key stakeholders and joint contributions of these actors to the success of the project. In addition, the scope of the proposed project and possible means of maximizing local communities' social, economic and environmental benefits from the project implementation were underlined.

7.1.1 CONSULTATION AND ENGAGEMENT METHODS AND PROCESS

To obtain stakeholder opinion on the proposed WARDIP project, several consultation and discussion meetings were held on March 14th – 30th 2022 in all regions (WCR, NBR, CRR, and URR) with regional government authorities (Governors), potential project beneficiaries (women and youth groups), relevant regional and districts officers, CBOs and NGOs. Ministry of Trade and Regional Integration, Department of Agriculture, Department of Community Development, Department of Forestry, and National Environment Agency (NEA), Department of Social Welfare, Department of Gender and Children, Department of Water Resources, Department of Forestry, Department of Parks and Wildlife Management and Non-Governmental Organizations, telecommunication institutions (Gamtel/Gamcel), Africell, Comnium, Qgroup, radio and television stations, and The Gambia Submarine Cable Project Officials. We also consulted businesses and establishments operating in the ICT sector and individual community members.

In total, 192 people were consulted across the country with 35% being women. More than 20 focus group discussions and key informant interviews with stakeholder institutions at the regional and national levels were held. (see annex 5).

All the consulted categories favor the project and perceive it as a possibility of increasing connectivity and enhancing effective communication and access to goods and services.

The questionnaire administration was done via tablets using the survey solution interviewer app. In line with the COVID-19 preventive measures, using the tablets will prevent possible transmission of the virus among the survey team and committee members. The survey solution tool comes with a supervisor app that the supervisor uses to monitor collected forms and vet them before approval. This real-time data collection platform enabled the team to receive data as they are entered and important to read the location of the engagement/consultation. Additionally, electronic administration of the questionnaires reduced printing and

photocopying activities, thereby minimizing the emission of the release of chemicals and reducing logistic costs relating to printing and data entry. Important still, in line with COVID-19 preventive measures, wearing of masks and physical distancing were observed throughout the consultation/engagement process.

From discussions and personal interviews, it was clear that most participants in the communities had never heard of the WARDIP project. Thus, it is essential for stakeholder involvement in the design of project concepts to instill project ownership and guarantee sustainability. Needs assessment of ICT stakeholders should be carried out to ensure the positive impact of the project. Laws should be put in place to prevent SEAH of women by contractors and project staff. Finally, the project device mechanism encourages women's participation in decision-making before and during the implementation of the project activities.

Stakeholder consultations and engagement are continuous; therefore, consultation should be part of the ongoing implementation process. Continuous consultation can be facilitated with a Stakeholder Engagement Plan (SEP), which is prepared for the project. Refer to annex 16.

Table 10: summary of key concerns obtained from stakeholder consultations

No	Issues/concerns raised during the consultation	Category of Respondents	Date
1	○ participation and incentives for the private sector ○ cyber-security is key and important to be included ○ Awareness of stakeholders, improve landing stations and backups. We need second landing stations as a backup.	Submarine Cable officers	March 17th 2022
2	○ Interest in Smartphone Device Affordability Model	Community member Jappineh	March 19th 2022
3	○ Need affordable but also quality smart devices ○ Affordability is not on devices alone but on voice and data too, those touchpoints need to be considered too ○ Define the target number of people to reach through this project to achieve significant smartphone penetration. ○ Benchmark on new models of last mile connectivity	Internet Café operator in Soma, LRR	March 19th 2022

No	Issues/concerns raised during the consultation	Category of Respondents	Date
4	○ Capitalize on the youth in implementation as they are the key drivers and largest pool of consumers of digital technologies. ○ Need to effectively do partnership ecosystem mapping and Develop a partnership strategy. ○ Highlight how both the private sector employees' and public servants' skills will be enhanced through this project	SOMATECH, Jarra Soma, LRR	March 19th 2022
5	○ Highlight how the project will help to boost local access to ICT and innovation	Farafenni Youth	March 20th 2022
6	○ Happy with the project which is in line with The Gambia National Development Plan	Regional Governors across the country	March 19th – 23rd 2022
7	○ Do not foresee any strong adverse impacts apart from e-waste management but rather expressed that the project will have many positive impacts ○ Many communities do not have electricity and this might compromise the provision, access and use of the internet.	Pakliba Community	March 19th 2022
8	○ Digital skills development should be given more emphasis and that it should especially target rural areas. ○ ICT literacy skills need to be enhanced ○ Local leaders should have special training and support in ICT	SUNA institute of science and technology, Brikama, WCR and SOMATECH, Jarra Soma, LRR	March 30th 2022
9	○ Expressed that in addition to traditional ways of communicating (when measures against COVID 19 allow) the project should empower communities to use technology-enabled communication which can even better fit the situation of COVID19 that the country is facing.	Individual community members across regions	March 19th – 23rd 2022
10	○ With regard to grievance handling, these stakeholders said that there are existing and functional mechanisms of filing and resolving grievances, mainly linked to the administrative levels. However, some of	Chiefs and alkalos across regions	March 19th – 23rd 2022

No	Issues/concerns raised during the consultation	Category of Respondents	Date
	the existing mechanisms consist of physical or face-to-face interactions with health village heads and district chiefs.		
11	○ During the project implementation, recruitment priority should be given to the local people.	Alkalos, men and women across regions	March 19th – 23rd 2022
12	○ Expressed the need for complementing or supplementing mechanisms such as call centres and internet and web-based mechanisms that can allow communities to get their grievances received and handled without moving from their places.	Interent Café operator in Farafenni	March 20th 2022
13	○ Very happy with the project. It is in line with current societal needs ○ Poor internet connectivity ○ Political interference in the selection of beneficiaries ○ Sexual exploitation, abuse and harassment could be eminent from project contractors and staff ○ Unequal payments to males and females when the same hours of labour are used for the same work.	Men and women across regions	March 19th – 23rd 2022
14	○ Internet is still very expensive, especially the broadband that is still not accessible because it is very expensive	Kwinella villages elders	March 20st 2022
15	○ Land use problems for projects like this ○ Lack of e-commerce platform for marketing agricultural produce ○ The proportion of women taking leadership positions is still low compared to men as socio-cultural norms favour men over women.	Men and Women farmers across regions	March 19th – 23rd 2022
16	○ Bias in the selection of project beneficiaries ○ Political interference in the selection of beneficiaries ○ Lack of capacity building on ICT for community members in terms of use	Communities across regions	March 19th – 23rd 2022

No	Issues/concerns raised during the consultation	Category of Respondents	Date
17	○ Cutting down of trees for project intervention without replacement	Forestry Dept., NEA, Wildlife Dept.	March 15th 2022
18	○ Limited public consultation on projects, especially on their proposed activities, affects sustainability	Institutions and communities	March 19th – 30th 2022
19	○ Existence of mild male dominance in decision making	Community Women across regions	March 19th – 23rd 2022
20	○ Inadequate human and technical capacity in environmental management and related matters	NEA, Forestry, DoA, and Technical Advisory Committees across regions	March 19th – 23rd 2022
21	○ Underdeveloped market information system	Farmers across regions	
22	○ Inadequate research infrastructure (laboratories, equipment, personnel, etc.)	DoA, NARI and NEA	March 16th 2022
23	○ Absence of land use policy and regulation for e-waste management	NEA and MoH	March 16th 2022
24	○ Limited understanding of climate change/variability and its associated risks. ○ Digitalize government institutions	NEA and Forestry	March 16th 2022
25	○ Low access of women to ICT and e-commerce	Business Women across regions	
26	○ Untimely payment of dues to the service provider ○ Access coverage is low, Access penetration is low particularly in rural areas. ○ Improve network connectivity and strength and make internet services affordable for our clients	Gamtel/Gamcel	March 18th 2022
27	○ Introduction and strengthen ICT as a syllabus from Primary to tertiary level as a compulsory.	Real Time Stationary Record and Printing Shop	March 16th 2022
30	○ ICT needs to start from the grassroots since technology is the order of the day. If		

No	Issues/concerns raised during the consultation	Category of Respondents	Date
	we did not digitalize the sector, we would continue to remain backward, since other countries are moving rapidly.	Regional governor, URR	March 19th – 23rd 2022
31	○ Since we provide ISP in the region customers keep complaining about low speed. PURA should be flexible with its policies for ISP.	Rafew Technologies	March 25th 2022
32	○ Have more landing connectivity points in the country. Improve regulation. Come up with more digital projects. More ICT Infrastructure. Improve Enumeration for specialists.	Gambia Submarine Cable	March 17th 2022
33	○ More collaboration with stakeholders and PURA for effective and efficient Internet services.	Unique Solutions	March 16th 2022

7.1.2 PARTICIPANTS' SUGGESTIONS AND RECOMMENDATIONS

- MoCDE should engage local authorities in a consultative manner to instill a sense of project ownership in the communities.
- MoCDE in collaboration with departments of forestry and environment should encourage and promote the protection and caring of trees, particularly in landing station construction sites
- Increase political will in project activities
- MoCDE should facilitate the expansion of internet connectivity to facilitate e-commerce
- MoCDE should provide more technical support in the area of ICT to enhance entrepreneurship
- MoCDE to ensure more capacity building of stakeholder institutions.
- There should be adequate consultations with stakeholders, particularly women and youth and their concerns addressed accordingly within the project's framework.
- Given that there are no e-waste management guidelines, there is a need for awareness and training of various stakeholders and operators/contractors for the proposed project.
- NEA officials mentioned that once roles and responsibility under the proposed projects are well defined, both institutions will assess whether or not the ESMS need to be reviewed and updated to accommodate E&S risks associated with this project.
- Local/traditional authorities engage the service providers to improve the quality of service in their areas.

- GSM companies to provide a 4G+ network that can enhance a wide range of Value Added Services(VAS) to The Gambia market.
- MoCDE and PURA to encourage service providers to strengthen and improve the services particularly at the grassroots through advocacy.
- MoCDE to increase capacity in both infrastructure and training and provide to increase the level of literacy of ICT.
- Government to increase spending on ICT infrastructure
- MoCDE and service providers to ensure good and affordable ICT services to all.
- MoCDE engages people with technical know-how to support the service providers.
- Government to provide more incentive packages to maintain the technical capacity.

7.2 GRIEVANCE MECHANISM

In line with the World Bank ESF a Grievance Mechanism (GM) has been prepared and integrated into the Stakeholder Engagement Plan (SEP). Please refer to Annex 17.

A GRM shall be established under the Project Implementation Unit (PIU) to address complaints arising during the project implementation of all sub-components. Concerning the grievance at the contractor level and following ESS2, a labor-management procedure (LMP) has been prepared as a standalone document. The LMP has taken into account the treatment of grievances for all project workers.

Project direct workers will be informed about the grievance redress mechanism during meetings at the time of the induction and training will be provided where required. Contracted workers will be informed about the grievance redress mechanism through meetings at the workplace as well as notices to be made available at the workplace. The Grievance Redress Committees (GRCs) are to be established to handle the arising grievances. The process of how to go about grievances handling is documented for further reference.

The workers' grievance mechanism will include:

- A procedure to receive grievances such as a comment/complaint form, suggestion boxes, email, a telephone hotline;
- stipulated timeframes to respond to grievances;
- A register to record and track the timely resolution of grievances;
- A responsible department to receive, record and track the resolution of grievances.

The onsite WARDIP's Environmental and Social safeguards specialists shall monitor the contractors' recording and resolution of grievances, and report these to the project manager in their monthly progress reports. The process will be monitored by the GRM Focal Point, the safeguards specialists will be responsible for the project GRM. The direct workers' grievance mechanism will be described in staff induction training, which will be provided to the newly recruited project workers. The mechanism will be based on the following principles:

- The process will be transparent and allow workers to express their concerns and file grievances;
- There will be no discrimination against those who express grievances, and any grievances will be treated confidentially;
- Anonymous grievances will be treated equally as other grievances, whose origin is known;
- Management will treat grievances seriously and take timely and appropriate action in response.

7.2.1 COMPLAINTS INVOLVING SEA/SH AND VAC

For complaints regarding SEA/SH and VAC, receiving and treating the complaint will be different from the procedure for general complaints outlined above. At all times, the approach for such issues will follow a survivor-centered approach, and the anonymity of the survivor will remain intact, with the confidentiality of the survivor's express consent. The security of the involved parties will not be breached. A mechanism in the form of a ***GBV/SEA/SH/VAC Compliance Team (GSVCT)*** will be set up to manage cases of SEA/ SH and VAC. The membership will include, at least four representatives as follows:

- A social or environmental safeguards officer trained by the GBV Consultant
- The occupational health and safety manager from the contractor or someone else tasked with the responsibility for addressing GBV and VAC at the time and seniority to devote to the position will also be trained by the GBV Consultant;
- A representative from a local service provider with experience in GBV and VAC (the 'Service Provider').
- A representative from the MoCDE handles gender issues.

These members will be specially trained on the management and review of SEA/SH complaints, the importance of a survivor-centered approach, and guiding principles for survivor care and management of SEA/SH data and claims. If permitted by the survivor, a representative from a service provider should participate in the management committee to provide advocacy on behalf of the survivor and ensure that survivor care principles are respected throughout the process. Below are the procedures for managing SEA/SH–related complaints.

7.2.2 PROCEDURES FOR THE MANAGEMENT OF SEA/SH-RELATED COMPLAINTS

Step 1: Uptake

A complainant who wishes to lodge a SEA/SH-related grievance may use any trusted channel available to her or him to file a complaint with the project GM. The project should identify secure, confidential, and accessible entry points through which survivors will feel safe and comfortable making reports (e.g., an anonymous complaint box, grievance form, telephone, service provider, community-based structure, or focal point, etc.). Complainants may also use contractor grievance processes to file SEA/SH claims, but once filed with the contractor, the claims should be referred to the project GM operator.

The appropriate actor should complete a complaint intake form after having obtained the survivor's written consent to proceed with the grievance. Suppose the complainant has not yet been referred for services, in that case, the intake actor should confirm whether the survivor wishes to receive support and obtain the survivor's consent to be referred for appropriate care, connect the survivor with locally available providers, or arrange for remote support where needed. Medical, psychosocial, and legal aid services should at least be made public, other benefits if possible (for example, socio-economic, security and legal.).

If the survivor chooses to be referred for services only and not to file a complaint, then the survivor's wishes must be respected; the service provider can then ask if the survivor consents to share basic case information to assist the project in tracking the cases that choose not to access the GM. The survivor always retains the right to be referred for services whether or not there is a link established between the project and the incident in question.

Where community-based uptake points are utilized, these actors must be trained on how to receive and refer SEA/SH cases following survivor care principles, apply active listening techniques, and complete and store intake forms safely and confidentially. Any information collected about a survivor or the alleged perpetrator must be recorded and maintained separately from other grievance documentation, in a secure and lockable space, with strictly limited access.

Step 2: Sort and Process

Once the complaint has been formally received by the GM operator, with informed survivor consent, the GM focal point should verify that the complainant has been offered the opportunity to receive services, and if not, ensure that the survivor is referred for necessary services upon obtaining the survivor's informed consent.

The complaint should then be triaged as a SEA/SH complaint and the coordinator for the verification structure should be notified that a SEA/SH complaint has been received and will need review. The GM focal point should also notify the appropriate MoCDE focal point, who in turn will inform the World Bank project lead, within a 24-hour period that a SEA/SH complaint has been received. The GM focal point needs only share the nature of the case, the age and sex of the complainant (if known), whether there is a link with the project, and whether the survivor has been referred for services. No identifying information for the survivor or the alleged perpetrator may be shared with either the MoCDE or World Bank focal points.

Step 3: Acknowledge Receipt

The GM focal point should ensure that the complainant receives a document acknowledging formal receipt of the SEA/SH grievance within three days of filing the complaint. Delivery of the acknowledgment to the complainant will depend upon how the complaint was initially received; ideally through a service provider, all communication with the survivor can be done through the service provider.

Step 4: Verification Process

The verification process for a SEA/SH grievance will be handled by the GBV/SEA/SH/VAC Compliance Team (***GSVCT***) as described above. Once the coordinator convenes, GSVCT will review available information about the SEA/SH claim in question, the nature of the claim, and whether there is a link with the project. The committee will also recommend the alleged

perpetrator's employer or manager as to appropriate disciplinary sanctions per the code of conduct, type of incident, and the applicable labor laws and regulations. Potential disciplinary sanctions for alleged perpetrators can include but are not limited to informal or formal warnings, loss of salary, and suspension or termination of employment. The committee must complete the verification process and render its decision within ten days of receipt of the complaint.

It should be noted that the objective of the verification process is to examine only whether there is a link between the project and the reported SEA/SH incident and to assure accountability in recommending appropriate disciplinary measures. The verification process establishes neither the innocence nor the guilt of the alleged perpetrator as only the judicial system has that capacity and responsibility. In addition, all final decisions regarding disciplinary actions will rest solely with the employer or manager of the alleged perpetrator; the verification committee can make only its recommendations.

Step 5: Monitor and Evaluate

Monitoring the SEA/SH complaints will be essential to ensure that all complainants are offered appropriate service referrals, that informed consent is obtained in all cases for both fillings of grievances and service referrals, and that all grievances are handled safely confidentially, and promptly. Any information shared by the GM operator with the MoCDE or World Bank will be limited as noted above under **Step 2**. The project GM operator should enter into information-sharing protocols with service providers to ensure safe and confidential sharing of case data and appropriate closures of SEA/SH cases.

Step 6: Feedback

Once the verification process has been concluded, the result of the process shall be communicated first to the survivor within fourteen days, ideally through the service provider, to allow the survivor and relevant advocates the appropriate amount of time to ensure adequate safety planning as needed. Once the survivor has been informed, the alleged perpetrator can be informed of the result as well. If either party disagrees with the result, s/he can appeal the verification committee's decision via the GM appeals process and must file an appeal within fourteen days of receipt of the verification result. This appeal will be filed to the Permanent Secretary, who will set up a committee composed of relevant experts and the Project Coordinator, MoCDE.

7.2.3 RESOURCES AND RESPONSIBILITIES FOR IMPLEMENTING STAKEHOLDER ENGAGEMENT ACTIVITIES

During the implementation phase of the Project, the grievance mechanism shall carry out the following:

1. Establishing a Grievance Redress Committee GRC) and MoCDE will determine a sitting allowance for GRC members
2. Establish multiple grievance uptake locations and channels for receiving grievances (Chiefs, Alkalos, Village Development Committees (VDC) etc.
3. Fixed service standards (transparency, fairness, accountability, timeliness) for grievance resolution and adjudication process

4. A reliable and effective reporting and recording system (grievance register, complaints logbook – both hard copy and e-copy)
5. A clear and transparent procedure for assessing and responding to the grievance
6. Capacity building of both actors working in the GM and among contractors and community of how the GM works
7. Develop a SEA/SH and VAC Prevention and Management Plan
8. A SEA/SH Action Plan and Code of Conduct (CoC) have been developed. Refer to stand-alone document.

Table 11: implementation plan for the Grievance Redress Mechanism

Phase	Process	Description	Completion timeframe	Responsible Agency/Person
1	Receipt of complaint	Document date of receipt, name of complainant, village, nature of the complaint, and inform the MoCDE	1day	Project Focal point in the regions
2	Acknowledgment of grievance	By letter, email, phone	1-3 days	Social Development Specialist of MoCDE
3	Screen and establish the merit of the grievance	Visit the site; listen to the complainant/community; assess the merit	3-7 days	GRC, including the social development specialist
4	Implement and monitor a redress action	Where the complaint is justified, carry out resettlement redress in line with the entitlement matrix	10-15 days or at a time specified in writing to the aggrieved PAP	Social Development Specialist
5	Extra intervention for a dissatisfied scenario	Review the redress steps and conclusions, provide an intervention solution	2-4 weeks of receiving a status report	MoCDE
6	Judicial adjudication	Take the complaint to the court of law	No fixed time	Complainant

8 ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

8.1 INTRODUCTION

The framework for environmental and social impact assessment comprises the ESIA, ESMP and related safeguard instruments. This section outlines the guidelines for these elements: the impact prediction process in ESIA, identification of mitigation measures in the ESMP and the framework for effective management and implementation of the mitigation and enhancement measures in the ESM. The section begins with guidelines for the screening subprojects.

8.2 ENVIRONMENT AND SOCIAL MANAGEMENT PROCESS

1. Project screening and categorization

Screening is the first stage of the Environment and Social (E&S) process which results in a key E&S decision, namely to either conduct the assessment (based on the likely significant impacts) or not conduct it (in the anticipated absence of such impacts). Screening needs to follow specific procedures often described in the legislation so all the projects follow the same process. Key contributions of the screening process are: (a) Facilitates informed decision making by providing clear, well-structured, factual analysis of the effects and consequences of proposed actions and (b) influences both project selection and policy design by screening out environmentally and/or socially unsound proposals, as well as modifying feasible action.

2. Screening of subprojects

The process determines whether the subproject should undergo a full assessment or not. It is based mainly on reviewing the environmental and social information about the subproject and reconnaissance field visits to subproject sites. The screening process is the mandate of the NEA and details of the screening form applied by the institution are provided in Annex 8. The core information requested on subprojects in the form includes the following:

1. Purpose of the subproject;
2. The nature of the subproject is whether it is: *a new project, extension of an old project, or component of an existing project;*
3. Description of the project detailing its specific objectives and activities and resource uses;
4. Detailed location information describing its immediate physical and social environment.

The latter point on detailed location information is verified during the reconnaissance field visit. While the NEA screening form is not detailed on this; it should include the nature of the *physical, biological & human* environments near the subproject location. At the end of the screening process, the subproject could fall into one of the following categories, after the screening process, as per the EIA Regulations 2014.

Table 12: environmental and social safeguards categories

Type of the Project	The Gambia (NEA) Guideline	WB ESF	Remarks
The project is likely to have significant adverse impacts on the environment or society.	Cat A	High Risk	Requires full-scale EIA
The project may have adverse impacts on the environment or society, but these impacts are less significant than those of High risks projects. These impacts are site-specific; few, if any, of them are irreversible; in most cases, they can be mitigated more readily than High risks projects.	Cat B	Substantial Risk	Depending on the scale of adverse impact full-scale EIA may or may not be necessary
The project is likely to have minimal or no adverse impact on the environment or society.	Cat C	Moderate Risk	

8.3 ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

This is perhaps the core of the ESMF as it leads to the potential environmental and social impacts, both positive and negative, which could come as a result of the subproject. The

process shall also consider the climate and disaster risk assessment report to be prepared for the project as well as potential cumulative impacts. The project will finance the deployment of a second cable landing in the Gambia to increase redundancy of the overall network and thereby increase availability of Internet services. This includes (i) the recruitment of a transaction advisor to among others, conduct technical feasibility studies including the development of a high-level design of the new technical solution, analyze potential environmental and social impacts of the solution chosen, and support the country in the overall transaction with the future provider, and (ii) financing of the public part of the investment to deploy the new infrastructure (including the new submarine cable and the new landing station)". A full assessment of risks and impacts in biodiversity was not conducted as part of this ESMF. Therefore, a full biodiversity survey will be prepared as part of technical feasibility studies prior to selection of routine of cable and location of landing site. This survey will include identification of the biodiversity hotspots and sensitive habitats along the relevant portion coast (with a map if possible). In addition, a robust screening mechanism and exclusion list will be provided to guide the selection for the routine of the submarine cables and the sitting of the landing stations and other works expected under the project.

A fine-scale map for turtle nesting including other habitats within at least 25 m depth will also be prepared to inform the technical design studies.

Various tools are applied in impact prediction including professional judgments, GIS and network analyses to mention a few. These should be applied within the context of the following procedure:

1. field visit to subproject locations to document the nature and conditions of the physical, social and biological environment within the zone of influence of the subproject; GPS is a very useful tool during such visits for map production;
2. extensive consultations with communities within the zone of influence of the subproject and those that will benefit from it and maybe away from the location;
3. extensive consultations with institutions, partners and other stakeholders, which will be largely involved with the implementation of the subproject;
4. review of similar projects, especially those located in similar environments;
5. identification of impacts and describing their significance;
6. Proposing mitigation measures for the significant impacts.

The significance of the impacts, social or environmental, is determined by changes to the current baseline environmental conditions as a result of the Project. Therefore, a detailed description of the environmental elements provided in Annex 13 should be included in the ESIA report; every impact, positive or negative, should refer to an aspect of the baseline conditions.

8.3.1 IMPACT ASSESSMENT REPORT

As a framework where one element leads to another, we propose a single report format that incorporates all elements (ESIA, and ESMPs). It is worth mentioning that the *'analysis of alternatives'* as an essential component of the ESIA is part of the report. Many times this is not provided, which should be avoided at all costs. An impact assessment should ultimately provide a range of development options to the one proposed, especially where the alternative could have lesser impacts on the environment.

8.3.2 ENVIRONMENTAL & SOCIAL MANAGEMENT PLAN

This framework identifies mitigation & management, measures and actions for the significant impacts predicted by the ESIA process. The chosen mitigation and management measures and efforts should be described, clearly giving the reason for choosing that option for the negative impact in question. In essence, the ESMP section of the report should have the following details:

1. summary of the potential negative and positive impacts of projects, citing which phase of the project (construction or implementation) the effect is expected to occur;
2. A detailed description of the measures/actions for mitigating the negative impacts, bearing in mind the mitigation hierarchy consisting of *avoidance, minimizing & mitigation, and offset*. In other words, the choices of measures/actions should first seek to avoid the impacts before considering minimizing its effects and choosing mitigation as a last resort;

3. enhancement measures for the positive impacts;
4. as an action plan, an implementation plan should be provided for the impact management measures that spell out institutional arrangements/responsibilities for each impact;
5. a detailed monitoring plan should also be provided that defines indicators, methods of data collection, schedules and responsibility;
6. reporting responsibilities for both implementation and monitoring;
7. not least the budgetary requirements of both implementation and monitoring need to be spelled out in addition to the source of the funds.

Templates for implementation and monitoring plans are provided in Annex.15

8.4 INSTITUTIONAL ARRANGEMENTS AND CAPACITY ANALYSIS FOR IMPLEMENTATION OF THE ESMF

The MoCDE, NEA, relevant ministries, private sector, and communities are the main implementers of the project's environmental and social mitigation measures. The other institutions and agencies whose functions relate to the project in terms of oversight, project design and technical support include the Project Steering Committee (PSC) and Project Technical Committee (PTC).

8.4.1 ROLES OF KEY INSTITUTIONS IN THE ESMF AND PROJECT IMPLEMENTATION

This section looks at the roles of institutions in implementing and monitoring the ESMF. There are various institutions with specific mandates in the ESMF. The implementation of the ESMF is the responsibility of the MoCDE. Monitoring of the ESMF is paramount as it ensures that mitigation and enhancement measures are implemented. Monitoring assists to :

1. Improve environmental and social management practices
2. Check the efficiency and quality of the environmental processes
3. Establish the scientific reliability and credibility of the ESMF for the Project
4. Provide the opportunity to report on the safeguards results, impacts and proposed mitigation measures

The monitoring shall be viewed in three phases: monitoring compliance, impact monitoring, and cumulative impact monitoring. The National Environment Agency is responsible for monitoring compliance and resources should be made available by the project for the Agency to execute this task followed by reporting. The project team does impact monitoring and cumulative monitoring does impact monitoring and cumulative monitoring.

Furthermore, it will also identify the capacity-building needs of the various institutions and persons involved in the implementation of the ESMF/ESMPs. It prescribes the approaches and methods as required.

8.4.2 INSTITUTIONAL FRAMEWORK FOR ENVIRONMENTAL IMPACT ASSESSMENT AND ESMF IMPLEMENTATION

The NEA has the legal mandates of the custodian of the EIA process in the country. The Agency works closely with multi-sectoral EIA Working Group comprising relevant stakeholders from the public sector, private sector and civil society. The roles of the various stakeholders in the EIA process are as follows:

1. The EIA Working Group

Advises the NEA Executive Director on approval or otherwise of environmental impact statement. To undertake scoping exercises, public consultations and the review of draft environmental impact statements that developers or proponents submit to the NEA for the Executive Director's approval in place of environmental clearance before the project starts.

2. The National Environment Agency (NEA)

The NEA is responsible for ensuring compliance with laid down EIA procedures in the Gambia according to the NEMA Act 1994) and its amendment. The Agency is expected to give environmental approval for Projects. The EIA is applied in the Gambia to development projects and other undertakings as an environmental permitting prerequisite and a major environmental management tool. The NEA is represented in all five regions of the country and will support the project by exercising its permitting and monitoring role.

Largely, the agency screens projects using the EIA Screening Forms. To support the EIA Working Group to conduct scoping of projects requiring EIA/ESIAs. Develop the terms of reference for the subsequent environmental impact study. Furthermore, the Working group coordinates public consultations on draft environmental and social impact statements submitted to the NEA, the review of same is also its responsibility.

3. The Developer/Investor (MoCDE)

- Completes the EIA screening form and takes part in the scoping exercise.
- Conducts the environmental and social impact assessment and findings statement to NEA for consideration by the EIA Working Group and the public through public consultations or disclosure
- Implements that section of the impact statement on the remedial actions of the environmental management plan. In addition to the EIA and ANR Working Groups, the NEA has other cross-sector working groups that advise it and other government departments on specific environmental and natural resources issues as per their respective names.

4. Regional Coordinating team

The NEA regional team will collaborate with the ANR/EIA subcommittee (which is essentially the regional version of the EIA Working Group at the national level) of the Technical Advisory Committee (TAC) located at the Office of the Governors of the Regions. The Regional team

will work with the MoCDE to provide technical backstopping and monitoring to the implementing communities.

5. Project (Beneficiary) Communities

The beneficiary communities are particularly the most important for environmental and social safeguards implementation since the benefits or otherwise are borne by the community.

Table 13: summary of stakeholder analysis of key institutions

Institution	Mandate	Interest in Project	Role and Responsibilities in The Project	
			Implementation of mitigation measures	**monitoring**
National Environment Agency (NEA)	NEA is mandated Gambia government Agency to ensure compliance of projects with national environmental management laws	The project can generate adverse environmental effects if proposed surveillance activities are not adequately implemented.	NEA ensures compliance with laid down EIA procedures NEA will have in charge to clear E&S studies, conducting environmental monitoring, Report validation and issuance of the permit (when required)	Quarterly environmental monitoring with key stakeholders
MOCDE	Management and Coordination of all project activities	Responsible for the day-to-day management of the project activities	Ensure implementation of all project activities successfully in line with the government agreements with the World Bank	Overall monitoring of the project activities with M&E unit working closely with safeguard team.
Ministry of Environment, Climate Change and Natural Resources	This Ministry oversees the implementation of the environmental policies adopted by the National Environment Management Council (NEMC)	The Project is in line with policy goals in the sound management of the environment and conservation of natural resources	To ensure adopted policies are in line with our national environmental laws	Policy guidance during project implementation
Department of Water Resources	It is responsible for assessing the periodic variation of the	The project is in line with Gambia's water policies in ensuring the periodic	Direct monitoring of the implementation of enhancement of mitigation measures and concerns	Potential contributor towards the cost of implementation of the

Institution	Mandate	Interest in Project	Role and Responsibilities in The Project	
			Implementation of mitigation measures	**monitoring**
	country's water resources, their use and water resources planning.	assessment of water resources, use and water resource planning	changes in the quality or contamination of surface and groundwater in project intervention areas.	ESMP since this is not the project's responsibility
Ministry of Health	The project has implications on public health issues	Monitor and help in controlling public health issues relating to the project	Potential contributor towards of implementation of the plan in terms of environmental health including COVID19 matters	Key stakeholders in the monitoring of controlling public health issues
Ministry of Gender, Children and Social Welfare	The project has implications for women's issues	Promote women empowerment and resilient	Serve on the Grievance Redress Committee (GRC) within the Grievance Redress Mechanism to oversee issues related to GBV/VAC.	Key stakeholders in the monitoring of controlling women and children issues
Regional Governors offices	Oversee the ANR/EIA Working Groups of the Regional TACs. .	The TACs will assist with monitoring of Project implementation at the regional level based on the ESMPs and other safeguards	Oversee the ANR/EIA Working Groups of the Regional TACs. The TACs will be responsible for monitoring project implementation within the Regions based on the ESMPs.	Regional level monitoring working with MoCDE safeguard team
NGOs/CBOs	Working in communities	Assisting in sensitization and monitoring	Participate in the technical committee	Support the implementation of the project relevant activities

Institution	Mandate	Interest in Project	Role and Responsibilities in The Project	
			Implementation of mitigation measures	monitoring
Department of parks and Wildlife Management	Mandated for the protection and conservation of biodiversity	Can provide technical expertise in siting of project areas particularly ecological sensitive area	Participate in the technical committee and contribute to the implementation process as a partner	Support the implementation of the project relevant activities

8.5 ASSESSMENT OF STAKEHOLDER CAPACITIES IN ENVIRONMENTAL AND SOCIAL MANAGEMENT AND CAPACITIES BUILDING MEASURES

The environmental and social management of activities of the WARDIP project involves various stakeholders whose qualifications and experiences must meet the ESMF requirements per the World Bank's ESSs and those of the national legislation relevant to the Project. This is important for the effective and successful implementation of this ESMF and other safeguard instruments for the project.

The assessment of environmental and social management capacities is summarized in the following table:

Table 14: environmental and social management capacities

Institution	Capacities		Capacity-building measures
	Strengths	**Limitations**	
MoCDE	Have experience and the management of projects. Coordination capacity for the working relationships among different entities that will be engaged in the project implementation	limited technical expertise to implement the Environmental and Social safeguard instruments	Need to identify and recruit relevant technical experts such as environmental and social safeguards experts, etc. that can be incorporated to address the project's key environmental and social aspects during the implementation. Provide on-the-job training. Contract consultants to provide project management support to the MoCDE during project implementation. Support areas include Supervision of the implementation of civil works; Environmental and social supervision of safeguards implementation; In addition to the consultants, the MOCDE can bring on board relevant staff members from other implementing departments as necessary.
National Environment Agency (NEA)	NEA is the technical arm for environmental management in The Gambia and enforces the NEMA,1994; EIA Regulations 2014, EIA guidelines and similar legislation SEA Policy 2017 – 2021 and SEA Guidelines 2016	NEA capacity is currently inadequate to inspect efficiently, monitor, and conduct tests and analyses to ensure effective implementation of activities as required. This concerns equipment and materials and technical skills at the regional level; due to the lack of equipment and supplies, the	Sign MoU to facilitate different areas of support for the implementation of the E&S instruments such as ESMF/ESMPs, and monitoring both at the central and regional levels. Need to understand ESF requirements in prepared safeguard instruments (ESMF, ESIAs/ESMPs.)

	Responsible for giving the final approval of environmental assessments and certifying, where appropriate the compliance of the proposed activities with Gambia's environmental protection legislation; Ensures the full implementation of the ESMF/ESMP/ESIAS for compliance through quarterly monitoring with EIAWGs Member of SC. Part of the decision-making process of the project.	Formulation Laboratory is not operational. Familiarity with the Bank ESF is also a limit that could affect their review of E&S instruments prepared under ESF	
Ministry of Environment, Climate Change and Natural Resources	Responsibility for environmental policies Advocates and promote the environmental observance of environmental policies on behalf of the government	Limited institutional capacity on environmental management and other related issues.	Training in varying degrees in environmental assessment, monitoring and reporting, environmental laws, and participatory resource mapping and monitoring, SEA/SH.
Department of Parks and Wildlife Management (DPWM)	Responsible for management of biodiversity, knowledgeable about siting of activities in certain ecologically sensitive areas and related matters under Ministry of Environment.	Institutional capacity is currently inadequate on E&S instruments prepared under World bank ESF	Training in varying degrees in environmental monitoring and reporting, environmental laws, and participatory resource mapping and monitoring

Department of Water Resources	It is responsible for the assessment of the periodic variation of the country's water resources, their use and water resources planning. Coordinates and regulates the use of surface water	Limited institutional capacity on environmental management and other related issues.	Training in varying degrees in environmental monitoring and reporting, environmental laws, and participatory resource mapping and monitoring, SEA/SH.
Ministry of Fisheries and Water Resources and NAMs	Statutorily mandated Gambia government institution responsible for the policies of all water and fisheries resources	Limited institutional capacity on environmental management and other related issues.	Training in varying degrees in environmental monitoring and reporting, health and safety, environmental laws, climate-smart agriculture and participatory resource mapping and monitoring, SEA/SH
Local Government Authorities	Regional authority within whose administrative area the project falls and a potential supporter in both project and post-project era	Limited institutional capacity on environmental management and other related issues.	Training in varying degrees in environmental monitoring and reporting, health and safety, environmental laws, climate-smart agriculture and participatory resource mapping and monitoring, SEA/SH.
Ministry of Health	Have experience and can Monitor and help in controlling public health issues relating to the project	Limited institutional capacity on environmental management and other related issues.	Training in varying degrees in environmental monitoring and reporting, health and safety, environmental laws, climate-smart agriculture and participatory resource mapping and monitoring, SEA/SH.
Ministry of Gender, Children and Social Welfare	Mandated and experience in gender policy implementation, Promoting women empowerment and resilient, and children & social welfare	Limited institutional capacity on environmental management and other related issues.	Training in varying degrees in environmental monitoring and reporting, health and safety, environmental laws, climate-smart agriculture and participatory resource mapping and monitoring, SEA/SH.

Regional Governors offices	Oversee the ANR/EIA Working Groups of the Regional TACs. The TACs will be responsible for monitoring project implementation within the Regions based on the ESMPs.	Given that most of the members of the TACs are not trained in environmental issues (their respective sectoral backgrounds include mainly agricultural extension, veterinary and animal husbandry, water resources management, forestry, etc.), members will have problems in supporting the WARDIP in the Regions; the majority of the memberships are not familiar with general environmental management, and more so with specific ESIA preparation and implementation.	Training workshops on the implementation of the ESMF/ESMPs, and WB ESF

8.6 ENVIRONMENTAL AND SOCIAL CAPACITY BUILDING

Taking into consideration the limited capacities of the institutions involved training and capacity building is necessary for the key stakeholders to ensure that they have the appropriate knowledge and skills to implement the environmental and social management framework. The ESMF implementation requires special expertise from the beneficiaries and all project participants at each project stage. To ensure the effective implementation of the project and a clear understanding of the requirements for safeguards of the project, a capacity-building program is proposed under this project.

A detailed capacity-building program will be developed during implementation, focusing on strengthening the local entities responsible for environmental and social management, as well as health and safety. Considering its significance in driving and achieving WARDIP's outcomes, relevant stakeholders should be trained in varying degrees in environmental monitoring and reporting, health and safety, environmental laws, waste management and participatory resource mapping and monitoring and gender-related matters. These stakeholders would include the National Environment Agency, EIA working group, regional from the Communication sector such as GAMTEL/GAMCEL, other departments, MoCDE, TACs/ANR sub-committees, NGOs/CBOs such as TANGO, Action Aid, GAT which can participate in sensitization of project activities and independent monitoring as third party. The training should be in the form of workshops/ seminars. The environmental and the social safeguards specialists to be recruited by the project will also need specific training on Environmental and social Screening of Sub-projects using the NEA Screening Form and Preparation of Terms of Reference for ESIA and related matters. Sensitization on gender-based violence and child protection should be done for the local communities and contractors.

The project is to provide training in general environmental policy and regulations of the World Bank's ESF, relevant national legislation, and specific aspects relevant to this project. It is planned to conduct training and provide information on such topics as the introduction of ESMF, reporting on ESMF/ ESMP, and specific issues relevant for the project implementation. A consultant shall be recruited to produce a capacity-building manual that will include among others the following themes:

- Occupational health and safety awareness, prevention, and management;
- Stakeholder engagement, consultation, and partnerships;
- Labour management procedures; child and forced labor prevention;
- Awareness campaigns and prevention of communicable diseases, including Covid-19 pandemic
- Grievance Mechanism;
- Gender Based Violence (GBV), sexual exploitation and abuse(SEA), sexual harassment (SH) prevention and management, Action Plan and its implementation;
- Emergency preparedness and response plan
- Climate change and extreme event management, resources management for carbon footprint reduction of the IT sector
- Reporting, monitoring and auditing

For the said purpose, before the commencement of implementation, MoCDE/PIU to hire a Consultant with knowledge of the national environmental and social management requirements and a substantial understanding of the policies and requirements of the World Bank's safeguards, who will develop training materials and training for themselves. The training will

include WB's ESF requirements, national rules and procedures for safeguards, and case studies in this regard. After the first series of training by the Consultant, all developed training materials will be transferred to the MoCDE team for further application.

The proposal for capacity-building of the Project on environmental and social issues will cover the following basic areas:

MoCDE potential capacity and key stakeholders training activities for the implementation of ESMF during the process of sub-projects selection, stages of construction and functioning of the sub-projects. A hired Consultant will provide appropriate training for MoCDE and Safeguard Specialists on the requirements of safeguards of the operational policy of the World Bank, preparation of ESIA and ESMP, and further assistance in the monitoring of social aspects and ESMP.

MoCDE potential capacity and the key stakeholders: Consultants together with the ESSs of the MoCDE will develop and conduct a training program on the overall review of the WB ESS and national environmental and social requirements. The purpose of this training will be to present the World Bank's ESF and national environmental requirements for different types (categories) of projects and further necessary actions. There is a need to have World Bank experts support in the training of World Bank's ESF

Beneficiaries' Capacity (institutions, youth, women groups, Extension workers, farmers, entrepreneurs, contractors (construction of infrastructure and agro logistic centers) – introduction training on WB's ESF and national environmental requirements, the content of ESIA, ESMP documents, environmental monitoring reporting during the project implementation.

To provide separate training on specific identified topics relevant for the project. The training materials, along with the requirements of national legislation on safety, health at the workplace and environmental measures, shall provide information on best practices and requirements of international institutions such as the World Bank.

Table 15: capacity building plan and training program

No.	Name of Training	Time and estimated duration of training	Target group	organizer	Estimated cost (in USD)
1	Review of WB ESS and its Implementation during the project cycle. National environmental	During the first year of the Project implementation. Duration - 2 days	Head of MoCDE, PIU and their experts and key stakeholders	Consultants World Bank specialists	20,000

No.	Name of Training	Time and estimated duration of training	Target group	organizer	Estimated cost (in USD)
	requirements for the project preparation and implementation				
2	Implementation of ESMF, ESMP, RPF, ARAP/RAP, SEP, GM	Before the selection of sub-projects Duration - 2 days	ES&SS of the MoCDE/PIU, NEA and key stakeholders IPs	Consultant	5,000
3	ESMF, ESMP, social screening	Prior to the selection of sub-projects Duration - 1 day	NEA/EIA working group and regional TACs/ANR sub-committees	Consultant	5,000
4	SEA/SH training and awareness-raising / implementation of SEA/SH action plan	to be delivered in a combined manner	MoCDE staff Contractors and Supervisors, Partners at the national and regional level Local government /community members	Consultant, MoCDE	10,000
5	Preparation of capacity-building manual and training on relevant identified topics for the project stakeholders	To be done in stages from the inception of the project implementation	MoCDE staff Contractors and Supervisors, Partners at the national and regional level	Consultant(s)	75,000
	Total				**115,000 USD**

8.7 ESMF BUDGET

Table 16: estimated cost for the ESMF implementation

No	Item/Activity	Cost USD	Responsible for financing	Responsible Institution
1.	Capacity Building and Training Program	115,000	WARDIP	Consultant/NEA
2.	Hiring and salary of the Project's ESS for 5yrs	85,000	MoCDE	MoCDE/NEA
3	Mobilization and sensitization of beneficiary institutions and communities Especially in the WARDIP project.	12,000	WARDIP/ MoCDE	MoCDE E&S Safeguards Specialists/ NEA
4.	Environmental Screening and Preparation of ESIAs, ESMPs and related identified studies	140,000	WARDIP	Consultant/ NEA
5.	Environmental and Social Audits for project investments in the target areas.	65,000	WARDIP	Consultant
6	Environmental and social safeguards monitoring and reporting	30,000	WARDIP	MoCDE E&S Safeguards Specialists/ NEA
7	Support to NEA to enhance its capacity for effective participation in the implementation of the project activities and delivery (MoU with NEA)	32,000	WARDIP/MoCDE/NEA	NEA
8	Final assessment of the ESMP	21,000	WARDIP	Consultant/ NEA
	Total	**500,000**		

9 RECOMMENDATIONS AND CONCLUSION

The Ministry of Information and Communication Infrastructure prepared this ESMF for WARDIP that will be implemented across all the project areas in the country to ensure the project implementation is in full compliance with national environmental legislation and World Bank environmental and social framework (ESF).

The policy, legal and institutional frameworks for this ESMF and the socio-economic baseline project were developed; public consultation and participation meetings were conducted; the report provides potential environmental and social impacts and guidelines for mitigation. It also provides the WARDIP environmental and social management process as well as the implementation and monitoring procedures.

This ESMF has an inbuilt grievance procedure that will be used to address grievances that can arise during the project implementation. The estimated budget for the ESMF is US$ **500,000.** Given the nature of the project, the potential adverse impacts are moderate to substantial and can be controlled through proposed mitigation measures. The proposed subprojects, Environmental and Social Impact Assessment (ESIA), will be done and propose site-specific measures to mitigate adverse impacts.

Successful implementation of this ESMF will depend largely on the involvement and participation of local communities. Specifically, it is recommended that: Environmental and Social awareness and education for the key stakeholders and affected communities be an integral part of the ESMF implementation.

From discussions and personal interviews, it was clear that most participants had never heard of the WARDIP project. In this regard, stakeholder involvement in designing project concepts needs to instill project ownership and guarantee its sustainability. Ensure that project sites selection is free from political influence. Given the nature of project activities, Sexual Exploitation and Abuse, Sexual Harassment, child labour and forced labour are considered low. Nonetheless, the contractors will be required in their contracts to commit against the use of forced labor. Every worker on-site will be required to sign an anti-sexual harassment policy which will be developed during the implementation of WARDIP. Further, as part of monitoring activities, the safeguard and M&E team will conduct spot checks to ensure that rules are not violated, and in cases where they are, swift actions will be taken to respond and resolve them.

Based on the foregoing, the MoCDE should hire highly trained and competent Environmental and social Specialists to evaluate and monitor environmental and social risks and impacts management construction and installation phase and operational phase. The government should also provide a regulatory environment that establishes management procedures for e-waste. This ESMF should be reviewed and approved through the national approval process and by the World Bank accordingly.

REFERENCE

- GOTG (2019) National Agricultural Investment Plan (GNAIP). Banjul, the Gambia.
- GoTG (1990) Public Health Act
- GoTG (1994) Hazardous Chemicals and Pesticides Control and Management Act
- GoTG (1994) National Environment Management Act
- GoTG (1999) Environmental Discharge (Permitting) Regulations
- GoTG (1999) Environmental Quality Standards Regulations
- GoTG (2002) Local Government Act
- GoTG (2003) Gambia Roads Technical Services Authority Act
- GoTG (2003) National Council for Arts and Culture Act, 2003
- GoTG (2005) Mines and Quarries Act
- GoTG (2005) The Children's Act (2005)
- GoTG (2006) Forestry Policy (2006-2016)
- GoTG (2007) Anti-littering Regulations
- GOTG (2007) Labor Act
- GoTG (2009) The Communication Act
- GoTG (2009) The Gambia National Gender and Women Empowerment
- GOTG (2009) The National Youth Policy (2009-2018)
- GoTG (2010) The Women's Act
- GoTG ((2013) The National Agricultural Research System of The Gambia: Updated Analysis and Strategy for the Long Term- Draft Report
- GoTG (2014) EIA Regulations
- GoTG (2017) National Development Plan 2018-2021
- GoTG (2018) Forestry Act, 2018
- GoTG (2018) Environmental and Social Management Framework (ESMF): The Gambia Agriculture and Food Security Project (GAFSp)
- NEA (1999) Environmental Impact Assessment (EIA) Guidelines
- NEA (2009) Gambia Environmental Action Plan, Phase II (2019-2026)
- State of the Environment Report –The Gambia (SER –TG) (2010)
- UN Convention on Biological Diversity (CBD) (1992)
- UN Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) (1979)
- UN Convention on the Rights of Persons with Disabilities (CRPD) (2006)
- UN Convention on the Rights of the Child, (UNICEF) (1989)
- UN Framework Convention on Climate Change (UNFCCC) (1994)
- United Nations (2001) Convention to Combat Desertification (CCD) (1994)
- WB (2018) ESF Guidelines
- UNDP. 2015. Human Development Report. United Nations Development Programme (UNDP). Available at: http://bit.ly/1nwKJGt

ANNEXES

ANNEX 1: DISCUSSION GUIDE – WARDIP ESMF ASSIGNMENT - GAMBIA, 2022

Section A: Institutions

Name of Institution/ Partner:			**Local Government Area:**
Address:			
Name of Respondent:			**Telephone #:**
Gender	**Male**	**Female**	**Age:**
1.	Does your institution have a stake in the ICT sector of The Gambia?		
2.	If yes, what is your stake?		
3.	What role does your institution have or offer in developing the ICT sector in The Gambia or can offer in the implementation of project activities?		
4.	What is your assessment of the ICT sector and projects in this country?		
5.	Are rules and regulations of the ICT management system documented and available?		
6.	Is there a dispute resolution mechanism (e.g. an appeals council) to address issues of procedural & outcome equity for the sector?		
7.	If yes, give a brief explanation of the mechanism		
8.	Are there any challenges associated with the development of the ICT sector in this country from your perspective?		

9.	If yes, what are the challenges?	
10.	How could these challenges be resolved from your point to improve the ICT sector in this country?	
11.	Any Capacity strengthening needs to be addressed to enable other partners and your active participation in the implementation of this project?	
12.	If yes, describe the capacity building needs.	
13.	Do you know of any activities that were undertaken by MoCDE of importance for the ICT sector in the country?	
14.	If yes, what are the activities?	…… ……..
15.	Are there anything more you would like to share with the team on issues related to the ICT projects in The Gambia and the way forward?	
16.	If yes, what are they?	…… …… …… ……

Section B: Community members (group)

Please indicate your main area of occupation/business:	

Local Government Area:		
Address:		
Name of Group:	**Telephone # of the Head:**	
Participants	**Male**	**Female**
Benefits for the beneficiaries		
1	What is/are your expectation concerning this project in terms of contributing socio-economic improvement?	…… …… …… ……
2	What is your assessment regarding the improvement of your livelihoods as a beneficiary of the ICT project?	…… …… …… ……
3	Does this community have a management structure in place to ensure the sustainability of the project as a beneficiary?	…… …… .
4	Are there any challenges associated with the implementation of the project?	…… …… …
5	If yes, what are the challenges?	…… ……
6	How do you think these challenges could be addressed from your point of view?	…… ……..
8	What role (s) do you expect from Local authorities in the project?	…… ……

9	Do you foresee any other issue that may be associated with the project?	…… …… ……
10	If yes, what is/ are the issue(s)?	…… ……
Environmental and Health-related issues of the project		
11	Do you think there are environmental impacts that may be associated with the implementation of the project?	…… ……..
12	If yes, what are the environmental impacts that you think may be associated with the project implementation?	…… …… …… ……..
13	Will the implementation of project activities affect or destroy any sensitive or sacred sites in your area?	…… ……
	If yes, name the site (s) in the area	…… …… ……
14	Will this project activity generate any waste?	
15	If yes, which type of waste is generated?	…… …… ……
16	How will the project manage waste and the by-products from project activities?	…… ……

17	Do you think the project activities will impact your surrounding?	…… …… ……
18	If yes, how will the activities impact your project intervention sites?	…… ……
19	Do you think the implementation of the project in this area will affect the neighborhood?	…… …… ……
20	If yes, how will it affect the neighborhood?	…… …… ……
21	How do you think such challenges could be addressed during project implementation?	…… …… …… …… …… ……..
22	Do you think your home, workplace, site, farms, and rice field will be affected by the project?	…… …… …… ……..
23	If yes, explain how?	…… …… …… …… …… ……
Consultant (Observation)		

24	Brief description of the intervention area (*Topography, Vegetation, water ways (streams and lakes*)	…… …… …… …… …… …… ……
25	Assess the environmental situation and identification of the environmental and social impacts *(Topography, Vegetation, water ways (streams and lakes), land ownership, sensitive ecosystem i.e. close protected areas or forest)*	…… …… …… …… …… …… …… …… …… ……

Section C: Gender Situation And Gender-Based Violence Questions Individuals (KII)

1	Name of respondents:……	Gender: Male Female
2	Age of respondents:……	Level of education: ……..
3	Vocational skills/professional skills if any)?	…… ……
4	What is your power in decision-making for managing the household?	…… …… …… …….
5	What is your power in decision-making for your economic activity?	…… …… …… ……..
6	In your households are your special needs relating to your gender adequately satisfied?	…… ……

		…… …… ……..
7	If No, why?	…… …… …… ……
8	Who decides who should attend community meetings?	…… …… …… ……
9	Who makes decisions at community meetings?	…… …… …… ……
10	Who decides leadership and participation in ICT and other community programs?	…… …… …… ……
11	Who does what kind of ICT work? Men? Women?	…… …… …… ……
12	Are men and women treated equally regarding Formal/informal work?	…… …… …… …… …… ……
13	Are men and women treated equally regarding Paid/unpaid work?	…… …… …… …… …… ……..
14	Are men and women treated equally regarding Full-time/part-time?	…… …… …… ……

		……
15	Are men and women treated equally regarding Skilled/unskilled work?	…… …… ……
16	Who occupies leadership positions in your community?	…… …… ……..
17	Who are consulted about solutions to problems in your community?	…… …… ……
18	What specific mechanisms can be proposed to encourage and enable women to participate in the project?	…… …… …… ……
19	Who has access to and control of resources, services and decision-making?	…… …… …… …… ……
20	Will the project potentially challenge the existing division of tasks, responsibilities, and resources among men and women?	…… …… …… …… ……...
21	In your economic activity are your special needs relating to your gender adequately satisfied	…… …… …… ……..
22	Are there avenue/s and procedures for addressing Sexual Exploitation, Abuse and Harassment?	…… …… …… ……
23	If yes, what are the avenues?	…… …… ……..

ANNEX 2: ENVIRONMENTAL AND SOCIAL SCREENING

Name of Sub-project:	**Local Government Area:**
District:	**Community:**
Contact person's Name:	**Telephone #:**

No	**Screening Questions**	**Yes**	**No**	**Comments** *(In the case select "yes", provide detailed explanation)*
1	**Project's siting:** Define project's boundaries and area of influence			
	Is the project site adjacent to or within any of the following sensitive receptors?			
	Natural habitats and/ or legally protected areas (wetlands, forests, nature reserves); if yes, is there possibility of a critical habitat present?			
	Cultural heritage site			
	Is the proposed site located on agricultural land?			
	Is the proposed site located on area used by vulnerable groups (women farmers)			
	Unique or aesthetically/historical valuable land			
	Is the proposed site located nearby airport/			
	Is the proposed site located in migratory route of birds			
2	**Potential Environmental Impacts**			
	Impacts on natural resources that constitute livelihoods of community (e.g. grazing or hunting grounds)?			
	Impacts on marine biodiversity?			
	Disfiguration of landscape?			
	Is there potential for landslide and soil erosion impacts?			
	Increase in waste generation?			
	Waste water from camping sites to be directly discharged to the surface water resources or not?			

	Construction waste directly discharged to the surface water?			
	Other potential biodiversity impacts (specify)?			
	Loss or destruction of unique or aesthetically valuable land			
	Disturbance of large areas due to material quarrying			
	Disposal of large quantities of construction spoils			
3	**Potential Community and Occupational Health and Safety Impacts**			
	Will the construction works disturb other commercial/community/residential activities?			
	Will the project create major noise/vibration?			
	Closest residence to the solar panel			
	Will it create dust problem around the sites?			
	Will project's construction cause disturbance to the transportation in the project's site?			
	Will batteries be removed/disposed (lead-acid or nickel-cadmium batteries) from battery-powered or battery-backup items?			
	Will there be social conflict in case of workers hired from other region?			
4	**Potential Social Impacts**			
	Type of land *Private land* *Public land* *Government land* *Leasehold land*			
	Type of land procurement *Voluntary land donation (VLD)* *Involuntary acquisition* *Negotiation*			
	Permanent land acquisition			

	Temporary land acquisition			
	Loss of productive land			
	Impacts on livelihoods/ economic displacement?			
	Is there any household need to be relocated?			
	Is the resettlement site environmentally and/or culturally sensitive?			
	Project's construction will cause any damage to the existing local roads system?			
	Will soil excavation during project's construction cause soil erosion?			
	Will project need to open new access roads?			
	Will project cause encroachment on historical/cultural/religious areas?			
	Acquisition of private land leading to loss of shelter and livelihood			
	Involuntary land taking resulting in loss of income, livelihood, sources of livelihood, loss of access to common property resources and/or private residential and/or property resources			
	Adverse impact to women including economic and safety concerns			
	Possible conflicts with and/or disruption to local communities			
	Significant issues raised by the stakeholders during consultation			
	Uncontrolled human migration into the area, made possibly by the subproject activities			
	Disproportionate impacts on the poor, children and other vulnerable groups			
	Community health and safety risks due to the transport, storage, and use and/or disposal of materials likely to create physical, chemical and biological hazards			
	Risks to community safety due to both accidental and natural hazards during project construction and operation			

Is the sub-project found in the list of project that require ESIA or partial ESIA as per *Section 22 of the National Environmental Management* (NEA) *Act of 1994 and Environmental Impact Assessment Regulations, 2014*, establishing the lists of projects that must undergo environmental impact assessment, instructions,

requirements and procedures to conduct environmental impact assessment ?

If the answer to any of the questions is "yes", Environmental and Social Assessment) is required

DECISION MAKING:

Refer to NEA classification criteria

1.	**ESIA required**	**Yes**	**No**

Type of the Project	The Gambia (NEA) Guideline	Remarks
The project is likely to have significantly adverse impacts on the environment or society.	Cat A	Requires full-scale EIA
The project may have adverse impacts on the environment or society, but these impacts are less significant than those of High risks projects. These impacts are site-specific; few, if any, of them are irreversible; in most cases, they can be mitigated more readily than High risks projects.	Cat B	Depends on scale of adverse impact full-scale EIA may or may not be necessary
The project is likely to have minimal or no adverse impact on the environment or society.	Cat C	

The management of impacts on biodiversity, the project will align with the Bank ESS6[27], relevant for this project. ESS6 states that: *"The Borrower will avoid adverse impacts on biodiversity and habitats. When avoidance of adverse impacts is not possible, the Borrower will implement measures to minimize adverse impacts and restore biodiversity in accordance with the mitigation hierarchy provided in ESS1 and with the requirements of this ESS. The Borrower will ensure that competent biodiversity expertise is utilized to conduct the environmental and social assessment and the verification of the effectiveness and feasibility of mitigation measures. Where significant risks and adverse impacts on biodiversity have been identified, the Borrower will develop and implement a Biodiversity Management Plan"* (as be the model below) during project implementation

APPENDIX A: INDICATIVE CONTENT OF A BIODIVERSITY MANAGEMENT PLAN (BMP)

(a) Objectives, based on the findings of the biodiversity baseline and recommendations of the environmental and social assessment or similar document(s). These might include, for example, No Net Loss or Net Gain.

[27] World Bank Note for Borrowers on the EES 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

(b) Activities to be carried out, along with any specific project requirements needed to achieve the intended BMP objectives. BMP activities may include, for example, new or expanded protected areas; site-specific habitat restoration, enhancement, or improved management; community benefit-sharing; livelihood restoration activities (to mitigate any negative socio-economic impacts from newly restricted access to natural resources, in accordance with ESS5); species-specific management interventions; monitoring of project implementation or biodiversity outcomes; or support for increased financial sustainability of conservation actions.

(c) Project Requirements that the implementing entities follow to achieve BMP objectives, such as biodiversity-related prohibitions or specific restrictions for civil works contractors and project workers. These may cover, for example, the clearing or burning of natural vegetation; off-road driving; hunting and fishing; wildlife capture and plant collection; purchase of bush-meat or other wildlife products; free-roaming pets (which can harm or conflict with wildlife); and/or firearms possession. Seasonal or time-of-day restrictions may also be needed to minimize adverse biodiversity impacts during construction or operation. Examples include (i) limiting blasting or other noisy activities to the hours of the day when wildlife are least active; (ii) timing of construction to prevent disturbance during the nesting season for birds of conservation interest; (iii) timing of reservoir flushing to avoid harming key fish-breeding activities; or (iv) curtailment of wind turbine operation during peak bird migration periods.

(d) An Implementation Schedule for the key BMP activities, taking into account the planned timing of construction and other project activities.

(e) Institutional Responsibilities for BMP implementation.

(f) Cost Estimates for BMP implementation, including up-front investment costs and long-term recurrent costs. The BMP also specifies the funding sources for project implementation as well as recurrent operating costs.

ANNEX 3: SUMMARY RESULTS OF STAKEHOLDER CONSULTATION

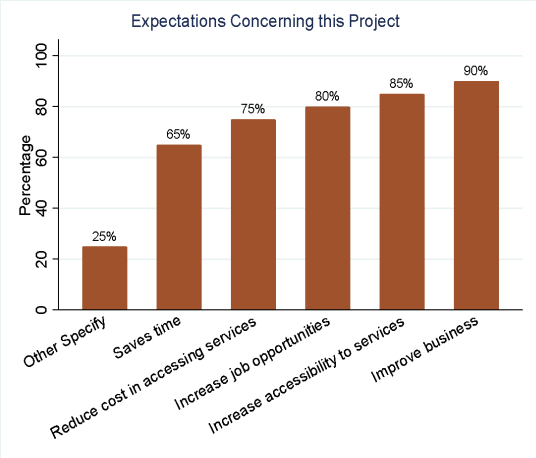
The public consultation with stakeholders was a very interactive process and generated a lot of discussion points for consideration in the implementation of the WARDIP project including;

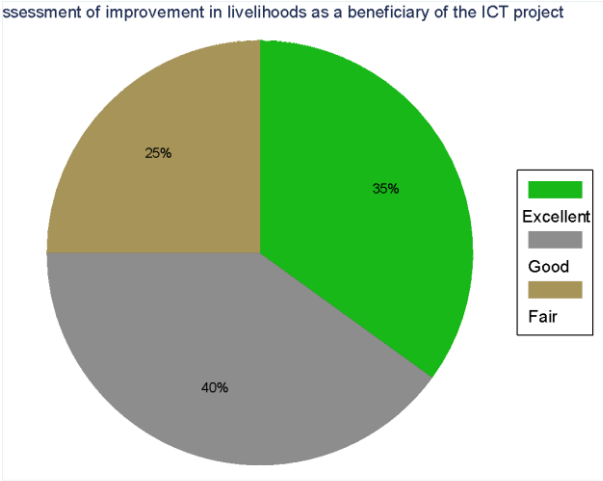
Due consideration to be put in place by MoCDE in the selection of project intervention/implementation sites

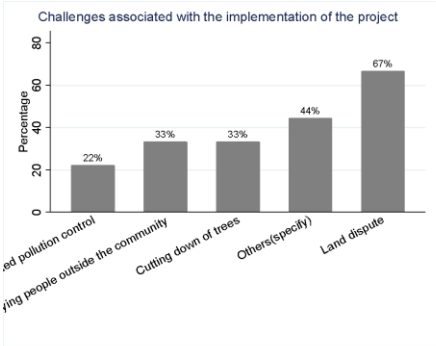
MoCDE to ensure that there is no political influence in the implementation of the project.

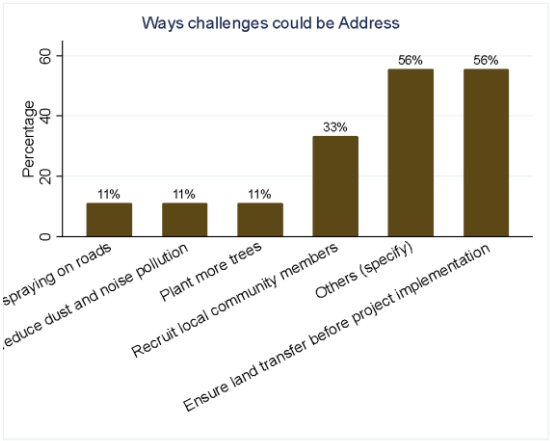
MoCDE to facilitate the creation of community management structures for the project to promote sustainability

Project Benefits to the Beneficiaries

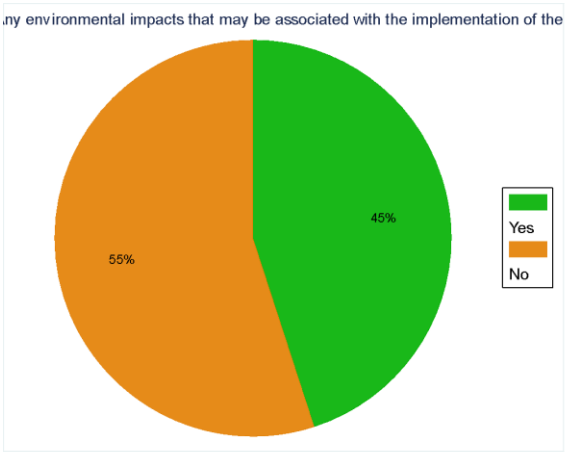


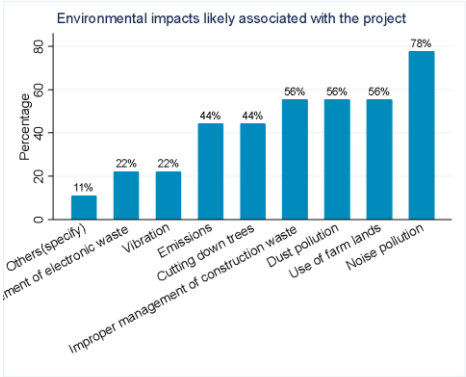


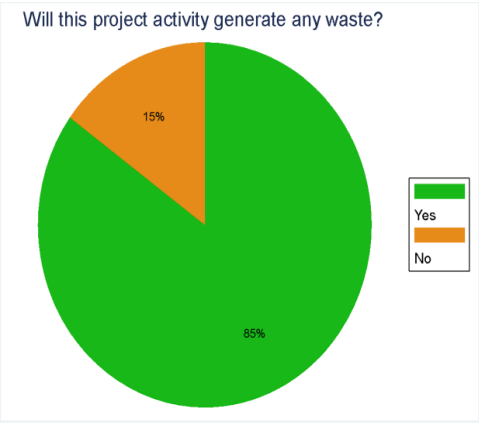


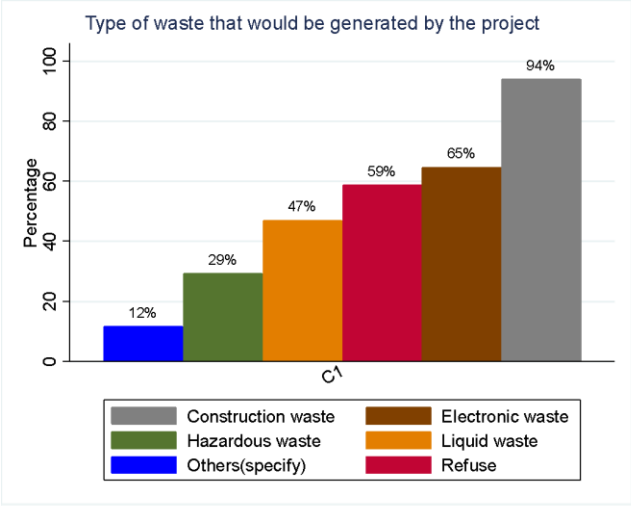


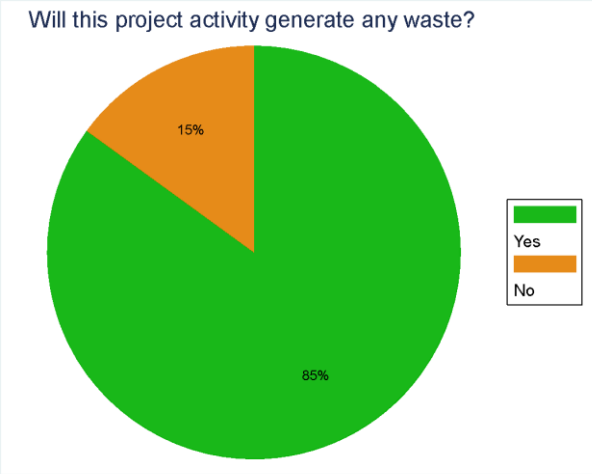
Environmental and health-related issues that may be associated with the project



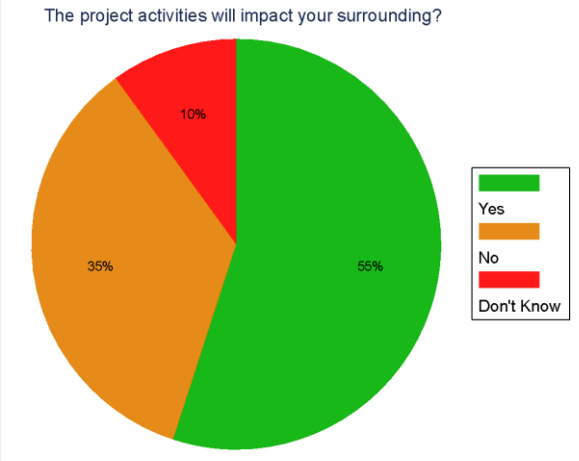


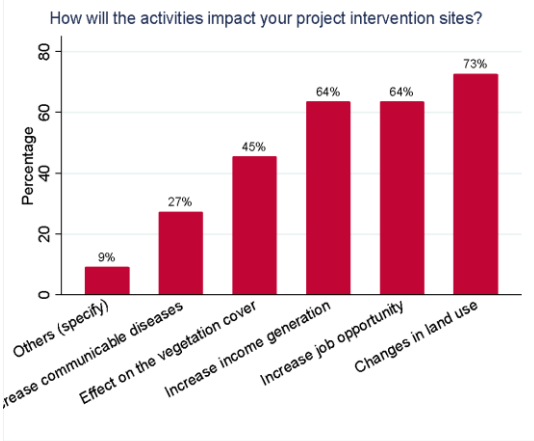

Will this project activity generate any waste?
15%
85%
Yes
No

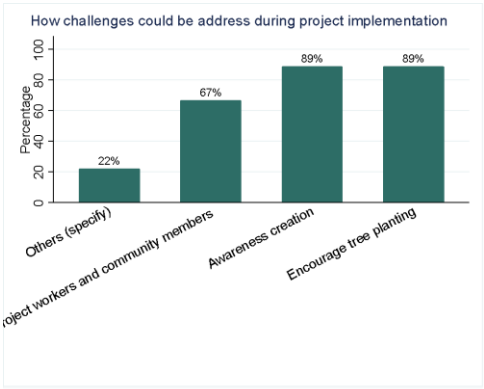

Type of waste that would be generated by the project
Percentage
0
20
40
60
80
100
12%
29%
47%
59%
65%
94%
C1
Construction waste
Electronic waste
Hazardous waste
Liquid waste
Others(specify)
Refuse

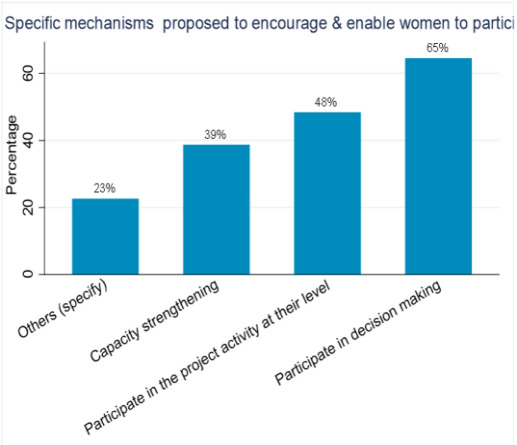

Will this project activity generate any waste?
15%
85%
Yes
No

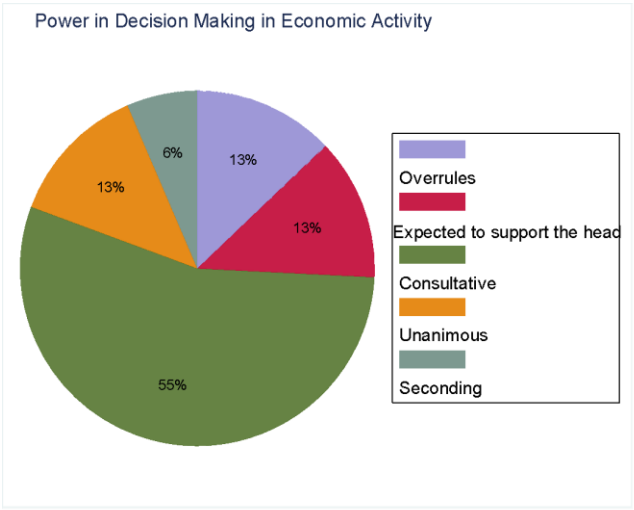

How should the project manage waste?
Percentage
0
20
40
60
80
100
15%
50%
95%
Others(specify)
Use of waste bins
Proper disposal (designated sites)

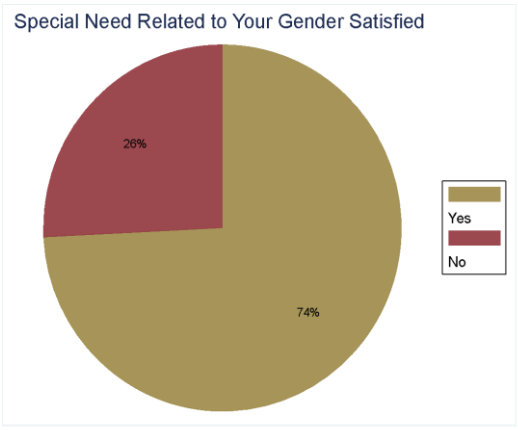

The project activities will impact your surrounding?
10%
35%
55%
Yes
No
Don't Know

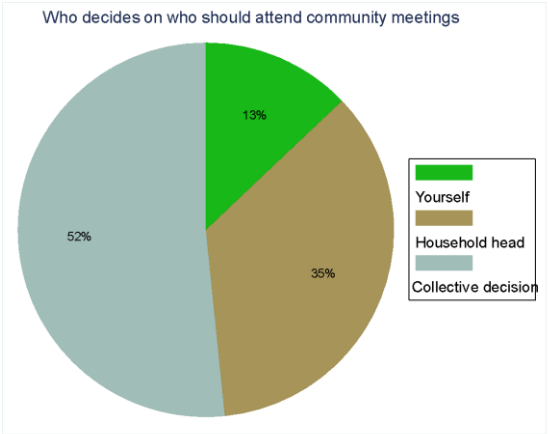

How will the activities impact your project intervention sites?
Percentage
0
20
40
60
80
9%
27%
45%
64%
64%
73%
Others (specify)
rease communicable diseases
Effect on the vegetation cover
Increase income generation
Increase job opportunity
Changes in land use

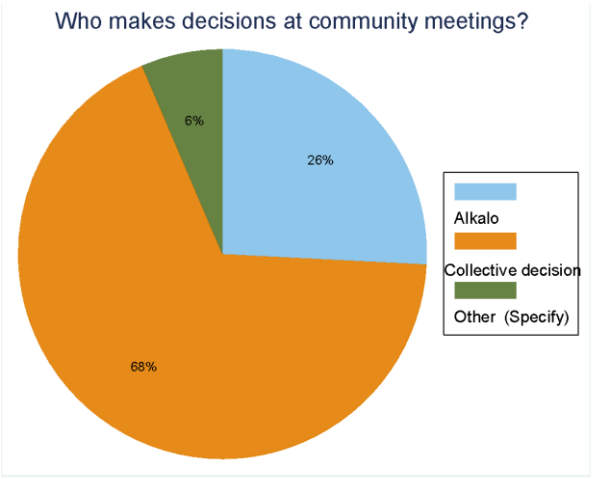

How challenges could be address during project implementation
Percentage
0
20
40
60
80
100
22%
67%
89%
89%
Others (specify)
oject workers and community members
Awareness creation
Encourage tree planting

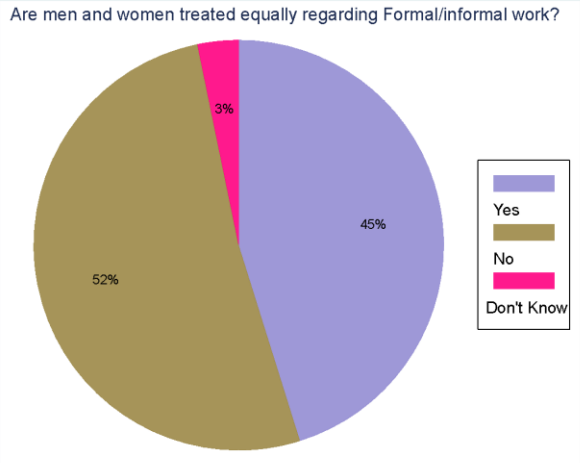

Specific mechanisms proposed to encourage & enable women to partici
Percentage
0
20
40
60
23%
39%
48%
65%
Others (specify)
Capacity strengthening
Participate in the project activity at their level
Participate in decision making

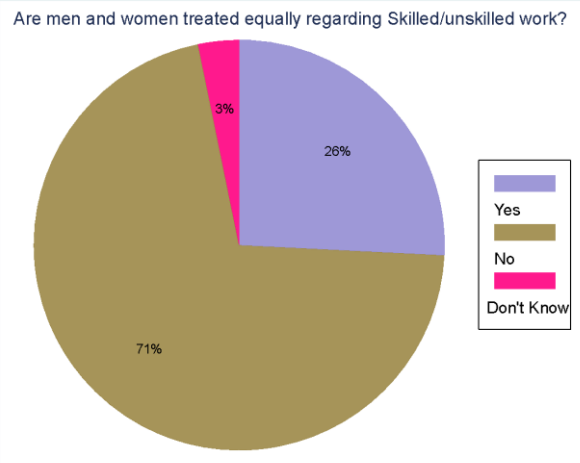

Power in Decision Making in Economic Activity
13%
13%
6%
13%
55%
Overrules
Expected to support the head
Consultative
Unanimous
Seconding

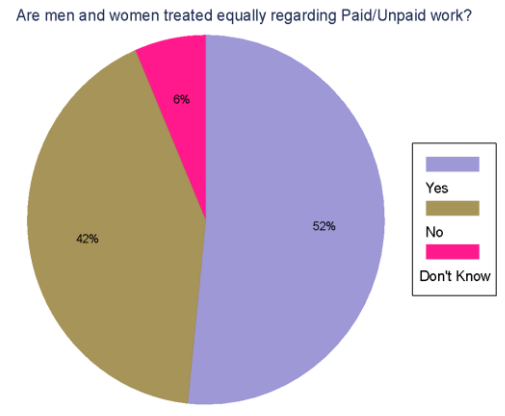

Special Need Related to Your Gender Satisfied
26%
74%
Yes
No

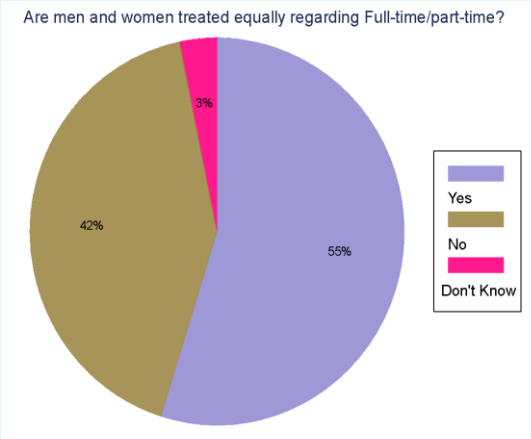

Who decides on who should attend community meetings
13%
52%
35%
Yourself
Household head
Collective decision


Who makes decisions at community meetings?
6%
26%
68%
Alkalo
Collective decision
Other (Specify)


Are men and women treated equally regarding Formal/informal work?
3%
45%
52%
Yes
No
Don't Know


Are men and women treated equally regarding Skilled/unskilled work?
3%
26%
71%
Yes
No
Don't Know


Are men and women treated equally regarding Paid/Unpaid work?
6%
52%
42%
Yes
No
Don't Know


Are men and women treated equally regarding Full-time/part-time?
3%
42%
55%
Yes
No
Don't Know

Project Monitoring Checklist

Date: Community:

District: Region:

Description of Sub-project:

ENVIRONMENTAL SAFEGUARDS

No	Compliance Issues	Yes	No	Corrective/ follow-up action Recommended	Responsibility for corrective/ follow-up action/timelines
1	Land clearance restricted to the designated right of way (RoW)/ or dam foundation area, future reservoir area and locations of other ancillary facilities (e.g., spillway site, etc.)				
2	Chemicals or burning being used for bush clearing?				
3	Major/ economic trees saved where possible				
4	Winning of sand/ gravel from approved DA sites (Check from the DWE)				
5	All burrow pits well re-instated				
6	The solid waste generated on site is adequately collected and properly disposed of (at the community's dump site)				

7	Measures in place to collect solid waste (plastics, food leftovers etc.) generated				
8	Channels were created for stagnant waters to prevent the creation of water pools				
9	Dust suppression measures (dousing) are being implemented				
10	embankments reinforced with vetiver grasses and boulders				
11	Catchment area covered with grass and shrubs to reduce erosion and siltation				
12	Broken down canals and faulty valves were repaired to reduce water loss from the reservoir and increase water availability to farmers.				
SOCIAL SAFEGUARDS/ GENDER					
No	**Compliance Issues**	**Yes**	**No**	**Corrective/ follow-up action Recommended**	**Responsibility for corrective/ follow-up action/ timelines**
13	Project location devoid of conflicts/disputes that will endanger human lives				
14	Women make up 60% of the workforce (beneficiaries) on site				
15	Pregnant women are given the opportunity to work				
16	Any of the women beneficiaries suffering spousal violence because of income earned from LIPW?				

17 Is any of the women carrying her child on her back whilst working?

18 Work schedule conflicting with the period for household chores for women

19 Women being discriminated against by supervisors

20 Any woman on site suffering sexual harassment from any of the male supervisors

21 No Minor working at the site

22 Nursing mothers not carrying babies whilst working

23 The mandatory rest period of 1 hour is observed

24 On-site Creche/ Nursery for babies established.

25 Caregivers are on site

26 Road marks to aid the visually impaired/ Road ramps to limit speed

27 Designs of dams are user friendly to the PLWD/ Aged

28 Transparency and Accountability Board installed

29 If the TAB is installed, is it updated regularly (within the last 2 weeks)

30 Is the Helpline of Hope Toll-Free phone number (SWCES) displayed and still visible on the TAB?

31 Income paid regularly (Monthly)

32 If yes to the above, are payments made on time?

33	Beneficiaries are aware of avenues to channel Grievances to (Case Mgt. Committee hotlines etc.				

OCCUPATIONAL HEALTH & SAFETY

No	**Compliance Issues**	**Yes**	**No**	**Corrective/ follow-up action Recommended**	**Responsibility for corrective/ follow-up action/ timelines**
34	Workers well-spaced to reduce the risk of injuries when using cutting tools				
35	Well-stocked first aid kit for minor injuries provided at the site				
36	Trained person (could be beneficiary) on site to administer First Aid in the event of an injury				
37	Health and First Aid education carried out for all workers				
38	Safe drinking water for participants provided at the site with enough provision made for drinking cups (if possible, a cup for each participant)				
39	Engagement of workers in construction activities with no poor/damaged tools				
40	Engagement of workers to use machines and tools for which they have only been trained to use				
41	No Involvement of workers in activities without appropriate protective gear				
42	Where there are ongoing construction activities on feeder roads, are there signals to warn road users of ongoing works?				

43	Has gravel been heaped on the road in such a manner that it does not impede the free flow of traffic?
44	Provision of temporary toilet facilities (pit latrines)
45	Pit latrines provided are clean and odorless
46	Provision of separate toilet facilities for both male and female
47	Borrow pits fenced with caution tapes
48	Adequate safety measures put in place to avoid incidents, accidents e.g. visible warning signs, diversions etc.
49	Adequate provision made for alternative routes/ road diversions in the case where LIPW activities affect access and smooth flow of movement/ traffic
50	Adequate provision made for working tools
51	Compliance with COVID-19 protocols

ANNEX 5. LIST OF INSTITUTIONS/COMMUNITIES CONSULTED IN NATIONAL AND REGIONAL LEVELS

No.	Name	Gender	Organisation/LGA	Designation
1.	Baboucarr Cham	M	Broadcasters Association	Vice chairperson
2.	Mohamed Jaiteh	M	Broadcasters Association	Member
3.	Basiru Jarju	M	Broadcasters Association	Secretary General
4.	Njaga Touray	M	NEA	Director intersectoral Networks
5.	Malang Jarsey	M	Dept. of Forestry	Deputy Director
6.	Sabina K Mendy	F	Dept of Planning, Min. of Agric.	Principal Planner
7.	Ebrima Cham	M	Dept of Planning, Min. of Agric.	Senior Planner
8.	Isatou Cha	F	Dept of Planning, Min. of Agric.	Planner
9.	Seedy M Demba	F	Dept of Planning, Min. of Agric.	Principal Planner
10.	Afang M Samateh	M	Dept of Planning, Min. of Agric.	Planner
11.	Momodou Sidibeh	M	Dept. of Fisheries	Deputy Director
12.	Foday Conteh	M	Dept. of Water Resources	Deputy Director
13.	Malang Darbo	M	Min. of FWR&NAMs	DPS Fin.&Admin
14.	Paul steven Prierra	M	Star FM/TV	Editor
15.	Patrick Mendy	M	Unique Solutions	Admin. And Procu.
16.	Rodima S Renner	M	PURA	D/Director ICT
17.	Nuha Jammeh	M	Dept. of Parks &Wildlife	Conservation Officer
18.	Pa M Touray	M	Gamcel	Director Access network
19.	Ebrima Jammeh	M	Gamtel	Director core network
20.	Elizabeth Johnson	F	Gamcel	GM Gamcel
21.	Isatou Cham	F	TGSB	Snr Standards officer
22.	Momodou Baldeh	M	TGSB	Standards officer
23.	Lamin Demba	M	GICTA	Board Chairperson
24.	Amie Njie	F	MOCDE	PS
25.	Malick Jeng	M	GRTS	Director General
26.	Abdoulie Danjo	M	NaNa	Procurement specialist
27.	Mam Dawda Gai	M	GSC	DTO
28.	Lamin Jabbi	M	GSC	DG

No.	Name	Gender	Organisation/LGA	Designation
29.	Marie Ellen Cherry	F	The Point newspaper	Web master
30.	Sainabou Sambou	F	The Fatu-network	Reporter
31.	Sulayman Gaye	M	Comium	Customer care supervisor
32.	Mathew Mendy	M	Min. of EFP&WL/CC	ICT Support Technician
33.	Musa Sise	M	Africel	Head of Corporate Affairs
34.	Sheriff Bojang	M	The Standard	MD
35.	Ebrima Mbye	M	Paradise TV	Administrator
36.	Momodou Jarju	M	Foroyaa newspaper	Assistant Editor
37.	Rabi Jaiteh	F	Min. of Gender,CSW	DPS
38.	Alagie Camara	M	SUNA Institute	Technical Assistant
39.	Sang J. Gomez	M	GAMTEL	Regional Manager, WCR
40.	Lamin Bajo	M	Forestry	Regional Director, WCR
41.	Alagie Daffeh	M	Upper Badibou	Gamtel Regional Office
42.	Modou Njie	M	Upper Badibou	Gamtel IT
43.	Dembo S Dibba	M	Upper Badibou	Farafenni Community
44.	Bakary Dibba	M	Upper Badibou	:
45.	Karamo Dibba	M	Upper Badibou	:
46.	Kalifa Dibba	M	Upper Badibou	:
47.	Muhammed Njie	M	Upper Badibou	IT Café provider
48.	Kadijatou Barry	M	Upper Badibou	Cash power centre
49.	Karamba Jammeh	M	Lower Badibou	Illiassa community
50.	Modou Jammeh	M	Lower Badibou	:
51.	Mariama Marong	F	Lower Badibou	:
52.	Karamba Drammeh	M	Central Badibou	:
53.	Lamin Camara	M	Lower Badibou	Kerewan Community
54.	Omar Ceesay	M	Lower Badibou	:
55.	Kemo Gassama	M	Lower Badibou	:
56.	Bakary Kitabou Fatty	M	Lower Badibou	:
57.	Pa Bojang	M	Lower Badibou	NEA Regional office Kerewan
58.	Ismaila Sallah	M	Lower Nuimi	Essau Gamtel
59.	Kola Bahoum	M	Lower Nuimi	Multi-purpose Cafe
60.	George Sonko	M	Lower Nuimi	Chief
61.	Seedy Gannes	M	Jarra West	Soma Gamtel
62.	Alpha Saidyleigh	M	Jarra West	Soma Entrepreneur

No.	Name	Gender	Organisation/LGA	Designation
63.	Yusupha Saidykhan	M	Jarra West	Soma Technician
64.	Abdou Darboe	M	Jarra East	Pakaliba Community
65.	Kalipha Manneh	M	Jarra East	:
66.	Tijan Darboe	M	Jarra East	:
67.	Sanna Darboe	M	Jarra East	:
68.	Jainaba Jallow	F	Jarra East	:
69.	Fatou Sunkary Darboe	F	Jarra East	:
70.	Saidou Jallow	M	Jarra East	:
71.	Baba Darboe	M	Jarra East	:
72.	Ebou Sabally	M	Jarra East	Wellingaraba
73.	Jama Baldeh	M	Jarra East	Alikalo Wellingaraba
74.	Sheriff Baldeh	M	Jarra East	Wellingaraba
75.	Fatou Jaiteh	F	Jarra East	:
76.	Kumba Jallow	F	Jarra East	:
77.	Aminata Kandeh	F	Jarra East	:
78.	Jainaba Jallow	F	Jarra East	:
79.	Ramatoulie Jallow	F	Jarra East	:
80.	Kumba Sanneh	F	Jarra East	:
81.	Fatoumata Saidy	F	Jarra East	:
82.	Kumba Faal	F	Jarra East	:
83.	Fatou Ndow	F	Jarra East	:
84.	Ellen Manneh	F	Jarra East	:
85.	Fatoumata Dem	F	Jarra East	:
86.	Ida Manneh	F	Jarra East	:
87.	Mariama Kanteh	F	Jarra East	:
88.	Daddo Mballow	F	Jarra East	:
89.	Mai Baldeh	F	Jarra East	:
90.	Hulay Kabary	F	Jarra East	:
91.	Banna Sanneh	F	Jarra East	:
92.	Nenegalleh Jallow	F	Jarra central	:
93.	Kumba Baldeh	F	Jarra central	:
94.	Sallimatou Jallow	F	Jarra central	:
95.	Fanta Manneh	F	Jarra central	:
96.	Belly Kanteh	F	Jarra central	:
97.	Ndelleh Baldeh	F	Jarra central	:
98.	Jainaba Kandeh	F	Jarra central	:
99.	Karamo Jadama	M	Jarra central	Jappineh

No.	Name	Gender	Organisation/LGA	Designation
100.	Wandifa Dampha	M	Jarra central	:
101.	Dembo Darboe	M	Kiang Central	Kwinella
102.	Tabora Camara	M	Kiang Central	:
103.	Borry Manjang	M	Kiang Central	:
104.	Karim Ceesay	M	Kiang Central	:
105.	Sandy Manka	M	Kiang Central	:
106.	Ansumana Dibba	M	Kiang Central	:
107.	Landing Sanneh	M	Kiang Central	:
108.	Yahya Manjang	M	Kiang Central	:
109.	Alh. Ansumana Sanneh	M	Kiang East	Kaiaf
110.	Molifa Ceesay	M	Kiang East	:
111.	Kebba Darboe	M	Kiang East	Mansakonko
112.	Pierre Bah	M	Niani	Wassu (Chief)
113.	Banna Sillah	M	Niani	Kuntaur
114.	Dodou Joof	M	Niani	:
115.	Aminata Ndongo	F	Niani	:
116.	Baturr Secka	F	Niani	:
117.	Abdoulie Gomez	M	Niani	:
118.	Sumai Jallow	M	Niani	:
119.	Aziz Sowe	M	Niani	:
120.	Momodou Lamin Bandeh	M	Lower Fulladou West	Sankulay kunda (Chief)
121.	Lamin Sima	M	Janjanbureh	Janjanbureh
122.	Lamin Janneh	M	Janjanbureh	:
123.	Alieu Sarr	M	Janjanbureh	:
124.	Michael P Mendy	M	Janjanbureh	:
125.	Amie Demba	F	Janjanbureh	:
126.	Sulayman Camara	M	Janjanbureh	:
127.	Massaneh Susso	M	Janjanbureh	:
128.	Modou Samba	M	Upper Fulladou	Bansang
129.	Malang Jammeh	M	Upper Fulladou	:
130.	Faye Kijera	F	Upper Fulladou	:
131.	Kaddy Janneh	F	Upper Fulladou	:
132.	Jarrai Drammeh	F	Upper Fulladou	:
133.	Aja Tida Dansira	F	Upper Fulladou	:
134.	Aja Hajira Jassey	F	Upper Fulladou	:
135.	Lamin Tamba	M	Lower Fulladou West	Brikamaba
136.	Siaka Sinera	M	Lower Fulladou West	:

No.	Name	Gender	Organisation/LGA	Designation
137.	Chima Ceesay	M	Kantora	Garawol
138.	Omar Jarju	M	Upper Fulladou East	Basse /DWR
139.	Samba John	M	Upper Fulladou East	TAC/DoA
140.	Ismaila Sanyang	M	Upper Fulladou East	TAC/DWR
141.	Musa Jarra	M	Upper Fulladou East	Basse Koba Kunda
142.	Lamin B Fatty	M	Wulli West	Nyakoi
143.	Muhammed M Jallow	M	Upper Fulladou East	TAC/NEA
144.	Alhagi Jatta	M	Upper Fulladou East	TAC/DCD
145.	Ebrahima Rafer Jallow	M	Upper Fulladou East	Rafer Technology
146.	Pa Modou Drammeh	M	Upper Fulladou East	Basse
147.	Maimuna Krubally	F	Upper Fulladou East	Mansajang
148.	Fanta Manneh	F	Upper Fulladou East	:
149.	Kaddijatou Jallow	F	Upper Fulladou East	:
150.	Fatou Jawo	F	Upper Fulladou East	:
151.	Fatoumata Baldeh	F	Upper Fulladou East	:
152.	Salimatou Jawo	F	Upper Fulladou East	:
153.	Baya Baldeh	F	Upper Fulladou East	:
154.	Yabba Susso	F	Upper Fulladou East	:
155.	Sarjo Janbang	F	Upper Fulladou East	:
156.	Sainey Kanteh	F	Upper Fulladou East	:
157.	Kumba Jawo	F	Upper Fulladou East	:
158.	Fatoumata Camara	F	Upper Fulladou East	MoWGC Basse
159.	Samba Bah	M	Upper Fulladou East	Governor URR
160.	Lamin Fatty	M	Upper Fulladou East	Basse Santasu
161.	Aja Soma Jallow	F	Upper Fulladou East	:
162.	Lasana Camara	M	Upper Fulladou East	:
163.	Sellou Bah	M	Upper Fulladou East	Alikalo Santasu
164.	Nenneh Darboe	F	Upper Fulladou East	Basse Santasu
165.	Pateh Baldeh	M	Upper Fulladou East	:
166.	Boye Barry	M	Upper Fulladou East	:
167.	Ho. Saikou Bah	M	Upper Fulladou East	:
168.	Seedy Kinteh	M	Upper Fulladou East	:
169.	Alagie Jallow	M	Upper Fulladou East	:
170.	Maimuna Baldeh	F	Upper Fulladou East	:
171.	Hawa Cham	F	Upper Fulladou East	:
172.	Maimuna Jeng	F	Upper Fulladou East	:
173.	Hawa Janbang	F	Upper Fulladou East	:

No.	Name	Gender	Organisation/LGA	Designation
174.	Ana Janko	F	Upper Fulladou East	:
175.	Kadijatou Jawo	F	Upper Fulladou East	:
176.	Dodou Malang	M	Upper Fulladou East	:
177.	Alh. Mamansa Gumaneh	M	Kantora	Koina
178.	Amara Gumaneh	M	Kantora	:
179.	Surahata Gumaneh	M	Kantora	:
180.	Beyagi Gumaneh	M	Kantora	:
181.	Yankuba Gumaneh	M	Kantora	:
182.	Musa Gumaneh	M	Kantora	:
183.	Alieu Jawo	M	Kantora	Fatoto
184.	Abdourahman Baldeh	M	Kantora	:
185.	Omar Jallow	M	Kantora	:
186.	Alh. Lamin Baraji	M	Kantora	:
187.	Bakary Baldeh	M	Kantora	:
188.	Jatta Banora	M	Kantora	:
189.	Kebba Tunkara	M	Kantora	:
190.	Bubacarr Gumaneh	M	Kantora	:
191.	Ismaila Camara	M	Kantora	:
192.	Kuru Camara	M	Kantora	:

The Western Africa Regional Digital Integration Project (WARDIP), T

Register for Community/Group Engagement

Name of Local Government Area (LGA): Kerewan LGA

No.	Name	Gender	District	Community/Group	Contact No
1	Alagie Daffeh	M	Upper Badibu	Gamtel Regional Office	9823
2	Modou Njie	M	Upper Badibu	Gamtel Re- IT	992
3	Dambo S Dibba	M	UBD	tamfomi community	2529
4	Bakary Dibba	m	✓	✓	779
5	Karamo Dibba	m	–	–	993
6	Kalifa Dibba	m	–	✓	73862
7	MUHAMMED D.NJIE	m	✓	IT CARE PROVIDER	9000
8	Kaddijatou Bojang	f	✓	Cash power centre &	7004
9	Karamba Jammeh	M	Upper Badibu	Illiasa community network	917
10	Modou Jammeh	M	"	Illiasa community	392
11	Mariama Marong	F	"	"	574
12	Karamba Drammeh	M	Central Badibu	Njaba Kunda youth mentor	959
13	Lamin Camara	M	Central Badibu	Kerewan	979
14	Omar Ceesay	M	"	"	990
15	Kemo Gassam	M	Gov's Office	Kerewan NBA	537
16	Bakary Kutubu Fatty	M	Lower Badibu	Kerewan	397738
17	Pa Bojang	M	Lower Badibu	NEA Regional Office - Kerewan	5256
18	Ismaila Sillah	M	~~[illegible]~~ Lower Nuimi Essau	Essau GMH	971

No.	Name	Gender	District	Community/Group	Contact N
19	Kola Rahaman	M	LN	Nuimi CAFE Multi purpos	987
20	George Simo	M	L.N.D.	Chief	761

The Western Africa Regional Digital Integration Project (WARDIP), The Gam

Register for Institutional Engagement

No.	Name	Gender	Institution	Position	Contact
	Marie Ellen Chery	Female	The Point Newspaper	Web Master	270
	Sainabou Sambou	Female	The Fatu Network	Reporter	35
	Sulayman Gaye	Male	Comium	Customer Care Supervisor	66
	Matthew Mendy	Male	Ministry of environment (MECCNAR)	ICT Supporting Technician	7
	Musa Sise	Male	Africell	Head of Corp Affair	775
	Sheriff Bojang	Male	The Standard	M.D	708
	Ebrima Mbye		Paradise TV	Admin	347
	Momodou Faye	Male	Foroyaa Newspaper	Assistant Editor	38
	Lala Jaiteh	Female	Ministry of Gender Children's Social Welfare	Deputy Permanent Secretary	

The Western Africa Regional Digital Integration Project (WARDIP)
Register for Institutional Engagement

No.	Name	Gender	Institution	Position
1	Momodou Alieu Jallow	M	MOICI	PICTO
2.	Omar Manjang	M	MOICI	AS

The Western Africa Regional Digital Integration Project (WARDIP
Register for Institutional Engagement

No.	Name	Gender	Institution	Position
1	Alieun Bayo	M	GIEPA	SITO
2	Betty Gomez	F	GIEPA	ITA

The Western Africa Regional Digital Integration Project (WA
Register for Community/Group Engagemer

Name of Local Government Area (LGA): Mansakonko LGA

No.	Name	Gender	District	Community	C
1	Seedy Gannes	m	Jarra Central	Gunte/Soma	9
2	Alpha Saidyleigh	m	Jarra West	Saidy Eater	7
3	Yusupha Saidyleigh	M	Jarra West	SomaTech	6
4	Abdou Darboe	m	Jarra East	Pakaliba	8
5	Kaliphs Mannel	m	"	"	8
6	Tijan Darboe	m	"	"	88
7	Sanna Darboe	m	"	"	9 2
8	Jainaba Jallow	F	"	"	3
9	Fatoumata Darboe	f	"	"	31
10	Saidou Jallow	m	"	"	98
11	Baba Darboe	m	"	"	85
12	EBOU SABALLY	M	Jarra East	Kelligarabo	93
13	Jama Baldeh	m	"	Afelo Kelligarabo	
14	Sheriff Baldeh	M	"	Kellingarabo	91
15	Fatou Jaiteh	F	"	"	74
16	Kumba Jallow	"	"	"	77

No.	Name	Gender	District	Community	
17	Aminata Kanteh	F	Jarra East	Wellingara-ba	
18	Jaineba Jallow	"	"	"	
19	Ramatoulie Jallow	"	"	"	
20	Kumba Sanneh	"	"	"	
21	Fatoumata Sandy	"	"	"	
22	Kumba Faal	"	"	"	
23	Fatou Ndow	"	"	"	
24	Ellen Manneh	"	"	"	
25	Fatoumata Bem	"	"	"	
26	Ida Manneh	"	"	"	
27	Mariama Kanteh	"	"	"	
28	Dadda Mballow	"	"	"	2
29	Maimuna Baldeh	"	"	"	7
30	Hulay Kobary	"	"	"	
31	Banna Sanneh	"	"	"	7
32	Nenegalleh Jallow	"	"	"	
33	Kumba Baldeh	"	"	"	
34	Sallimatou Jallow	"	"	"	7
35	Fanta Manneh	"	"	"	
36	Bally Kanteh	"	"	"	2
37	Ndalleh Baldeh	"	"	"	202
38	Jainaba Kanteh	"	"	"	7-3984

No.	Name	Gender	District	Community
39	Karamo Jadama	M	Jarra Central	Jappineh
40	Mandifa Bampha	M	Jarra Central	Jappineh
41	Dembo Darboe	M	Kiang Central	Kwinella
42	Taboora Camara	M	Kiang Cent	Kwinella
43	Borry Manjang	M	"	"
44	Karim Ceesay	M	"	"
45	Sandy Manka	M	"	"
46	Ansumana Dibba	M	"	"
47	Landing Sanneh	M	"	"
48	Yahya Manjang	M	"	"
49	Alh. Ansumana Sanneh	M	Kiang East	Kaiaf
50	Molifa Ceesay	M	~~Mansakonko~~ Jarra West	Soma
51	Kebba Darbo	M	Jarra West	Mansakonko

The Western Africa Regional Digital Integration Project (WARDIP), TI

Register for Institutional Engagement

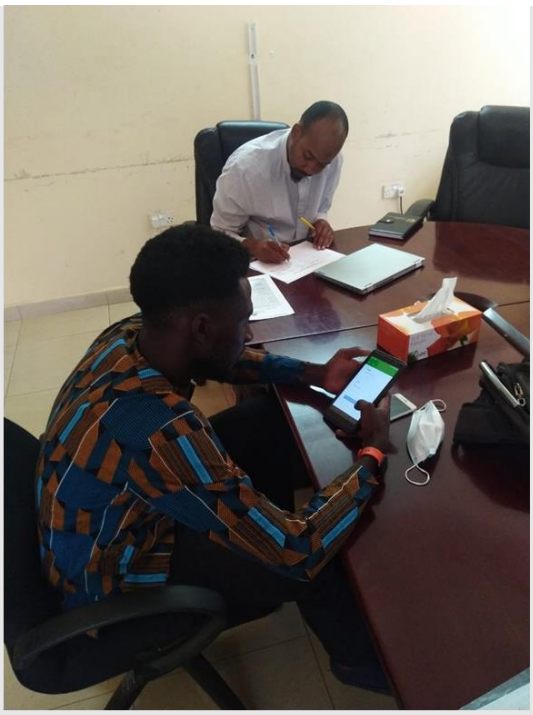
No.	Name	Gender	Institution	Position
1	Pa M. Touray	M	GAMCEL	Director Access Net Work
2	Ebrima Jammeh	M	Gamtel	Director Core Netw
3	Elizabeth Johns-	F	GAMCEL	GM (GAMCEL)
4	Isatou Cham	F	TGSB	Snr. Standards.
5	Mamadou Baldeh	M	TGSB	Standars office
6	Lamin DEMBA	M	GICTA	Chairman of Board
7	Amie Njie	F	MOICI	PS
8	Malick Jeng	M	GPTS	Director General
9	Abdoulie Danso	M	NaNA	Procurement Specialist
10	Mam Dawda Gu	M	GSC	DTO
11	Lamin JABBI	m	GSC	DG

No.	Name	Gender	Institution	Position
	Alagie Camara	Male	Suna Institute	Technical Assist
	Sanneh Jr. Gomez	Male	Gamtel	Regional Manage
	Lamin Bajo	Male	Forestry	Regional forestry officer

GAMTEL exchange station at Illiasa, NBR

GAMTEL exchange station at Njaba Kunda, NBR

GAMTEL exchange station at Kuntaur, CRR



The Gambia Standards Bureau

GICTA Board Chair

Dept. of Planning, Ministry of Agriculture

Department of Forestry

Department of Fisheries

Department of Water Resources.

Ministry of Fisheries Water Resources and NAMs

Gambia Maritime Administration

DK Telecom Manager

Unique Solution

GCCI IT Department

Department of Labour

Department of Parks & Wildlife

GAMTEL Regional Office, LRR

SomaTech Manager, LRR

IT Business man in Soma, LRR

Chief Niani District CRR

Interview a woman at Pakaliba, LRR

FGD with Community members in Pakaliba, LRR

KII with IT businessman in Pakaliba, LRR

KII with a youth in Wellingaraba, LRR

Interview with youth in Illiasa, NBR

Interview with the Alkalo of Kerewan, NBR

Interview with Regional Governor of Kerewan LGA at Kerewan, NBR

FGD with community members at Njaba Kunda, NBR

KII with Internet WiFi connection businessman at Farafenni, NBR

FGD with Alkalo and community members at Farafenni, NBR

Interview with Koina VDC, URR

Interview with Lower Nuimi Chief, NBR

Interview with Kiang East Chief, LRR

Interview with the Deputy Regional Governor, LRR

Interview with GAMTEL Exchange Station Manager, Essau, NBR

Interview with a young lady in Farafenni, NBR

Council of elders, Fatoto

Interview with Governor, URR

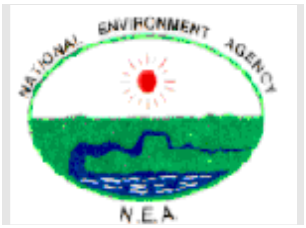
Women gardeners at Basses Mansajang

Interview with the Director General, Gambia Submarine cable

Senior IT specialist and the Asst. Secretary

DPS Technical and IT director

Interview with the permanent Secretary, MoICI



NATIONAL ENVIRONMENT AGENCY

Jimpex Road, Kanifing, PMB 48, The Gambia.

Tel: (220) 4399422/4399423 **Fax:** (220) 4399430

Website: www.nea.gm **Email:** nea@gamtel.gm

ENVIRONMENTAL IMPACT ASSESSMENT SCREENING FORM

Please type or print clearly, completing this form in its entirety. You may provide additional information on a separate sheet of paper if necessary. Kindly note that the information you are to provide is required by Section 22 of the National Environmental Management Act of 1994 and it is an offense to give inaccurate information under Section of the same Act.

SECTION 1: INFORMATION ON THE CONTACT PERSON

Name _____

Institutional Affiliation _____

Business Title/position _____

Business Address _____

Telephone _____ Fax_____ Email_____

SECTION 2: DESCRIPTION OF THE PROPOSED PROJECT

Name of Proposed Project _____

Date expected to start construction _____

Proposed location of project _____

(Attach a map or maps, covering the proposed site and surrounding 5 Km radius)

Land Area _____

(Approximate land area and of proposed location)

Current Land Use (Describe how the land is being used at present)

……
……
……..

Describe any Possible Alternative Site(s):…….....

……

Serial No._____

Describe other types of industries or facilities (including health centres and school) which are located within 100 metres of the site, or are proposed to be located near the proposed facility. Indicate the proximity of the proposed industrial site to residential areas, national parks or areas of ecological, historical or cultural importance.

_____

_____

_____

_____

Indicate whether adequate infrastructure exists at the proposed location, or whether new buildings, roads, electricity and water lines, or drainage systems will need to be constructed as a part of the proposed project.

_____

_____

SECTION 3: EMPLOYEES AND LABOURERES

Number of people to be employed:

Employees and Labourers	During Construction	During Routine Operation
FULL-TIME		
PART-TIME		

Indicate whether you plan to construct housing/sanitation facilities for temporary or permanent workers.

Serial No._____

SECTION 4: DESCRIPTION OF INDUSTRIAL PROCESS

Briefly describe the type and nature of industrial processes to be conducted at the installation.

_____

_____

_____

_____

_____

State the type and quantity of energy to be used (including the origin of the energy, i.e. public utility, on-site generator, wood, solar, wind, etc.)

Type(s) and Source	Quantity	Period (per day/week/etc.)

Estimate the quantities of water to be used for the following:

Use(s) of Water	Quantity	Period	Source
Cooling			
Steam Generation			
Production Process			
Other			

List the type and quantity of raw materials to be used per year in the production process (including soil, sand, cement, aggregates, wood, animals, etc.). Identify if the sources of all raw materials.

Type	Quantity	Source

List all of the chemical expected to be used for any aspect of the production process (A separate list may be attached with more detailed information)

Name/Type	Description	Quantity

SECTION 6: PRODUCTS

Briefly state the nature of the product(s) or output of the proposed facility, and the expected quantities on a quarterly or annual basis. Indicate the intended uses of the product(s).

Name of Product/Output	Description of Uses	Anticipated Output per Qtr/Yr

SECTION 7: BY-PRODUCTS, WASTE MANAGEMENT AND DISPOSAL

Specify the nature of each waste or by-product and the quantity to be generated

Type	Description	Quantity in Kg per wk/mo
Solid (Bulk)		
Solid (particulate)		
Liquid		
Gaseous		
Other		

Proposed method of disposal or management of wastes (e.g., burning, bury, etc.)

Type of Waste	
Method of Disposal/Management	

Indicate sources of noise pollution, the type/quality of nose (i.e. machinery/repetitive pounding, etc.)

Source of Noise	
Type of Noise	

SECTION 8: ENVIRONMENTAL IMPACTS

Please indicate environmental impacts that may occur as a result of the proposed project

Nature of Impact	Y/N	Brief Description of the Anticipated Impacts
Air Quality		
Drainage		
Landscape		
Forest Cover		
Vegetation		
Human Population		
Animal Population		
Soil Quality		
Soil Erosion		
Water Quality		
Tranquility/Noise		
Special Habitats		
Other		

SECTION 9: PROPOSED MITIGATION MEASURES

Indicate whether measures are being considered to mitigate against damage likely to be caused by the proposed project to human health and/or the environment. Briefly describe these measures.

Air Pollution		
Water Pollution		
Noise Pollution		

Removal of vegetation

Wastes

Displacement of human populations

Destruction of fish habitat

Destruction of special habitats

Soil Erosion Others

State any and all experience you have with implementing the above mentioned mitigation measures. If you do not have prior experience, what skills do you possess to implement these mitigating measures?

_____

_____

What staff training will be provided to ensure compliance with health and environmental safety standards?

_____

_____

Serial No._____

SECTION 10: TESTIMONY

I confirm that the information provided herein is accurate to the best of my knowledge. I will also endeavor to provide additional information and facilitate a site visit if required.

_____
__

Signed:
Developer Date

For Official Use Only	
Reviewed by: Classified A B C	Date:
Reasons for the Classification:	
Endorsed by: Approved by Executive Director:	Date: Date:

I. Introduction and context

This section will be completed at the appropriate time, and will provide the necessary information with respect to the context and methodological approaches to be undertaken.

II. Objectives of the study

This section will (i) outline the objectives and particular activities of the planned activity; and (ii) indicate which activities are likely to have environmental and social impacts that will require appropriate mitigation. (Adapted to specific activities)

III. Terms of Reference

The consultant will perform the following tasks:

1. Carry out a description of the biophysical characteristics of the environment in which the planned activity will take place, and highlight the major constraints that need to be taken into account during construction as well as during operation of the facility;

2. Carry out a description of the socio-economic environment of the planned investment, and highlight the major constraints that need to be taken into account during construction as well as during operation of the facility;

3. Assess the potential environmental and social impacts due to construction or rehabilitation activities, and recommend mitigation measures as appropriate, including cost estimates;

4. Assess the potential environmental and social impacts due to the provision of water supply and sanitation facilities that might be needed for the planned facility and make appropriate recommendations;

5. Assess the need for liquid and solid waste collection, disposal and management in the facility, and make recommendations accordingly;

6. Discuss alternative project designs and make recommendations;

7. Assess alternative project designs and make recommendations;

8. Carry out a review of the respective national environmental policies, legislation, regulatory and administrative frameworks in conjunction with the World Bank's ten safeguard policies, indicate which of these policies is triggered by the planned activity, identify any gaps that might exist, and make recommendations as to how potential gaps should be bridged in the context of the planned activity;

9. Review the Conventions and Protocols to which the country is a signatory;

10. Assess the country's environmental assessment and management capacity, as well as the capacity to implement the proposed mitigation measures, and make appropriate recommendations, including potential capacity building and training needs, and their costs;

11. Prepare an Environmental and Social Management Plan (ESMP) for the planned activity. The ESMP should outline (a) potential environmental and social impacts resulting from the activity; (b) proposed mitigation measures; (c) institutional responsibilities for the implementation of the mitigation measures; (d) monitoring indicators; (e) institutional responsibilities for monitoring the implementation of the mitigation measures; (f) cost estimates for these activities; and (g) time horizons for implementing the ESMP.

12. Public consultations. EIA results and proposed mitigating measures will then be shared with the potentially affected population, NGOs, local authorities and the private sector working in the area where the activity will take place. Minutes of this consultation will form an integral part of the report**.**

Company Code of Conduct

This section presents three Codes of Conduct for use:

1. **Company Code of Conduct:** Commits the company to addressing GBV and VAC issues;
2. **Manager's Code of Conduct:** Commits managers to implementing the Company Code of Conduct, as well as those signed by individuals; and,
3. **Individual Code of Conduct:** Code of Conduct for everyone working on the WARDIP, including managers.

Company Code of Conduct

Implementing ESHS and OHS Standards

Preventing Gender-Based Violence and Violence against Children

The Company is committed to ensuring that the Project is implemented in such a way that minimizes any negative impacts on the local environment, communities, and its workers. This will be done by respecting the environmental, social, health and safety (ESHS) standards, and ensuring appropriate occupational health and safety (OHS) standards are met. The Company is also committed to creating and maintaining an environment in which gender-based violence (GBV) and violence against children (VAC) have no place, and where they will not be tolerated by any employee, sub-contractors, supplier, associate, or representative of the Company.

Therefore, to ensure that all those engaged in the WARDIP's are aware of this commitment, the Company commits to the following core principles and minimum standards of behavior that will apply to all Company employees, associates, and representatives, including sub-contractors and suppliers, without exception:

General

The Company-and therefore all employees, associates, representatives, sub-contractors and suppliers-commits to complying with all relevant national laws, rules and regulations.

The Company commits to full implementing its 'Contractors Environmental and Social Management Plan' (CESMP).

1. The Company commits to treating women, children (persons under the age of 18), and men with respect regardless of race, color, language, religion, political or other opinions, national, ethnic or social origin, property, disability, birth or another status. Acts of GBV and VAC violate this commitment.
2. The Company shall ensure that interactions with local community members are done with respect and non-discrimination.

3. Demeaning, threatening, harassing, abusive, culturally inappropriate, or sexually provocative language and behavior are prohibited among all company employees, associates, and its representatives, including sub-contractors and suppliers.

4. The Company will follow all reasonable work instructions (including regarding environmental and social norms).

5. The Company will protect and ensure proper use of the property (for example, to prohibit theft, carelessness or waste).

Health and Safety

6. The Company will ensure that the WARDIP's occupational health and safety (OHS) Management Plan is effectively implemented by company staff, as well as sub-contractors and suppliers.

7. The Company will ensure that all persons on-site wear prescribed and appropriate personal protective equipment, preventing avoidable accidents and reporting conditions or practices that pose a safety hazard or threaten the environment.

8. The Company will:

1. Prohibit the use of alcohol during work activities.

2. Prohibit the use of narcotics or other substances which can impair faculties at all times.

3. The Company will ensure that adequate sanitation facilities are available on site and at any worker accommodations provided to those working on the project.

Gender Based Violence and Violence Against Children

9. Acts of GBV or VAC constitute gross misconduct and are therefore grounds for sanctions, which may include penalties and/or termination of employment, and if appropriate referral to the Police for further action.

10. All forms of GBV and VAC, including grooming, are unacceptable, regardless of whether they take place on the work site, the work site surroundings, at worker's camps or within the local community.

11. Sexual Harassment-for instance, making unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct, of a sexual nature, including subtle acts of such behavior, is prohibited.

12. Sexual favors-for instance, making promises or favorable treatment dependent on sexual acts-or other forms of humiliating, degrading or exploitative behavior are prohibited.

13. Sexual contact or activity with children under 18-including through digital media-is prohibited. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse.

14. Unless there is full consent by all parties involved in the sexual act, sexual interactions between the Company's employees (at any level) and members of the communities surrounding the work place are prohibited. This includes relationships involving the withholding/promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex-such sexual activity is considered "non-consensual" within the scope of this Code.

15. In addition to Company sanctions, legal prosecution of those who commit acts of GBV or VAC will be pursued if appropriate.

16. All employees, including volunteers and sub-contractors, are highly encouraged to report suspected or actual acts of GBV and/or VAC by a fellow worker, whether in the same company or not. Reports must be made in accordance with WARDIP's GBV and VAC Allegation Procedures.

17. Managers are required to report and act to address suspected or actual acts of GBV and/or VAC as they have a responsibility to uphold Company commitments and hold their direct reports responsible.

Implementation

To ensure that the above principles are implemented effectively the Company commits to ensuring that:

18. All managers sign the project's 'Manager's Code of Conduct' detailing their responsibilities for implementing the Company's commitments and enforcing the responsibilities in the 'Individual Code of Conduct'.

19. All employees sign the Project's 'Individual Code of Conduct' confirming their agreement to comply with ESHS and OHS standards, and not to engage in activities resulting in GBV or VAC.

20. Displaying the Company and Individual Codes of Conduct prominently and in clear view at workers' camps, offices, and in in public areas of the work space. Examples of areas include waiting, rest and lobby areas of sites, canteen areas and health clinics.

21. Ensure that posted and distributed copies of the Company and Individual Codes of Conduct are translated into the appropriate language of use in the work site areas as well as for any international staff in their native language.

22. An appropriate person is nominated as the Company's 'Focal Point' for addressing GBV and VAC issues, including representing the Company on the WARDIP GRC which includes representation on issues related to GBV and VAC complaints, which is comprised of representatives from the Project, Contractor/Component Managers), the Supervision Consultant, and the Ministry of Gender/Women's Bureau as the local Service Provider.

23. Ensuring that an effective GBV and VAC Action Plan for the WARDIP is implemented consultation with the GRC.

24. That the Company effectively implements the agreed final SEA/SH GBV and VAC Action Plan to be developed under the GIVAC, providing feedback to the GRC for improvements and updates as appropriate.

25. All employees attend an induction training course prior to commencing work on site to ensure they are familiar with the Company's commitments to ESHS and OHS standards, and the Project's GBV and VAC Codes of Conduct

26. All employees attend a mandatory training course once a month for the duration of the contract starting from the first induction training prior to commencement of work to reinforce the understanding of the Project's ESHS and OHS standards and the GBV and VAC Code of Conduct.

I do hereby acknowledge that I have read the foregoing Company Code of Conduct, and on behalf of the Company agree to comply with the standards contained therein. I understand my role and responsibilities to support the Project's OHS and ESHS standards, and to prevent and respond to GBV and VAC. I understand that any action inconsistent with this Company Code of Conduct or failure to act mandated by this Company Code of Conduct may result in disciplinary action.

Organization Name: ……

Signature: ……

Printed name: …….

Title: ……

Date: ……..

Manager's Code of Conduct

Implementing ESHS and OHS Standards

Preventing Gender Based Violence and Violence against Children

Managers at all levels have a responsibility to uphold the Company's commitment to implementing the ESHS and OHS standards, and preventing and addressing GBV and VAC. This means that managers have an acute responsibility to create and maintain an environment that respects these standards, and prevents GBV and VAC. Managers need to support and promote the implementation of the Company Code of Conduct. To that end, managers must adhere to this Manager's Code of Conduct and sign the Individual Code of Conduct. This commits them to supporting the implementation of the CESMP and the OHS Management Plan (Contractor needs to have an OHS Plan), and developing systems that facilitate the implementation of the GBV and VAC Action Plan. They need to maintain a safe workplace, as well as a GBV-free and VAC-free environment at the workplace and in the local community. These responsibilities include but are not limited to:

Implementation

1. To ensure maximum effectiveness of the Company and Individual Codes of Conduct:

1. Prominently displaying the Company and Individual Codes of Conduct in clear view at workers' camps, offices, and in public areas of the work space. Examples of areas include waiting, rest and lobby areas of sites, canteen areas and health clinics.

2. Ensuring all posted and distributed copies of the Company and Individual Codes of Conduct are translated into the appropriate language of use in the work site areas as well as for any international staff in their native language.

2. Verbally and in writing explain the Company and Individual Codes of Conduct to all staff.

3. Ensure that:

1. All direct reports sign the 'Individual Code of Conduct', including an acknowledgment that they have read and agree with the Code of Conduct.

2. Staff lists and signed copies of the Individual Code of Conduct are provided to the OHS Manager, the WARDIP's GRC, and the Project.

3. Participate in training and ensure that staff also participate as outlined below.

4. Put in place a mechanism for staff to:

1. Report concerns on ESHS or OHS compliance; and,

2. Confidentially report GBV or VAC incidents through the Grievance Redress Mechanism (GRM)

5. Staff are encouraged to report suspected or actual ESHS, OHS, GBV or VAC issues, emphasizing the staff's responsibility to the Company and the country hosting their employment and emphasizing the respect for confidentiality.

4. In compliance with applicable laws and to the best of your abilities, prevent perpetrators of sexual exploitation and abuse from being hired, re-hired or deployed. Use background and criminal reference checks for all employees.

5. Ensure that when engaging in partnership, sub-contractor, supplier or similar agreements, these agreements:

1. Incorporate the ESHS, OHS, GBV and VAC Codes of Conduct as an attachment.
2. Include the appropriate language requiring such contracting entities and individuals, and their employees and volunteers, to comply with the Individual Codes of Conduct.
3. Expressly state that the failure of those entities or individuals, as appropriate, to ensure compliance with the ESHS and OHS standards, take preventive measures against GBV and VAC, to investigate allegations thereof, or to take corrective actions when GBV or VAC has occurred, shall not only constitute grounds for sanctions and penalties in accordance with the Individual Codes of Conduct but also the termination of agreements to work on or supply the project.
6. Provide support and resources to the GRC to create and disseminate internal sensitization initiatives through the awareness-raising strategy under the SEA/SH GBV and VAC Action Plan.
7. Ensure that any GBV or VAC issue warranting Police action is reported to the Police, the Project, and the World Bank immediately.
8. Report and act according to the response protocol (see Response Protocol below) any suspected or actual acts of GBV and/or VAC as managers have a responsibility to uphold Company commitments and hold their direct reports responsible.
9. Ensure that any major ESHS or OHS incidents are reported to the Project and the Supervision Consultant immediately.

Training

10. The managers are responsible to:

1. Ensure that the OHS Management Plan (to be developed) is implemented, with suitable training required for all staff, including sub-contractors and suppliers; and,
2. Ensure that staff have a suitable understanding of the CESMP and are trained as appropriate to implement the CESMP requirements.

11. All managers are required to attend an induction manager training course prior to commencing work on-site to ensure that they are familiar with their roles and responsibilities in upholding the GBV and VAC elements of these Codes of Conduct. This training will be separate from the induction training course required of all employees and will provide managers with the necessary understanding and technical support needed to begin to develop the GBV and VAC Action Plan for addressing GBV and VAC issues.

12. Managers are required to attend and assist with the Project-facilitated monthly training courses for all employees. Managers will be required to introduce the training and announce the self-evaluations, including collecting satisfaction surveys to evaluate training experiences and provide advice on improving the effectiveness of training.

13. Ensure that time is provided during work hours and that staff prior to commencing work on site attend the mandatory Project-facilitated induction training on:

1. OHS and ESHS; and,

2. GBV and VAC required of all employees.

14. During civil works, ensure that staff attends ongoing OHS and ESHS training, as well as the monthly mandatory refresher training course required of all employees to combat the increased risk of GBV and VAC.

Response

15. Managers will be required to take appropriate actions to address any ESHS or OHS incidents.

16. With regard to GBV and VAC:

1. Provide input to the GBV and VAC Allegation Procedures, and Response Protocol to be developed by the WARDIP GRC as part of the final cleared SEA/SH GBV and VAC Action Plan.

2. Once adopted by the Company, managers will uphold the Accountability Measures set forth in the SEA/SH GBV and VAC Action Plan to maintain the confidentiality of all employees who report or (allegedly) perpetrate incidences of GBV and VAC (unless a breach of confidentiality is required to protect persons or property from serious harm or where required by law).

3. If a manager develops concerns or suspicions regarding any form of GBV or VAC by one of his/her direct reports, or by an employee working for another contractor on the same work site, s/he is required to report the case using the GRM and GRC.

4. Once a sanction has been determined, the relevant manager(s) is/are expected to be personally responsible for ensuring that the measure is effectively enforced, within a maximum timeframe of 14 days from the date on which the decision to sanction was made

5. If a Manager has a conflict of interest due to personal or familial relationships with the survivor and/or perpetrator, he/she must notify the respective company and the GRC. The Company will be required to appoint another manager without a conflict of interest to respond to complaints.

6. Ensure that any GBV or VAC issue warranting Police action is reported to the Police, the Project, and the World Bank immediately

17. Managers failing to address ESHS or OHS incidents, or failing to report or comply with the GBV and VAC provisions may be subject to disciplinary measures, to be determined and enacted by the company's CEO, Managing Director or equivalent highest-ranking manager. Those measures may include:

1. Informal warning.

2. Formal warning.
3. Additional Training.
4. Loss of up to one week's salary.
5. Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.
6. Termination of employment.

18. Ultimately, failure to effectively respond to ESHS, OHS, GBV and VAC cases on the work site by the

Company's managers or CEO may provide grounds for legal actions by authorities.

I do hereby acknowledge that I have read the foregoing Manager's Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to ESHS, OHS, GBV and VAC requirements. I understand that any action inconsistent with this Manager's Code of Conduct or failure to act mandated by this Manager's Code of Conduct may result in disciplinary action

Signature: ……

Printed name: …….

Title: ……

Date: ……..

Individual Code of Conduct

Implementing ESHS and OHS Standards

Preventing Gender-Based Violence and Violence Against Children

I, _____, acknowledge that adhering to environmental, social health and safety (ESHS) standards, following the WARDIP's occupational health and safety (OHS) requirements, and preventing gender based violence (GBV) and violence against children (VAC) is important.

The Company considers that failure to follow ESHS and OHS standards, or to partake in GBV or VAC activities-be it on the work site, the work site surroundings, at workers' camps, or the surrounding communities-constitute acts of gross misconduct and are therefore grounds for sanctions, penalties or potential termination of employment. Prosecution by the Police of those who commit GBV or VAC may be pursued if appropriate.

I agree that while working on the project I will:

1. Attend and actively partake in training courses related to ESHS, OHS, HIV/AIDS, GBV and VAC as requested by my employer.

2. Will wear my personal protective equipment (PPE) at all times when at the work site or engaged in Project-related activities.

3. Take all practical steps to implement the Contractor's environmental and social management plan (CESMP).

4. Implement the OHS Management Plan (to be developed).

5. Adhere to a zero-alcohol policy during work activities, and refrain from the use of narcotics or other substances which can impair faculties at all times.

6. Consent to Police background check.

7. Treat women, children (persons under the age of 18), and men with respect regardless of race, color, language, religion, political or other opinions, national, ethnic or social origin, property, disability, birth or other status.

8. Not use language or behavior towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.

9. Not engage in a sexual harassment-for instance, making unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct, of a sexual nature, including subtle acts of such behavior (e.g. looking somebody up and down; kissing, howling or smacking sounds; hanging around somebody; whistling and catcalls; giving personal gifts; making comments about somebody's sex life; etc.).

10. Not engage in a sexual favors-for instance, making promises or favorable treatment dependent on sexual acts—or other forms of humiliating, degrading or exploitative behavior.

11. Not participate in sexual contact or activity with children-including grooming, or contact through digital media. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse.

12. Unless there is full consent[21] by all parties involved, I will not have sexual interactions with members of the surrounding communities. This includes relationships involving the withholding or promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex-such sexual activity is considered "non-consensual" within the scope of this Code.

13. Consider reporting through the GRM/GRC or to my manager any suspected or actual GBV or VAC by a fellow worker, whether employed by my company or not, or any breaches of this Code of Conduct.

With regard to children under the age of 18:

14. Wherever possible, ensure that another adult is present when working in the proximity of children.

15. Not invite unaccompanied children unrelated to my family into my home, unless they are at immediate risk of injury or in physical danger.

16. 1Not use any computers, mobile phones, video and digital cameras or any other medium to exploit or harass children or to access child pornography (see also "Use of children's images for work related purposes" below).

17. Refrain from physical punishment or discipline of children.

18. Refrain from hiring children for domestic or other labor below the minimum age of 16 unless, or which places them at significant risk of injury.

19. Comply with all relevant local legislation, including labor laws in relation to child labor and World Bank's ESF policies and guidelines on child labor and minimum age.

20. Take appropriate caution when photographing or filming children.

Use of children's images for work related purposes

When photographing or filming a child for work related purposes, I must:

21. Before photographing or filming a child, assess and endeavor to comply with local traditions or restrictions for reproducing personal images.

22. Before photographing or filming a child, obtain informed consent from the child and a parent or guardian of the child. As part of this I must explain how the photograph or film will be used.

23. Ensure photographs, films, videos and DVDs present children in a dignified and respectful manner and not in a vulnerable or submissive manner. Children should be adequately clothed and not in poses that could be seen as sexually suggestive.

24. Ensure images are honest representations of the context and the facts.

25. Ensure file labels do not reveal identifying information about a child when sending images electronically.

Sanctions

I understand that if I breach this Individual Code of Conduct, my employer will take disciplinary action which could include:

1. Informal warning.
2. Formal warning.
3. Additional Training.
4. Loss of up to one week's salary.
5. Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.
6. Termination of employment.
7. Report to the Police if warranted.

I understand that it is my responsibility to ensure that the environmental, social, health and safety standards are met. That I will adhere to the occupational health and safety management plan. That I will avoid actions or behaviors that could be construed as GBV or VAC. Any such actions will be a breach this Individual Code of Conduct. I do hereby acknowledge that I have read the foregoing Individual Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to ESHS, OHS, GBV and VAC issues. I understand that any action inconsistent with this Individual Code of Conduct or failure to act mandated by this Individual Code of Conduct may result in disciplinary action and may affect my ongoing employment.

Signature:……

Printed name: …….

Title: ……

Date: ……..

The ESMP for subprojects should be user friendly, practical, and action oriented, specifying measures to be taken to address the negative environmental impacts. It should also specify the actions, resources and responsibilities needed to implement the agreed actions and details on key social and environmental management and monitoring performance indicators.

Further, the ESMP should ensure that the costs of implementing the ESIA report recommendations are budgeted into the total WARDIP costs. The ESMP should cover the following aspects:

1. **Summary of Impacts**: Anticipated adverse environmental and social impacts should be identified and summarized and the appropriate mitigation measures.
2. **Description of Mitigation measures:** The mitigation measures proposed for the various impacts should be described in relation to the corresponding impacts while stating the conditions under which they are required.
3. **Consultations:** Adequate description of the public participation and consultations should be done and justified.
4. **Description of monitoring program:** A detailed monitoring program should be described in the ESMP, listing environmental performance indicators and their link with impacts and mitigation measures. The ESMP should also describe the parameters to be measured, methods to be used, sampling location and frequency of measurements, detection limits and a clear definition of thresholds that indicate the need for corrective measures.

Monitoring and supervision schedules should be clearly stated and agreed to ensure timely detection of needs for remedial action and also provide information on the level of compliance with ESMP following the relevant safeguards. These arrangements must be clearly stated in the project implementation/operations manual to reinforce project supervision.

1. **Legal requirements and bidding/contract documents**: The ESMP should be incorporated in all legal documents to enforce compliance by all Contractors participating in the WARDIP. The ESMP should be summarized and incorporated in the bidding and contract documents.
2. **Institutional arrangements:** The ESMP should clearly state who is responsible for monitoring, execution of remedial action and the reporting order and format to allow for a defined channel of information flow. It should also recommend institutional strengthening for relevant agencies and the funding authorities for the various activities.
3. **Capacity Development and Training**: To support timely and effective implementation of environmental project components and mitigation measures, the ESMP draws on the assessment of the existing capacities and role of the various actors, on site. If necessary, the ESMP recommends the establishment or expansion of such units, and the training of staff, to allow implementation of recommendations. Specifically, the ESMP provides a specific description of institutional arrangements i.e. who is responsible for carrying out the mitigation and monitoring measures (e.g., for operation, supervision,

enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training). To strengthen environmental management capability in the agencies responsible for implementation, most ESMPs cover one or more of the following additional topics: (a) technical assistance programs, (b) procurement of equipment and supplies, and (c) organizational changes.

4. **Implementation Schedule**: The frequency, timing and duration of mitigation measures and monitoring should be stated in the implementation schedule. Links between mitigation measures and development of relevant institutions and legal requirements of the project should be stated.

5. **Reporting**: The order of information flow as it concerns monitoring reports should be clearly defined. The relevant officers to receive these reports should be those who have authorities to facilitate implementation of the results of the monitoring. These reports should also be communicated to the Bank via media to be agreed and specified in the ESMP. Adequate arrangements should be made by the Bank to facilitate the circulation of the ESMP through the selected means.

ANNEX 12. FRAMEWORK REPORT TEMPLATE

i Acknowledgement

ii Table of Content

iii List of tables, maps and figures

iv Abbreviations & Acronyms

PART A: GENERAL INFORMATION

1 Introduction

1. Context and justification of the project
2. Public consultation process
3. Legal and regulatory framework of the project
4. The institutional framework of the project (includes the major proponents)

2 Description of project

1. Objective and components
2. Technical description of specific activities
3. Analysis of alternatives (sites and activities)
4. Recommendations for the preferred options (sites and activities)
5. Summary of activities with the potential to cause significant impacts

3 Baseline Conditions

1. Physical environment (soils and water resources, air quality and noise etc.)
2. Biological environment (e.g. protective areas, and sensitive ecosystems, wildlife)
3. Socioeconomic env. (e.g. land use, livelihoods, infrastructure, public health)

PART B: ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT

4 Project Impacts on baseline conditions

1. Definition of impacts (scale, project phases etc.)
2. Description of impact prediction methods (annex tools)
3. Assessment of impact significance (methods applied)
4. Description of significant negative environmental impacts (physical and biological env.)
5. Analysis of alternatives
6. Description of significant positive environmental impacts (physical and biological env.)

5. Socioeconomic analysis of Project and its impacts

1. Impact analysis
2. Significant negative socioeconomic impacts

3. Significant positive socioeconomic impacts

PART C: ENVIRONMENTAL & SOCIAL MANAGEMENT PLAN

6. Stakeholder analysis of project (necessary for defining roles)

1. Stakeholder engagement program for implementation and monitoring

2. Implementation of measures

    1. Description of mitigation measures for adverse impacts

    2. Description of enhancement measures for positive impacts

    3. Implementation plan for mitigation and enhancement measures

7. Monitoring program

    1. Impact monitoring (frequencies, methods, reporting etc.)

    2. Compliance monitoring (frequencies, methods, reporting etc.)

    3. Monitoring plan

    4. Other follow-up activities

        1. Evaluation

        2. Decision making (i.e. taking action in response to monitoring and evaluation issues)

        3. Communicating the follow-up results (monitoring and evaluation)

8. Contingency plans

1. Performance

2. Disaster risk

3. Etc.

PART D: CONCLUSION

9. Summary of ESMP

10. Further conditions for approval

11. Annexes

1. Reports on consultations

2. Maps

3. Impact prediction and analysis tools

4. Etc.

12. References

The rules, including specific prohibitions and construction management measures, should be incorporated into all relevant bidding documents, contracts, and work orders.

Prohibitions: The following activities should be prohibited on or near the project site:

1. Cutting of trees for any reason outside the approved construction area
2. Hunting, fishing, wildlife capture, or plant collection
3. Use of unapproved toxic materials, including lead-based paints, asbestos, etc.
4. Disturbance to anything with architectural or historical value
5. Setting of fires
6. Use of firearms (except authorized security guards)
7. Use of alcohol by workers.
8. Have unproper behaviors with local communities, especially women

Construction Management Measures:

Waste Management:

1. Minimize the production of waste that must be treated or eliminated.
2. Identify and classify the type of waste generated. If hazardous wastes are generated, proper procedures must be taken regarding their storage, collection, transportation and disposal.
3. Identify and demarcate disposal areas indicating the specific materials that can be deposited in each.
4. Control placement of all construction waste (including earth cuts) to approved disposal sites. Dispose of in authorized areas all of garbage, metals, used oils, and excess material generated during construction, incorporating recycling systems and the separation of materials.
5. Establish and enforce daily site clean-up procedures, including maintenance of adequate disposal facilities for construction debris.

Maintenance:

1. Ensure that all equipment maintenance activities, including oil changes, are conducted within demarcated maintenance areas; never dispose of spent oils on the ground, in watercourses, drainage canals or sewer systems.
2. Identify, demarcate and enforce the use of within-site access routes to limit the impact to site vegetation.

Labor health and safety

1. Place signs and lighting at strategic locations

2. Informing community before works starts
3. Conduct safety training for construction workers before beginning work.
4. Provide personal protective equipment and clothing (goggles, gloves, respirators, dust masks, hard hats, steel-toed etc.,) for construction workers and enforce their use.
5. During heavy rains or emergencies of any kind, suspend all work.
6. Safely store hazardous items away from the public
7. Educate on risks and prevention of STIs

Community Safety during Construction

The Contractor's responsibilities include the protection of every person (workers and the public) and nearby property from construction accidents. The Contractor shall be responsible for complying with all national and local safety requirements and any other measures necessary to avoid accidents, including the following: the preparation of regular monitoring report, the recruitment of an OHS Specialist if needed,

ANNEX 14: IMPLEMENTATION AND MONITORING PLANS

Implementation plan template

Project phase	**Potential impacts**	**Mitigation/enhancement measure**	**Implementation responsibility**	**Implementation schedule**

Monitoring plan template

Impact	**measure**	**Implementation schedule**	**Monitoring elements**				
			Question (what do we want to know)	**Indicator** (how do we know it)	**Method** (how do we collect the data)	**Responsibility** (who collects the data)	**Timeframe** (when to collect the data)

ANNEX 15: STAKEHOLDER ENGAGEMENT PLAN

Activity	**Identified Stakeholders**	**Reason/Justification for Consultation**	**Period/Frequency**	Communication Method	**Responsibility**
Disclose ESMF	WARDIP; WB; NEA; affected communities	1. In compliance with Bank requirements 2. Ensures compliance with sub-project ESMPs to mitigate negative impacts of WARDIP 3. Communities to determine if their concerns and views are integrated into ESMF	Upon approval of ESMF report	Bank's website; NEA website; national dailies; distribution of ESMF documents	WB; MoCDE; NEA
Disclose ESMF Sub-project ESIA/ESMP preparation	WARDIP; WB; NEA; WARDIP team, communities & other partners	In compliance with Bank requirements Ensure that community concerns and views are taken into account and	Upon approval of During ESIA/ESMP preparation	Bank's website; NEADuring site visits; consultation and public participation; interviews; e-mail; telephone; literature review	WB; MoCDE; consultant

		integrated into ESIA/ESMP Ensure that impact mitigation measures are implemented and monitored for compliance Health and safety issues are integrated into ESMPs			
Consultation start of construction works	WARDIP team, Contractors Partners	Information sharing on planning of works Create awareness on potential impacts of works and method of mitigating impacts Inform and build capacity on grievance redress mechanism (GRM) Build capacity of stakeholders including WARDIP on implementation of ESMPs	Before commencement of works	Radio announcement; newspaper announcement; local and traditional means of communication	WARDIP ESS Safeguard team

Start of construction works as above	WARDIP team & partners	Information on schedule of works and progress Awareness creation on potential impacts and mitigation measures Review ESMPs and mitigation measures Training on SEAH/SEA & LMP	During the implementation the works	Community meetings; Stakeholder meetings; periodic progress reports	MoCDE and WARDIP team
End of construction works and decommissioning of construction equipment	WARDIP & Partners, Contractor	Information on schedule of works and progress Awareness creation on potential impacts and mitigation measures Review ESMPs and mitigation measures Training on implementation of ESMPs;	Decommissioning period	Community meetings; Stakeholder meetings; Periodic progress reports	Safeguard team Consultants

		training on SEAH/SEA & LMP Training on GRM			
Commissioning and handing over of sub projects	WARDIP, contractor	Information sharing Identification of roles and responsibilities Awareness creation on expectations Training of operators/farmers/cooks	Before commissioning of facilities and infrastructure	Radio announcement; newspaper announcement; local and traditional means of communication Training workshops	WARDIP team & Partner such as consultants ,
Operation and Maintenance (O&M) of sub-projects	WARDIP team; Affected communities;	O&M requirements Roles and responsibilities Review GRM	During period of O&M	Stakeholder meetings; training	WARDIP Team & Partners

ANNEX 16. GRIEVANCE MECHANISM (FROM THE STAKEHOLDER ENGAGEMENT PLAN)

Grievance Mechanism

The Grievance Mechanism (GM) is designed to resolve disputes at the earliest possible time before they escalate. Project-affected persons should be heard and be able to voice concerns, and as such, they must have access to fair, transparent, and accessible means to address their concerns and views related to the project. Furthermore, the mechanism should be effective in addressing project complaints and concerns at the project level so that grievances are not referred to the court system for resolution, which is often not timely nor financially feasible or accessible to all. A functioning, inclusive and accessible grievance mechanism is essential for the social sustainability of the project.

The present GM responds to concerns and grievances of PAPs related to the environmental and social performance of the project. However, the grievance mechanism for project workers will be provided separately under the Labor Management Procedures prepared for this project. The grievance mechanism provided below will set specific procedures to manage SEA/ SH complaints ethically and confidentially accompanied by an appropriate response protocol.

Principles of GRM

The GM will adopt the following six core principles to enhance its effectiveness:

a. Fairness: Grievances will be treated confidentially, assessed impartially, and handled transparently.

b. Objectivity and independence: The GM will operate independently of all interested parties to guarantee fair, objective, and impartial treatment to each case. Officers working under the GM will have adequate means and powers to investigate grievances (e.g., interview witnesses, access records).

c. Simplicity and accessibility: Procedures to file grievances and seek action will be made simple enough that project beneficiaries can easily understand them. Project beneficiaries will have a range of contact options including, at a minimum, a telephone number, and email address, and postal address. The design of the GM will be such that it is accessible to all stakeholders, irrespective of where they live, the language they speak. The GM will not have complex processes that create confusion or anxiety (such as only accepting grievances on official-looking standard forms or through grievance boxes in government offices).

d. Responsiveness and efficiency: The GM will be designed to be responsive to the needs of all complainants. Accordingly, all officers handling grievances will be trained to take effective action upon and respond quickly to grievances and suggestions.

e. Speed and proportionality: All grievances, simple or complex, will be addressed and resolved as quickly as possible. The action taken on the grievance or suggestion is expected to be swift, decisive, and constructive.

f. Participatory and socially inclusive: All project-affected persons – community members, members of vulnerable groups, project implementers, civil society, and the media - are encouraged to bring grievances and comments to the attention of project authorities. Special attention is given to ensure that poor and disadvantaged groups, including those with special needs, can access the GRM.

The key objectives of the GM are:

1. Record, categorize and prioritize the grievances according to severity and immediacy of the issue, and provide timely, fair, accountable resolution to grievances at the project level
2. Settle the grievances via consultation with all stakeholders (and inform stakeholders of the solutions, obtain their views on the outcome, and ensure they understand possible next steps to escalate if they are not satisfied with the outcome)
3. Forward any unresolved cases to the relevant authority
4. Regularly analyze grievances to assess if there are systemic issues in the project that should be addressed to mitigate the same types of issues being reported.

The GM operates within the existing legal, cultural and community context of The Gambia. It will also take into consideration World Bank procedures and recommendations regarding complaint handling.

Structure of the GM

The GM shall consist of a three-tier system: (i) local/community level; (ii) project-level grievance resolution; and (iii) national legal level. The general process is that a PAP should first raise a grievance at the local level. If it is not resolved at this level, it is referred to the Grievance Redress Committee (GRC). If this proves unsuccessful in resolving the grievance, the complainant can proceed to the judicial/legal system.

Local Level Grievance Redress

Local communities have existing traditional and cultural grievance redress mechanisms. It is expected that some disputes at the community level may be resolved using these mechanisms, without the involvement of the Project, contractor(s), and or Government representatives at the local and national level. The extended family, village and/or chiefs may be involved at this level. All complaints at the local level will be referred to this committee. Dispute resolution at this level will be practical and efficient for the PAP because in many cases, the types of grievances will often relate to issues of inventories, requests for information, or activities that have yet to take place, such as disbursement of compensation, which can be directly addressed

by the project focal point in the region. In cases where the dispute relates to traditional and customary issues such as land ownership, inheritance and land boundaries the Project Focal Point in the Region will resort to the traditional dispute resolution mechanism comprising the Village head and community leaders. The specific composition and other details will be spelled out before project implementation. If the complaint cannot be resolved at this level, the PAP will be advised to proceed to the next level, the Project level-Grievance Redress Committee.

Project-level Grievance Redress Committee

The Grievance Redress Committee will be responsible for receiving and resolving complaints in a fair, objective, accountable, effectively, timely and accountable manner in all phases of the project lifecycle. It will deal with all grievances that have not been resolved at the local level.

The broad responsibilities of the GRC include:

1. Developing and publicizing the grievance management procedures
2. Receiving, reviewing, investigating, and keeping track of grievances
3. Adjudicating grievances
4. Monitoring and evaluating the fulfillment of agreements achieved through the grievance redress mechanism.

The GRC will normally include a representative from each of the following agencies: (i) the Ministry of Agriculture; (ii) The Project Coordinator, MoCDE or his representative; (iii) an NGO working in the area; (iv) a trade association; and/or (v) the Area Council; a representative of PAPs with the social development specialist in the MoCDE serving as the secretary to the Committee.

National legal level

If the GRC does not provide a satisfactory resolution for the PAP, he or she will be advised to seek redress through the judicial system as provided for in the Constitution 1997 and other relevant laws. The cost relating to such a process will be borne by the project.

Grievances at the Contractor level

During project implementation, contractors should strictly adhere to the World Bank standards on Environmental, Social, Health and Safety (ESHS) and Occupational Health and Safety (OHS) in the workplace and on their relationship with affected communities. Codes of Conduct will be applied to help ensure the project meets its ESHS and OHS objectives, as well as preventing and/or mitigating the risks of SEA/SH and VAC on the project and in the local communities. Contractors should make sure these Codes of Conduct are signed and adopted by those working on the project and are meant to:

1. create awareness of the ESHS and OHS expectations on the project;
1. create common awareness about SEA/SH and VAC and ensure a shared understanding that they have no place in the project; and create a clear system for identifying, responding to, and sanctioning GBV and VAC incidents.

The three codes of conduct are set for strict use and they include:

1. **Company Code of Conduct:** Commits the company to addressing GBV and VAC issues;
2. **Manager's Code of Conduct:** Commits managers to implementing the Company Code of Conduct, as well as those signed by individuals; and,
3. **Individual Code of Conduct:** Code of Conduct for everyone working on the project, including managers and MoCDE staff.

These codes of conduct will be explained and displayed in the worksites, workers and affected communities will be sensitized prior to works start and during all the Project implementation *(Sensitization campaign every six months for the affected community and every month for workers).* Every new worker will receive training on these subjects before he starts working. The contractor liaison officer will work closely with the MoCDE safeguards team to bring to the GRC all complaints and special cases which affect the codes of conduct.

Grievance Mechanism Procedures for complaints unrelated to GBV/SEA/SH

The community will be informed and sensitized about the existence and use of the GM (through radio notices, community meetings, Imam and with some awareness training by the MoCDE before the starting of the resettlement process and of the various uptake options where complaints can be submitted. These uptake channels can include:

1. Toll-free telephone hotline;
2. E-mail;
3. Letter to project focal points in the regions;
4. Complaint form to be lodged via any of the above channels
5. Walk-ins may register a complaint on a grievance logbook at various easily accessible facilities.

The following procedures will be followed in treating complaints:

Step 1: Receipt and registration of complaints

The channels for receiving complaints will be diversified as indicated above. Oral complaints must be transcribed in writing before the rest of the process in order to ensure traceability (by the secretariat). Any complaint, whether verbal or written, is immediately recorded in a

Grievance logbook attached as Annex1. The complainant shall receive an acknowledgment of receipt within 48 hours of filing his/her complaint.

Step 2: Investigation of complaints

Sorting is carried out by the complaint handling bodies to distinguish between sensitive and non-sensitive complaints, taking into account the precise criteria retained by the Project Implementation Manual. Non-sensitive complaints will be dealt with by the GRC. Sensitive complaints, after registration by the MGP, are immediately transmitted to the special committee set up to address SEA/SH. The time required to analyze a complaint shall not exceed seven (7) days after receipt of the complaint.

Step 3: Investigation to verify the merits of the complaint

At this stage, the information and evidence will be gathered to determine the validity or otherwise of the grievance and to provide solutions to the grievance raised. Specific expertise may be requested if the GRC if such expertise is not available from within the GRC. The maximum period for this phase is ten (10) working days. If further investigation is required, the complainant should be informed accordingly specifying the deadline when a reply will be provided.

Step 4: Response proposals

Based on the findings of the investigations, a written reply will be sent to the complainant highlighting the validity or otherwise of the claim. If valid, the complaint will be informed in writing (email, letter, mails, SMS) of the conclusions of the investigations, the solutions adopted, the means of implementing corrective measures, the schedule implementation and budget. The proposed response is made within five (5) working days after the investigations. Similarly, if the complaint is found to be unjustified, written notification will be sent in the same format to the complainant.

Step 5: Review of responses in case of non-resolution at first instance.

In the event of dissatisfaction, the complainant may contest the measures adopted. He then has the opportunity to request a review of the resolutions of the Grievance Redress Committee. The period allowed for this is a maximum of fifteen (15) working days from the date of receipt of the notification of the decision to contest the decision by the complainant. In such circumstances, the Committee has ten (10) working days to review its decision and propose additional measures if necessary which the complainant should be notified of in writing.

Step 6: Implement corrective measures

The implementation of the measures adopted by the grievance redress committee cannot take place without the prior agreement of both parties, especially the complainant, to avoid all forms of dissatisfaction and abuse. The procedure for implementing the corrective action (s) start five

(05) working days after the complainant acknowledges receipt of the letter notifying him of the solutions adopted and his agreement to the decision to the measures proposed.

Step 7: Judicial settlement

If all attempts at an amicable resolution are not acceptable to the complainant, the latter may resort to the judicial system. All measures must be taken to promote the amicable settlement of complaints (except for complaints relating to EAS / HS) through the mechanism set up for this purpose, but complainants are free to opt for a judicial procedure if they wish. Thus, complainants must be informed of their freedom to have recourse to the judicial system. Legal costs or costs related to legal recourse will be borne by the complainant.

Step 8: Completion or termination of the complaint

The procedure will be closed by the GRC if the mediation is satisfactory for the parties, in which case the complainant is required to confirm the agreement in writing. The file is closed after five (05) working days from the date of implementation of the corrective decision, which will then be documented.

Step 9: Reporting

All complaints received will be recorded in the grievance logbook, within ten (10) working days from the date of implementation of the resolution. This operation will make it possible to document the entire complaint management process and to draw the necessary lessons through a simple and adapted database designed for this purpose. The database will also flag the most frequently submitted issues and the places from where the most complaints originate, resolutions applied suggestions, or best practices.

Step 10: Archiving

The project will establish a physical and electronic filing system for filing complaints. Archiving will take place within five (05) working days of the end of the reporting. All the supporting documents for the meetings that will have been necessary to reach the resolution will be recorded in the complaint file. The archiving system will provide access to information on i) complaints received ii) solutions found and iii) unresolved complaints requiring further action.