REPUBLIC OF THE GAMBIA

OFFICE OF THE VICE PRESIDENT

NATIONAL SOCIAL PROTECTION AGENCY

VULNERABLE YOUTH AND WOMEN SUPPORT PROJECT (VYWSP)

Environmental and Social Impact Assessment

FOR

THE CONSTRUCTION/RENOVATION OF BRIKAMA DISTRICT HOSPITAL, WEST COAST REGION

DRAFT REPORT

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Submitted by

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LIST OF ABBREVIATIONS AND ACRONYMS

CBD	Convention on Biological Diversity
CCD	Convention to Combat Desertification
C-ESMP	Contractor Environmental and Social Management Plan
CoC	Codes of Conduct
DCD	Department of Community Development
DoF	Department of Forestry
DPPH	Department of Physical Planning and Housing
EHSG	Environmental, Health, and Safety Guidelines
ESIA	Environmental and Social Impact Assessment
ESMS	Environmental and Social Management System
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standards
FGDs	Focus Group discussions
GBV	Gender-Based Violence
GDHS	Gambia Demographic Health Survey
GEAP	Gambia Environmental Action Plan
GER	Gross Enrolment Rate
GoTG	Government of The Gambia
GRM	Grievance Redress Mechanism
HCWM	HealthCare Waste management
HF	Health Facility
HFU	Health Facility Users
HSE	Health Safety and Environment
ICWMP	Infection Control and Waste Management Plan
ILO	International Labour Organization
KIIs	Key Informant Interviews
LGA	Local Government Area
LTB	Leprosy and Tuberculosis
LRR	Lower River Region

MoECCNAR	Ministry of Environment, Climate Change and Natural Resources
MoGCSW	Ministry of Gender, Children and Social Welfare
MoH	Ministry of Health
MoLRGRA	Ministry of Lands, Regional Governments, and Religious Affairs
MoTWI	Ministry of Transport Works and Infrastructure
NAWEC	National Water and Electricity Company
NDP	National Development Plan
NEA	National Environment Agency
NEMA	National Environment Management Act
NER	Net Enrolment Rate
NGO	Non-Governmental Organization
PHC	Primary Health Care
PHC	Population and Housing Census
PCU	Project Coordination Unit
PDO	Project Development Objective
OHS	Occupational Health Safety
OPD	**Outpatient department**
PMT	Project Management Team
PPE	Personal Protective Equipment
RHD	Regional Health Directorate
RPPHO	Regional Principal Public Health Officer
SEA	Sexual Exploitation and Abuse
SEAH	Sexual Exploitation, Abuse and Harassment
SEP	Stakeholder Engagement Plan
STIs	sexually transmitted infections
TAC	Technical Advisory Committees
2xVAC	Violence Against Children
VDCs	Village Development Committees
VHS	Village Health Services
VOC	Volatile Organic Compounds

WB	World Bank
WCR	West Coast Region
WHO	World Health Organization
WMP	Waste Management Plan

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 and Social Impact Assessment (ESIA): It is an instrument to identify and assess the potential environmental and social 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 environmental activity.

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 refer 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.

Risk: are potential negative consequences to a project that result from its impacts (or perceived impacts) on the natural environment (i.e. air, water, soil) or communities of people (e.g. employees, customers, local residents).

Scoping: 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.

Stakeholders: A "stakeholder" refers to individuals or groups who: (a) are affected or likely to be affected by the project (project-affected parties); and (b) may have an interest in the project (other interested parties)

Vulnerable individuals/groups Individuals/groups: who may be more likely to be adversely affected by the project impacts and/or more limited than others in their ability to take advantage of a project's benefits

Waste: anything that no longer has a use or purpose and needs to be disposed

EXECUTIVE SUMMARY

Project overview

The Government of The Gambia through the National Social Protection Agency (NSPA) has received support from the African Development Bank (AfDB) for the Vulnerable Youth and Women Support Project (VYWoSP) to provide vulnerable groups, particularly out-of-school youth and women, with market-oriented skills and access to a range of services (financial and nonfinancial, basic social services) to tackle the multidimensional aspect of poverty and vulnerability. The main thrust of the project is that if poor and vulnerable women and youth in rural areas have the required skills in the agricultural value chain and access to quality basic social services, then there will be an increase in their productivity, and household income, and access to quality healthcare and education, thus reducing poverty and improve inclusive growth. Transformative social and behavioral change communication will intervene to sustainably strengthen achievements and change populations' perception of gender equity, women's economic empowerment, use of basic social services, etc.

The project will adopt a holistic approach to tackling the multidimensional aspects of vulnerability and poverty. The project will also contribute to reducing gender inequalities by providing better economic and social prospects for young girls and women and reducing social expectations of male youth as household providers. It will also contribute to resilience in the country by tackling some of the key drivers of fragility. The Gambia Fragility Assessment identified low human development, including youth unemployment, poverty and inequalities, and poor access to health and social protection services, as a driver of fragility and a potentially destabilizing factor for the world as The Gambia is an important contributor to irregular migrants to Europe.

Project objective

The project's overall objective is to improve the incomes and productivity of the most vulnerable youth and women in rural areas and to improve their access and use of basic social services, including health, nutrition, and education services. The additional financial support from the Bank was geared towards supporting the implementation of The Gambia National Health Strategic Plan (2021 – 2025). A portion of the grant was allocated for the construction and renovation of the Brikama Health Facility.

The project has the following four components. Sub-component 2.1 deals with the Renovation and equipment of four additional health facilities to provide high quality health services, including sexual and reproductive health. This will contribute to improvements in the capacity of the health system to respond to Gender Based Violence (GBV) and reduce out of pocket expenditure on health. Subcomponent 3.2: Renovation and upgrading nutrition treatment centers will focus on enhancing infrastructure and service delivery capacities. This will include the expansion of facilities, provision of supplies, capacity building for health workers on the latest malnutrition treatment protocols, and improved service integration and referral systems.

Project area of intervention

The intervention included the construction/renovation of Brikama District Hospital (BDH), which is situated in the Kombo Central District of the West Coast Region (WCR). It is the only District Hospital in the Western II Health Region. This health facility comprises eighteen (18) different components: Leprosy and Tuberculosis (LTB) & Public Health Block, Security Post, Laundry room, Generator Room, Emergency Block, Male & Female ward, Mortuary, Eye Unit, Operating Theater, Proposed X-ray block, Proposed Accident and Emergency, Laboratory Block, Pediatric Ward, Administration Block, Waiting Shed, Staff Quarters, Maternity & Labour Ward.

Annually, an estimated clinical attendance for under 5 outpatients is 30,715 and general population consultation is 70,027. BDH has a bed capacity of 86 beds (19 for the pediatric ward, 22 for adult wards, 10 for the eye unit, 8 for the Outpatient Department (OPD) and Accident and Emergency (A&E) and 27 for the maternity ward.

Project beneficiaries

Brikama District Hospita (BDH) is located in the Kombo Central District. The facility is within Brikama Town and covers a catchment area of 42 communities, of which 20 are PHC villages and 22 non-PHC villages. It has 2 PHC circuits namely; Kassa Kunda and Marakissa Circuits. It has a projection estimated catchment area population of 187, 648, of which 29, 442 are children under the age of five (MoH, 2024).

Rationale for ESIA for the Project

The project is anticipated to positively impact healthcare service delivery by improving access, quality, staff motivation and retention. It will also positively impact development opportunities, thus improving the livelihood of the local communities and beyond. Apart from the positive impacts, the project might pose adverse negative impacts and thus require an Environmental and Social Impact Assessment (ESIA) study. To fulfill the statutory requirement of AfDB and the National Environment Agency (NEA), the NSPA of The Gambia contracted a consulting expert team to develop this ESIA report.

The overall objective of conducting the ESIA is to determine the potential adverse environmental and social impacts of the construction and renovation of the Brikama District Hospital (BDH) and to develop mitigation measures that can be adopted to reduce or eliminate these adverse impacts as well as maximize the potential benefits of the project.

The following are the specific objectives of the ESIA study:

- To identify project activities that have the potential to impact the environment negatively.
- To map negative environmental and social areas of concern in constructing and renovating the health facilities.

- Develop mitigation measures and an Environmental and Social Management Plan (ESMP).
- Identify positive practices and innovations to promote a clean environment and reduce environmental degradation.
- Identify the risks, constraints and opportunities linked to the environment in which the project will operate.

This ESIA study focused on the construction and renovation of BDH in Brikama, West Coast Region (WCR). The key activities undertaken included:

- Field visits to the proposed project site to observe the existing environmental conditions, collect baseline information about the receiving environment, assess the proposed development and its interaction with the segment of the environment, and identify potential impacts.
- Consultations with relevant stakeholders using suitable data collection methods such as focus group discussions, key informant interviews etc.
- Prepare the ESIA report for the project with a chapter dedicated to ESMP.

Methodological Approach

The assessment was conducted using a mixed-method approach using both quantitative and qualitative data collection approaches. Therefore, both primary and secondary data collection were used to collect the data required for the assessment.

Secondary Data Collection

This involves a desk review of relevant project documents to gain in-depth knowledge and understanding of the project. These vital documents include the Project Appraisal Document (PAD), feasibility study and design reports, and other relevant documents from previous projects. Several relevant policy and legal documents were also reviewed.

Primary Data Collection

Primary data is required for the baseline study and stakeholder consultations. Data on the project environment and socio-economic impacts were collected from stakeholders by conducting surveys, expert discussions, focus group discussions (FGDs), and key informant interviews (KIIs). The survey targeted health staff at BDH and service users/patients within the BDH Catchment Area to gauge their perceptions of the environmental and social impacts of the project as well as establish their level of understanding and appreciation of the proposed project.

Policy, Legal and Institutional Framework

The administrative and legal framework relevant to the proposed BDH Construction and Renovation Project in terms of relevant and applicable National Policy Framework, National Legal Framework, International and Health Conventions and Agreements, Institutional Framework, as

well as the African Development Bank Integerated safeguard Systems,operational policies and other relevant requirements have to be contextualized and presented in this ESIA report.

Environmental and Social Baseline Conditions of the proposed project site

Generally, the Gambia's natural environment has not changed significantly across regions and administrative boundaries over the years. Thus, this section will not focus on general climatic conditions, hydrology, geology, topography, and regional biodiversity. Secondly, since the assessment is site-specific, only the existing physical, biological and socio-economic environmental conditions will be considered.

Rainfall: Like other regions in The Gambia, Brikama also enjoys rainfall from May to October and a dry season from November to April. The total average annual rainfall recorded from 2010 to 2024 in Brikama is 809.9, which is the lowest rainfall reported compared to all the other regions during the same period. The month with the highest rainfall is August (280.9mm).

Air and Noise Quality: The air and noise quality in Brikama District Hospital is found to be within the accepted standards, except for particulate matter 2.5 (PM 2.5), which can cause health effects for people who are more vulnerable to air pollution (sensitive groups). These vulnerable groups sensitive to air pollution are people with respiratory conditions, heart disease, the elderly, children, and pregnant women.

Water Quality: All the physico-chemical, chemical and microbiological parameters tested are within the recommended guideline values set by the World Health Organization, except for the **high nitrite level,** which is beyond the accepted guideline. The facility may be impacted by environmental factors or possible water supply contamination. Serious health consequences could result from this circumstance, especially for susceptible groups like pregnant women, new-born, and patients with underlying medical conditions.

Temperatures: Temperatures in The Gambia increase from the coast towards the east. The Brikama District Hospital is situated in a region of the country that experiences high temperatures during the dry season particularly when compared to the coastal areas in the western region. The mean maximum temperature during the daytime ranges from 30 °C to 34 °C throughout the year in The Gambia. From late November to February, this region experiences cooler weather, with temperatures ranging from 25 °C to 18 °C during the early hours of the day.

Humidity: On average, August is the most humid throughout the entire year, whereas January is known to be the least humid. A drastic increase in relative humidity is observed from July to September, which falls during the rainy season. The average annual percentage relative humidity is calculated to be around 63 %. Between the years 2010 and 2024, the Brikama Local Government Area (BLGA) recorded its highest humidity levels in August and September, reaching 80%.

Flora and Fauna: Different tree species are present at the Brikama District Hospital. There are some trees within the health facility premises. The tree species present are 2 neem trees, 2 mango trees. No endangered plant species were observed within the facility premises. No animals were

present within the health facility during the assessment. Even though no wildlife species were observed during the field visit at the site, there is a high possibility of the existence of cats and rodents.

Demography: According to the 2024 Population and Housing Census (PHC), The Gambia had a population of 2.42 million, with females constituting 51 percent of the population and 49 percent of males. Between 2013 and 2024, The Gambia's annual population growth rate is 2.5 per cent. At the LGA level, Banjul and Kanifing have a relatively smaller proportion of youthful population (30.0% and 34.2% respectively) compared to Brikama (47.9%) and Basse (46.7%), where nearly half the population is under 15 years.

Education: While the national Gross Enrolment Rate (GER) at the primary level is 86.8 percent, the Brikama LGA only recorded 43.8 percent. The adult literacy rate in the Brikama LGA is 22.8 percent, which is well below the national average of 50.8 percent. To improve educational outcomes in the LGA, there is a need to design a special educational program for the LGA.

Health: The Government of The Gambia prioritizes the citizenry's health and specifically focuses on reducing maternal and newborn deaths, reducing the burden of diseases, and ensuring that the country has a skilled and healthy workforce. Most births in Brikama LGA occur in health facilities (82.5%). The health indicator at Brikama LGA is very low. According to the Gambia Demographic Health Survey (GDHS) report 2019-20, 40% of the household population in BLGA had improved sanitation facilities, and 89% had improved drinking water sources. For anemia, BLGA recorded the highest prevalence at 77% and 62%, for children 6-59 months and women aged 15-49 years, respectively.

It has been difficult to access the Brikama District Hospital recently due to increased traffic and the market. Additionally, since it is the only district hospital in the West Coast Region, the demand is high, making access to services a major challenge for the users in terms of waiting time, limited workspace, and human resources, among others.

Agriculture: Brikama, like many communities in The Gambia, has a longstanding agricultural tradition that underpins its economy and sustains the livelihoods of many residents. The region's fertile lands and favorable climate have historically supported diverse farming activities, including the cultivation of staple crops such as groundnuts, rice, millet, sorghum, and maize. Fruits like mangoes, oranges, bananas, and cashews are cultivated, contributing to local consumption and export revenues. Several initiatives have been launched to revitalize and modernize Brikama's agricultural sector.

Poverty and Inequality: Poverty is a multidimensional phenomenon with monetary and non-monetary aspects. People are said to be poor when they have no opportunities to work, learn, and live healthy and fulfilling lives. In the Gambia, income is affected by planting and harvest seasons; hence, relying on that indicator might under- or overestimate people's living standards. Food purchases account for the largest share of households' total food consumption. It constitutes more than 61 per cent of total food consumption. Brikama has exhibited high poverty rates. In 2003, the

headcount poverty rate stood at 56.7%, indicating that over half of the population lived below the poverty line. This figure slightly increased to 57.5% in 2010 (GBoS 2010), highlighting persistent economic hardships.

Stakeholder Engagement and Consultation

Stakeholder consultation is done through holding a series of public meetings in Brikama and neigbouring selected communities, including Brikama, Pirang, Marakissa, Kuloro, Kitty, Jamisa and Serekundading and with the Technical Advisory Committee (TAC) and the Regional Health Directorate, Western Health Region 2 from February 23rd to March 10th, 2025. Each FGD meeting was attended by 6 to 14 participants. The meetings were organized with the assistance of the Regional Principal Public Health Officer of the Regional Health Directorate of Western Health Region 2. In attendance were 109 participants 85 (78%) females and 24 (22%) males). For the KII, 18 persons were interviewed. In total, the perceptions of 250 survey respondents were 69% of service users/patients and 31% of service providers (staff of Brikama Health Facility and RHD). More than half of the respondents (55%) were females and were married (68%).

Findings of the ESIA

The consultations yielded positive feedback from the stakeholders expressing full support for the proposed construction/renovation of the district health hospital. The potential positive impacts associated with the implementation and operations of the proposed project include increase/improve access to quality healthcare, staff motivation and retention, reduced patient referrals, enhancement of the performance of health workers, reduced patient waiting, create employment opportunities, source of income from the sale of construction materials, etc. Some of the key findings of the consultation are as follows:

- 54% of the total respondents were unaware of the health facility's proposed renovation activities. However, the project awareness level was higher among health facility (HF) users (56%) compared to the HF staff (48%).
- 46% of users and staff rated the healthcare facilities as fair and good, while more than half (51%) rated them as fair. For the healthcare services, 50% and 38% of the users and staff rated the service delivery as good, respectively
- 80% of respondents stated that Brikama District hospital, with the majority reporting sometimes (40%) and more than 5 years (59%).
- Up to 96% of the respondents expressed that the project is anticipated to positively impact their livelihoods, of which 95% were among Health Facility Users (HFU) and 87% among Health Facility Staff (HFS). More than half (66%) of the respondents think the project will not impact health service delivery, 59% being HFU, and 81% HFS.
- More than 50% of the respondents perceived the healthcare facility services and facilities condition as not good.

- The majority of the respondents reported easy access to healthcare services (75%), improved healthcare services (74%), employment creation (62%), improved public health (60%), better healthcare facilities (56%), income generation (48%), enhanced performance of healthcare workers (41%), safe and health working environment (31%).

Aside from the potential benefits anticipated, some environmental and social risks highlighted during consultation are summarized in the below table

Environmental Risks Anticipated and Mitigation Measures	
Risk	**Mitigation**
1. Increased Waste generation	- Work with council to properly manage waste generation during construction/renovation. - Temporal site for waste disposal before finally collection
2. Increased moist and dust pollution	- Springling of water for dust management - Protective gears - Site must be completely enclosed - Perimeter fence of the area during construction. - Sensitization of communities about dust and how they can protect themselves from it.
3. Noise generation	- Heavy machines should be used only in the daytime
4. Loss of vegetation	- Indigenous trees must not be cut and design the construction of new building within the facility such that some trees will not be cut - Replanting of trees within the health facility premise
5. Oil leakage leading soil and water contamination	- Provide storage containers for waste oil - Containers must be covered - Use a confined place for equipment maintenance
6. Waste such as worn-out tyres can trap water and can become breeding grounds for mosquitos	- Worn-out tyres should be properly managed - Avoid burning of tyres
7. Mining of sand and gravel	- Contractors should collect sand and gravel only from approved identified sites
8. Access roads to mining or construction sites via people's properties or farmlands.	- Creation of suitable diversion to avoid tampering with farmlands. - Roads should be properly maintained.
9. Risk of accidents due to over speeding from construction	- Speed limits must be instituted and observed to avoid accidents.

vehicles	
10. Health and safety environment	- Due to high temperatures during the day in the region, contractors should have breaks in peak temperature periods of the day.
11. Construction activity may lead to water shortage.	- Encourage contractor to construct an industrial borehole for their construction/renovation activities.
Social Risks Anticipated and Mitigation Measures	
Risk	**Mitigation Measures**
1. Sexual abusive and harassment of community members by workers at the construction/renovation project site	- Contractor code of conduct for the workers - Any worker found wanting on the code of conduct should be dealt with appropriately by leveraging the law of the land. - Hiring of youths and other residents in the community - There should be continuous community engagement to increase awareness of some of these risks
2. Possibility of child labour	- Employment of under aged children must be avoided at all costs. - Verification of age, either through birth certificate or Identity Card, before hiring - Children must not be involved in hazardous work.
3. Influx of foreign workers in the community	- Recruitment of local youths should be encouraged
4. Risk of domestic violence	- Work-related issues that may lead to increase in domestic violence such as not paying workers on time and therefore worsening their economic situation should be identified and properly addressed. - Community members should be sensitized on work induced domestic violence and how it can be mitigated.
5. Sexual exploitation/inducement risk due to rise in the income levels of workers	- Communities should be sensitized about the risk and encouraged to protect their families from such risk.
6. Introduction of alien lifestyle leading to rise of social vices	- Sensitization of workers and community to minimize the transfer of foreign habits from construction workers.
7. Commercial activities at site may increase risk of school going children dropping out of school	- Members of the affected communities should be sensitized of the dangers of sending their school going children to construction site for revenue generation.
8. Lack of sanitary facilities leading to open defecation	- Proper sanitary facilities should be in place at the construction/renovation project site.

9. Increase in theft in the community due to poor security at construction site	- Construction site and materials should be well secured such that theft at the construction project site can be minimized.
10. Inappropriate hiring and firing of workers	- Contractors must follow due process in the recruitment of workers and avoid exploitation of workers. - People must not be hired without proper documentation of the conditions and terms of employment. - Grievance Redress Management (GRM) system need to be set up during the project implementation. - Contractor should promote equal employment opportunities for all and must not discriminate against women.
11. Poor work environment in terms of health and safety	- Provision of first aid boxes and health and safety gears at the construction site. - Contractors must hire a health and safety officer that will ensure health and safety protocols are always observed at construction site. - Work stressors that can affect the mental and psychological wellbeing of workers should be identified and appropriately dealt with.
12. Interruption of services	- Ensure timely communication for start of the project to give adequate time for planning by the RHD and HF for alternative continuation of services
13. Inconvenience of staff whose residences are included in the renovation	- Ensure the timeline for renovation is communicated and short as possible to prevent prolong inconvenience regarding the accommodation aspect. - Rent convenient apartments/houses for affected staff to ensure continuity of service

Environmental and Social Risks and Mitigation Measures during Project Implementation Phases

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
Pre-Construction/Renovation Phase				
Site preparation and mobilization of equipment/machinery movements	Air (dust & gaseous emissions) and noise pollution affecting health and property Traffic accidents due to increased traffic of trucks and light vehicles	Medium	○ Water spraying within the facility to suppress dust ○ Cover or wet construction materials such as sand, and gravel to prevent dust pollution during transportation. ○ Ensure that all vehicles transporting construction material, staff and machinery used are properly maintained and serviced. ○ Reduce the idling of vehicles that may occur and thus reduce the gaseous emission from vehicles in the area. ○ Reduce vehicle speed within the facilities.	Contractor and NEA
Construction/Renovation Phase				
Site clearing	Interference with the physical setting	Medium	○ Ensure there is minimal disturbance to the topography of the facility area; including the ○ local drainage. Restoration shall be undertaken to ensure that the original setting is as much as possible retained; ○ Ensure proper demarcation of the health facility area to be affected by the new construction/renovation works to limit vegetation removal from the health facilities, ○ Ensure retention of trees close to the site to the extent possible and	Contractor

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ Re-vegetate the facility area in the disturbed sections and the surrounding environment after completion of works.	
Renovation/construction activities (All components)	Air pollution affecting health and property	Medium	○ Access to pre-construction sites by the public must be prohibited by placing appropriate signs, barriers and security personnel. ○ Workers must be provided with personal protective gear. ○ Trucks transporting earth material must be covered to prevent dust and flying debris. ○ Provide appropriate PPE (dust masks, gloves etc.) to workers and enforce on use, ○ All works must be carried out during the daytime to reduce noise nuisance. Contractors must be warned in their agreement clauses to address the ESMP.	Contractor
Noise and vibration generation	Noise emissions from types of machinery and vibration from construction activities	Medium	○ The contractor must determine the time of day to engage in activities that will likely cause very loud and prolonged noise nuisance in the neighborhood. ○ Noise suppression measures must be applied to all construction equipment such as; ○ Install portable barriers to shield compressors and other small stationary equipment; cover the engine of generators where necessary; ○ Use of quiet equipment (i.e., equipment	Contractor

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			designed with noise control elements such as those that utilize electricity as opposed to those which utilize diesel or petrol) and ensure all the equipment used on site is well maintained and in good working condition, o Limit pickup trucks and other small equipment to a minimum idling time and observe a common-sense approach to vehicle use, and encourage workers to shut off vehicle engines whenever possible; o Provide appropriate PPE (hearing protection - ear muffs/plugs) to the workers and any other person visiting the construction and renovation site, especially in work areas with heightened noise levels, o Limit construction activities causing extreme noise during the time between 8 am and 7 pm; o Consider manual labour-based construction methodologies and o Construction workers should be aware of the facility staff, users, and patients and advised to limit verbal and other noise.	
	Visual disturbance from an unpleasant landscape	Low	o Sites must be cleared of equipment and machinery after all Project activities. o All waste and unused material will be removed for management according to the waste management plan in the C-ESMP. o Stockpiles of materials should be organized	

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			and located at strategic locations within the specified facility properties where the works will be.	
	Effects of public health and safety risks	Medium	○ Install warning and safety signs - Integrate staff training, especially drivers on defensive driving ○ Forbid access to the sites ○ Ensure supervision of workers ○ Do not employ children ○ Create awareness on GBV, SEA/H, VAC and penalties for non-compliance ○ Provide information on the use of the GRM	Contractor
	Effects of Occupational health and safety risks	Medium	○ Comply with OSH rules and regulations as stipulated in the Labour Act, 2007 ○ Provide training and safety information to all workers and visitors ○ Provide on-the-job training and knowledge of procedures to reduce risks ○ Workers should be trained in good practices and contingency measures prior to the start of works. ○ Provide proper work conditions, including access to toilets, drinking water, and waste disposal facilities. ○ Implement a health and safety program to effectively identify and correct risky conditions routinely, protect the workers	Contractor, Labour Department

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			and public from hazards, and provide personal protective equipment and emergency equipment such as fire extinguishers and first aid kits, plus training on their use. o Record and report incidents and near-misses o Where possible, use local workers o Educate workers on the risks and prevention methods of communicable diseases; carry out surveillance.	
	Interruption of the services	Medium	o Healthcare services disruption during the renovation activities will be mitigated by making advanced arrangements for spaces for the continuity of services.	NSPA, Regional Health Directorate, Contractor
	Effects of renovation/construction-related wastes	Medium	o Prepare a waste management plan as part of the C-ESMP to be implemented at the site (storage, provision of bins, site clean-up, bin clean-out schedule, etc.) before the commencement of any works, which should promote waste minimization and recycling. o Encourage efficient use of materials to avoid and minimize waste production as much as possible. o Ensure waste is recycled/reused before opting to dispose of it o Reuse waste plastic materials (deformed	Contractor, Brikama Area Council, NSPA Safeguard Officer, NEA

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			bottle containers) as feedstock for plastic product production. o Organic waste generated can be composted and use as manure. o Designate temporal waste/garbage holding areas at the site. o Appropriate storage, handling and management of clinical waste o Use of waste receptacles that encourage segregation to hold waste on site before its collection o Use durable, long-lasting materials that do not need to be replaced often. o Engage the Area Council to dispose of hazardous waste and have a waste destruction certificate and transfer notes. o Waste disposal by burning shall not be encouraged/permitted and signage should be erected. o NEA to identify waste disposal sites with strict adherence to health and safety of the environment o Prohibit the burning of solid waste material at the project site (to identify designated dump sites).	
	Accidental spills and leakages	Low	o Temporal storage on site of all hazardous /toxic substances will be in safe containers, labelled with details of composition, properties and handling information	Contractor, and NEA

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			including safety data sheets o Ensure proper storage of chemicals/materials, and if possible, in secondary containers just in case of accidental puncturing and away from storm water runways or exposure to weather elements such as rains. o Ensure proper handling, storage and disposal of waste oil, lubricants, oil filters and fuel from vehicles. Hazardous waste would be contained and properly disposed of by a licensed hazardous waste handler o Provide and use appropriate PPE (medical mask, gowns, heavy duty gloves, eye protection and boots) to workers on site o Spill prevention and response procedures include all necessary equipment and workers' training.	
Noise and vibration generation	Noise emissions from types of machinery and vibration from construction activities	Medium	o The contractor must determine the time of day to engage in activities likely to cause a loud and prolonged noise nuisance in the neighborhood. o Noise suppression measures must be applied to all construction equipment such as; o Install portable barriers to shield compressors and other small stationary equipment, cover the engine of generators where necessary;	Contractor Safeguard Officer,

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ Use of quiet equipment (i.e. equipment designed with noise control elements such as those that utilize electricity as opposed to those which utilize diesel or petrol) and ensure all the equipment used on site is well maintained and in good working condition, ○ Limit pickup trucks and other small equipment to a minimum idling time, observe a common-sense approach to vehicle use, and encourage workers to shut off vehicle engines whenever possible; ○ Provide appropriate PPE (hearing protection - ear muffs/plugs) to the workers and any other person visiting the construction and renovation site especially in work areas with heightened noise levels, ○ Limit construction activities causing extreme noise during day time, between 8 am and 7 pm; ○ Consider manual labour-based construction methodologies; and ○ Construction workers should be aware of the facility staff and service users/patients and advised to limit verbal and other noise.	
	Extraction and use of construction materials	Low	○ Construction materials should be sourced from registered and NEA licensed quarries and sand mining within the project area ○ Designate a place for the extraction of building materials within the region	Contractor, NEA Regional Officer

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
	Effects of increased water demand for mixing materials, wetting surfaces or cleaning/curing completed structures	Low – Medium	○ Ensure water is used efficiently at the site by sensitizing construction staff to avoid irresponsible water use. Alternatively, the contractor should source their own water by drilling a borehole specifically for the construction/ renovation works; ○ Encourage prompt maintenance of water pipeline leaks and ○ Upon commissioning, the health center management will be required to supply water to the facility at its cost for normal operations. The area is not connected to the national water grid. It is recommended that water conserving taps that turn-off automatically when water is not being used be installed at the facility coupled with waterless urinals and cisterns of low water volume use.	Contractor, Department of Water Resources and Brikama District Hospital Management
Recruitment of workers	Labour influx	Medium	○ Implement a no hiring 'at the gate' policy when hiring the construction workforce: It will be made clear that there will be no recruitment of workforce and people "at the gate", and the formal recruitment process will be advertised to discourage settlement of opportunistic demands and tension. ○ Hire from within the locality, hence will limit movement or very short distances from their homes;	Contractor, NSPA Safeguard Officer and Regional Social Welfare Officer.

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ Effective contractual obligations for the contractor will be done with workers to adhere to the mitigation of risks against labour influx, ○ Keep proper and updated records of the labourers on site (including Age, Gender, and Resident Community) while avoiding child and forced labour; ○ Fair treatment, non-discrimination and equal opportunity for all labourers. ○ All workers are to sign a code of conduct that clearly discourages labour influx ○ Ensure that workers and the community are informed about the Grievance Redress Mechanism (GRM) ○ The GBV focal person at Brikama District Hospital should be part of the GBV team	
	Human rights and gender inequalities / violations	Low – Medium	○ During the recruitment of workers, there will be no discrimination against one gender either by design or oversight; ○ Ensure the provision of the necessary basic sanitary facilities for gender – provide separate sanitary facilities for each gender; ○ Ensure mechanisms are in place for reporting and addressing gender discrimination incidences and other human rights violations. ○ Treat women, children and men with respect;	Contractor, Health Social Welfare Officer

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ Report any violations of the CoC to the workers' representative, HR or grievance redress committee and ensure that no employee who reports a violation of the CoC in good faith will be punished in any way; and ○ Comply with the National Gender and Equality Act, 2011.	
	Gender-based violence (GBV), Sexual exploitation and abuse (SEA), Violence against Children (VAC)	Medium	○ Develop a code of conduct that encompasses a clear warning to workers on any SEA/SH, to be signed by all contractor workers on site ○ project staff must adhere to project CoC, which encompasses a clear warning to workers on any SEA/SH and to be signed by every worker on site; ○ Mechanisms to be in place where workers are free to report any sexual advances and abuse to the senior management without fear of intimidation; ○ Share information with the community on the GRM; ○ Share information on GBV/SEA/SH services around/near the facility for survivors' support ○ Ensure that staff are sensitized on GBV/SEA/SH risk management.	Contractor, NSPA, Health Social Welfare Office
	Grievances arising from	Medium	○ Putting in place grievance mechanisms	Contractor, NSPA and

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
	construction activities		○ Assigning a contractor-based GRM Focal Person ○ Putting in place channels to allow people to complain- e.g. Telephone, Email, registers, WhatsApp platform for workers, suggestion box, among others ○ Raising awareness among all stakeholders on the existing GRM and sensitizing them to the need to register their dissatisfaction with the contractor or the facility. ○ Resolving complaints within the project timeline (acknowledging within seven days and resolving within 21 days or as soon as possible ○ Immediately after the reception of GBV/SEA/SH complaints refer the survivors to GBV services for assistance and inform the PIU and the World bank within 24 hours of the reception of GBV/SEA/SH complaints ○ Ensure that complaints reports using the annexed formats are reported to the PMT monthly	Regional Health Directorate
	Child labour	Low	○ Develop and implement a Children Protection Strategy that will ensure minors are protected against negative impacts associated with the Project, including on SEA/SH. ○ All staff must sign, committing themselves	Contractor, Health Social Welfare Office and Regional Health Directorate

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			to protecting children, a contract that clearly defines what is and is not acceptable behavior o Children under the age of 18 years should not be hired on-site as provided by the Child Rights Act (Amendment) 2014. o Wherever possible, ensure that another adult is present when working in the proximity of children. o Not to invite unaccompanied children to workers' homes unless they are at immediate risk of injury or in physical danger. o Refrain from physical punishment or discipline of children). o Refrain from hiring children for domestic or other labor, which is inappropriate given their age or developmental stage, which interferes with their time available for education and recreational activities, or places them at significant risk of injury. o Comply with all relevant local legislation, including labor laws about child labor,	
	Labor disputes	Low	o Fair terms and conditions shall be applied for project workers (guided by relevant labour laws), and the project LMP o The project shall also have GRMs for project workers (direct workers and contracted workers) to address their	Contractor, NSPA and Department of Labour

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			workplace grievances promptly; o The project shall abide by the provision of the project LMP and o The project shall respect the workers' right to labor unions and freedom of association; o Ensure equal compensation for excess working hours	
Operational Phase				
Healthcare Facility Operation	Improper Healthcare waste management	Medium	o The health facility shall prepare, operate, and maintain a Health Care Waste Management Plan (HWMP) that is adequate for the scale and type of activities and identifies hazards consistent with the AfDB OS guidelines for Health Facilities and WHO guidelines (section 4.5.2). o Waste should be identified and segregated at the point of generation. Non-hazardous waste, such as paper, cardboard, glass, aluminum, and plastic, should be collected separately and recycled. Food waste should be segregated and composted. Infectious and/or hazardous wastes should be identified and segregated according to their category using the colour-coded system. o Prevention and minimization of waste production (integrating systems and practices to avoid waste creation into facility design and management, equipment	Brikama District Hospital Management, Brikama Area Council and Regional Health Directorate

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			and consumables purchasing). o Reuse or recycling of wastes to the degree feasible o Seal and replace waste bags and containers when they are approximately three-quarters full. Full bags and containers should be replaced immediately. o Identify and label waste bags and containers properly before removal. o Transport waste to storage areas on designated trolleys/carts, which should be cleaned and disinfected regularly. Never transport infectious and non-infectious waste together. o Instructions on handling infectious waste from isolation and treatment centers should be made available to the waste handlers. o Ensure the safety and health of the healthcare waste handlers by providing appropriate PPEs, vaccination against Hepatitis B and tetanus, and post-exposure prophylaxis (PEP). o Waste storage areas should be located within the center and sized to the quantities of waste generated, o Unless refrigerated storage is possible, storage times between generation and treatment of waste should not exceed 48 hours during the cool season, and 24 hours	

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			during the hot season. o Packaging containers for sharps should be puncture-proof o Ensure microwaved and shredded waste is secured to prevent pieces of shredded waste from scattering as particles during transportation to the final disposal site. o Routine monitoring of shredded waste for quality assurance of the de-contamination. o Properly transport treated waste to a disposal facility (i.e. the inert waste to a sanitary landfill)	
	Risk of fire outbreak	Medium	o Provide sand buckets and fire extinguishers at strategic positions within the center and ensure servicing. o Stand-by generator operators shall have basic training in fire control. o Fire alarm cards containing emergency telephone numbers should be well displayed at the hospital. o Regular fire drills should be undertaken targeting all center staff to gauge the levels of preparedness, test emergency response, and use the results to improve the response mechanism. o Provision of a fire assembling point	Brikama District Hospital Management, and the Fire and Rescue Department
	Occupational Safety and Health Risks for Healthcare	Medium	o Update and implement the center emergency response plan.	Brikama District Hospital Management,

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
	Workers		○ Ensure identification of risks (Job Risk Assessment) and the implementation of proactive measures, ○ Train the healthcare workers on the potential OHS risks relevant to their work; of particular interest are the operators of the generators and equipment, who must be trained on the contents of the health and safety plan, including on the general functioning of the treatment facility, including heat recovery and flue-gas cleaning technologies, where appropriate; Health, safety and environmental implications of treatment operations; Technical procedures for operation of the plant; Recognition of abnormal or unusual conditions; Emergency response, in case of equipment failures and alarms; Maintenance of the plant and record keeping; Surveillance of the final waste treated product. ○ Provision of adequate and required personal protective equipment (PPE) to health workers and enforce of its use. This includes a single-use medical mask, gown, Apron, eye protection, boots or closed shoes. ○ Provision of a system for disinfection of the multi-use PPE if not available.	and Regional Health Directorate

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ Implement a systemic risk management plan comprising risk prevention, evacuation of accident victims, evaluation and improvement measures. ○ Limit access to the waste treatment area only to authorized persons; ○ Warning and safety signage to be placed in the areas within the microwave site; ○ All personnel involved with the HCWM process should be subjected to medical surveillance; ○ The waste holding area/chambers should be well sheltered from direct rainfall, sunlight, and strong winds but should be adequately aired; ○ All machinery and equipment involved in the waste treatment and disposal process should be washed and disinfected before leaving the site; ○ Thorough, complete and up to date records on healthcare waste management, incidents, accidents and grievances should be kept. ○ Provide adequately stocked first aid kits to be placed at strategic locations to allow ease of access by workers on-site;	
	Environment pollution due to solid waste generation	Low – Medium	○ The Brikama District Hospital Management and Regional Health Directorate shall prepare a waste management plan to be implemented at the health facility (storage,	Brikama District Hospital Management, and Regional Health Directorate

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			provision of bins, site clean-up, bin clean-out schedule, etc.) to promote waste minimization and recycling. o The Brikama District Hospital Management, and the Regional Health Directorate shall be responsible for handling and disposal of all waste originating from the waste treatment microwave area, o Encourage efficient use of materials to avoid and minimize waste production as much as possible. o Designate temporal waste/garbage holding areas at the site. o Use of waste receptacles that encourage segregation to hold waste on-site before collection. o Use durable, long-lasting materials that do not need to be replaced often. o Engage a NEA registered waste contractor to dispose of hazardous waste and have waste destruction certificate and waste transfer notes. o Waste disposal by burning shall not be permitted, and signage should be erected. o Depending on the service level and tasks of the hospital, the wastewater might contain chemicals, pharmaceuticals and contagious biological agents, and might even contain	

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			radioisotopes. A major part of liquid chemical waste is disposed of via the sink. The most important chemicals in center wastewater are anesthetics, disinfectants, chemicals from laboratory activities, developer and fixer solutions from photographic film processing, and iodinated X-ray contrast media. Note that sludge and sewage from healthcare facilities generated by a basic wastewater-management system should never be used for agricultural or aquaculture purposes. Effluents from the basic treatment should not be discharged into water bodies used nearby to irrigate fruit or vegetable crops, produce drinking water, or for recreational purposes.	
	Improper waste disposal	Medium	○ Ensure regular monitoring of solid-liquid waste management practices and waste treatment; ○ Ensure proper management of pharmaceutical waste by engaging a consultant to develop measures and guidelines for the hospital; ○ To ensure proper sewage management; ○ Install appropriate drainage channels within the health facility; ○ The center management should undertake regular assessments of waste generation quantities and categories to facilitate waste	Brikama District Hospital Management, and Regional Health Directorate

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			management planning and investigate opportunities for waste minimization continuously, o Separate residual chemicals from containers and dispose of the containers to reduce the generation of secondary contamination, especially wastewater; o Ensure the healthcare waste generated in the center is disinfected, treated, and safely disposed of appropriately	
	Increased energy use	Medium	o Use load shedding on the lighting system and other equipment to avoid creating peaks in demand, o Turn lights off using automated sensors or a building automation system, o Install a sub-meter throughout to monitor its power usage and o Install solar energy resources to provide additional security lighting within the waste management area in case of power outages	Brikama District Hospital Management and NAWEC
	GBV/SEA/SH	Medium	o Continuous sensitization of staff on SEA/SH risk management o Provision of GRM channels for reporting SEA/SH cases o Ensuring that the GBV/SEA/SH one pager is placed at strategic points of the facility o Document available GBV/SEA/SH	Brikama District Hospital Management, and Regional Health Directorate

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			referral pathways for survivors' information and support o Develop an Action plan for all GBV/SEA/SH incidences to avoid presence o Ensure the facility is well light to avoid hiding places for SEA/SH perpetrators o Provision of separate helping places for men and women o To include prohibition of GBV/SEA in the Employees Code of Conduct e.g. discouraging the use of inappropriate language or behavior, harassing, abusive, sexually provocative, demeaning or culturally inappropriate language towards women or children. o Prohibiting sexual activity with children under 18 years—including through digital media and promoting respect to the rule of law in respect to children's rights.	
	Security and conflict	Low	o Ensuring that security personnel undertake adequate surveillance o Stock taking of the equipment and accessories to ensure there is no loss o Ensuring proper fencing and lighting arrangement. o Improve security surveillance e.g., by installing CCTV cameras at a strategic point to enhance security, ensuring proper check-	Brikama District Hospital Management, and Regional Health Directorate

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			in and check-out arrangements. o Consider public police reinforcement in incidences of escalated insecurity.	
Decommissioning Phase				
Equipment/ Machine decommissioning				
Demolition Wastes	Soil pollution/air pollution/water resources pollution	Medium	o Use an integrated solid waste management system, i.e. through the hierarchy of options 1. Source reduction 2. Recycling, 3 Composting and re0use 4. Combustion. 5 Sanitary landfilling o Provide appropriate waste skips that encourage waste segregation o Ensure proper waste collection, storage, treatment and disposal of waste generated o Donate reusable demolition waste to charitable organizations, individuals and institutions o Properly dispose of the demolition debris when it is no longer considered useful	Brikama District Hospital Management, and Regional Health Directorate, and NEA
	OHS/ Public Safety	Medium	o The decommissioning contractor should have a well-developed EHS plan for the decommissioning exercise under the supervision of an EHS officer. o A qualified EHS officer should be stationed at the decommissioning site during the entire decommissioning period to ensure health and safety plan compliance.	Brikama District Hospital Management, and Regional Health Directorate, and NEA

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ Ensure the workers are provided with adequate and appropriate PPE (dust mask, ear plugs, helmets, gloves) on-site and enforce the use. ○ While working at height, provide safety harnesses and scaffolding equipment. ○ Fence off/ barricade the site before demolition to minimize health and safety risks ○ Restrict demolition activities during daytime between 0080hrs to 1600 hrs. ○ Provide a well-stocked first aid kit and ensure one of the workers can administer first aid.	
	Grievances arising from project decommission	Medium	○ Ensuring that there is an operational GRM that is responsive to stakeholders' concerns ○ Inclusive stakeholder engagement to raise awareness of the project decommissioning, clarify issues and consider the input of the affected and interested parties in the process ○ The center should continue to create awareness about the GRM mechanism for all workers and patients. ○ Ensure appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants. ○ Ensuring that there is a workable	Brikama District Hospital Management, and Regional Health Directorate

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			mechanism for opening complaints reported through suggestion boxes o Document and report on all sub-project-related grievances	

Environmental and Social Management Plan (ESMP):

The overarching objective of ESMP is to (1) ensure that all mitigation measures prescribed in the ESIA document for eliminating, minimizing, and enhancing the project's adverse and beneficial impacts are fully implemented; and (2) provide part of the basis and standards needed for overall planning, monitoring, auditing, and review of environmental and socio-economic performance throughout the project activities. The ESMP guidelines for implementing the mitigation measures are presented in the Table below.

ESMP Guidelines for Mitigation Measures Implementation Phases

Activities	Impacts	Indicators	Means of verification	Timelines (preparation, construction, exploitation, Closing phases)	Responsible for			Implementation Cost (US$)
					Execution	Monitoring	Aftercare	
○ Site clearing and preparation. ○ Civil during renovation. ○ Removal of vegetation ○ Movement of machinery and vehicles	Air Quality	• Systematic watering of site and spoil (at least twice a day in the dry season) • Number of covered trucks • Up-to-date maintenance booklet for machinery • Waste tracking form • Number of cases where speed limits were exceeded • Percentage of staff wearing the correct PPE	Report of air sample analysis	Renovation and operation phase	Project contractor	NSPA PIU, NEA ESIA Working Group	Health Facility Management	2,000
○ Use of sanitary facilities by staff ○ Run-off water ○ Oil spill ○ Solid waste and effluent discharge	Water Quality	• Level of compliance of discharges (pH, COD, BOD, SS, coliforms, etc.) with the applicable water quality standard • The existence of an HSE manual and its implementation • Level of compliance with World Bank Group EHS guidelines • Existence of an approved and implemented waste	Reports of water sample analysis	Renovation and operation phase	Project contractor	NSPA PIU, NEA ESIA Working Group, Department of Water Resources Regional Officer	Health Facility Management	2,000

Activities	Impacts	Indicators	Means of verification	Timelines (preparation, construction, exploitation, Closing phases)	Responsible for			Implementation Cost (US$)
					Execution	Monitoring	Aftercare	
○ Presence of workers on site ○ Onsite civil work/floor concrete ○ Painting and coating ○ Disposal of construction/renovation waste ○ Domestic and sanitary waste generated by workers ○ Biomedical waste	Waste generation	• Existence of an approved and implemented WMP • Waste tracking slip • Existence of labelled bins for waste collection • The existence of a clean-up kit on site • Effectiveness of the waste recovery and treatment contract	Records on waste management	Renovation and operation phase	Project contractor	NSPA PIU, NEA ESIA Working Group, Regional Health Directorate	Health Facility Management	3,000

Activities	Impacts	Indicators	Means of verification	Timelines (preparation, construction, exploitation, Closing phases)	Responsible for			Implementation Cost (US$)
					Execution	Monitoring	Aftercare	
○ All civil works ○ Material transportation and handling ○ Working conditions ○ Workers' behaviour	Occupational Health and Safety (increased accident potential)	• Existence of a Workforce Management Plan • Number of awareness campaigns conducted among the population • Number of accident cases involving site activities • Number of workers equipped with PPE • Number of workers made aware of safety measures • Level of compliance with health and safety requirements of the labor code • Level of compliance of collective protection equipment with project risks • Effectiveness of the implementation of mitigation measures	Report on work related accidents, injuries, near misses and illnesses.	Renovation and operation phase	Project contractor	NSPA PIU, NEA ESIA Working Group, Regional Health Directorate	Health Facility Management	3,000

Activities	Impacts	Indicators	Means of verification	Timelines (preparation, construction, exploitation, Closing phases)	Responsible for			Implementation Cost (US$)
					Execution	Monitoring	Aftercare	
		• Number of training and awareness sessions on occupational health and safety • The existence of first aid kits at work sites • Effectiveness of posting safety instructions • The existence of an HSE agent on site						
○ Recruitment, All works onsite. ○ Presence of workers	In-migration (Risk of conflicts related to the use of labor)	• The number of local community workers recruited • Number of skilled workers from the community recruited by the project • Conflict prevention and management committee established and functioning • Number of workers with PPE • Level of compliance with the requirements of the labor code in terms of health and safety at work • Number of workers who have benefited from capacity building	Record of employees hired	Renovation and operation phase	Project contractor	NSPA PIU, NEA ESIA Working Group, Regional Health Directorate	Health Facility Management	5,000

Activities	Impacts	Indicators	Means of verification	Timelines (preparation, construction, exploitation, Closing phases)	Responsible for			Implementation Cost (US$)
					Execution	Monitoring	Aftercare	
○ Interaction of the workforce with community members	Gender-based violence (GBV), Sexual exploitation and abuse (SEA), Violence against Children (VAC)	• The existence of a complaint management mechanism that is sensitive to GBV, SEA, SH • Number of people sensitized on GBV (disaggregated by sex) • Number of awareness sessions for staff on SEA/SH and the content of the code of conduct • Number of awareness raising campaigns for communities in GBV/SEA/SH/VAC • Number of complaints received and treated • Percentage of SEA/SH related complaints that had been referred to GBV service providers for assistance. • Percentage of all staff and workers who signed the code of conduct The number of consultations with women done in separate groups led by a woman.	GBV, SEA, SH Complaint report Report on GBV/SEA/SH sensitization	Renovation and operation phase	Project contractor	NSPA PIU, NEA ESIA Working Group, Civil Society	Health Facility Management	8,000
Total								23,000

The programs recommended for managing the potential impacts of the proposed project include:

a) Air quality management program
b) Water quality management program
c) Waste management program
d) Occupational Health and Safety Management Program
e) GBV, SEA and SH Prevention Program
f) Socio-cultural management program

The implementation of the ESMP is also linked to a series of comprehensive management plans. Management and mitigation measures should follow legislative requirements. Where no legal guidance is provided, industry and/or international good practices should be applied as far as is practicable.

The monitoring will be undertaken to ensure that the proposed mitigation measures for negative impacts are implemented. For this reason, it is important that environmental and social monitoring be included in the project planning.

The essential objectives are:

- ✓ To measure the level of completion (success or failure) of the implementation of mitigation measures.
- ✓ Identifying unexpected impacts; and
- ✓ Facilitate the integration of environmental and social management in the project implementation interventions.

Monitoring the implementation of mitigation measures and the proponent's commitments is essential in the sustainable implementation of the proposed undertaking. The monitoring plan for the ecological and socio-economic components of the proposed project is provided below**.**

Monitoring Plan

Potential Impact	Indicator Parameter	Monitoring Method and Location	Timeline/ Frequency	Responsibility	Cost for Monitoring (US$)
Air Pollution	Dust and particulate matter ($PM_{2.5}$ & PM_{10})	Use of Air-sampling instrument/ Point measurements at the project sites	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant	2,000
	Gaseous emissions (CO, SO2, Nox)	Outdoor air quality monitoring measurements and analysis	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant	2,000
Noise and vibration	Noise level in dB(A) (Leq, Leq day, Leq night, and hourly Leq) ≤49.2 dB(A) daytime (7am-10pm)	Onsite measurement of noise level and frequency of vibration	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant	2,000
Soil Contamination	Soil properties - Soil pH within the 6.0-8.5 range; heavy metals (As, Pb, Cd, Hg) below WHO limits at all test locations	Collection of soil sample from sites and analysis	End of Project Audit	ESIA – Working Group (WG); Project Environmental Officer; Consultant	3,000

Potential Impact	Indicator Parameter	Monitoring Method and Location	Timeline/ Frequency	Responsibility	Cost for Monitoring (US$)
Water Pollution	Temp., Turbidity, pH, EC, TDS, Salinity, Color, Odor, Taste, TSS, PO_4^{3-}, NO3-, NO2−, Fe, Cl-, Alkalinity, Hardness, Ca, Mn, DO, As, F^-, SO2−4, NH4, TC and FC	Sample collection (and analysis) from water sources (of closest surface waterbody or borehole)	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant	8,000
Waste	Types, quality, quantity, collection system, and disposal locations.	Visual checks to assess the situation and record-keeping including photographs if applicable.	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant ESIA – Working Group (WG); Project Environmental Officer; Consultant	3,000
Social life impact/Socio-cultural conflict	Cultural conflicts, norms, social vices, project-perception of community leaders, hospitality of indigenous	Continuous effort of Consultations (at all levels); review of implementation of Community Engagement Plan in the host community	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant	5,000

Potential Impact	Indicator Parameter	Monitoring Method and Location	Timeline/ Frequency	Responsibility	Cost for Monitoring (US$)
Influx of people	Number of workers from outsider the host community -	Monitor and record the number of workers employed	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant	2,000
Occupational health and safety	Frequent illness of workforce, workplace accident, medical fitness	Observation, interviews, and the use of Job-Hazard-Analysis report, and reports from nearby healthcare facilities	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant	2,000
Community Health Impact	Common/prevalent diseases in the host communities	Use of questionnaires within the host communities as well as collection of health statistics from the nearest healthcare centre (Brikama)	Annual Environmental and Social Performance Audit	ESIA – Working Group (WG); Project Environmental Officer; Consultant	4,000
Hazard-exposure to workforce	Frequent illness of workforce, workplace accident, medical fitness	Observation, interviews, and the use of Job-Hazard-Analysis report	Biannually	ESIA – Working Group (WG); Project Environmental Officer; Consultant	2,000
Gender Impacts (GBV, SEA/SH)	Report of GBV, SEA/SH cases - reported cases resolved within 30 days	Investigation of reported cases, interview with affected and non-affected victims	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant	10,000
TOTAL					**45,000**

Implementation Schedule and Cost Estimates

The environmental and social management plan will be implemented in line with the finalized project schedule, as well as activities integrated into the project design. There would be a need for the contractor to update the safeguards instruments based on the final design of the construction, renovation or upgrading works. The estimated cost for implementation of the mitigation measures and monitoring plan proposed in the ESMP for the project is approximately US$ 191, 000 as shown below

ESMP Implementation Budget

#	Activity	Role/ Responsibility	Responsible for financing	Estimated Cost (USD)
	Mitigation Measures	NSPAPIU/NEA /Contractor/ RHD	GoTG AfDB	23,000
1.	Capacity building of NSPA PIU, Contractors, Workers, and other stakeholders involved in ESMP implementation	NSPAPIU/NEA /RHD/ Consultant	GoTG AfDB	30,000
2.	ESMP Monitoring - Regular supervision – environmental and social aspects - Support to NEA to enhance its capacity for effective participation in the implementation of the project activities and delivery (MoU with NEA)	PIU/NEA/ RHD NEA	GoTG AfDB	45,000 24,000
3.	GRC reinforcement and operations	Local community/NSPA PIU/Contractor	GoTG AfDB	26,000
4.	Environmental and Social Aftercare Programs	NSPA PIU/NEA/RHD	GoTG AfDB	11,000

5.	Healthcare Waste Management Plan	RHD/NEA	GoTG AfDB	10,000
6.	Annual Audit	NSPA PIU/Consultant	GoTG AfDB	22,000
	TOTAL			**191,000**

Reporting Responsibilities of ESMP during Implementation

Reporting of the ESMP implementation and monitoring should be harmonized with the main Project monitoring and evaluation reporting system, to ensure holistic and effective communication amongst the stakeholders.

ESMP Disclosure

Upon approval of the ESIA /ESMP report, the NSPA will ensure it is published on the NSPA and Ministry of Health websites. NEA will also publish it on its website and other relevant places as may be required. The Africa Development Bank will disclose it on its website.

Environmental and social aftercare programmes

To reduce and manage the impacts of the proposed project, the surrounding local communities and the environment, the following are recommended for implementation as environment and social aftercare programmes in line with the ESMP for sustainability:

- Community and environmental education programme
- Water quality management programme
- Waste management programme
- Air quality management programme
- Occupational Health and Safety management programme
- Gender, SEA/SH& Social Management Programme

It should be noted that the proposed ESMP will form the benchmark for any upcoming management programmes and related plans as well as addressing the monitoring factor in line with relevant laws and good practices for sustainable development.

Environmental Audit

This is a systemic review of the Project activities against the ESMP to ensure that it is implemented in an environmentally sustainable manner. The audit may also identify possible new risks that have not been anticipated due to changes in the design of Project activities or changes at the site. Thus, new or alternative means of mitigation may be suggested. Therefore, an independent environmental audit is recommended midway of the Project implementation.

Conclusions

The negative environmental impacts that have been identified and are associated with the implementation of this project are minimal and could be addressed by implementing the mitigation measures proposed to ensure that they pose no threat to the environment and to the communities The proposed development should be permitted to proceed, provided the project proponent demonstrates full commitment to implementing the proposed mitigation measures and Environmental and Social Management Plan (ESMP). An environmental audit is recommended upon the completion of construction works to verify the implementation of the proposed mitigation measures. Any unforeseen impacts arising from the project should be identified and addressed through annual environmental audits.

It is also advised that the project establish a Grievance Redress Mechanism to effectively manage and resolve any grievances or complaints from individuals affected by the project.

RÉSUMÉ EXÉCUTIF

Aperçu du projet

Le gouvernement de la Gambie, par l'intermédiaire de l'Agence nationale de protection sociale (NSPA), a reçu le soutien de la Banque africaine de développement (BAD) pour le projet de soutien aux jeunes et femmes vulnérables (VYWoSP). Ce projet vise à fournir aux groupes vulnérables, en particulier aux jeunes sortis du système scolaire et aux femmes, des compétences orientées vers le marché et l'accès à une gamme de services (financiers et non financiers, services sociaux de base) afin de s'attaquer aux aspects multidimensionnels de la pauvreté et de la vulnérabilité.

L'idée principale du projet est que si les femmes et les jeunes pauvres et vulnérables dans les zones rurales disposent des compétences nécessaires dans la chaîne de valeur agricole et ont accès à des services sociaux de base de qualité, cela entraînera une augmentation de leur productivité, de leurs revenus et de leur accès à des soins de santé et à une éducation de qualité, réduisant ainsi la pauvreté et améliorant la croissance inclusive. Une communication transformative sur les changements sociaux et comportementaux interviendra pour renforcer durablement les réalisations et modifier la perception des populations sur l'équité de genre, l'autonomisation économique des femmes, et l'utilisation des services sociaux de base.

Le projet adoptera une approche holistique pour s'attaquer aux aspects multidimensionnels de la vulnérabilité et de la pauvreté. Il contribuera également à réduire les inégalités de genre en offrant de meilleures perspectives économiques et sociales aux jeunes filles et aux femmes, tout en réduisant les attentes sociales envers les jeunes hommes en tant que pourvoyeurs de la famille. De plus, il renforcera la résilience du pays en s'attaquant à certains des principaux facteurs de fragilité. L'évaluation de la fragilité de la Gambie a identifié le faible développement humain, y compris le chômage des jeunes, la pauvreté et les inégalités, ainsi qu'un accès limité aux services de santé et de protection sociale, comme des moteurs de fragilité et des facteurs potentiellement déstabilisants, la Gambie étant un contributeur important aux migrants irréguliers vers l'Europe.

Objectif du projet

L'objectif global du projet est d'améliorer les revenus et la productivité des jeunes et des femmes les plus vulnérables dans les zones rurales, ainsi que d'améliorer leur accès et leur utilisation des services sociaux de base, y compris les services de santé, de nutrition et d'éducation. Le soutien financier supplémentaire de la Banque a été orienté vers la mise en œuvre du Plan stratégique national de santé de la Gambie (2021-2025). Une partie de la subvention a été allouée à la construction et à la rénovation de l'établissement de santé de Brikama.

Le projet comprend quatre composantes, et la sous-composante 2.1 concerne la rénovation et l'équipement de quatre établissements de santé supplémentaires pour fournir des services de santé de haute qualité, y compris pour la santé sexuelle et reproductive. Cela contribuera à améliorer la capacité du système de santé à répondre à la violence fondée sur le genre (VBG) et à réduire les dépenses de santé à la charge des ménages. La sous-composante 3.2 : la rénovation et la mise à

niveau des centres de traitement de la nutrition se concentrera sur l'amélioration des infrastructures et des capacités de prestation de services. Cela inclura l'expansion des installations, la fourniture de fournitures, le renforcement des capacités des travailleurs de la santé sur les derniers protocoles de traitement de la malnutrition, ainsi que l'amélioration des systèmes d'intégration et de référence des services.

Zone d'intervention du projet

L'intervention comprenait la construction/la rénovation de l'hôpital de district de Brikama (BDH), situé dans le Kombo Central de la région côtière ouest (WCR). C'est le seul hôpital de district dans la région de santé ouest II. Cet établissement de santé comprend dix-huit (18) composantes différentes : bloc de lèpre et de tuberculose (LTB) et bloc de santé publique, poste de sécurité, salle de lavage, salle des générateurs, bloc d'urgence, services pour hommes et femmes, morgue, unité ophtalmologique, bloc opératoire, bloc de laboratoire, service pédiatrique, bloc administratif, abri d'attente, logements du personnel, service de maternité et de travail.

Chaque année, la fréquentation clinique estimée pour les patients de moins de 5 ans est de 30 715, et pour la consultation de la population générale, elle est de 70 027. Le BDH a une capacité d'accueil de 86 lits (19 pour le service pédiatrique, 22 pour les services pour adultes, 10 pour l'unité ophtalmologique, 8 pour le service des urgences et 27 pour le service de maternité).

Bénéficiaires du projet

Le BDH est situé dans le district de Kombo Central. L'établissement se trouve dans la ville de Brikama et couvre une zone de chalandise de 42 communautés, dont 20 sont des villages de soins de santé primaires (PHC) et 22 des villages non PHC. Il comprend 2 circuits PHC, à savoir Kassa Kunda et Marakissa. La population de la zone de chalandise est estimée à 187 648, dont 29 442 sont des enfants de moins de cinq ans (MoH, 2024).

Raison d'être de l'Évaluation de l'Impact Environnemental et Social (ESIA) pour le projet

Le projet devrait avoir des impacts positifs sur la prestation de services de santé en termes d'amélioration de l'accès, de la qualité, de la motivation et de la rétention du personnel. Il aura également un impact positif sur les opportunités de développement, améliorant ainsi les moyens de subsistance des communautés locales et au-delà. En dehors des impacts positifs, le projet pourrait également engendrer des impacts négatifs indésirables, nécessitant ainsi une étude d'Évaluation de l'Impact Environnemental et Social (ESIA). Pour satisfaire aux exigences statutaires de la BAD et de l'Agence nationale de l'environnement (NEA), la NSPA de la Gambie a engagé une équipe d'experts consultants pour élaborer ce rapport ESIA.

L'objectif global de la réalisation de l'ESIA est de déterminer les impacts environnementaux et sociaux potentiels négatifs de la construction et de la rénovation de l'hôpital de district de Brikama (BDH) et de développer des mesures d'atténuation pour réduire ou éliminer ces impacts tout en maximisant les avantages potentiels du projet.

Les objectifs spécifiques de l'étude ESIA sont les suivants :

- Identifier les activités du projet susceptibles d'avoir un impact négatif sur l'environnement.
- Cartographier les zones de préoccupation environnementale et sociale négative dans la construction des nouveaux établissements de santé.
- Développer des mesures d'atténuation et un Plan de Gestion Environnementale et Sociale (PGES).
- Identifier les pratiques et innovations positives pour promouvoir un environnement sain et réduire la dégradation de l'environnement.
- Identifier les risques, contraintes et opportunités liés à l'environnement dans lequel le projet sera mis en œuvre.

Cette étude ESIA s'est concentrée sur la construction et la rénovation du BDH à Brikama, dans la région côtière ouest (WCR). Les principales activités réalisées comprennent :

- Visites de terrain sur le site proposé pour observer l'état de l'environnement existant, collecter des informations de base sur l'environnement réceptif, évaluer le développement proposé et son interaction avec le segment de l'environnement, et identifier les impacts potentiels.
- Consultations avec les parties prenantes pertinentes en utilisant des méthodes de collecte de données appropriées telles que des discussions en groupes, des interviews avec des informateurs clés, etc.
- Préparation d'un rapport ESIA pour le projet, avec un chapitre dédié au PGES.

Approche méthodologique

L'évaluation a été réalisée à l'aide d'une approche mixte utilisant à la fois des méthodes de collecte de données quantitatives et qualitatives. Ainsi, des données primaires et secondaires ont été utilisées pour collecter les informations nécessaires à l'évaluation.

Collecte de données secondaires

Cela implique une revue documentaire des documents de projet pertinents pour acquérir une connaissance et une compréhension approfondies du projet. Certains de ces documents vitaux incluent le Document d'évaluation du projet (PAD), les études de faisabilité et les rapports de conception, ainsi que d'autres documents pertinents issus de projets antérieurs. Plusieurs documents politiques et juridiques pertinents ont également été examinés.

Collecte de données primaires

Les données primaires sont nécessaires pour l'étude de base et les consultations avec les parties prenantes. Des données sur l'environnement du projet et les impacts socio-économiques ont été

collectées auprès des parties prenantes en réalisant des enquêtes, des discussions d'experts, des discussions en groupes (FGD) et des interviews avec des informateurs clés (KII). L'enquête a ciblé le personnel de santé du BDH et les utilisateurs/patients dans la zone de chalandise du BDH pour évaluer leurs perceptions des impacts environnementaux et sociaux du projet ainsi que leur niveau de compréhension et d'appréciation du projet proposé.

Cadre politique, juridique et institutionnel

Le cadre administratif et juridique pertinent pour le projet de construction et de rénovation du BDH, en termes de cadre politique national, de cadre juridique national, de conventions et d'accords internationaux en matière de santé, ainsi que des politiques opérationnelles de sauvegarde de la Banque africaine de développement et d'autres exigences pertinentes, a été contextualisé et présenté dans ce rapport ESIA.

Conditions environnementales et sociales de référence du site proposé

En général, l'environnement naturel de la Gambie ne change pas de manière significative entre les différentes régions et frontières administratives au fil des ans. Ainsi, cette section ne se concentrera pas sur les conditions climatiques générales, l'hydrologie, la géologie, la topographie et la biodiversité régionale. Deuxièmement, étant donné que l'évaluation est spécifique au site, seules les conditions environnementales physiques, biologiques et socio-économiques existantes seront prises en compte.

Pluie : Comme dans d'autres régions de la Gambie, Brikama bénéficie de la pluie de mai à octobre et d'une saison sèche de novembre à avril. La moyenne totale annuelle de pluie enregistrée de 2010 à 2024 à Brikama est de 809,9 mm, ce qui est la plus faible pluie enregistrée par rapport aux autres régions pendant la même période. Le mois avec le plus de pluie est août (280,9 mm).

Qualité de l'air et du bruit : La qualité de l'air et du bruit à l'hôpital de district de Brikama est dans les normes acceptées, sauf pour les particules fines (PM 2,5) qui peuvent avoir des effets sur la santé pour les personnes plus vulnérables à la pollution de l'air (groupes sensibles). Ces groupes vulnérables sensibles à la pollution de l'air comprennent les personnes souffrant de maladies respiratoires, de maladies cardiaques, les personnes âgées, les enfants et les femmes enceintes.

Qualité de l'eau : Tous les paramètres physico-chimiques, chimiques et microbiologiques testés sont conformes aux valeurs directrices recommandées par l'Organisation mondiale de la santé, sauf pour le niveau élevé de nitrites, qui dépasse la limite acceptée. L'établissement pourrait être impacté par des facteurs environnementaux ou une contamination possible de l'approvisionnement en eau. Des conséquences graves pour la santé pourraient résulter de cette situation, en particulier pour les groupes sensibles comme les femmes enceintes, les nouveau-nés et les patients ayant des problèmes de santé sous-jacents.

Températures : Les températures en Gambie augmentent de la côte vers l'est. L'hôpital de district de Brikama est situé dans une région du pays qui connaît des températures élevées pendant la saison sèche, notamment par rapport aux zones côtières de la région ouest. La température maximale moyenne pendant la journée varie de 30 °C à 34 °C tout au long de l'année en Gambie. De fin

novembre à février, cette région connaît un temps plus frais, avec des températures variant de 25 °C à 18 °C pendant les premières heures de la journée.

Humidité : En moyenne, août est le mois le plus humide de toute l'année, tandis que janvier est le moins humide. Une augmentation drastique de l'humidité relative est observée de juillet à septembre, qui tombe pendant la saison des pluies. Le taux moyen annuel d'humidité relative est calculé à environ 63 %. Entre 2010 et 2024, la zone du gouvernement local de Brikama (BLGA) a enregistré ses niveaux d'humidité les plus élevés en août et septembre, atteignant 80 %.

Flore et faune : Il existe différentes espèces d'arbres présentes à l'hôpital de district de Brikama. Certains arbres se trouvent dans l'enceinte de l'établissement de santé. Les espèces d'arbres présentes comprennent 2 neem et 2 manguiers. Aucune espèce de plante menacée n'a été observée dans l'enceinte de l'établissement. Aucun animal n'a été observé dans l'établissement de santé au moment de l'évaluation. Bien qu'aucune espèce de faune n'ait été observée lors de la visite sur le terrain, il existe cependant une forte probabilité d'existence de chats et de rongeurs.

Démographie : Selon le recensement de la population et du logement de 2024 (PHC), la Gambie avait une population de 2,42 millions d'habitants, avec des femmes représentant 51 % contre 49 % d'hommes. Entre 2013 et 2024, le taux de croissance annuel de la population de la Gambie est de 2,5 %. Au niveau de l'administration locale, Banjul et Kanifing ont une proportion relativement plus faible de population jeune (30,0 % et 34,2 % respectivement) par rapport à Brikama (47,9 %) et Basse (46,7 %), où près de la moitié de la population a moins de 15 ans.

Éducation : Bien que le taux brut de scolarisation (GER) national au niveau primaire soit de 86,8 %, la zone de Brikama LGA n'a enregistré que 43,8 %. Le taux d'alphabétisation des adultes dans la zone de Brikama LGA est de 22,8 %, ce qui est bien en dessous de la moyenne nationale de 50,8 %. Pour améliorer les résultats éducatifs dans la LGA, il est nécessaire de concevoir un programme éducatif spécial pour cette zone.

Santé : Le gouvernement de la Gambie accorde la priorité à la santé de ses citoyens et se concentre spécifiquement sur la réduction des décès maternels et néonatals, la réduction de la charge des maladies et la garantie que le pays dispose d'une main-d'œuvre qualifiée et en bonne santé. La majorité des naissances dans la LGA de Brikama se déroulent dans des établissements de santé (82,5 %). Les indicateurs de santé dans la LGA de Brikama sont très faibles. Selon le rapport de l'enquête démographique et de santé de la Gambie (GDHS) 2019-20, 40 % de la population des ménages dans la BLGA disposait de services d'assainissement améliorés, 89 % d'une source d'eau potable améliorée. En ce qui concerne l'anémie, la BLGA a enregistré la plus forte prévalence, avec 77 % pour les enfants de 6 à 59 mois et 62 % pour les femmes âgées de 15 à 49 ans.

Récemment, il a été difficile d'accéder à l'hôpital de district de Brikama en raison de l'augmentation du trafic et du marché. De plus, étant le seul hôpital de district dans la région côtière ouest, la demande est élevée, rendant l'accès aux services un défi majeur pour les utilisateurs en raison des temps d'attente, de l'espace de travail limité et des ressources humaines, entre autres.

Agriculture : Brikama, comme de nombreuses communautés en Gambie, a une longue tradition agricole qui soutient son économie et les moyens de subsistance de nombreux habitants. Les terres fertiles de la région et le climat favorable ont historiquement soutenu diverses activités agricoles, y compris la culture de cultures de base telles que les arachides, le riz, le mil, le sorgho et le maïs. Des fruits comme les mangues, les oranges, les bananes et les noix de cajou sont cultivés, contribuant à la consommation locale et aux revenus d'exportation. Plusieurs initiatives ont été lancées pour revitaliser et moderniser le secteur agricole de Brikama.

Pauvreté et inégalités : La pauvreté est un phénomène multidimensionnel avec des aspects monétaires et non monétaires. Les personnes sont considérées comme pauvres lorsqu'elles n'ont pas d'opportunités de travail, d'apprentissage et de vie saine et épanouissante. En Gambie, le revenu est affecté par les saisons de plantation et de récolte ; par conséquent, s'appuyer sur cet indicateur pourrait sous-estimer ou surestimer le niveau de vie des gens. Les achats alimentaires représentent la plus grande part de la consommation totale de nourriture des ménages, représentant plus de 61 % de la consommation totale. Brikama a affiché des taux de pauvreté élevés. En 2003, le taux de pauvreté était de 56,7 %, indiquant que plus de la moitié de la population vivait en dessous du seuil de pauvreté. Ce chiffre a légèrement augmenté à 57,5 % en 2010 (GBoS 2010), soulignant des difficultés économiques persistantes.

Consultation des parties prenantes

La consultation des parties prenantes a été réalisée par le biais d'une série de réunions publiques à Brikama et dans des communautés sélectionnées voisines, notamment Brikama, Pirang, Marakissa, Kuloro, Kitty, Jamisa et Serekundading, ainsi qu'avec le Comité consultatif technique (TAC) et la Direction régionale de la santé, région de santé ouest II, du 23 février au 10 mars 2025. Chaque réunion de discussion en groupe (FGD) a été suivie par 6 à 14 participants. Les réunions ont été organisées avec l'assistance de l'Agent principal de santé publique de la Direction régionale de la santé de la région de santé ouest II. Au total, 109 participants étaient présents, dont 85 (78 %) femmes et 24 (22 %) hommes. Pour les interviews avec des informateurs clés (KII), 18 personnes ont été interrogées. En tout, les perceptions de 250 répondants à l'enquête comprenaient 69 % d'utilisateurs de services/patients et 31 % de prestataires de services (personnel de l'établissement de santé de Brikama et RHD). Plus de la moitié des répondants (55 %) étaient des femmes et 68 % étaient mariées.

Résultats de l'ESIA

Les consultations ont donné lieu à des retours positifs de la part des parties prenantes exprimant un soutien total pour la construction/rénovation proposée de l'hôpital de santé du district. Les impacts positifs potentiels associés à la mise en œuvre et aux opérations du projet proposé incluent l'augmentation/amélioration de l'accès aux soins de santé de qualité, la motivation et la rétention du personnel, la réduction des références de patients, l'amélioration de la performance des travailleurs de la santé, la réduction des temps d'attente pour les patients, la création d'opportunités d'emploi, et une source de revenus provenant de la vente de matériaux de construction.

Voici quelques-unes des principales conclusions de la consultation :

- 54 % des répondants n'étaient pas au courant des activités de rénovation proposées à l'établissement de santé. Cependant, le niveau de sensibilisation au projet était plus élevé parmi les utilisateurs de l'établissement de santé (56 %) par rapport au personnel (48 %).
- 46 % des utilisateurs et du personnel ont évalué les installations de santé comme étant satisfaisantes ou bonnes, tandis que plus de la moitié (51 %) les ont évaluées comme satisfaisantes.
- 80 % des répondants ont déclaré que l'hôpital de district de Brikama, dont la majorité a signalé une utilisation occasionnelle (40 %) et depuis plus de 5 ans (59 %).
- Jusqu'à 96 % des répondants ont exprimé que le projet devrait avoir un impact positif sur leurs moyens de subsistance, dont 95 % parmi les utilisateurs de l'établissement de santé (HFU) et 87 % parmi le personnel de l'établissement de santé (HFS). Plus de la moitié (66 %) des répondants pensent que le projet n'aura pas d'impact sur la prestation des services de santé, avec 59 % étant HFU et 81 % HFS.
- Dans l'ensemble, plus de 50 % des répondants ont perçu les services de l'établissement de santé et l'état des installations comme pas satisfaisants.
- La majorité des répondants ont signalé un accès facile aux services de santé (75 %), une amélioration des services de santé (74 %), la création d'emplois (62 %), l'amélioration de la santé publique (60 %), de meilleures installations de santé (56 %), la génération de revenus (48 %), une performance améliorée des travailleurs de la santé (41 %), et un environnement de travail sûr et sain (31 %).

Programmes de Gestion des Impacts Potentiels du Projet

Programmes Recommandés

1. Programme de Gestion de la Qualité de l'Air
2. Programme de Gestion de la Qualité de l'Eau
3. Programme de Gestion des Déchets
4. Programme de Gestion de la Santé et de la Sécurité au Travail
5. Programme de Prévention du GBV, SEA et SH
6. Programme de Gestion Socio-Culturelle

Mise en Œuvre du PGES

La mise en œuvre du PGES est liée à une série de plans de gestion complets. Les mesures de gestion et d'atténuation doivent respecter les exigences législatives. En l'absence de directives légales, des

pratiques industrielles et/ou internationales reconnues doivent être appliquées dans la mesure du possible.

Objectifs du Suivi

Le suivi est essentiel pour garantir que les mesures d'atténuation proposées sont mises en œuvre correctement. Les objectifs essentiels incluent :

- Mesurer le niveau d'achèvement des mesures d'atténuation (succès ou échec).
- Identifier les impacts inattendus.
- Faciliter l'intégration de la gestion environnementale et sociale dans les interventions de mise en œuvre du projet.

Plan de Mise en Œuvre et Estimations de Coût

Calendrier de Mise en Œuvre

Le plan de gestion environnementale et sociale sera mis en œuvre conformément au calendrier du projet finalisé, avec des activités intégrées dans la conception du projet. Le contractant devra mettre à jour les instruments de sauvegarde en fonction de la conception finale des travaux de construction, de rénovation ou de mise à niveau.

Estimation des Coûts

Le coût estimé pour la mise en œuvre des mesures d'atténuation et du plan de suivi proposé dans le PGES pour le projet est d'environ 191,000 US$.

Activités et Estimations des Coûts

Activité	**Rôle/Responsabilité**	**Responsable du Financement**	**Coût Estimé (USD)**
1. Mesures d'atténuation	NSPAPIU/NEA/Contractor/RHD	GoTG, AfDB	23,000
2. Renforcement des capacités	NSPAPIU/NEA/RHD/Consultant	GoTG, AfDB	30,000
3. Suivi du PGES	PIU/NEA/RHD	GoTG, AfDB	45,000
- Supervision régulière	- Aspects environnementaux et sociaux		
- Soutien à la NEA	- Renforcement de la capacité	GoTG, AfDB	24,000

Activité	Rôle/Responsabilité	Responsable du Financement	Coût Estimé (USD)
4. Renforcement et opérations du GRC	Communauté locale/NSPA PIU/Contractor	GoTG, AfDB	26,000
5. Programmes de suivi environnemental et social	NSPAPIU/NEA/RHD	GoTG, AfDB	11,000
6. Plan de gestion des déchets médicaux	RHD/NEA	GoTG, AfDB	10,000
7. Audit Annuel	NSPAPIU/Consultant	GoTG, AfDB	22,000

TOTAL : 191,000 USD

Responsabilités de Reporting du PGES durant la Mise en Œuvre

Harmonisation du Reporting

Le reporting de la mise en œuvre et du suivi du PGES doit être harmonisé avec le système principal de suivi et d'évaluation du projet, afin d'assurer une communication holistique et efficace entre les parties prenantes.

Diffusion du PGES

À l'approbation du rapport ESIA/PGES, la NSPA veillera à ce qu'il soit publié sur les sites web de la NSPA et du Ministère de la Santé. La NEA le publiera également sur son site et d'autres lieux pertinents si nécessaire. La Banque Africaine de Développement le diffusera sur son site.

Programmes de Suivi Environnemental et Social

Pour réduire et gérer les impacts du projet proposé sur les communautés locales et l'environnement, les programmes suivants sont recommandés :

1. Programme d'éducation communautaire et environnementale
2. Programme de gestion de la qualité de l'eau
3. Programme de gestion des déchets
4. Programme de gestion de la qualité de l'air
5. Programme de gestion de la santé et de la sécurité au travail
6. Programme de gestion des genres, SEA/SH et social

Le PGES proposé servira de référence pour tout programme de gestion ou plan connexe à venir, en tenant compte du facteur de suivi conformément aux lois pertinentes et aux bonnes pratiques pour un développement durable.

Audit Environnemental

Un audit environnemental systématique des activités du projet par rapport au PGES est recommandé pour s'assurer qu'il est mis en œuvre de manière durable sur le plan environnemental. Cet audit peut également identifier de nouveaux risques non anticipés en raison de changements dans la conception des activités du projet ou sur le site. Ainsi, de nouveaux moyens de mitigation peuvent être suggérés. Un audit environnemental indépendant est recommandé à mi-parcours de la mise en œuvre du projet.

Conclusions

Les impacts environnementaux négatifs identifiés, associés à la mise en œuvre de ce projet, sont minimes et peuvent être gérés par l'application des mesures d'atténuation proposées, garantissant qu'ils ne représentent pas une menace pour l'environnement ni pour les communautés. Le développement proposé doit être approuvé, à condition que le promoteur du projet démontre un engagement total à mettre en œuvre les mesures d'atténuation et le PGES. Un audit environnemental est recommandé à la fin des travaux de construction pour vérifier la mise en œuvre des mesures d'atténuation proposées. Les impacts imprévus résultant du projet doivent être identifiés et traités par le biais d'audits environnementaux annuels.

Il est également conseillé d'établir un Mécanisme de Recours pour gérer et résoudre efficacement les plaintes des personnes affectées par le projet.

1. INTRODUCTION

The Government of The Gambia through the National Social Protection Agency (NSPA) has received support from the African Development Bank (AfDB) for the Vulnerable Youth and Women Support Project (VYWoSP) to provide vulnerable groups, particularly out-of-school youth and women, with market-oriented skills and access to a range of services (financial and nonfinancial, basic social services) to tackle the multidimensional aspect of poverty and vulnerability. The main thrust of the project is that if poor and vulnerable women and youth in rural areas have the required skills in the agricultural value chain and access to quality basic social services, then there will be an increase in their productivity, and household income, and access to quality healthcare and education, thus reducing poverty and improve inclusive growth. Transformative social and behavioral change communication will intervene to sustainably strengthen achievements and bring change in populations' perception of gender equity, women's economic empowerment, use of basic social services, etc.

The project will adopt a holistic approach to tackling the multidimensional aspects of vulnerability and poverty. The project will also contribute to reducing gender inequalities by providing better economic and social prospects for young girls and women and reducing social expectations of male youth as household providers. It will also contribute to resilience in the country by tackling some of the key drivers of fragility. The Gambia Fragility Assessment identified low human development, including youth unemployment, poverty and inequalities, and poor access to health and social protection services, as a driver of fragility and a potentially destabilizing factor for the world as The Gambia is an important contributor to irregular migrants to Europe.

The additional financial support from the Bank is geared towards supporting the implementation of The Gambia National Health Strategic Plan (2021 – 2025). A portion of the grant is allocated for the construction and renovation of Brikama District Hospital.

The project has the following four (4) components:

1) **Component 1:** Support to equitable and inclusive access to jobs and livelihood opportunities for youth and women (UA 4.28 million). This component will build on the existing project that is focused on providing non-financial support to youth and women owned enterprises. In addition to existing activities (functional literacy and entrepreneurship training, provision of equipment and non-financial services), it will promote access to finance for the creation of decent jobs and enhance nutrition skills on selected agricultural value chains. It has two sub-components.

    a. *Sub-component 1.1* – Support for job creation will focus on providing credit access to women and youth-owned enterprises, alongside capacity building in entrepreneurship and financial skills for credit recipients. Beneficiaries will also receive training and equipment for agro-processing. A feasibility study will be done at the beginning of the project implementation to identify the financial intermediary, the criteria for accessing

the financing facility, and the credits modalities. Additionally, the component will support the Ministry of Higher Education, Research, Science, and Technology (MoHERST) in creating regional national innovation and entrepreneurship hubs to foster entrepreneurship, innovation, and business development across regions. Capacity building will also be provided for the Ministry of Youth and Sport (MoYS), the Ministry of Gender, Children, and Social Welfare (MoGCSW), and MoHERST to strengthen their support for these initiatives.

b. *Sub-component 1.2* – Provision of nutrition related skills development within selected agricultural value chains for women and youth. The component will include training programs on nutrition-sensitive agriculture practices while supporting improved storage and other postharvest loss technologies that retain nutrient content.

2) **Component 2:** Support for health systems strengthening (UA 8.72 million). This component will increase the impact of the existing project that is focused on financing the renovation and equipping of two healthcare centers. AF-VYWOSP will support the renovation and equipping of four additional health facilities to improve equitable access to health services including response to GBV and FGM/C. In addition, it is expected to improve the capacity of the health system to detect and therefore respond to disease outbreaks by strengthening the surveillance system. It has three sub-components.

a. *Sub-component 2.1:* Renovation and equipment of four additional health facilities to provide high quality health services including for sexual and reproductive health. This will contribute to improvements in the capacity of the health system to respond to GBV and reduce out of pocket expenditure on health.

b. *Sub-component 2.2:* Capacity building and technical assistance to the Ministry of Health by the World Health Organization (WHO) to strengthen the health system to deliver improved health outcomes. This includes support to develop a national health investment plan that identifies and prioritizes investable opportunities in the health sector for both government and its partners. In addition, the funding will support the appraisal and preparation of well-structured bankable projects to be financed by partners including the African Development Bank, Islamic Development Bank, the European Investment Bank and other partners, mobilizing additional resources for the health sector The World Health Organization will build the capacity of the Ministry of Health to improve the quality of their health infrastructure to WHO global standards, promote policy reforms that strengthen pandemic preparedness and promote private health entrepreneurship to create jobs and support skills development in the health sector.

3) **Component 3:** Support for enhanced nutrition-smart surveillance and treatment systems (UA 1 million). The component will enhance the nutrition surveillance system to function as

an early warning tool, improving the ability to promptly monitor and address nutritional deficiencies. This will ensure timely interventions to prevent malnutrition from worsening. Additionally, for severe cases of malnutrition, nutrition treatment centers in the health facilities will be upgraded and rehabilitated into better-equipped facilities. These improvements will lead to more effective management and recovery of malnourished individuals, thereby reducing morbidity and mortality rates associated with malnutrition.

a. *Subcomponent 3.1:* Strengthening nutrition surveillance as an early warning system through digitization and integration with health, agricultural and social services for a comprehensive view on nutritional status in the areas leading to better monitoring, timely interventions and ultimately improved nutritional outcomes. This will include capacity building to ensure the quality and accuracy of data collected.

b. *Subcomponent 3.2:* Renovation and upgrading of nutrition treatment centers will focus on enhancing infrastructure and service delivery capacities. This will include the expansion of facilities, provision of supplies, capacity building for health workers on the latest malnutrition treatment protocols, and improved service integration and referral systems.

4) **Component 4:** Project management (UA 1 million). This component will support activities that aim to enhance effective and efficient management of project activities such as coordination and capacity building on financial management and procurement. At the environmental level, risks will be related to Component 2 and Activity 2.1, in particular the component concerning the Renovation of four additional Healthcare facilities to provide high quality health services including for sexual and reproductive health.

1.1. Project Objective

The Project Development Objective (PDO) is to improve the incomes and productivity of the most vulnerable youth and women in rural areas and to improve their access and use of basic social services, including health, nutrition, and education services.

Overall, the project will:

(i) Create jobs and livelihood opportunities for vulnerable women and out-of-school youth in rural areas, increase their productivity and hence their incomes through skills development, entrepreneurship, supply of productive equipment and non-financial support (counseling, coaching); and

(ii) Improve their use and access to better and inclusive basic social services (health and nutrition, education). The project will adopt a holistic approach to tackling the multidimensional aspects of vulnerability and poverty. The project will also contribute to reducing gender inequalities by providing better economic and social prospects for young girls and women and reducing social expectations of male youth.

1.2. Rationale for ESIA for the Project

The National Environment Management Act (NEMA1994) provides the legal basis for environmental protection and preservation, thereby ensuring that efforts put into planning and management are made to bear fruit. Part V of NEMA specifically provides for Environmental Impact Assessment. Suffice it to say that any project that has and/or is deemed to have an impact on the environment should undergo the EIA procedure so that potential impacts are identified, and adequate mitigation actions/strategies are developed.

The EIA Guidelines and Procedures detail the processes one must undertake to ensure that project proponents comply with the procedure. The EIA Regulations 2014 clearly explains the provisions of the law as well as the procedure and guidelines, outlined steps that need to be followed in terms of scoping, screening, actual impact study, reviews, and monitoring. Furthermore, it outlines the provision for environmental audits.

Carry out an Environmental and Social Impact Assessment (ESIA) and prepare a report for submission as a requirement that the Agency relies on to determine if proponents can ensure that their proposed development projects do not create significant negative impacts on human & animal health and the environment.

In this regard, it is a requirement by the environmental laws of the country and the AfDB safeguard policies to carry out an ESIA and prepare a report which includes the Environmental and Social Management Plan (ESMP) accordingly.

1.3. Objectives of ESIA/ESMP

The overall objective of conducting an ESIA is to identify, assess, and evaluate the potential environmental and social impacts of the construction/renovation of Brikama District Hospital (BDH) and develop mitigation and enhancement measures that can be adopted to reduce or eliminate these negative impacts as well as maximize the potential benefits of the project. The assessment and management plan will be key to developing a sustainable intervention with minimal environmental and social impact. The assessment results will also provide evidence based on informing stakeholders including policymakers and project actors.

The following are the specific objectives of the ESIA study:

- To identify project activities that have the potential to impact on the environment negatively.
- To map negative environmental and social areas of concern in the construction/renovation of the Brikama District Hospital.
- Develop mitigation measures and an Environmental and Social Management Plan (ESMP).
- Identify positive practices and innovations to promote a clean environment and reduce environmental degradation.

- Identify the risks, constraints and opportunities linked to the environment in which the project will be implemented.

1.4. Scope of ESIA/ESMP

The focus of the ESIA study will be on the project activities associated with the construction/ renovation of the Brikama District Hospital.

The key activities undertaken for the preparation of this ESIA included:

- Detailed desk review to better understand the project objectives, components, activities and outcomes as well as the legal and institutional framework around the implementation of this project.
- Conduct field visits to the selected site for Health Facility construction/renovation to observe the existing environment and social conditions, assess the proposed development, and identify potential impacts.
- Conduct a comprehensive scoping to identify the environmental and social risk and impact issues for the new BDH after the feasibility designs are completed.
- Consultations with relevant stakeholders using suitable data collection methods such as focus group discussions, key informant interviews, etc.
- Prepare Environmental and Social Impact Assessment (ESIA) report including Environmental and Social Management Plan (ESMP).

1.5. Project description

1.5.1. Description of The Gambia Health Care System[1]

The Gambian healthcare system is founded on a robust primary healthcare concept that dates back to 1980. It operates through a three-tier structure comprising primary, secondary, and tertiary levels of care.

At the primary level, there are village health services (VHS), which include village health posts, village clinics, and reproductive health outreach clinics. The secondary level is made up of minor and major health centres and district hospitals. The tertiary level primarily consists of hospitals, including general, specialized, and teaching hospitals, as illustrated in **Figure 1.**

In addition to the public health system, there is a network of private healthcare facilities throughout the country. This includes non-governmental organizations (NGOs), private for-profit entities, and faith-based health facilities, all of which complement the services provided by the public sector.

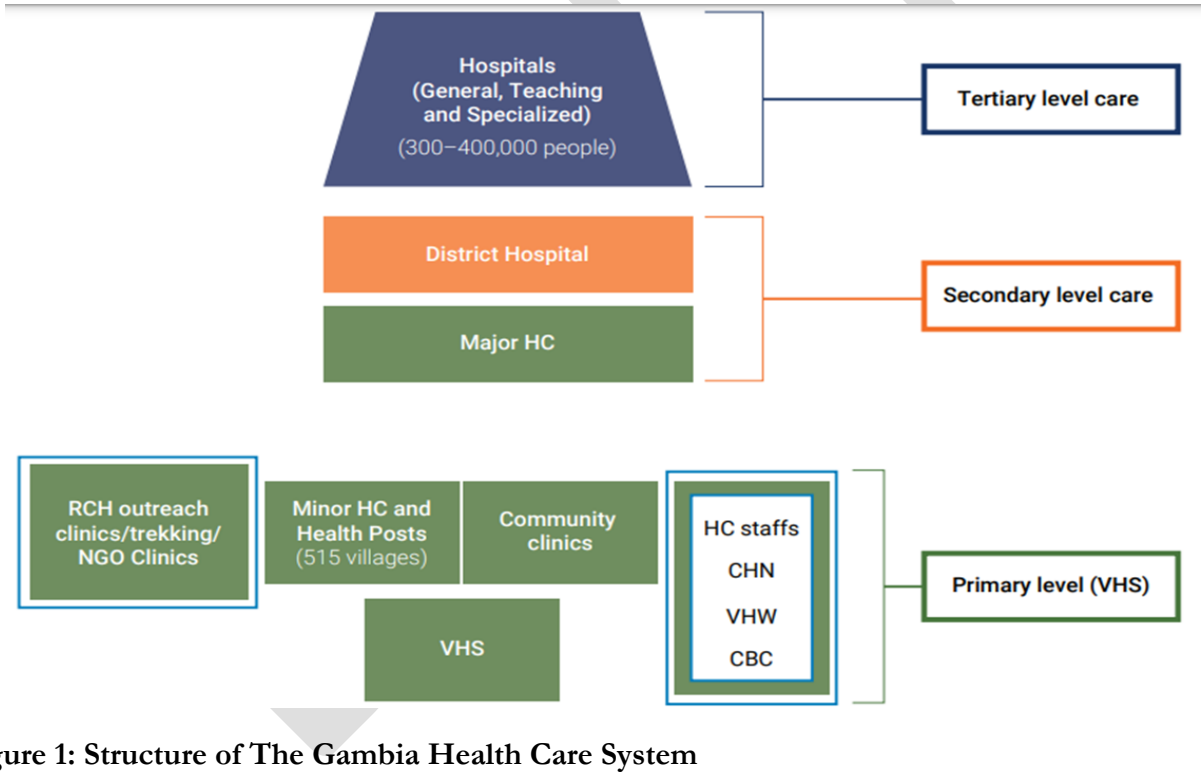


Figure 1: Structure of The Gambia Health Care System

The Health Service Assessment report of 2019 noted that the decentralization of healthcare is weak, and that the delegation of authority is more of a "push" system where allocations to facilities are

[1] Extracted from the National Multi-Sectoral Strategy and Costed Action Plan, 2022 – 2027. https://www.afro.who.int/sites/default/files/2022-07/National%20Multi-sectoral%20Strategy%20and%20Costed%20Action%20Plan%20for%20NCD%20prevention%20and%20control%20-Gambia%202022-27.pdf

based on what is received from the central authority rather than specific requisition[2]. This system impacts on the quality of both general and specific services provided at the facility level. Hence, health services utilization is low with a shortage of health facilities, core healthcare workers, medicines, and equipment. Although 40% of the population resides in rural areas, where access to healthcare is mainly from primary or secondary level facilities, coverage in rural areas is low with an average coverage of 40% nationally. Only 20% of health funding is allocated to these facilities[3].

Coordination across the health sector in The Gambia, involving government, NGOs/civil society, and donors, remains a significant challenge. Despite notable improvements, the Health Service Assessment Report (2019) revealed that most coordination occurs at the programme or activity level rather than across various health programmes within the Ministry of Health (MoH). Currently, there is no established cross-programme coordination mechanism within the MoH, or between private health sectors and NGOs. Consequently, the regulation of healthcare providers in the private sector and NGOs continues to be problematic.

Furthermore, the coordination and regulation of healthcare personnel face similar challenges, as the professional councils have limited necessary capacity to effectively carry out their regulatory responsibilities. While legislation provides these councils with the statutory authority for regulation and licensing, they do not possess adequate technical and financial resources to enforce regulations on health providers. Additionally, many healthcare providers are often unaware of the relevant regulations governing their profession. Nevertheless, the MoH has implemented a mechanism to license all private and NGO health facilities, as well as their personnel.

1.5.2. Brikama District Hospital

Brikama District Hospital (BDH), one of the identified health facility for construction/renovation is situated in the Kombo Central of the West Coast Region (WCR). It is the only District Hospital in Western II Health Region. It is located in the Kombo Central District. The facility is within Brikama Town and covers a catchment area of 42 communities, of which 20 are PHC villages and 22 non-PHC villages. It has 2 PHC circuits namely; Kassa Kunda and Marakissa Circuits. It has a projection estimated catchment area population of 187 648, of which 29, 442 are children under the age of five (MoH, 2024). Annually, an estimated clinical attendance for under 5 outpatients is 30,715 and general population consultation is 70,027. BDH has bed capacity of 86 beds (19 for pediatric ward, 22 for adult wards, and 10 for the eye unit, 8 for the Outpatient Department (OPD) and Accident and Emergency (A&E), and 27 for the maternity ward.

This health facility comprises of eighteen (18) different components Leprosy and Tuberculosis (LTB) & Public Health Block, Security Post, Laundry room, Generator Room, Emergency Block, Male & Female ward, Mortuary, Eye Unit, Operating Theater, Proposed X-ray block, Proposed

[2] Health Management Information System, (2019). Health Service Statistics Report, Ministry of Health, Banjul, The Gambia

[3] National Health sector Strategy plan 2021-2025

Accident and Emergency, Laboratory Block, Pediatric Ward, Administration Block, Waiting Shed, Staff Quarters, Maternity & Labour Ward.

As a government-managed health facility, BDH is strategically located in Brikama town, ensuring accessibility for the communities it serves (see **Figure 2**). BDH premise is crowded with buildings and few trees including mango and neem trees.

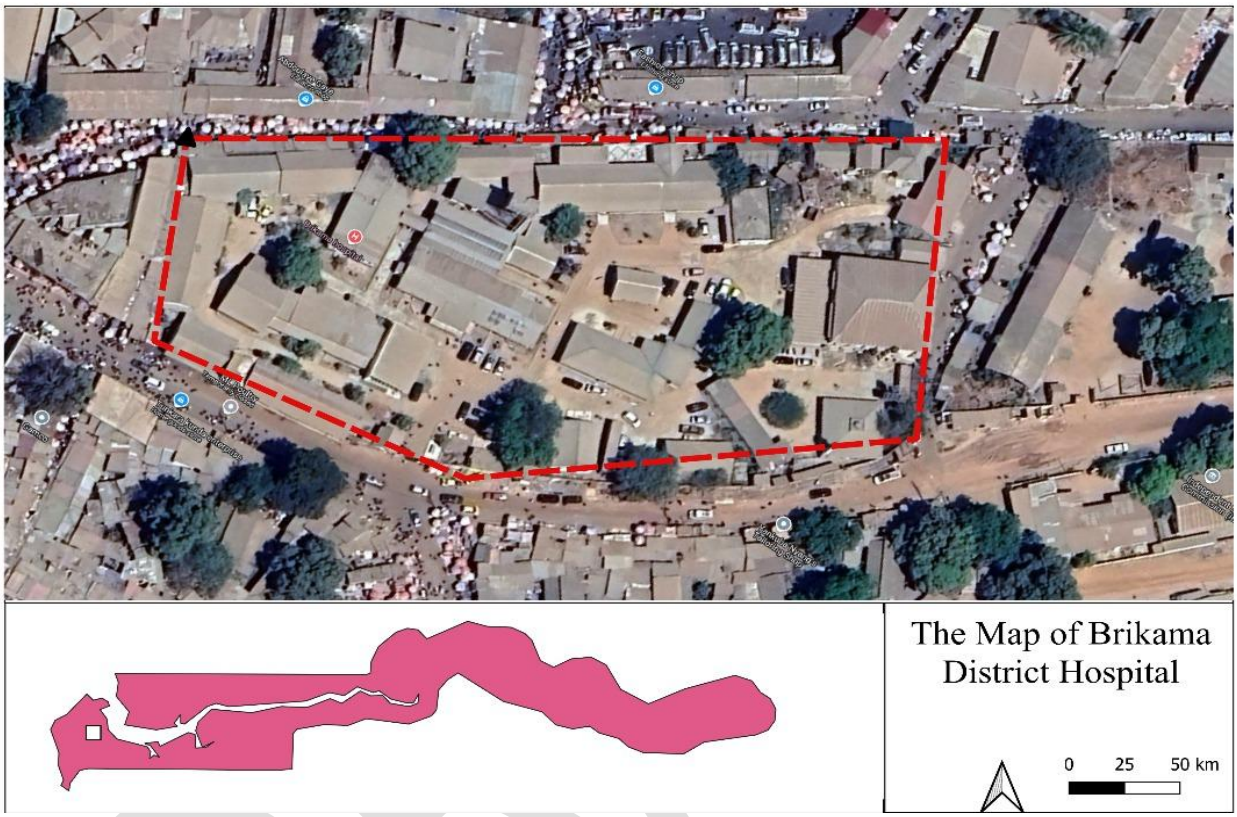


Figure 2: Google Earth Map Showing the Proximity of the Closest Community to the Site

Table 1:Location and Perimeter coordinates of Brikama District Hospital

Location Coordinates	13.273807	-16.648162
Perimeter coordinates		
A	13.273753	-16.648731
B	13.273374	-16.648597
C	13.274647	-16.647535
D	13.274094	-16.647213

1.5.3. State of Infrastructures at Brikama District Hospital

The general conditions of these structures are fairly good, but some structures are not suitable to house patients and key personnel of the health facility. This facility serves a catchment area of the total population of about three hundred thousand patients yearly thus making it one of the busiest major health facilities in the country. The labour ward of this facility has an average of 600 to 700 deliveries in a single month. The Pediatric Ward of Brikama has a total of 15 beds. Looking at its catchment area, the number of beds is too small to accommodate more patients. The laboratory block in Brikama District Hospital is small in terms of size of the block, thereby s making it very tight and unconducive for the patients and staff. This has forced the facility staff not to utilize some of the equipment and machines available there. However, the buildings developed some defects, which are as follows:

- Minor leakages are common as spotted on the ceiling and major leakage on the buildings of the blocks which requires that roofing sheet to be replaced and roof structures
- Major electrical fault on the cables as well as appliances
- Faulty doors and window
- Minor hairline cracks on walls
- Changing of WC and Wash hand basins in toilets
- Painting
- Leakage marks on ceiling
- Replacement of complete doors

- Low water pressure
- Pavement concrete

Figure 3: Structural Defects identified in Brikama District Hospital

1.5.4. Recommended Construction/Renovation Activities Brikama District Hospital

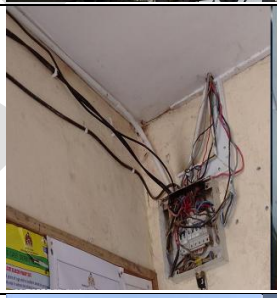
Although, there has been quite a number of renovations done in the past but the current status of the infrastructures within the facility demands urgent renovation to ensure better and quality health care service delivery. Following assessment of the BDH, the following recommended construction/renovation works are required:

- Removed and replace with new roofing sheets and roofing structures
- Repaired and replaced all electrical faults on the cables as well as appliances.
- Repaired all hairline and major cracks on walls
- Repaired and replace with new plumbing fittings in wards and toilets

- Repaint the whole facility
- Remove and replaced with new ceiling
- Remove and replaced with new doors and windows
- Provide new floor tiles where needed
- Expand and construct one floor on top of the maternity ward.
- Expand the labour ward by creating delivery room for each patient with complete privacy.
- Construct one floor on top of the existing pediatric ward to accommodates more patients.
- Construct one floor on top of the existing laboratory block to accommodates more patients, staff, equipment and machines.
- Expand the front elevation of the mortuary block and provide more selves for dead bodies.
- Convert an office block to be use as X-ray unit.
- Construction of new Accident and Emergency unit.
- Provides additional water supply and repaired all water supply systems.

Table 2: List of Infrastructure to be Renovated/Constructed

Name of Infrastructure	**Proposed renovation work**	**Pictures**
Maternity Unit Block	1. Painting 2. Roofing 3. Ceiling 4. Expansion of delivery rooms 5. Tiling 6. Installation of doors and windows 7. Plumbing and electrical work	
Outpatient Block	1. Roofing 2. Installation of doors and windows 3. Plumbing and electrical work 4. Painting 5. Tiling	
Public toilets	1. Painting 2. Changing WC and Wash hand basins in toilets 3. Roofing 4. Installation of doors and windows 5. Tiling 6. Plumbing work	

Mortuary Block	1. Painting 2. Roofing 3. Ceiling 4. Expansion of Front elevation 5. Increase More selves for dead bodies 6. Doors and Windows	 
Water	1. Installation of additional water tank 2. Repair of the damaged water system	
Electricity	1. Remove and replace all electric fault	 
Wards	1. Painting 2. Included walls 3. Reinforcement and formwork 4. Plastering and blockwork 5. Ceiling 6. Installation of doors and windows 7. Plumbing and electrical work 8. Roofing Tiling	 
New Accident and Emergency	Construction of a new one-story building 1. Painting 2. Roofing 3. Ceiling 4. Extended walls 5. Concrete work 6. Reinforcement and formwork 7. Plastering and blockwork 8. Tiling	

	9. Installation of doors and windows 10. Plumbing and electrical work	
Construct one floor on top of Maternity ward, Pediatric ward and Lab block for more patients, staff, equipment and machine	Construction of a new Block 1. Painting 2. Roofing 3. Ceiling 4. Extended walls 5. Concrete work 6. Reinforcement and formwork 7. Plastering and blockwork 8. Tiling 9. Installation of doors and windows 10. Plumbing and electrical work	
X-Ray Room	1. Painting 2. Roofing 3. Tiling 4. Electrical works 5. Installation of Doors and Windows 6. Ceiling	

1.5.5 Primary beneficiaries of the Project

Brikama District Hospital, one of the identified health facility for construction/renovation is situated in the Kombo Central of the West Coast Region. It is the only District Hospital in Western II Health Region. It is located in Kombo Central District. The facility is within Brikama Town and covering a catchment area of 42 communities. It also serves major referral facilities for 9 public and private health facilities in kombo east and south, including Sanyang Health Center, Gunjur health Center, Nyambai Community Clinic, Wellingara Community Clinic, Kafuta Minor Health Center, Pirang Health Center, Farato Minor Health Center, Darsilameh and Basori Community Clinic. **(Figure 4).**

Figure 4: Brikama District Hospital Catchment Area Map

1.6 Project Alternatives

The objective of analyzing this project's alternatives is to identify practical options to reduce or prevent the adverse impacts on the proposed renovation/construction of Brikama District Hospital. Intending to increase access to quality healthcare services, the alternative analysis of this project considers other practicable strategies that can be looked at to achieve the project objectives and eliminate adverse environmental and social impacts associated with project implementation. The scenarios are given to choose the design and renovation/construction plan in accordance with the objectives and the actual natural environment and socioeconomic conditions in Brikama District Hospital. The various alternatives to the proposed project were assessed regarding environmental acceptability and economic feasibility during the assessment process as discussed below.

1.6.1. Action Alternative Scenarios

Reactions from consultations and engagement with the community and key stakeholders highlighted that the major benefit of the proposed project is improving access to better healthcare services in the district of Kombo Central District as it is the only functional District Hospital in the district. Therefore, the renovation/construction of the Brikama District Hospital is most appropriate considering its proximity to good road facilities for easy reach by users and other peripheral health facilities.

1.6.2. Zero or No Project Alternative

In the case where the zero-scenario alternatives are considered, this means that the project will not be implemented. The forgone costs of not having the project could result in economic and social losses regarding employment development, human welfare, livelihood and improved services. So, this option is not recommended for this project since the plot belongs to the health center and there is no other alternative plot that the developer can access without incurring additional costs. There is also evidence that the renovation/construction of this health facility will not have severe negative impacts on the surrounding environment and communities.

Therefore, Zero or No Project Option is the least preferred from the health, socio-economic, and perspectives, considering that the health risks associated with no renovation/construction in the Brikama Region, especially with long the distance to referral hospitals will persist. This analysis shows that the No Project alternative may not be an option for the MoH and the people Brikama and its satellite villages.

1.6.3. Location and layout alternatives

The location and layout alternatives were not considered since the proposed construction and renovation/construction works will take place within the premises of existing structures at Briakama

District Hospital. Also, the intended project concerns the expansion work of the Brikama District Hospital, which already exists in the project area. This means that the site fits the proposed project. The site also has access to water and grid electricity expansion in the area.

1.6.4. Construction

The design considered construction techniques that use local materials as much as possible and imported materials where local ones cannot be obtained. The construction will involve the use of locally made materials like cement blocks because there is no other affordable solution available for the construction of such permanent structures and bearing in mind that the other alternative is the use of burnt bricks that are very detrimental and destructive to the environment. Local materials made from wood, tiles, or iron sheets manufactured locally will be used for roofing which substitutes for the other alternative of using imported ones. The use of locally made materials provides employment and supports the promotion of local industries.

1.6.5. Solid waste management

The waste will be sorted on-site, and four categories of waste will be treated separately:

- Organic waste that will be generated during the renovation/construction and operation phases of the project will be transformed into organic manure through composting and used in the school garden as soil dressing.
- For paper, wood, etc., a better option is to transport them to a designated waste dumping site for appropriate disposal.
- Stony and earthy materials will be converted into construction materials. This will be tried only during the construction phase.
- Artificial and non-biodegradable materials (metals, plastics, etc.) will be removed from the site and reused where possible or sold to companies for recycling or taken to the approved landfill site.

Several opportunities will need to be explored to reduce solid waste. The most possible option is the composting of organic waste and their reuse.

1.6.6. Water supply

The water supply will be connected to the health center's existing water supply network and the National Water grid. However, additional capacity is required to improve cleaning, toilet flushing or school garden irrigation. It is therefore suggested to install an additional 8000 liters water tank, high-capacity pumping machine This will ensure water availability throughout the project lifecycle and operational phase.

1.6.7. Energy supply

There are many types of energy sources. The best option would be to use a renewable energy source. Solar energy would be a better option, but the high demand for energy in different building activities is also considered; hence solar energy cannot cope with the demand. Using a generator also presents many disadvantages, among them, the high prices of fuel including the high fuel prices and noise pollution. The only reliable option is to continue with the connected source of the national grid available in the area.

1.6.8. Timing and Duration of construction works

The renovation/construction works schedule will follow a logical building order. For the earthworks, the intention is to minimize the excavation on site and any consequential effects of soil erosion and the downstream drainage system clogging. Interruption with normal activities of school residents around the construction site, including noise and dust pollution, is anticipated since normal lessons will continue within the project implementation period. Thus, rehabilitation/construction works will be scheduled to minimize the impact of noise and dust on the school and the surrounding environment. The timing and duration of the construction works is likely to have a number of implications, especially if the rainy season is taken into account. Heavy rains will undoubtedly affect the duration of construction activities especially in areas with high rainfall and soft soil which makes road transport almost impossible due to mud and sliding, hence the complication of delivering materials to the construction site.

Table 3. Analysis of Alternative

Option/ Method of Deployment	Potential Environmental, Social, Technological and Economic Implications		Preferred Option
Zero scenario alternatives			
Allowing the project	**Advantages** 1. Employment opportunities will be provided during the project implementation	**Disadvantages** 1. The anticipated adverse environmental and social impacts will be a reality	The not allowed option is preferred
Not allowing the project	**Advantages** 1. The anticipated adverse environmental and social impacts will be avoided	**Disadvantages** 1. There will be loss of employment opportunities due to the project	
Location and layout alternatives			
Build within the existing premises	**Advantages** 1. No extra cost to to be incurred in buying land	**Disadvantages** - Potential constriction of available space	Build on site option preferred

Option/ Method of Deployment	Potential Environmental, Social, Technological and Economic Implications		Preferred Option
	2. No grievances due to dispossession		
Build on a different site	**Advantages** - May lead to a wider space available	**Disadvantages** 1. Cost implication for a new land 2. Potential grievances arising from dispossession	
	Advantages	**Disadvantages**	
Construction			
1. Cement blocks	1. Materials available 2. Will promote business 3. Relatively manageable	1. Pollution effect of cement 2. Retains heat and generally hot at night 3. Environmental degradation due to extraction of sand	Cement blocks since it is easier to made and readily available
4. Bunt bricks	1. Promotion of local skills 2. Employment opportunities	1. Will lead to environmental degradation 2. Risk of fire outbreaks 3. More labor intensive and time consuming 4. Emission into atmosphere due to burning	
Solid waste management			
1. Composting	1. Availability of manure for gardening 2. Will reduce the reliance on agro-chemicals	1. Tedious and time consuming	Both options preferred
2. Disposal	3. Will prevent indiscriminate littering and pollution	1. Proper disposal site may not be close to source of waste 2. May incur significant cost thus a sustainability challenge 3. Further contamination of land and ground water due to type of waste and characteristics of a disposal site	
Water supply			
Reliance on existing water supply	- Will enable no disruption of the water supply system - Will require no cost implications	- The demand will be too much for the existing system to support	Both options preferred

Option/ Method of Deployment	Potential Environmental, Social, Technological and Economic Implications		Preferred Option
Improvement of the existing capacity with pumping system and overhead tank	- Will enhance the existing capacity - Will ensure that adequate water is available for other needs	- Will incur significant cost implication	
Energy supply			
Solar	**Advantages** - Environmentally friendly - Does not incur extra cost besides the initial - The local environmental conditions support it	**Disadvantages** - Not enough power will be generated to serve all the needs - Risk of theft	Solar is the preferred option but it is highly recommended to connect to the national grid to enable the powering of the appliances
Generator	- Does not incur significant start-up cost, depending on the type and power needed	- Noise and vibration impacts - Emission from the generator exhaust especially as it ages - Frequent buying of fuel to power the generator may not be sustainable	
Grid	- Ensures that all the Center`s appliances are functional	- Frequent buying of cash power will have significant cost implications	
Timing and duration of construction works			
Construction during the dry season	**Advantages** - Heavy machinery and trucks can easily access the construction site to deliver the materials	**Disadvantages** - Dust emission due to use of heavy vehicles, excavations, etc	The preferred option to construct during the dry season but work to be scheduled to avoid dust, noise and vibration impacting learning sessions.
Construction during the rainy season	- Dust emission will be minimal due to wet conditions	- Certain areas with muddy soils will be inaccessible	

2. METHODOLOGY

The ESIA report provides the potential environmental and social impacts that may occur due to the Project and the measures identified to mitigate against those significant impacts. This assessment was completed in consultation with the relevant stakeholders.

The assessment was done using a mixed-method approach to data collection using both quantitative and qualitative approaches. Therefore, both primary and secondary data collection were used to collect the data required for the assessment.

2.1. Data Collection

Data collection is a key component of any impact assessment. Two forms of data were used for the assessment: secondary data collected through desk review and primary data collected through survey, FGDs, KIIs, and site visits. Both sources of data were crucial for gathering information for the assessment.

2.1.1. Secondary Data Collection

2.1.1.1. Desk review

Relevant project documents are reviewed to develop an in-depth knowledge and understand of the project. Some of these vital documents include the Project Proposal, Baseline report (if any), project sites, and similar projects in the country, among others provided by the National Social Protection Agency (NSPA) team.

The following key legal documents will also be reviewed among others:

- National Policies and Regulations
- National Legislations
- Relevant Environmental and Social Standards (i.e. AfDB`s safeguard instruments)
- Relevant International Environmental Instruments /Conventions The Gambia subscribed to
- As part of the secondary information gathering to identify existing environmental conditions, proposed developments at the selected sites, and the prediction of potential impacts, consultative meetings will be organized with key project actors. Results from this exercise will inform the primary data collection.

2.1.2. Primary Data Collection

Primary data was required for the baseline study and stakeholder consultations. To gather data from stakeholders on project environment and socio-economic impacts, the following data collection activities were carried out:

This data collection was done through the collection of water, air and noise data using suitable devices during the field visits.

2.1.3. Groundwater sample collection and analysis

The water sampling and analysis were undertaken to understand the overall baseline water quality of the groundwater in the study area. Groundwater samples were collected from representative selected groundwater sources at the proposed project site.

The groundwater sampling locations were selected to obtain a representative water sample from various zones within the project site. Groundwater samples were collected from different groundwater sources located in the study area. After collection, the groundwater samples were sent to the laboratory [Water Quality Monitoring and Control Laboratory, Department of Water Resources (DWR), Abuko, Kanifing Municipal Council (KMC)] for further examination of the groundwater parameters.

The samples were analyzed for parameters covering Bacteriological and Physico-chemical characteristics, which included certain heavy metals and trace elements. Water samples were collected as grab water samples in a pre-washed 2-liter plastic jerry can and 250 ml sterilized clean PET bottle for complete physicochemical and bacteriological tests, respectively. The samples were analyzed as per the standard procedure/method given in Standard Method for Examination of Water and Wastewater, Edition 20, published by APHA.

2.1.4. Ambient Air Quality Monitoring

The objective of the ambient air quality monitoring test was to establish the baseline ambient air quality in the proposed project intervention area. The study area is characterized as a rural area comprising habitation, bush, savanna grassland, and agricultural lands. The existing sources of generation of particulate matter and gaseous air pollutants were primarily from vehicles plying the nearby roads, windblown dust from agricultural lands, domestic heating, and cooking. No other remarkable sources of air pollution, such as heavy industries, were observed very close to the project site.

The ambient air quality parameters like Particulate Matter (PM2.5, PM10) and Carbon Monoxide (CO) were measured at three locations in the project site and sounding area during baseline data collection. All measurements were taken upwind, downwind and crosswind of the suspected sources of generation of the dust. The concentration of air pollutants and their severity were compared to Environmental Quality Standards Regulations, 1999, and WHO Ambient Air Quality Guideline Values.

The baseline status of the ambient air quality was established through a scientifically designed ambient air quality monitoring network.

2.1.5. Ambient Noise Monitoring

Noise levels were recorded at three locations in the study area during the monitoring period. Noise levels were recorded in the form of sound pressure levels with the help of a digital sound level meter. The purpose of ambient noise level measurement was to determine sound intensity at the monitoring locations. The locations were chosen in such a way that representative data could be

recorded all over the proposed project site. The sound levels were recorded in the form of A-weighted equivalent continuous sound pressure level (Leq) values with the use of A-weighting filters in the noise-measuring instrument.

2.1.6. Stakeholder Consultation

Survey, Expert Discussions; Focus Group Discussions (FGDs); and Key Informant Interviews (KIIs) were the methods used for gathering primary data from key stakeholders. The stakeholder consultation targeted beneficiaries in selected communities within the intervention region. The purpose of the engagement was to gauge the perception of beneficiaries on the environmental and social impacts of the project.

The survey targeted health service users (patients), health personnel or providers, and community members around the BDH and its environment. Both service users and providers were targeted within the Brikama District Hospital area.

The population of the study was all healthcare users, personnel, and surrounding communities that would be impacted by the project. The catchment area data received for Brikama District Hospital was used as a proxy for those who would benefit from the project and have a catchment area of 253,000 people. Five (5) communities close to the Brikama District Hospital were targeted for consultation.

Data on the population of staff at Brikama District Hospital was obtained from the Ministry of Health. The data shows a total of 222 staff in this District hospital. Samples from Brikama district hospital were used as a surrogate to estimate the number of staff to be consulted for this assignment. Using the sample size determination criteria given below with the restriction that d=1 (due to less variability in the respondent type), a sample size of 111 respondents was obtained for this category. A probability proportional to size (PPS) was used to apportion the sample to the different health cadres in the Brikama District Hospital.

To determine the sample size for the perception survey, the Krejcie and Morgan (1970) sampling size determination formular was used, given below:

$$s = \frac{X^2 \rho(1-\rho)}{d^2(N-1) + X^2 \rho(1-\rho)}$$

Using this formula and with the values for d, X, and p maintained at values proposed by the consultants (0.05, 3.841, and 0.5, respectively) a representative sample size for the survey is 250 respondents, including 173 (69%) for the users and 77 (31%) for the providers.

Qualitative data collection targeted the following category of respondents: The host communities (mixed group and only female); Regional Health Directorate; Officer-in-charge; Alkalos, VDC Chairperson Women Group Head, Youth Group Head of project sites; Staff of Brikama District Hospital including; Doctor; Nurses, Public health officers, Community health nurses State Enroll Nurses laboratory and pharmacy staff, and auxiliary staff; Area Councilors & Governor; NGOs/CSOs. Furthermore, expert consultations were held with individuals from the following institutions: Regional NEA Officers; the Directorate of Health Services; the Directorate of Nursing

and Reproductive Health Services; the Directorate of Public Health Services, Ministry of Gender and Children and Social Welfare.

The stakeholder consultation targeted beneficiaries in selected communities within the intervention hospital. The purpose of the engagement was to gauge the perception of beneficiaries on the environmental and social impacts of the project.
The survey targeted health service users (patients), health personnel, providers, and community members around the health facility identified for construction/renovation. Both service users and providers were targeted in Brikama Central

A total of 109 participants, 85 (78%) females and 24 (22%) males) were consulted. For the KII, 18 persons were interviewed. In total, the perception survey respondents were 250, 69% of service users/patients and 31% of service providers (staff of Brikama health facility and RHD). More than half of the respondents 138 (55%) were females and were married (68%).

2.1.7. Data Collection Tools

To collect information from respondents regarding the project activities and the environmental and social impacts, three main tools were developed and used: a questionnaire for quantitative data collection and FGD and KII guides for qualitative data collection. The tools developed by the consulting team for the primary data collection (questionnaires, FGD and KII guides) as an annex to this report for review by the project team to ensure that they were fit for purpose. The survey tools (i.e., questionnaires) were developed using the Survey Solution Designer App.

The survey questionnaire is organized into four main sections: Socio-demographic characteristics of respondents; awareness about the project; perception on environmental impacts of project activities; perception on social impacts of project activities. Both environmental and social impacts were assessed via the Africa Development Bank Operation safeguards policies. Qualitative tools were also developed to collect similar types of information from the targeted participants.

2.1.8. Recruitment, Training, and Pre-testing of Tools

Before the start of data collection, qualified and experienced data collectors were recruited and trained in the administration of the relevant tools. Experienced field data collectors were recruited for interviews and FGD moderation to ensure a high degree of accuracy in the data collection. They received 1-day training on data collection tools, interview procedures, and techniques. Interview procedures were standardized through interviewer participation in a mock interview exercise during the training. Importantly, the supervisors worked together in the field to ensure data was collected as required.

2.2. Fieldwork

Once the tools were pilot-tested and corrected, the deployment of the data collectors for the various data collection sites as outlined above follows. For the survey, 250 individuals were sampled and surveyed in the targeted facility and surrounding communities. The survey data collection was done

using the Survey Solution CAPI tool, which was used for the overall management of the survey. The administration of survey questionnaires was done using the tool's interviewer App via tablets. The interviews were in-person in the location of the target respondents. Mobilization of participants for FGD was done and for each FGD, 5 to 20 participants were mobilized. KIIs were administered using the guide developed.

In addition, the consultant team conducted observation visits to the project site to gather information on the environmental and social baseline.

2.3. Assessment of Environmental Impacts

To identify and assess potential impacts associated with or resulting from Project activities, the ESIA team used data collected from the field consultations, professional judgment, and desktop analysis to identify potential impacts and their interactions. The significance of potential impacts that may result from the proposed Project was determined to assist in preparing recommendations for the proposed Project evaluation.

2.4. Impact Identification

The description of the planned project activities was to help in identifying the environmental aspects of the proposed project. These identified environmental aspects were matched with the existing baseline description of the project environment which was employed to generate a checklist of potential and related impacts of the proposed project. Project impacts were identified through the understanding of the interaction between the planned project activities and the prevailing environment at the project site. Expert knowledge and stakeholder consultation also played a significant role in the process of impact identification.

2.5. Impact Characterization

The potential impacts identified from the proposed activities of the project were further characterized to have an in-depth understanding of the nature of the identified potential project impacts. The characterization was based on the nature, characteristics and duration of the different project activities on the physicochemica and biological components of the environment as well as the socio-economic, cultural, human health and safety.

Project impact on the environment occurs when the existing environment interacts with the various project activities which may lead to changes in the environment as shown in Equation 3.1.

[Environment] + [Project] = {Changed Environment} Equation 3.1

The changed environment anticipated from the above interaction may be direct or indirect, adverse or beneficial, cumulative or residual, long-term or short-term as presented below.

***Positive/Beneficial Impacts*:** Impacts that would produce an overall positive effect on the well-being of the people as well as the environment.

***Adverse Impacts*:** Impacts that may result in;

- Irreversible and undesirable change(s) in the biophysical environment,
- Decrease in the quality of the biophysical environment,
- Limitation, restriction or denial of access to or use of any component of the environment to others, including future generations,
- Disturbance to the social cohesion and stability as well as the wellbeing of the people,
- Sacrifice of long-term environment viability or integrity for short-term economic goals.

***Direct Impacts*:** Impacts resulting directly (direct cause-effect consequence) from a project activity.

Indirect Impacts: Impacts that are at least one step removed from a project activity. They do not follow directly from a project activity.

***Normal Impacts*:** Impacts that will normally be expected to follow a particular project activity.

***Abnormal Impacts*:** An impact is considered to be abnormal when it follows a project activity as against sound predictions based on experience.

***Short-term Impacts*:** Impacts that will last only within the period of a specific project activity.

Long-term Impacts: Impacts whose effects remain even after a specific project activity.

***Reversible Impacts*:** Impacts whose effects can be addressed on application of adequate mitigation measures.

***Irreversible Impacts*:** Impacts whose effects are such that the project (impacted component) cannot be returned to its original state even after adequate mitigation measures are applied.

***Cumulative Impacts*:** Impacts resulting from interaction between ongoing project activities with other activities, taking place simultaneously.

***Incremental Impacts*:** Impacts that progress with time or as the project activity proceeds.

***Residual Impacts*:** Impacts that would remain after mitigation measures have been applied.

2.6. Impact Evaluation

The already identified and characterized potential impacts in the previous stages of the assessment process were evaluated based on explicitly defined criteria to ascertain the significance of the impacts. The criteria and weighing scale adopted for the evaluation are provided below.

Legal/Regulatory Requirement (L)

The proposed project activities that trigger the identified impacts were weighted against existing legal/regulatory provisions to determine the requirement or otherwise for permits prior to the execution of such activities. The following weighting scale was used:

Table 4: Weighting Scale for Each Legal Condition

Condition	Rating

No legal/regulatory requirement for carrying out project activity	Low = 1
Legal/regulatory requirements exist for carrying out the activity	Medium = 3
A permit is required prior to carrying out project activity which may result in an impact on the environment	High = 5

2.7. Risk Posed by Impact (R)

The health, safety and environmental risks associated with each impact was assessed and ranked as "Low", "medium" or "high", using the Risk Assessment Matrix (RAM) as shown in Table 4.

Table 5: Risk Assessment Matrix

			Likelihood				
			A	B	C	D	E
			Rare	Unlikely	Possible	Likely	Certain
Negative Consequences	5	Severe	M	H	H	H	H
	4	Major	M	M	H	H	H
	3	Moderate	L	M	M	M	H
	2	Minor	L	L	M	M	M
	1	Negligible	L	L	L	L	L
Positive impact (P)			P	P	P	P	P

The level of impact will be largely determined by a qualitative appraisal of the likely change in the receiving environment, human health/safety and socio-economic situation, based on the matrix in Table 4 and the weighting used was as follows:

- **Low Risk =1**: Where the level of risk is broadly acceptable and generic mitigation measures are already assumed in a design process but require continuous improvement.
- **Medium Risk =3**: Where the level of risk is tolerable, but mitigation measures are required to minimise the risk to reduce the risk as much as practicable (i.e. tolerable if ALARP).
- **High Risk =5**: Where the level of risk is not acceptable and mitigation measures are required to move the risk figure to the lower risk categories.

- Positive impacts (to be enhanced if at all practicable).

Frequency (F)

The frequency of the occurrence of the identified impacts was also evaluated. Frequency of impact occurrence was rated as "low", "medium" or "high" based on the historical records of accidents/incidents, consultation with experts or key informants and professional judgement. The frequency criterion is summarized below.

Table 6: Frequency Criterion

Low = 1	○ Minor degradation in quality in terms of scale (<0.1% of the study area, habitat, very localized), appearance, duration (a few days to a month) ○ Effect within range of naturally occurring impacts, changes, dynamics ○ Rapid reversibility (change lasting only a few weeks before recovery), no lasting residual impact of significance
Medium =3	○ Degradation in quality in terms of scale (>0.1% of study area, habitat, appearance, duration (a few months) ○ Effect beyond naturally occurring impacts variability ○ Slow reversibility (change lasting a few months before recovery), lasting residual impact ○ Potential for cumulative impact ○ Intermittent frequency of impact (occurs on only a few occasions during the project execution period) ○ The limited geographic extent of impact (large area within the study area)
High =5	○ Major degradation in quality in terms of scale (>1% of the study area or habitat within the study area), appearance, duration (beyond the duration of the project) ○ Irreversible or only slowly recoverable (change lasting more than 1 year) degradation of environmental ecosystem level (population, abundance, diversity, productivity) ○ High frequency of impact (occur continuously and almost throughout the project execution period (<4 months) ○ Geographic extent of impact (e.g. encompassing areas beyond study area)

Importance of Impact (I)

The importance of target environmental component in respect of identified potential impacts will be determined and rated as "low", "medium" or "high". The rating will be based on consensus of opinions among consulted experts. The importance criterion is summarized below.

Table 7: Importance of Impact Criterion

Importance	Attribute – Environmental, Human Health and Safety
Low =1	○ Imperceptible outcome ○ Insignificant alteration in value, function or service of impacted resource ○ Within compliance, no controls required
Medium =3	○ Negative outcome ○ Measurable reduction or disruption in value, function or service of impacted resource ○ Potential for non-compliance with international best practices
High =5	○ Highly undesirable outcome (e.g., impairment of endangered, protected habitat, species) ○ Detrimental, extended flora and fauna behavioral change (breeding, spawning, molting) ○ Major reduction or disruption in value, function or service of impacted resource ○ Impact during the environmentally sensitive period ○ Continuous non-compliance with international best practices

Public Perception (P)

Consultation with the project affected communities and stakeholders was carried out to determine the perception of the public on the proposed project and the identified potential impacts. The rating of "low", "medium" or "high" was assigned based on the consensus among consulted parties.

Table 8: Summary of the public perception criterion

Public Perception	
Low =1	○ No known risk to human health, acute and/or chronic ○ No known risk of life endangered for community inhabitants and site personnel ○ Minor reduction in social, cultural, and economic value ○ Unlikely adverse perception among the population

Public Perception	
Medium =3	○ Limited incremental risk to human health, acute and/or chronic ○ Unlikely life endangerment for community inhabitants and site personnel ○ Some reduction in social, cultural, and economic value ○ Possibility of adverse perception among the population
High =5	○ Elevated incremental risk to human health, acute and/or chronic ○ Possibility of life endangerment for community inhabitants and site personnel ○ Major reduction in social, cultural, economic value ○ Continuous non-compliance with international best practices ○ Any major public concern among the population in the project region

2.8. Impact Significance

The impact significance of the proposed project activities is the result of the impact assessment based on the evaluation of the various criteria such as legal/regulatory requirements (**L**), risk posed by impact (**R**), frequency of occurrence (**F**), importance of affected environmental component (**I**) and public perception (**P**). The overall rating of impact significance of each identified impact will be given as "low", "medium" or "high". To determine the overall impact significance, the following considerations will be adopted:

Low = (L+R+F+I+P) <8

Medium = (L+R+F+I+P) ≥8 but <15

High = (L+R+F+I+P) ≥15 or (F+I) ≥6 or P = 5

The rating for each identified potential impact against the selected criteria and the overall impact significance results based on the formula above are presented and discussed in the report.

2.9. Mitigation Measures

In developing mitigation measures, the first focus is on measures that prevent or minimize impacts through the design and management of the Project rather than on reinstatement and compensation measures. A 'hierarchy' of mitigation measures for planned activities and unplanned events is outlined below:

1) **Avoid at Source; Reduce at Source:** avoiding or reducing at source through the design of the Project (e.g., avoiding by sitting or re-routing activity away from sensitive areas or reducing by restricting the working area or changing the time of the activity);
2) **Abate on Site:** add something to the design to abate the impact (e.g., pollution control equipment);

3) **Abate at Receptor:** if an impact cannot be abated on-site then control measures can be implemented off-site (e.g., traffic measures)
4) **Repair or Remedy:** some impacts involve unavoidable damage to a resource (e.g., material storage areas) and these impacts require repair, restoration, and reinstatement measures.
5) **Compensate in Kind;** Compensate through Other Means where other mitigation approaches are not possible or fully effective, then compensation for loss, damage and disturbance might be appropriate (e.g., financial compensation for degrading agricultural land and impacting crop yields). It is emphasized that compensation to individuals with residual impacts on livelihood or quality of life will generally be non-financial and will have a focus on restoring livelihoods.
6) **Control:** this aims to prevent an incident happening or reduce the risk of it happening to as low as reasonably practicable (ALARP) through reducing the likelihood of the event (e.g., preventative maintenance regimes, traffic calming and speed limits, community road safety awareness training);
7) **Reducing the consequence** (e.g., Bunds to contain hazardous substance spills); and a combination of both of these; and
8) **Recovery/Remediation:** this includes contingency plans and response, e.g., Emergency Response Plans and Procedures.

2.10. Health Care waste management Plan

During the operation phase of the rehabilitated health care facility, the generation of health care waste is anticipated and thus, a management plan should be prepared for the proper collection, storage, transportation, treatment and disposal of these health care wastes. The Ministry of Health has a Health Care Waste Management plan and Policy (HCWMP). Therefore, a generic Health Care Waste Management Plan is prepared in this ESMP in accordance with the National HCWMP.

2.11. Complaint and Grievance Mechanism

A generic compliant and grievance mechanism is developed following the basic principles for a good Grievance Redress Mechanism.

2.12. Environmental and Social Management Plan

After the assessment and evaluation of all the significant environmental and social impacts, a management plan was prepared to effectively implement the recommended enhancement and mitigation measures. Furthermore, the monitoring plan for the implementation of the ESMP was also developed. A budget is prepared for the implementation of the ESMP and monitoring plan.

3. POLICY, LEGAL, AND INSTITUTIONAL FRAMEWORK

This Chapter focuses on the various national and international policies, legal and institutional frameworks, as well as the AfDB Operational Safeguards (OS) policies that are relevant to the development and implementation of this ESIA and its ESMP.

3.1. Relevant National Policies

Table 9 indicates the relevant national policies that are relevant and guided the development and implementation of the Project.

Table 9: Summary of Relevant National Policies

Policy	Description	Relevance to the Project
National Policy for the Advancement of Gambian Women and Girls (1999-2009)	Policy provides a legitimate point of reference for addressing gender inequalities at all levels of government and all stakeholders	Relevant to this Project since the focus of the project is on vulnerable youth and women.
National Social Protection Policy 2015-2025 (NSPP)	The policy is to contribute towards alleviating poverty and vulnerability in the country, in line with the Government of The Gambia's Vision and National Development Plan. The Policy is a comprehensive and cross-cutting social protection reform agenda and proposes a set of priority actions to guide the gradual establishment of a coherent social protection system in The Gambia.	This policy is relevant for the project. It is to facilitate the reform of the national social protection system by ensuring more efficient and effective use of resources, strengthened management and administrative systems, and progress towards a more inclusive form of social protection that makes basic income and social services available to The Gambia's poorest and most vulnerable people .This project is all about that and therefore relevant.
National Youth Policy (2009–2018)	Policy aims to mainstream youth issues into the advancement of all sectors	Successful project implementation will provide ease access to social services such as health care services to the youth

Policy	Description	Relevance to the Project
Gambia Environment Action Plan, GEAP (2021-2030)	Integrated environment and natural resources management	Provides guidance in general environmental planning and natural resources management.
Forestry Policy	Promotes state and community forest development and management	Sixty-six gazetted forest parks are located in various parts of the country, some of which are in the project intervention region (CRR). However, since the project will be implemented in an existing health facility, no tree or forest clearance will be done. Relevant to the project for guidance for the protection of forest cover and protection of the trees in the project area
Gambia National Gender & Women Empowerment Policy (2010–2020)	To mainstream gender in national and sectoral planning and programming to ensure equity and equality	Women to be consulted throughout the project implementation and they are expected to be the largest beneficiaries.
The National Health Policy, 2012-2020	Protects public, especially women and most vulnerable groups, and environmental health including nuisance and other risks associated with this Project	Relevant to this Project since dust, noise and other health risks can be associated with the project activities. Successful implementation of the policy measures will result in reducing morbidity and mortality of major diseases; reduce health risks and exposures associated with negative environmental consequences.
National Healthcare Waste Management Policy (2012-2020)	Provides guidance on proper management of health care waste, in order to safeguard the patient, health care provider, community and the environment.	This policy will guide the development of the waste plan in this ESIA.

Policy	Description	Relevance to the Project
The National Biodiversity Strategy and Action Plan (NBSAP), 2015	The NBSAP recognizes the conservation and sustainable use of biodiversity	The biodiversity within the premises of the health facility construction/renovation may be impacted.
National Climate Change Policy (2016 – 2025)	Policy provides the framework for managing climate risks, building institutions, capacities, and opportunities for climate-resilient development	Some of the proposed project activities might result in the emission of greenhouse gases (GHGs) which contributed to climate change and hence, this Policy is promoting low emission activities.
National Strategic Environmental Assessment Policy (2017- 2021)	Aims to ensure environmental sustainability	Applies when developing policies, plans or programs in all sectors, including health
Recovery Focused National Development Plan (RF-NDP) 2023-2027.	Policy to provide framework for sustainable development in the country, including sustainable Health Care Management	The RF-NDP has seven (7) strategic priorities with pillar IV geared towards increasing quality, accessible, and affordable health care services delivered for all
The Gambia National Gender Policy 2010- 2020	The overall goal of this policy is to achieve gender equity and women's empowerment as an integral part of the national development process through enhancing the participation of women and men, girls and boys for sustainable and equitable development and poverty reduction	Successful implementation of the Project will enhance women's participation and facilitate gender equity and equality at policy, program, and project levels in all institutions and across all sectors of the Gambian society

3.2. The National Legal Framework

The legal frameworks that will guide the Project's implementation are indicated in Table 10 below, listed in order of date enacted.

Table 10: The Summary of National Legal Framework Relevant to the Project

Title of Legislation or Regulations	Description	Relevance to the Project
Lands (Regions) Act, 1995	Regulates land tenure, property rights, and general land administration in areas under the Customary Land Tenure system. The act covers all Provinces' land outside State Lands Areas.	All lands in WCR fall under this Act. The potential project site is held and administered under this Act. Therefore, due diligence under this Act must be taken if required for the project. It is relevant for the project.
Public Health Act, 1990	Health, including abatement of nuisances and any condition that may be injurious to health. Protects the public and the environmental.	This is relevant to the Project since dust, noise, and other health risks such as COVID-19, HIV, can be associated with the Project.
Land Acquisition & Compensation Act, 1991	Provides for procedures, consultation, and compensation for land.	The Land Acquisition and Compensation Act, of 1991 is a significant legislation in The Gambia that governs the process of land acquisition by the government for public purposes, as well as the compensation to be provided to landowners. However, since the proposed site is the existing health facility, this act is included for guidance during the implementation and operations of the facility.
Physical Planning and Development Control Act, 1991	Ensures developments in The Gambia are in line with land use planning and construction standards.	The project construction/renovation activities shall be in line with national land use and planning rules and procedures.
National Environment Management Act, 1994	Principal legislation in environmental management; Part V of the Act provides for certain projects listed under Schedule A to be considered for ESIA.	This Project falls under Schedule A, which requires an ESIA to manage environmental and social risks and impacts.

Title of Legislation or Regulations	Description	Relevance to the Project
Hazardous chemicals and pesticide control and management Act 1994	The act provides the framework for the manufacture, importation, and use of hazardous chemicals and pesticides	Relevant in this Project given the potential hazardous biomedical and pharmaceutical waste generated at the BDH.
Environmental Quality Standards Regulations 1999	Regulations declare standards set out in Schedule 1 in respect of ambient air, saline waters, surface fresh waters, and groundwater.	Project implementation has the potential to generate dust, and to pollute surface fresh waters and the environs.
Environmental Discharge (Permitting) Regulations 2001	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 liquid waste into the premises environment.
Local Government Act, 2002	The act makes provisions for decentralized administrative structures including the devolution of functions, powers, and duties to local authorities	Implementation of the Project will require the participation and influence of decentralized institutions including the Offices of the Governor of WCR, as well as the respective Technical Advisory Committee (TAC).
Biodiversity and Wildlife Act, 2003	Provides for the protection of biodiversity and the establishment of protected areas	The implementation is within the existing health facility and thus does not affect any of the protected areas. However, the Act is relevant for guidance during implementation.
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 by prohibiting violence against children and child labour and will be enforced through monitoring of code of conduct of workers during construction/renovation phase of the project.
Mines and Quarries Act, 2005	The act makes provision for prospecting for minerals, for carrying out mining and quarrying operations, including gravel, sand, and for connected matters	The proposed construction/renovation activities, which will involve the use of sand and gravel aggregates mined in designated areas or with the permission of authorities.

Title of Legislation or Regulations	Description	Relevance to the Project
Labour Act (2023)	Provides the legal framework for the administration of labour, recruitment and hiring of labour, and protection of wages	The project will abide by the minimum age for hiring (18 years old). Contractors will be required to verify age and keep a record. Forced labor is expressly prohibited and will be clearly posted on the worksite, and how workers can grieve if workers' rights are violated. The rights of the workers, OHS, workers' contracts, vacation, hours, holidays, regulatory schedules, etc., will be included in contracts and workers will receive training on working conditions, workers' rights, etc. Relevant for the project implementation
Anti-littering Regulations, 2007	Addresses waste management and pollution issues concerning environmental health and hygiene	Construction/renovation wastes and wastes generated during the operation phase of the health facility will increase. Therefore, the project must ensure that all waste produced during all phases is well managed. Relevant for the project implementation
The Women's Act 2010	Aims to advance women's rights to land and natural resources in order to promote their economic and social empowerment	Relevant to this project given potential positive impacts on women, there is a need to avoid gender-based violence (GBV) and sexual exploitation and abuse/sexual harassment (SEA/SH)
Environmental Impact Assessment Regulations, 2014	The ESIA Regulations elaborate on the requirements for ESIA procedure, environmental impact statements, approval, environmental monitoring, etc.	The Regulations provide guidance for the ESIA of this project and implementation of its ESMP.
The Forest Act, 2018	Provides framework for implementation of Forestry Policy, and framework for the reservation and management of forests.	The forest cover will not be affected in this health facility. However, it is important to keep in mind to ensure that existing trees are not cut down or damaged during project implementation. Additionally, vegetation clearing for mining gravel at the quarries may lead to the vegetation cover destruction.

Title of Legislation or Regulations	Description	Relevance to the Project
Sexual Offences Act, 2013	Updates about the law and procedures regarding the trial of rape, sexual offences, and related matters	This Act is relevant to the Project due to the need for protection of vulnerable persons such women within the Project site against sexual offences, which is defined in the Act

3.3. Relevant International and Health Conventions and Agreements

The international conventions and agreements to which Gambia is a Party that is relevant to this Project are as indicated in Table 11 below.

Table 11: Summary of Relevant Health and International Conventions Signed/Ratified by The Gambia

Agreement/Convention	Objective	Relevance to the Project Activities
United Nations Convention on Biological Diversity (CBD), Ratified in 1994	The CBD promotes not only the protection of flora and fauna, but linkage with humans and dependence on such biodiversity for food, medicine, shelter, etc.	The project activities are not expected to severely affect the existing biodiversity in the sites. However, vegetation clearing for mining gravel at the quarries may lead to the destruction and the stripping of soil (use of quarry for the renovation works). Relevant for the project
Convention to Combat Desertification (CCD), Ratified in 1996	Protection of forests to avoid desertification	The project activities may lead to the destruction and the stripping of soil (use of quarry for the renovation works).
United Nations Framework Convention on Climate Change (UNFCCC), Ratified in 1996	Relates to sustainable sourcing	The loss of trees and vegetation will mean loss of "green cover" and loss of carbon capture footprint.
Convention on the Rights of Persons with Disabilities (CRPD) 2006, Ratified in 2013	The Convention intends to protect the rights and dignity of people with disabilities; to promote, protect, and ensure the full enjoyment of human rights by people with disabilities	Persons with disabilities could potentially be impacted negatively by the project activities at the health facility. Relevant for the project

Agreement/Convention	Objective	Relevance to the Project Activities
Convention on Migratory Species (CMS Convention), Singed in 1994	Also known as the Bonn Convention, aims to conserve terrestrial, aquatic, and avian migratory species throughout their range	The presence of trees on the proposed site serve as habitat for birds and other animals thus the disturbance from the construction activities might cause them to migrate elsewhere.
UN Convention on the Rights of the Child (CRC)(1989)	The rights in the treaty include the right to education, the right to play, the right to health and the right to respect for privacy and family life	The project could potentially affect the right to health of the child through the generation of dust, and air pollution, poor waste management, and spread of malaria due to stagnant water in quarry pits. Relevant for project implementation
Convention concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labor (ILO 182) and Minimum Age Convention (ILO 138), Ratified in 2001 and 2000 respectively)	The Convention asserts that children must be protected by States from treatment or activities which can be very harmful for their physical and mental health through child labor	No child (14 years or younger) will be hired for employment for civil works in accordance with these Conventions and national law.

3.4. Institutional Framework

The institutional framework relevant to the implementation of this Project is as indicated in Table 12.

Table 12: The Institutional Framework Relevant to the Project

Institutions	Specific Responsibilities	Interests and roles in this Project implementation	Level of intervention
National Environment Agency (NEA)	The NEA enforces the NEMA,1994, and EIA Regulations 2014	○ Evaluation of the ESIA report ○ Grant Environmental Approval for the Project ○ Disclosure and publication of the ESIA, ○ Issuance and renewal of environmental certificates/permits ○ Monitoring the environmental	All phases of the Project from planning and design to the construction and operation

Institutions	Specific Responsibilities	Interests and roles in this Project implementation	Level of intervention
		aspects of the ESMP implementation	
Ministry of Environment, Climate Change and Natural Resources	Oversees the NEA and the implementation of environmental laws and policies of The Gambia	Policy guidance oversees the Department of Forestry and the Department of Parks and Wildlife Management which are key to this Project	All phases of the Project, from planning and design to construction and operations
Governor's Office (WCR)	Oversee the Health Technical Advisory Committee (TAC) for WCR	The TAC will support the implementation and monitoring processes at the regional level	Pre-construction and renovation/construction phases
Ministry of Health	Responsible for overall formulation and direction of the national health agenda, planning, and health infrastructural development	○ Provides guidance on transmissible diseases to consider during sensitization ○ promotes safe and healthy environments at project site ○ responding to accidents	All phases
Ministry of Transport,Works and Infrastructure	Responsible for overall formulation and direction of the national infrastructural and work agenda and planning,	○ Provides guidance and supervision for the construction works ○ participation during sensitization ○ Supervise and ensure proper infrastructural work is done at project site	Pre-construction and renovation/construction phases
Women's Bureau/Gender Directorate	Under the Ministry of Gender, Children and Social Welfare, the Women's Bureau	○ Ensures the rights of women affected by the Project are protected ○ Participates in sensitization on	Pre-construction and renovation/construction phases

Institutions	Specific Responsibilities	Interests and roles in this Project implementation	Level of intervention
	/gender Directorate specifically promotes gender equity and women's empowerment in The Gambia.	gender issues.	
Department of Social Welfare	This department protects and promotes the rights of vulnerable people such as children, women and the disabled.	Supports and guides the process during related grievances and participates in sensitization on GBV, SEA, VAC etc.	Pre-construction and renovation/construction phases
Department of Labour	Enforces employment laws and combats child labour	Protection of employee rights; Protection against child labour; Response to complaints and reports such as accidents, abuse, and discrimination at work	Pre-construction and renovation/construction phases
Health Facility Management	Responsible for the day-to-day operation of the healthcare facility	Oversight is responsible for all the activities carried out during the renovation/construction in consultation with the NSPA, Regional Health Directorate, and Contractor.	All phases of the project
Construction companies in charge of the renovation/construction works	In charge of the implementation of the renovation/construction works following the signed contract.	Execute the project as designed and agreed, keeping in view the environmental and social safeguards	Pre-construction and construction phases
NGOs and civil society	These voluntary groups or organizations are determined to protect the rights of the community and promote awareness creation.	Support the community to ensure that the right thing is done in terms of project implementation as well as advocate for zero incidents, no environmental degradation and social disorder.	All phases of the project

3.5. The AfDB's Operational Safeguards Policies

In line with the AfDB's Integrated Safeguards System (ISS -2023), and that the proposed project will not trigger involuntary resettlement, it is OS1, OS2, OS3, OS4, OS5 OS9, OS10 of the Ten Operational Safeguards (OS) embedded in the ISS are considered and triggered. These are indicated in **Table 13** below.

Table 13: AfDB Environmental and Social Safeguards Triggered by the Proposed Project

AfDB Safeguards Instruments	Triggered by the Project	Remarks
Integrated Safeguards System (ISS 2023)	Yes	Overarching operational safeguard mainstream environmental, social, and sustainability considerations in all Bank operations.
OS1: Environmental and Social Assessment	Yes	Required for Category 1 and Category 2 projects to assess environmental, social, gender, and climate change impacts
OS2: Labor, Working Conditions, and Occupational Health and Safety	Yes	Reflects protection of workers' rights, health, safety, and promotion of decent work conditions.
OS3: Resource Efficiency, Pollution Prevention, and Climate Change	Yes	Promotes resource efficiency, reduction of greenhouse gas emissions, and management of pollution and hazardous materials.
OS4: Community Health, Safety, and Security	Yes	Addresses potential risks to communities' health and safety arising from project activities and infrastructure.
OS5: Biodiversity, Ecosystem Services, and Sustainable Natural Resource Management	Yes	Ensures conservation of biodiversity, maintenance of ecosystem services, and sustainable use of natural resources.
OS9: Financial Intermediaries	Yes	Ensures that Financial Intermediaries comply with AfDB's environmental and social standards.
OS10: Stakeholder Engagement and Information Disclosure	Yes	Reflects the need for inclusive stakeholder consultation, grievance mechanisms, and public access to project information.

The Bank's policy on Stakeholder Engagement Information Disclosure is also triggered. This Policy requires that all stakeholders (including all people residing in the project area of influence) have the right to be informed of the proposed development project in their respective areas. Given this, the ESMP summary will be disclosed on the Bank's website to allow various stakeholders to access its contents and provide feedback where necessary.

3.6. Point of convergence of legislation and ADB Operational Safeguards

The operational safeguards of AfDB and the national legislation have many measures in common. This section highlights the point of convergence of these legal tools as shown in Table 14.

Table 14: Point of convergence of legislation and ADB Operational Safeguards

AfDB Safeguards Instruments	National Legislation	Points of Convergence
OS1: Environmental and Social Assessment	• National Environment Management Act, 1994 • Environmental Impact Assessment Regulations, 2014	These are environmental legal safeguard tools that govern the process of determining the project's environmental and social category and the resulting environmental and social assessment requirements and procedures
OS2: Labor, Working Conditions, and Occupational Health and Safety	• Labour Act (2023) • Public Health Act, 1990 • Sexual Offences Act, 2013	These safeguards cover workers' conditions, rights and protection from abuse or exploitation.
OS3: Resource Efficiency, Pollution Prevention, and Climate Change	• Environmental Quality Standards Regulations 1999 • Anti-littering Regulations, 2007 • Environmental Discharge (Permitting) Regulations 2001 • Hazardous chemicals and pesticide control and management Act 1994 • National Climate Change Policy (2016 – 2025)	Promotes resource efficiency, reduction of greenhouse gas emissions, and management of pollution and hazardous materials.
OS4: Community Health, Safety, and Security	• Labour Act (2023) • Public Health Act, 1990	Addresses potential risks to communities' health and safety arising from project activities and infrastructure.

AfDB Safeguards Instruments	National Legislation	Points of Convergence
OS5: Biodiversity, Ecosystem Services, and Sustainable Natural Resource Management	• Biodiversity and Wildlife Act, 2003 • The National Biodiversity Strategy and Action Plan (NBSAP), 2015 • Gambia Environment Action Plan, GEAP (2021-2030) • Convention on Migratory Species (CMS Convention), Singed in 1994	Ensures conservation of biodiversity, maintenance of ecosystem services, and sustainable use of natural resources.
OS9: Financial Intermediaries		Ensures that Financial Intermediaries comply with AfDB's environmental and social standards.
OS10: Stakeholder Engagement and Information Disclosure		Reflects the need for inclusive stakeholder consultation, grievance mechanisms, and public access to project information.

3.7. Comparison between National Environmental Management laws and provisions of the AfDB's ISS

Below is the gap analysis and comparison between National Environmental laws and AfDB's ISS provisions and requirements.

Table 15 Gap analysis and comparison between National Environmental Law and AfDB ISS provisions

Aspect	The Gambia Environmental Law	AfDB ISS	Gap Analysis
Legal Framework	Limited legal framework; laws are fragmented and not comprehensively enforced	Comprehensive framework covering various environmental aspects	Inadequate national legal framework; the need for updated and comprehensive laws.
Scope of Environmental Protection	Focus on issues such as environmental health, natural resource management, and waste management; use an inadequate and integrated	Holistic approach covering various issues such as health,safety at work, environmental management, biodiversity, climate change,	Need for broader scope in Gambia's environmental laws to address various decision-making processes

	approach.	and pollution.	
Public Consultation/ stakeholder engagement	Limited mechanisms for public involvement; often top-down approach.	Emphasizes stakeholder engagement and participatory processes	Insufficient public participation in The Gambia's environmental decision-making processes. Need for proactive stakeholder engagement and awareness raising on environment and related matters
Impact Assessment	Provisions for ESIAs, but inconsistence in application	Strong requirement for ESIAs and risk assessment prior to the project	Strengthening of ESIA processes is needed in The Gambia for consistency and effective enforcement.
Enforcement Mechanisms	Weak enforcement capacities; lack of resources and trained personnel.	Established protocols for monitoring and enforcement of environmental standards.	Need for stronger enforcement mechanisms in The Gambia, including capacity building for the key actors and other stakeholders.
Environmental and Natural Resource Management	Existing laws focus on specific issues; limited overall strategy for environmental and Natural resources management	Comprehensive strategies for conservation, including ecosystem services.	Lack of a holistic Environmental and Natural Resource Management strategy in The Gambia. Need to review and update existing laws and policies.
Vulnerable Groups (Women, elderly, persons with disabilities and youth) and Local Communities	Limited focus on rights and roles of vulnerable groups in environmental and natural resources management.	Strong emphasis on the rights of local Communities and vulnerable groups.	Need for improved recognition and incorporation of vulnerable groups and communities' rights in The Gambia regarding environmental and natural resource management.
International Commitments	Limited engagement with international treaties; and weak implementation.	The framework aligns with global best practices and international agreements.	Need for better alignment with international commitments and practices in The Gambia.

4. ENVIRONMENTAL AND SOCIAL BASELINE CONDITIONS

The baseline environment describes the physical environmental conditions that will directly or indirectly impact the proposed project site and local communities. Physical observation and study of the proposed project site and area topography and consultation with local communities were the dominant strategies used for investigating the physical environment of the proposed project area. Generally, the natural environment of the Gambia has not changed significantly across the respective regions and administrative boundaries over the years. The current physical environmental conditions within the project influence zone are within acceptable national standards.

4.1. Direct influence area of the project

Table 16: Environmental and social conditions in the potential administrative region identified

District	POTENTIAL Area	BASELINE ENVIRONMENT
Kombo Central in West Coast Region (WCR)	Brikama and Immediate Neighboring Communities	**Topography**: The topography of an area, including its elevation, slope, and landforms, can have a direct influence on various aspects. It can affect the availability of water resources, the distribution of habitats, and the ease of transportation and infrastructure development. The topography in the Project's area of influence is generally flat and low-lying as is common in most areas of The Gambia **Drainage**: There are no surface water bodies within the Project's direct area of influence in Brikama. Surface water that may be considered includes rainwater runoff during the wet season, which, based on the topography, empties into tributaries or percolates into the soil. Groundwater is mainly collected through the Shallow Sand Aquifer by traditional wells and boreholes. **Biodiversity**: The presence and abundance of various plant and animal species in an area, known as biodiversity, can have a direct influence on ecosystem functioning, food webs, and overall ecosystem health. The Project area of influence is within urban settlement with limited vegetation types found such as fruit trees, such as mangoes, which are more common than forest trees, such as neem trees. These will not be affected by the Project. Like the vegetation cover, fauna found in the Project area are merely domestic animals that will not be affected by the Project. **Socioeconomic activities**: Like other urban regions in the Gambia, WCR is primarily an agricultural region with its population dependent on agriculture for its food and cash income. Commerce is an

		important source of income among the local population in WCR. As a regional city of WCR, it is the trading hub for surrounding communities and districts like the Fonis, Kombo South and North. The market in Brikama also serves as a social meeting place for the region. The work of the project will not impact on market. **Natural disasters:** In WCR like other parts of the country disasters such as floods, and wildfires, can directly impact the physical and social environment of an area. They can cause loss of life, damage to infrastructure and property, disruption of socio-economic activities, and long-term environmental changes. The susceptibility and vulnerability of an area to natural disasters can be influenced by factors such as location, geology, climate, and land use practices. Proper disaster preparedness, mitigation, and response measures can help reduce the impacts of natural disasters.

4.2. Indirect influence area of the project

The indirect influences on the Vulnerable Youth and Women Support Project (VYWOSP) in The Gambia are as follows:

Poverty and Vulnerability: The high poverty rates, low access to basic social services, and high youth and women unemployment and underemployment rates create a vulnerable population in The Gambia. The project aims to address these challenges and provide livelihood opportunities for vulnerable youth and women to help them escape poverty.

Social Protection: The government has identified social protection as a key strategic priority in its National Development Plan. The project aligns with this priority by providing access to basic social services, such as health, nutrition, education and social protection, to the vulnerable groups.

Skills Development and Livelihood Support: The project focuses on skills development and entrepreneurship training for vulnerable women and out-of-school youth. It aims to improve their productivity and income through the acquisition of market-oriented skills and access to financial and non-financial support.

Access to Basic Social Services: The project aims to improve the use and access of vulnerable groups to better and inclusive basic social services, including health, nutrition, and education. This addresses the inadequate access to these services, contributing to widespread poverty.

Gender Equity: The project aims to reduce gender inequalities by providing better economic and social prospects for young girls and women. It also seeks to change societal perceptions of gender equity and women's economic empowerment.

The Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (ESMP) ensure that the project's renovation/construction activities consider potential adverse environmental effects and develop mitigation measures to minimize environmental and social impacts. The assessment results also provide evidence for policymakers and project actors.

4.3. Biophysical Environment

4.3.1. Air quality and Noise Pollution

Regarding the air quality, samples were collected at the Brikama District Hospital on the 27th of February 2025. During the data collection process, samples were replicated three times in a site with an interval of three minutes between each of them. Values were averaged, and are in the table below, coupled with the air quality and noise pollution reference standards (**Table 18**).

Table 17: Air Quality and Noise Pollution Test Details

Field Number	Date	Start Time	End Time	Interval Between Samples	Location
01	26th to 27th February 2025	11:00 AM	14:00 PM	5 minutes	Brikama, WCR

Table 17 indicates the results of the air and noise pollution tests taken on the site and the reference standards are also presented in **Table 18.**

Samples of air and noise pollution collected at the Brikama health facility results from Table 17 indicate that the current air and noise quality in the above-mentioned facility is found to be within the accepted standards except for particulate matter 2.5 (PM 2.5). This means that air pollution may not pose a significant risk to the general public, but it can cause health effects for people who are more vulnerable to air pollution (sensitive groups). These vulnerable groups sensitive to air pollution are people with respiratory conditions, heart disease, old age, children, and pregnant women. The said groups should avoid outdoor activities during implementation and stay inside whenever feasible. At this level, the public is typically not impacted

The results of PM 2.5 align with what is reported in the perception survey (**figure 5**) reported that they perceive the air to be cleaned (74%).

Table 18: Air Quality and Noise Pollution Test Results

Parameters	Brikama District Hospital
Temperature (°C)	29.9
PM 2.5 (µg/m3)	46.1
PM 10 (µg/m3)	84.6
CO2 (ppm)	761
HCHO (mg/m3)	0.027
Humidity (%)	32.3

Noise (dB)	64.4

Table 19: Air Quality Parameter and Noise Quality Reference Values

Parameter	Good	Moderate	Unhealthy (sensitive Groups)	Unhealthy	Very unhealthy	Hazardous
PM 2.5 (µg/m^3)	≤12	12-35.4	35.5-55.4	55.5-150.4	150.5-250.4	≥250.5
PM 10 (µg/m^3)	≤54	55-154	155-254	255-354	354-424	≥425
CO2 (ppm)	≤700	701-1000	1001-1500	1501-2500	2501-5000	≥5001
	Healthy			Unhealthy		
HCHO (mg/m^3)	≤0.1			≥0.01		
Noise (dB)	≤85			≥90		

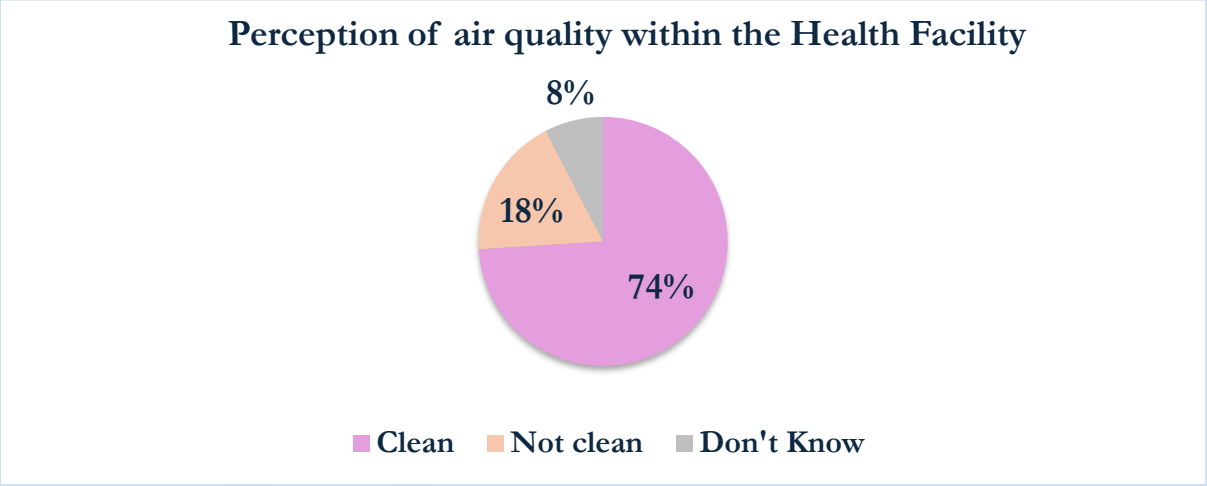


Figure 5: The Perception about Air Quality

4.3.2. Water Quality

All the physico-chemical, chemical and microbiological parameters tested are within the recommended guideline values set by the World Health Organization, except for the **high nitrite level,** which is beyond the accepted guideline.

This demonstrates unequivocally that the Brikama Health Centre's water quality nitrite value exceeds the international WHO standards. The facility may be impacted by environmental factors or possible water supply contamination. Serious health consequences could result from this circumstance, especially for susceptible groups like pregnant women, new-born, and patients with underlying

medical conditions. High nitrite levels could indicate pollution from improper waste disposal, fertilizer runoff from agriculture, or sewage leaks close to the health centre. Patients, employees, and guests may be at risk for health problems due to contaminated water. The elevated nitrate levels may indicate aging or inadequate water treatment. Thus, it is recommended that further monitoring is required as nitrite in water can lead to some health effects. In terms of the total and Faecal coliform, the sample is completely free of any biological contamination. Generally, the respondents to the survey indicated that water within the health facility is clean (88%) – see **figure 6**.

Table 20: Water Quality Analysis Results for Brikama Health facility

Parameters	Borehole	WHO Guideline Values
Temperature (°C)	31.2	**Acceptable**
Turbidity (NTU)	2.76	**<5**
pH	5.24	**6.5 - 8.5**
pH after aeration (A.pH)	5.29	**6.5 - 8.5**
Electrical Conductivity (□S/cm)	652.00	**1300**
Total Dissolved Solids (mg/l)	379.00	**1000**
Salinity (promile)	0.28	**NS**
Colour	Absent	**Absent**
Odour	Absent	**Normal**
Taste	Normal	**Normal**
Residual Chlorine (mg R.Cl2/l)	0	**0.3**
Suspended Solids (mg S.S./l)	9.00	**NS**
Phosphate (mg PO_4^{3-}/l)	0.05	**NS**
Nitrate (mg NO_3^--N/l)	8.5	**10**
Nitrite (mg NO_2^--N/l)	**0.050**	**0.03**
Total Iron (mg $Fe^{+2/3}$/l)	0.01	**0.3**
Sodium (mg Na^+/l)	0.0	**150**
Chloride (mg Cl^-/l)	33.0	**250**
Alkalinity (mg $CaCO_3$/l)	27.5	**>20**
Free Carbondioxide (mg CO_2/l)	20	**NS**
Hardness (mg $CaCO_3$/l)	78.2	**200**
Calcium (mg Ca^{+2}/l)	15.7	**200**
Magnesium (mg Mg^{+2}/l)	9.5	**150**

Parameters	Borehole	WHO Guideline Values
Manganese (mg Mn^{+2}/l)	0.00	**0.5**
Fluoride (mg F^{-}/l)	0.43	**1.5**
Sulphate (mg SO_4^{-2}/l)	6	**250**
Ammonia (mg NH_4^{+}/l)	0.32	**200**
Total Coliform (No./100ml)	0	**nil**
Faecal Coliform (No./100ml)	0	**nil**
Sanitary Survey	Fairly clean surrounding	**Clean, dry with good drainage**
Remarks: NS = not set , Please note that the stipulated guideline values are meant for drinking water quality recommended by World Health Organization (WHO).		

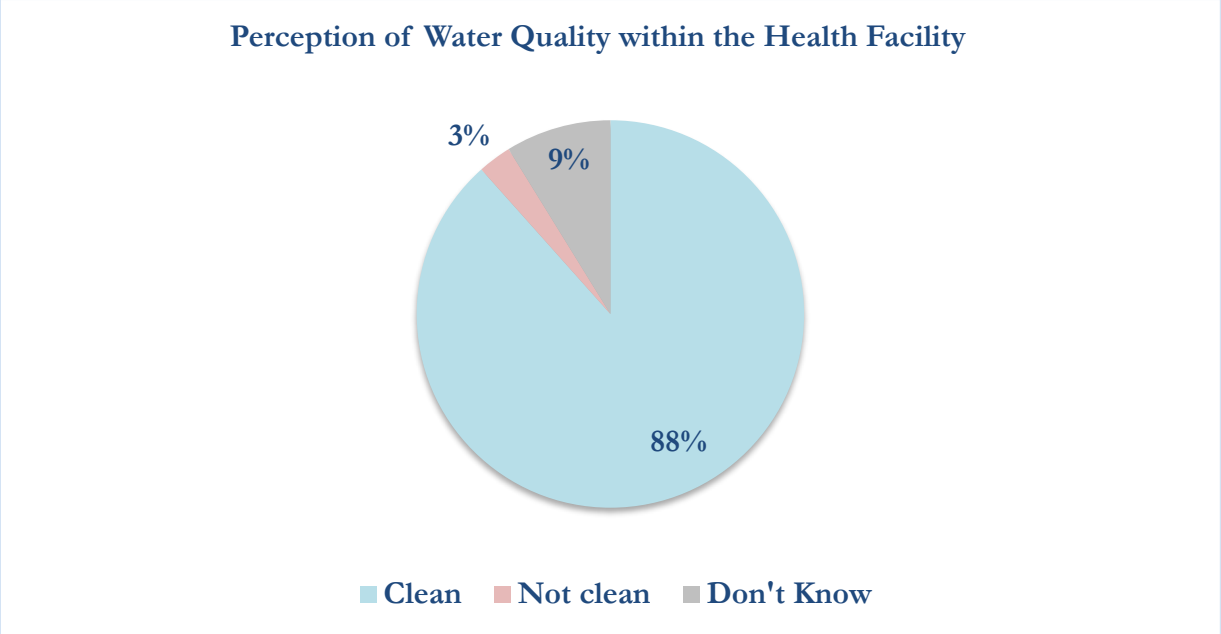


Figure 6: The Perception about Water Quality

4.3.3. Rainfall

Rainfall is an essential factor that determines the climate of an area to a large extend. The dry season period expands longer than the rainy season. The average annual precipitation of The Gambia is approximately 807 mm, while the mean number of wet days is around 74 days per year. Figure 5.1 shows that almost 85% of the rain falls between the months of July and September, with August as the peak of the rainy season. The highest mean total rainfall in The Gambia is 346.8 mm in August as presented in **Figure 7**. The amount of days it rains from the period of July to September varies from 14 to 19 days. This indicates that rain falls almost every other day during the stated time-frame.

The area that receives the highest amount of rainfall is the coast, followed by the south-east. Current rainfall trends have shown a decline in rainfall across the country, with greater changes in the western half of the country.

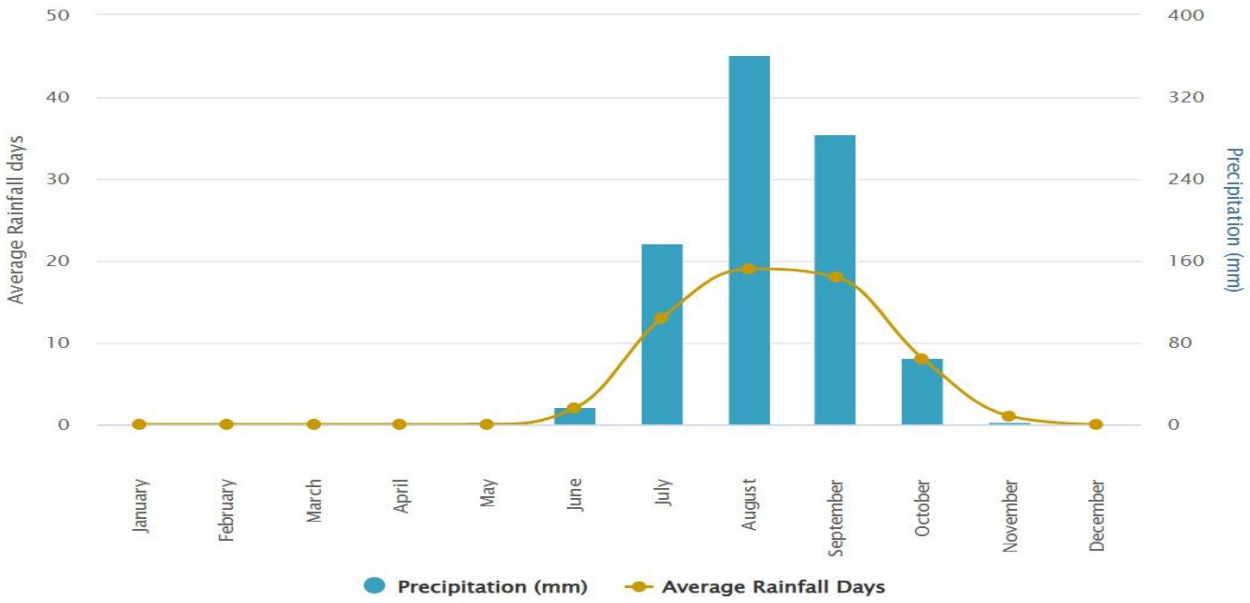


Figure 7: Mean Total Rainfall by Month in Brikama Administrative Area[8]

Like other regions in The Gambia, Brikama also enjoys rainfall from May to October and a dry season from November to April. The total average annual rainfall recorded from 2010 to 2024 in Brikama is 809.9 (see **Figure 8**), which is the lowest rainfall reported compared to all the other regions during the same period. The month with the highest rainfall is August (280.9mm).

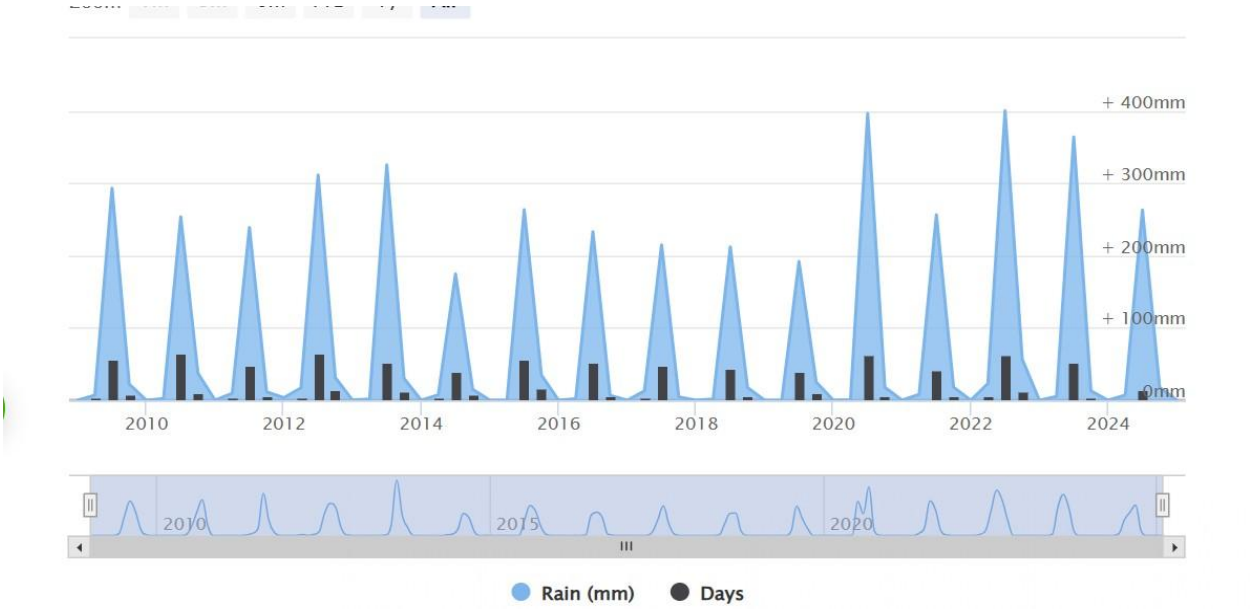


Figure 8: Brikama Local Government Area yearly rainfall (2010 - 2024)

(Source: www.worldweatheronline.com)

4.3.4. Temperature

Temperatures in The Gambia increase from the coast towards the east. The Brikama District Hospital is situated in a region of the country that experiences high temperatures during the dry season, particularly when compared to the coastal areas in the western region.

The mean maximum temperature during the daytime ranges from 30 °C to 34 °C throughout the year in The Gambia, as illustrated in **Figure 9**.

From late November to February, this region experiences cooler weather, with temperatures ranging from 25 °C to 18 °C during the early hours of the day.

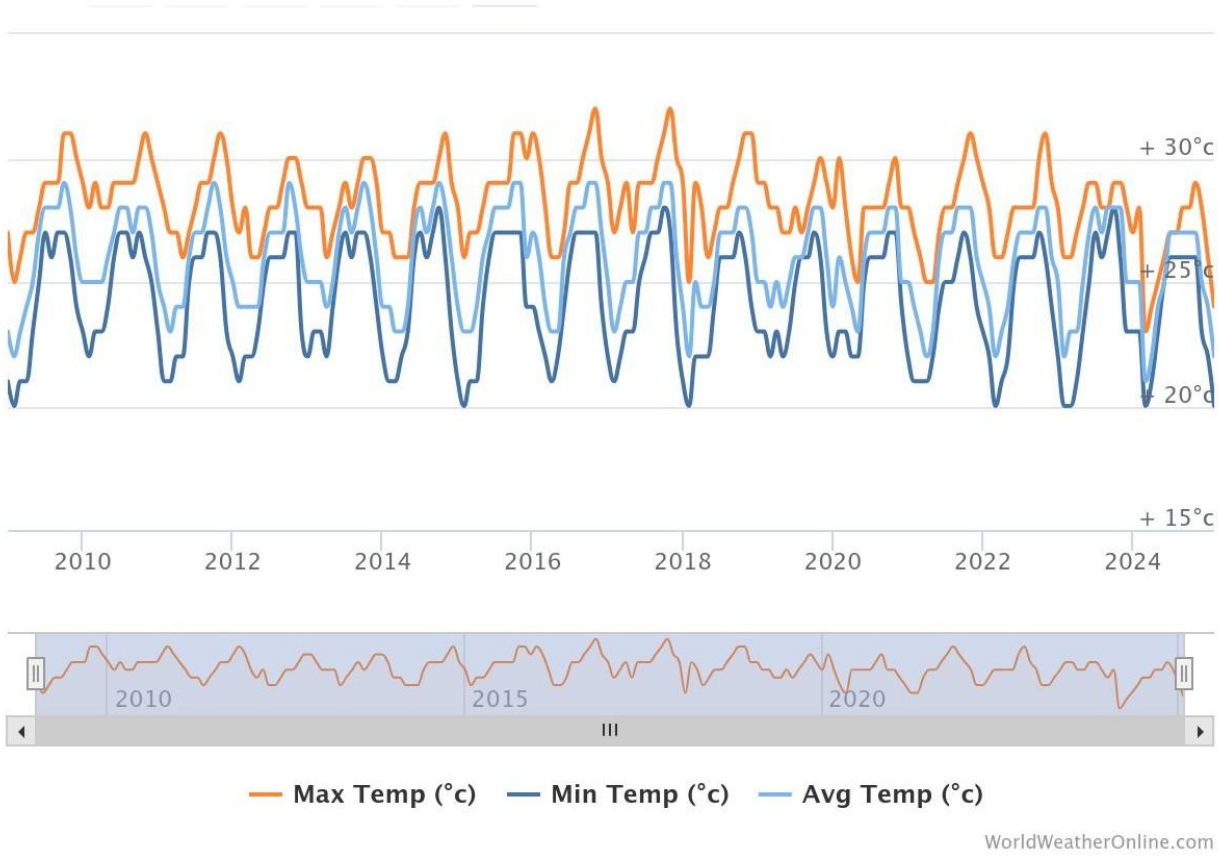


Figure 9: Average minimum and maximum temperatures in Brikama Local Area[8]

Figure 9 shows the average minimum and maximum temperature in Brikama from 2010 to 2024. The temperature curve for both the average minimum and maximum in Brikama is a mirror of the total average temperature illustrated in Figure 10. This indicated that the temperature pattern in the country is similar in all the regions across the country with small differences from region to region. The maximum average temperature experienced in the Brikama area (2010 - 2024) is 33°C in May, whereas the minimum average temperature is 22°C in January. According to the data in **Figure 10** the average minimum annual temperature in Brikama is 24°C while the maximum is 30°C.

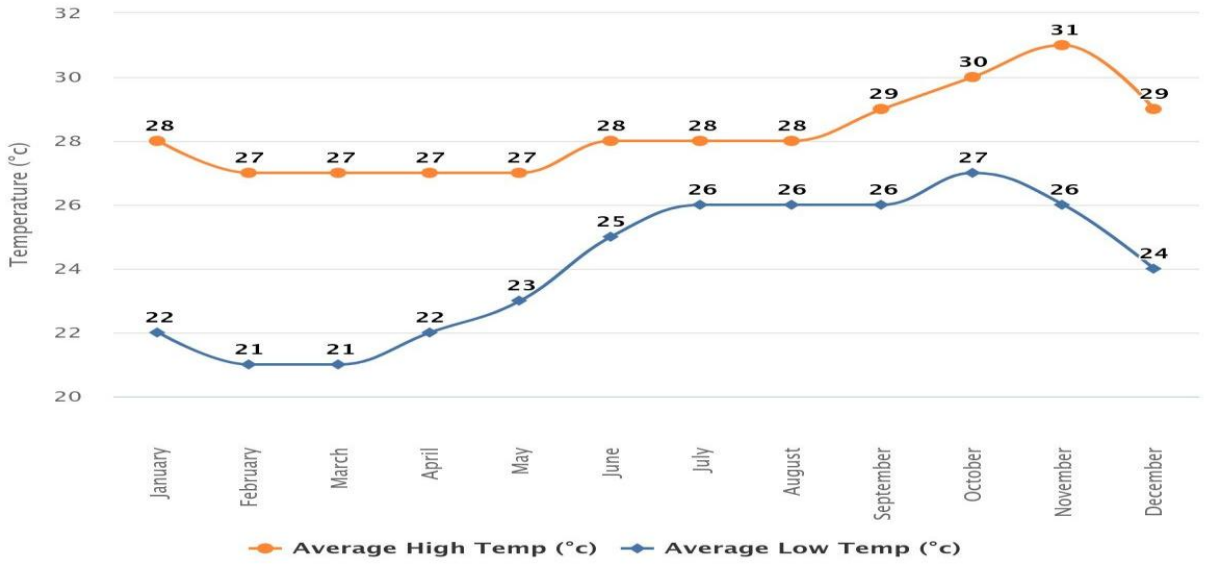


Figure 10: Average minimum and maximum temperatures in Brikama area

Source: World Weather Online

4.3.5. Humidity

On average, August is the most humid throughout the entire year whereas January is known to be the least humid (**see Figure 11**). The drastic increase in relative humidity is observed from the month of July to September which falls in the rainy season. The average annual percentage relative humidity is calculated to be around 63 %.

Between the years 2010 and 2024, the Brikama Local Government Area (BLGA) recorded its highest humidity levels in August and September, reaching 80%. In contrast, the lowest humidity was observed in January, with a figure of just 44%.

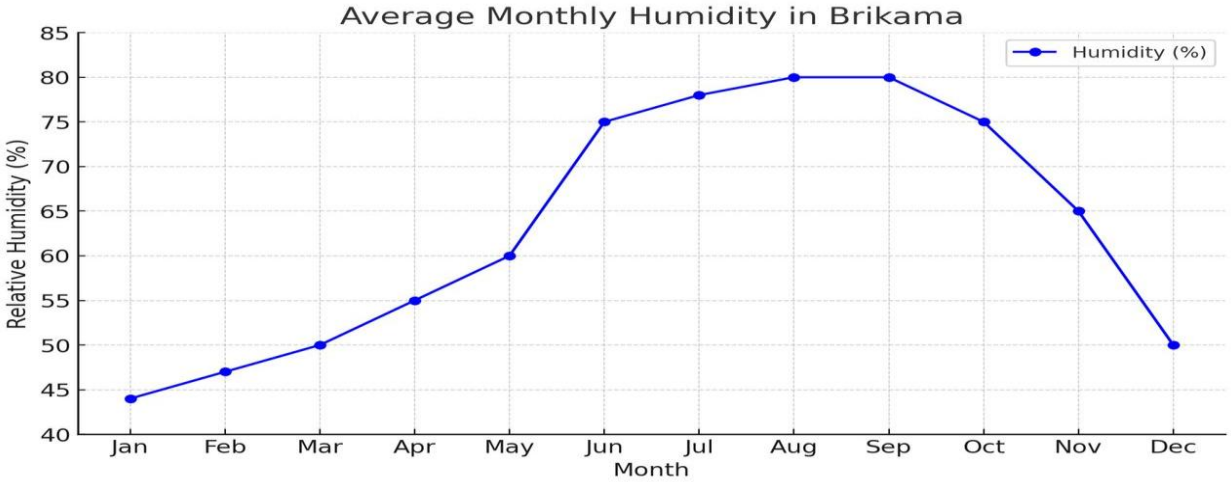


Figure 11: Average relative humidity in Brikama Local Area[8]

4.3.6. Flora and Fauna

There are different tree species present at the Brikama District Hospital. There are some trees within the health facility premises (see **Figure 12**). The tree species present are 2 neem trees, 2 mango trees. No endangered plant species were observed within the facility premises.

There were no animals present within the health facility at the time of the assessment. Even though no wildlife species were observed during the field visit at the site, however, there is a high possibility of the existence of cats and rodents. No tree felling will be required for the project. The project area comprises land that is already available for development and is not classified under any form of environmental protection, conservation status, or other legal restriction.

Figure 12: Photo of trees around OPD in Brikama HF

4.4. Socio-economic Environment

4.4.1. Demographic

According to the 2024 Population and Housing Census (PHC), The Gambia had a population of 2.42 million with Females constituting 51 percent as against 49 percent of males. Between 2013 and 2024, The Gambia's annual population growth rate is 2.5 per cent. This shows a decline in annual growth rate compared to the 2003 and 2013 inter-censual period, which recorded an annual growth rate of 3.1 per cent. The Gambia population is predominantly youthful, with 40.8 per cent under 15 years of age and only 3.0 per cent aged 65 and over. This dependent population is likely to put pressure on the working-age population, 15 to 64 years, which accounts for 56.2 per cent of the population. At the LGA level, Banjul and Kanifing have a relatively smaller proportion of youthful population (30.0% and 34.2% respectively) compared to Brikama (47.9%) and Basse (46.7%), where nearly half the population is under 15 years.

In The Gambia, while 47.2% of households engage in agriculture, Brikama Local Government Area (BLGA) has the second highest proportion (79.1%) of involvement in agriculture after Kerewan LGA (91.6%).

4.4.2. Education

The Gambia Education Sector Policy for 2016-2030[4] was developed, among other things, to promote a broad-based education at the basic level for lifelong learning and training. The policy is based on the principle of non-discrimination and all-inclusive provision of education, focusing on gender equity and targeting the poor and disadvantaged people. There is an increasing recognition that the most important determinant of economic growth is knowledge capital. The government is committed to strengthening policies and programmes to achieve equitable access to quality and relevant education for all.

While the national Gross Enrolment Rate (GER) at the primary level is 86.8 percent, the Brikama LGA only recorded 43.8 percent. The findings of the IHS further reveal that the adult literacy rate in the LGA is the lowest when compared to other LGAs. The adult literacy rate in the Brikama LGA is 22.8 percent, which is well below the national average of 50.8 percent. To improve educational outcomes in the LGA, there is a need to design a special educational programme for the LGA. Not limited to the provision of a standard library, and teachers' quarters, the LGA needs a multipurpose Technical and Vocational Education Training (TVET) center where youth and women can acquire skills for a sustainable livelihood. This will be of great benefit if a TVET institution is created within the LGA.

4.4.3. Health

The Government of The Gambia prioritizes the health of the citizenry and specifically focuses attention on reducing maternal and new-born deaths, reducing the burden of diseases, and ensuring that the country has a skilled and healthy workforce. As a priority, the government is committed to achieving Universal Health Coverage (UHC) through the provision of quality and equitable essential health services for all.

The maternal mortality rate in the 2019-20 GDHS is estimated at 289 maternal deaths per 100,000 live births; that is, for every 1,000 births in The Gambia, about three women die during pregnancy, during childbirth, or within 42 days of the end of pregnancy from causes other than accidents or violence. In 2013, the maternal mortality in the country was 433 maternal deaths per 100,000 live births. In the same period, child mortality rates were slightly higher. Reducing maternal and child mortality is one of the priorities of the international community, as enunciated in the 2030 Sustainable Development Agenda. The government is committed to strengthening policies and

[4] The Gambia Education Sector Policy for 2016-2030. Accessible, Equitable and Inclusive Quality Education for sustainable Development. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://www.rodra.co.za/images/countries/gambia/policies/Education%20Policy%202016-2030.pdf

programs to provide quality health service delivery for the reduction of maternal, new-born, infant, and child morbidity and mortality. The majority of births in Brikama LGA occur in health facilities (82.5%). The proportion of births that occurred at home was about 14 per cent.

The health indicator at Brikama Local Government Area (BLGA) of which Brikama is covered is very low. According to the Gambia Demographic Health Survey (GDHS) report 2019-20, 40% of the household population in BLGA had improved sanitation facilities, 89% with improved sources of drinking water, and 24% of married women had unmet need for family planning. For anemia, BLGA recorded the highest prevalence with the percentage of children 6-59 months and women age 15-49 years with any anemia is 77% and 62%, respectively. Compared to the national prevalence, BLGA has the highest prevalence of spousal violence, with 43% versus 39% nationally. Fertility is also highest with a 6.4 total fertility rate for the three years before the survey.

Given its crucial contribution to promoting healthy lives, access to safe drinking water is a key determinant of good health. About 86.1 percent of households in The Gambia have access to an improved and safe drinking water source. When compared with other LGAs, the Brikama LGA records the least at 66 percent, which is below the national, urban, and rural averages of 85 percent, 90.1 percent and 79.4 percent, respectively.

Access to health care services is a big problem for all the health facilities most especially to communities that are off-road and hard to reach. These communities find it difficult to access the health facility and they either trek by foot or use horse and donkey carts to the health facility. Only communities closer to the health facility and the communities the health centres are located find it easy to access the health facility.

Recently, it has been difficult to access Brikama District Hospital due to increased traffic and market. The inaccessibility of the health facility is worsened during the season when the access road is often flooded with run-off water. Additionally, since it is the only district hospital in the west coast region, the demand is high, making access to services a major challenge for the users in waiting time, limited workspace, and human resources, among others.

4.4.3.1. Services at Brikama Health Facility

The Services offered in the Brikama health facility are as follows:

- Laboratory analysis
- Pharmacy
- Leprosy and tuberculosis,
- Public health services,
- Outpatient consultation
- RCH services (Immunization)
- Admission.
- Maternity services (delivery and antenatal and postnatal care)

4.4.3.2. Number of staff per cadre

At the time of this assessment, Brikama District Hospital had 298 staff. Table 21 shows the different categories of staff in the healthcare facility and the number of staff under each cadre.

Table 21: Number of staff per cadre in the identified health facility

Cadre	Number
Officer In-Charge	1
Administrator	1
Midwives	38
Medical Doctors	9
General Nurses	46
Physician Assistants	4
Leprosy and TB Inspector (LTI)	4
Peri-Operative Nurse	7
Nurse Anesthetists	12
Public Health Officers	18
Laboratory Staff	18
Data Entry Clerks	14
Accounts Clerks	6
Community Nurse Attendants	32
Ophthalmic Staff	7
Pharmacy Staff	9
Social worker	1
Orderlies/ Health Labourers	47
Support Staff (Drivers, Security officers, Laundress, and generator operator)	24

4.4.4. Social Amenities

In determining the general socioeconomic status of the population, access to basic amenities such as drinking water, sanitation, electricity, and drainage is imperative for a decent quality of life. The majority of households are dwelling in their family compounds in BLGA - an average of 52.2 per cent. This was followed by the proportion of households that reported owning their dwellings (36%). The results show that households that are not owners but occupy their accommodation rent-free constitute a small proportion (4.3%) in the LGA.

4.4.5. Main Source of Cooking Fuel

Households rely on a specific fuel as the primary source of domestic energy for cooking. The type of fuel they use for cooking has implications for development as it is related to their socio-economic status. With fuelwood contributing more than 80% of the country's energy demand in the urban

areas, as Brikama District Hospital is located in the Brikama Local Government Area (BLGA), the main source of energy for cooking in B LGA is firewood (57.81%). Charcoal (38.91%) is the next main source of energy for cooking in the LGA[5]. Non-wood fuel (gas, electricity or solar) is rarely used by households in the LGA for cooking. National Water and Electricity Company Ltd (NAWEC) provides 66% of households with electricity (79% in urban areas and 23% in rural areas).

4.4.6. Waste Management at the Facility

At Brikama District Hospital (BDH), the healthcare waste comes from different departments within the facility, which means we need a well-organized system to handle it right from the moment it's created until it's finally treated. The waste types vary: general waste includes things like used gloves, cotton swabs, and disposable syringes. The Maternity Ward, on the other hand, produces biological waste, such as placentas, blood-stained gauze, and used delivery kits. The Laboratory deals with hazardous waste, which consists of used test tubes, reagent bottles, and infectious materials. Meanwhile, the Pharmacy has to dispose of expired medications, broken ampoules, and packaging materials. Additionally, the General Administration and Maintenance unit generates paper waste, plastic bottles, and general refuse.

Right now, BDH is facing challenges with proper waste segregation and storage. The hospital does not use colour-coded bins or bags to distinguish between different types of waste: red bins are meant for infectious waste, yellow bins for sharps and hazardous waste, and black bins for general non-infectious waste. Although there are containers available for needles, blades, and other sharp objects, there's no specific area set aside for temporarily holding waste before it gets collected and disposed of. Instead, some sharp items and other types of waste are left in an open area, and the local council provides communal bins for disposal.

[5] Draft National Strategy For the Popularisation of Liquefied Petroleum Gas (LPG) In The Gambia. https://www.mope.gm/download-file/8527eeeb-98ca-11ee-965f-02a8a26af761

Figure 13: Waste dumping situation in Brikama District Hospital

4.4.7. Water Supply

Access to safe drinking water, improved sanitation, and hygiene are essential to people's good health and development as well as contributing to the attainment of the targets under SDG. Access to water and sanitation are considered core socio-economic and health indicators and key determinants of child survival, maternal and children's health, family wellbeing, and economic productivity. Brikama district Hospital has piped water and a borehole erected within the health facility to supply water to all the different units and departments within the health facility as well as to the staff quarters. **Figure 14** presents the water storage tank in the health facility

Figure 14: Overhead water tank for solar and electrical powered boreholes in the health facility

4.4.8. Electricity

The energy supply for the health facility is both solar and electricity from the National grid provided by NAWEC. These energy sources provide power (see **Figure 15**) to the 18 different components, including the LTP & Public Health Block, Security Post, Laundry room, Generator Room, Emergency Block, Male & Female ward, Mortuary, Eye Unit, Operating Theater, Proposed X-ray block, Proposed Accident and Emergency, Laboratory Block, Pediatric Ward, Administration Block, Waiting Shed, Staff Quarters, Maternity & Labour Ward.

Figure 15: Solar PV System and NAWEC meter in Brikama District Hospital

4.5. Governance

The Government of The Gambia is committed to ensuring sustainable human development by implementing policies that restore good governance, respect for human rights, and the rule of law, and empower citizens through decentralization and local governance. To attain the objective of strategic priority on the restoration of governance and improving the governance landscape, the government has established institutions that seek to promote good governance through improving access to justice, promoting the rule of law and protecting human rights. Awareness of these institutions and their functions by the citizenry is critical for civil participation and responsible citizenship.

Awareness of the existence of the selected national governance institutions - National Council for Civic Education (NCCE) 16.7%, Office of the Ombudsman (11.0%) and the Alternative Dispute Resolution Secretariat (ADRS) 15.2 per cent, is very low. This defeats the purpose for which these institutions were created.

4.6. Environment

The adverse effects of climate change are already being felt in The Gambia. Low agricultural productivity and food insecurity, reduced biodiversity and ecosystems and dwindling water resources are some of the areas where climate change is negatively affecting communities. Water availability for livelihood is being threatened because of frequent droughts and changes in rainfall patterns while floods in other areas are destroying homes, crops and sometimes causing death. With these issues of concern for the environment, the government seeks to promote environmental sustainability, to ensure that the country's environment and natural resources are managed sustainably and conserved. The government is also committed to increasing resilience through strengthening environment and climate change-friendly policies, creating programs to raise awareness at all levels for resilience and sustainable management of natural resources.

Environmental messages are always disseminated on time to increase the awareness level of the people.

4.7. Agriculture

Brikama, like many communities in The Gambia, has a longstanding agricultural tradition that underpins its economy and sustains the livelihoods of many residents. The region's fertile lands and favorable climate have historically supported diverse farming activities, including the cultivation of staple crops such as groundnuts, rice, millet, sorghum, and maize. Fruits like mangoes, oranges, bananas, and cashews are cultivated, contributing to both local consumption and export revenues. Several initiatives have been launched to revitalize and modernize Brikama's agricultural sector. A notable example is the Agro Youth Project, introduced in September 2024 by Collective Actions for Sustainable Development in partnership with German collaborators. This project aims to empower young Gambians by providing training in sustainable agriculture and entrepreneurship, thereby fostering economic growth and self-reliance. The initiative places particular emphasis on involving young women, recognizing their pivotal role in the agricultural landscape. To address these challenges, programs like the Programme for Accelerated Community Development (PACD) by UNDP have been implemented[6]. PACD focuses on enhancing rural infrastructure and providing labor-saving devices to boost agricultural productivity. For instance, in 2021, 19 communities, including those around Brikama, received tractors and related equipment. These resources have enabled local farmers to increase efficiency, reduce physical labor, and generate additional income through services like transporting construction materials. The people of Brikama are involved in horticultural gardening, especially women to provide basic needs for the family, particularly food security and nutrition.

[6] https://www.undp.org/gambia/blog/innovating-agriculture-rural-gambia

4.8. Poverty and Inequality

[7]Poverty is a multidimensional phenomenon with monetary and non-monetary aspects. People are said to be poor when they have no opportunities to work, to learn, and to live healthy and fulfilling lives. In the Gambia, income is affected by planting and harvest seasons; hence, relying on that indicator might under- or overestimate people's living standards. Food purchases account for the largest share of total food consumption of households. It constitutes more than 61 per cent of total food consumption.

Brikama has exhibited high poverty rates. In 2003, the headcount poverty rate stood at 56.7%, indicating that over half of the population lived below the poverty line. This figure slightly increased to 57.5% in 2010 (GBoS 2010), highlighting persistent economic hardships. However, by 2015, there was a modest decline to 51.2%, and further to 48.3% in 2020, suggesting gradual improvements in economic conditions. Despite this progress, nearly half of Brikama's residents remained in poverty as of 2020. The Human Development Index (HDI), which assesses indicators like life expectancy, education, and per capita income, provides additional insights into Brikama's development.

Gender inequality significantly contributes to poverty in Brikama. A UN-Habitat report 2011 highlights that the majority of the poor are women, with disparities in access to education and employment being fundamental causes. Limited access to livelihood skills and economic resources further exacerbates women's economic vulnerability. At the national level, The Gambia has experienced fluctuating poverty trends. According to UNDP 2019-2021, nearly half of Gambians (48.6%) were considered poor, and unable to meet the basic cost of living. By 2019, this figure declined to 45.8%, reflecting modest economic growth. However, challenges such as food insecurity persist, with 29% of the population affected and 24% of households experiencing inadequate food consumption.

[7] https://www.gbosdata.org/data/718-poverty/1810-inequality-gini-index-brikama?utm_source=chatgpt.com

UN habitat report 2011 https://unhabitat.org/sites/default/files/download-manager-files/Gambia%20Kanifing%20Urban%20Profile.pdf

UNDP The Gambia Report 2019-2021 https://unhabitat.org/sites/default/files/download-manager-files/Gambia%20Kanifing%20Urban%20Profile.pdf

5. STAKEHOLDER CONSULTATION AND COMMUNITY ENGAGEMENT

Public consultation and stakeholder engagement are fundamental principles of the ESIA process. It largely contributes to the successful design, implementation, operation and management of proposed projects. This process involved consultations with relevant project-affected persons/groups/businesses and concerned government authorities and intuitions, documenting their concerns, assessing potential impacts, and exploring avoidance and mitigation options. The aim of this exercise was to disseminate information to interested and affected parties (stakeholders), solicit their views and consult on sensitive issues, in order to add value to the project design considerations. Public consultation has also been highly useful for gathering environmental and socio-economic data, understanding likely impacts, determining institutions and individual preferences, selecting project alternatives and designing viable and sustainable mitigation measures

The methodology entailed mainly public consultation by use of open-ended questionnaires and interviews with the stakeholders concerned. For this assignment, the following three methods of consultation were adopted:

- Perception survey
- Focus group discussion with communities around the proposed site
- Relevant stakeholder key informant interview

The objective of the perception survey was to establish the levels of understanding and appreciation of the selected communities within the catchment area for Brikama District Hospital to identify the impacts of the current and potential interventions on lives and livelihoods as well as on the environment. In particular, the survey sought to understand people's perceptions, including people's general knowledge of the project, project activities that have the potential to adversely affect the environment and social well-being of communities around the proposed site, and measures that can be taken to promote and protect the social and environmental impacts.

Quantitative and qualitative methodologies were used during the consultation process. For the quantitative data collection, which was implemented via a survey, targeted respondents included facility users (i.e. patients/community members around the proposed site for the health hospital) and service providers (staff of Western Health Region 2, RHD staff). Qualitative methods – semi-structured key informant interviews and focus group discussions (FGDs) – were designed to provide quality baseline information, perspectives, and expectations of beneficiaries to corroborate the quantitative data. In this regard, the two categories of methods complement and mutually reinforce each other.

The targeted respondents for the community engagement or institutional consultation included TAC members relevant to the project (i.e., Health, NEA, Ministry of Gender, Children& Social Welfare), and the Governor of the West Coast Region. At the community level, the interviews targeted the women, District Chiefs, Village Alkalos, VDC chairpersons, and other members.

Apart from the perception survey that targeted potential service users and staff, project relevant stakeholders at the health level, community consultations and stakeholder engagement exercises were conducted in different communities such as Kitty, Jamisa, Brikama Jidda, Serrekundading, Markisa, and Brikama Sanchaba, Kuloro, and Brikama Central.

This was organized through FDGs and KIIs and a perception survey. Up to 6 FDGs and 21 key informant interviews were held with stakeholder institutions, both at the health and national levels. In total, 84 persons were present for the FDGs, with 47 (56%) females and 37 (44%) males. Similarly, 82 participants participated in the perception survey, with 55% being females. All the people of the consulted categories are eager about the commencement of the health facility construction/renovation project activities, highlighting the positive aspects:

- Provide temporary and long-term employment opportunities, especially for women and youths, thereby reducing irregular migration
- Increase easy access to healthcare services for Gambians and non-Gambians alike
- The project, upon completion, will enhance the quality and provision of medical/healthcare services as more patients will be attended to
- Reduce maternal and child deaths
- Increase survival rate for accident victims by meeting the golden hour of emergency care
- Reduce long waiting time
- Increase business opportunities during the construction/renovation and operational phases
- Bring about infrastructural and social service development in Brikama and neighboring communities
- Enhance performance of healthcare workers
- Improve healthcare services
- Promote skill transfer from skilled migrant workers
- Increase staff motivation and retention
- Reduce facility inspection due to current tight space in the facility
- Increase confidence and trust for users in the health services
- More attractive to staff and users, thus boosting confidence.
- Reduce referrals

Aside from the potential benefits anticipated, some environmental and social risks highlighted during consultation are summarized in table 22.

Table 22: Summary of Issues Highlighted During the Consultation and Community Engagement

Environmental Risks Anticipated and Mitigation Measures	
Risk	**Mitigation**
12. Increased Waste generation	- Work with council to properly manage waste generation during construction/renovation. - Temporal site for waste disposal before finally

	collection
13. Increased moist and dust pollution	- Springling of water for dust management - Protective gears - Site must be completely enclosed - Perimeter fence of the area during construction. - Sensitization of communities about dust and how they can protect themselves from it.
14. Noise generation	- Heavy machines should be used only in the daytime
15. Loss of vegetation	- Indigenous trees must not be cut and design the construction of new building within the facility such that some trees will not be cut - Replanting of trees within the health facility premise
16. Oil leakage leading soil and water contamination	- Provide storage containers for waste oil - Containers must be covered - Use a confined place for equipment maintenance
17. Waste such as worn-out tyres can trap water and can become breeding grounds for mosquitos	- Worn-out tyres should be properly managed - Avoid burning of tyres
18. Mining of sand and gravel	- Contractors should collect sand and gravel only from approved identified sites
19. Access roads to mining or construction sites via people's properties or farmlands.	- Creation of suitable diversion to avoid tampering with farmlands. - Roads should be properly maintained.
20. Risk of accidents due to over speeding from construction vehicles	- Speed limits must be instituted and observed to avoid accidents.
21. Health and safety environment	- Due to high temperatures during the day in the region, contractors should have breaks in peak temperature periods of the day.
22. Construction activity may lead to water shortage.	- Encourage contractor to construct an industrial borehole for their construction/renovation activities.
Social Risks Anticipated and Mitigation Measures	
Risk	**Mitigation Measures**
14. Sexual abusive and harassment of community members by workers at the construction/renovation project site	- Contractor code of conduct for the workers - Any worker found wanting on the code of conduct should be dealt with appropriately by leveraging the law of the land. - Hiring of youths and other residents in the community - There should be continuous community engagement

	to increase awareness of some of these risks
15. Possibility of child labour	- Employment of under aged children must be avoided at all costs. - Verification of age, either through birth certificate or Identity Card, before hiring - Children must not be involved in hazardous work.
16. Influx of foreign workers in the community	- Recruitment of local youths should be encouraged
17. Risk of domestic violence	- Work-related issues that may lead to increase in domestic violence such as not paying workers on time and therefore worsening their economic situation should be identified and properly addressed. - Community members should be sensitized on work induced domestic violence and how it can be mitigated.
18. Sexual exploitation/inducement risk due to rise in the income levels of workers	- Communities should be sensitized about the risk and encouraged to protect their families from such risk.
19. Introduction of alien lifestyle leading to rise of social vices	- Sensitization of workers and community to minimize the transfer of foreign habits from construction workers.
20. Commercial activities at site may increase risk of school going children dropping out of school	- Members of the affected communities should be sensitized of the dangers of sending their school going children to construction site for revenue generation.
21. Lack of sanitary facilities leading to open defecation	- Proper sanitary facilities should be in place at the construction/renovation project site.
22. Increase in theft in the community due to poor security at construction site	- Construction site and materials should be well secured such that theft at the construction project site can be minimized.
23. Inappropriate hiring and firing of workers	- Contractors must follow due process in the recruitment of workers and avoid exploitation of workers. - People must not be hired without proper documentation of the conditions and terms of employment. - Grievance Redress Management (GRM) system need to be set up during the project implementation. - Contractor should promote equal employment opportunities for all and must not discriminate against women.

24. Poor work environment in terms of health and safety	- Provision of first aid boxes and health and safety gears at the construction site. - Contractors must hire a health and safety officer that will ensure health and safety protocols are always observed at construction site. - Work stressors that can affect the mental and psychological wellbeing of workers should be identified and appropriately dealt with.
25. Interruption of services	- Ensure timely communication for start of the project to give adequate time for planning by the RHD and HF for alternative continuation of services
26. Inconvenience of staff whose residences are included in the renovation	- Ensure the timeline for renovation is communicated and short as possible to prevent prolong inconvenience regarding the accommodation aspect. - Rent convenient apartments/houses for affected staff to ensure continuity of service

5.3. Key Findings of the Perception Survey

In total, the survey respondents were 250, 69% of users and 31% of staff of Brikama District Hospital. More than half of the respondents (55%) were females (**figure 16**) and were married (68%). On employment status, the majority of respondents reported being employed (42%) followed by self-employed (35%) and unemployed (23%).

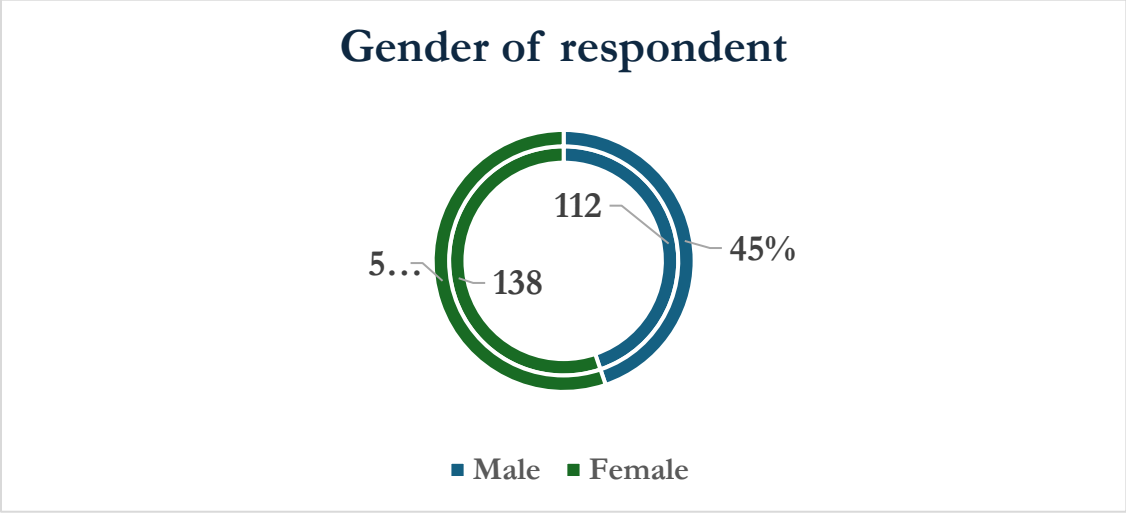


Figure 16: Gender of respondents

The survey respondents were asked about their awareness of the construction/renovation of the Brikama Health facility, and the results are presented in **Figure 17**. The results revealed that less

than half (46%) of the total respondents reported that they were not aware of the proposed health facility construction/renovation. However, the project awareness level was higher among the health facility (HF) users (56%) compared to the HF staff (48%). Regarding where they heard about the construction/renovation works, the majority (69%) of the respondents reported that they learnt about it from community members, and this was higher among HF users (92%) than the HF staff (73%) (**Figure 18).**

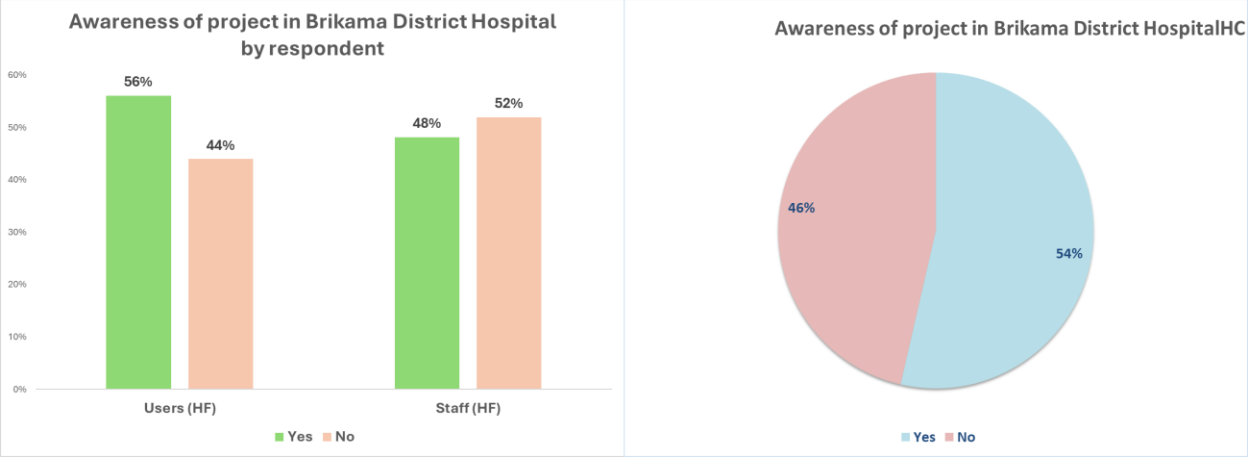


Figure 17: Awareness of the Brikama District Hospital Construction/renovation Project

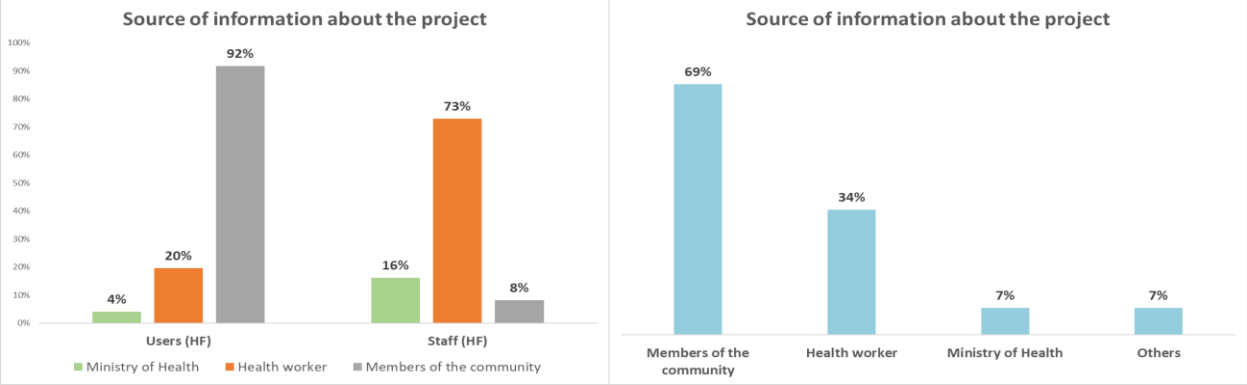


Figure 18: Source of Information about the Project

When asked about where they seek healthcare, almost 80% responded Brikama District hospital with majority reporting sometimes (40%) and more than 5 years (59%).

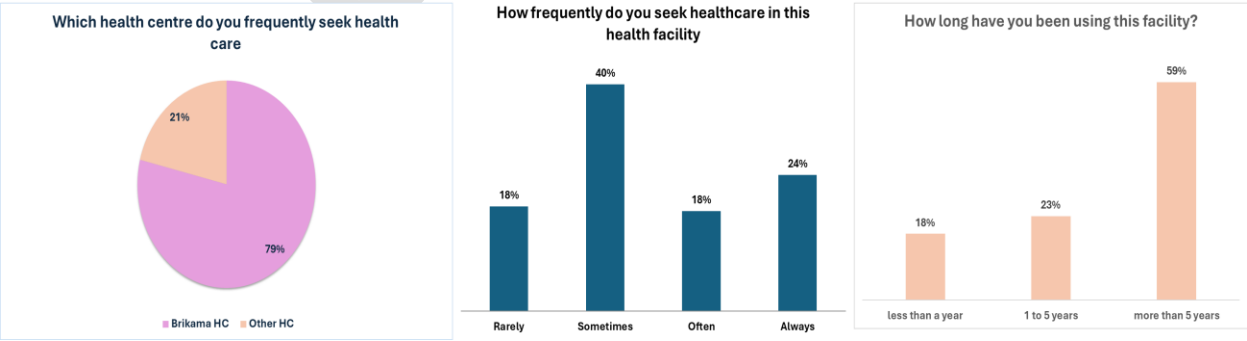


Figure 19: Healthcare-seeking behaviors among respondents

The respondents were informed of the proposed project and were asked about their perception of the overall impact of this project on their livelihoods. Up to 96% of the respondents expressed that the project is anticipated to positively impact their livelihoods, of which 95% were among Health Facility Users (HFU) and 87% among Health Facility Staff (HFS). More than half (66%) of the respondents think the project will not have an impact on health service delivery, with 59% being HFU, and 81% HFS. This finding reflects the viewpoint of the key stakeholders of the project, who also believe that although the project will have a positive impact on the livelihood, the health service delivery may not be very impactful by constructing new structures or renovating existing buildings, due the current location of the health facility. They further highlighted a lack of decent work environment and resources, including more specialized health workers, medications, and diagnostic equipment.

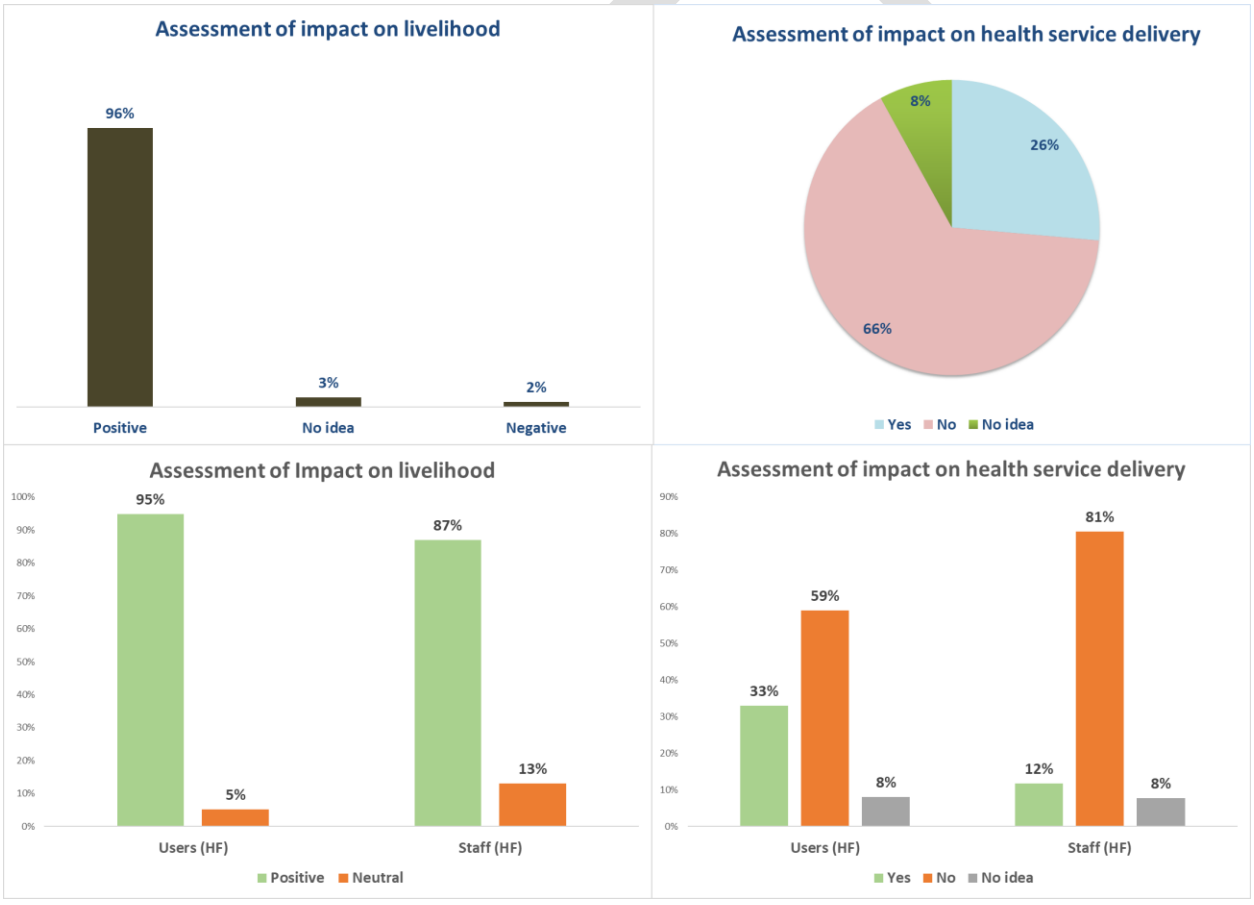


Figure 20: Impacts of the Project on Livelihood and Health Services Delivery

In response to the question about the perception of respondents on the current healthcare services at the Brikama District Hospital, 47% and 46% of the respondents stated that the healthcare facilities and services delivery are fair and good, respectively. However, 46% of both users and staff rated the healthcare facilities as fair and good, while more than half (51%) rated them as fair. For the

healthcare services, 50% and 38% of the users and staff rated the service delivery as good, respectively (**Figure 20).**

Overall, more than 50% of the respondents perceived the healthcare facility services and facilities condition as not good. Therefore, the healthcare facility requires renovation to improve services. The same sentiments were echoed in all the community consultations conducted. Similar concerns were reported by the TAC, RHD staff, Chairperson select committee on health at the National assembly and other stakeholders and community members during the KIIs.

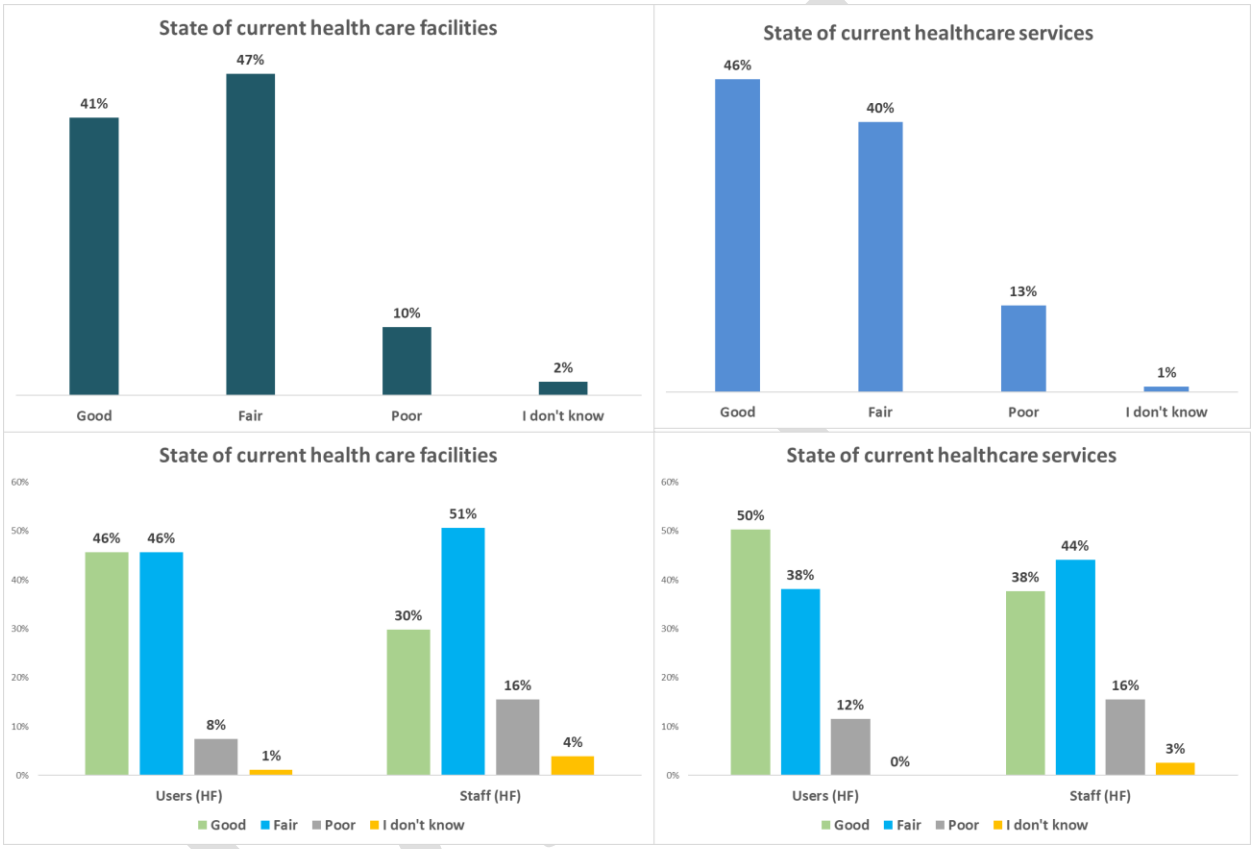
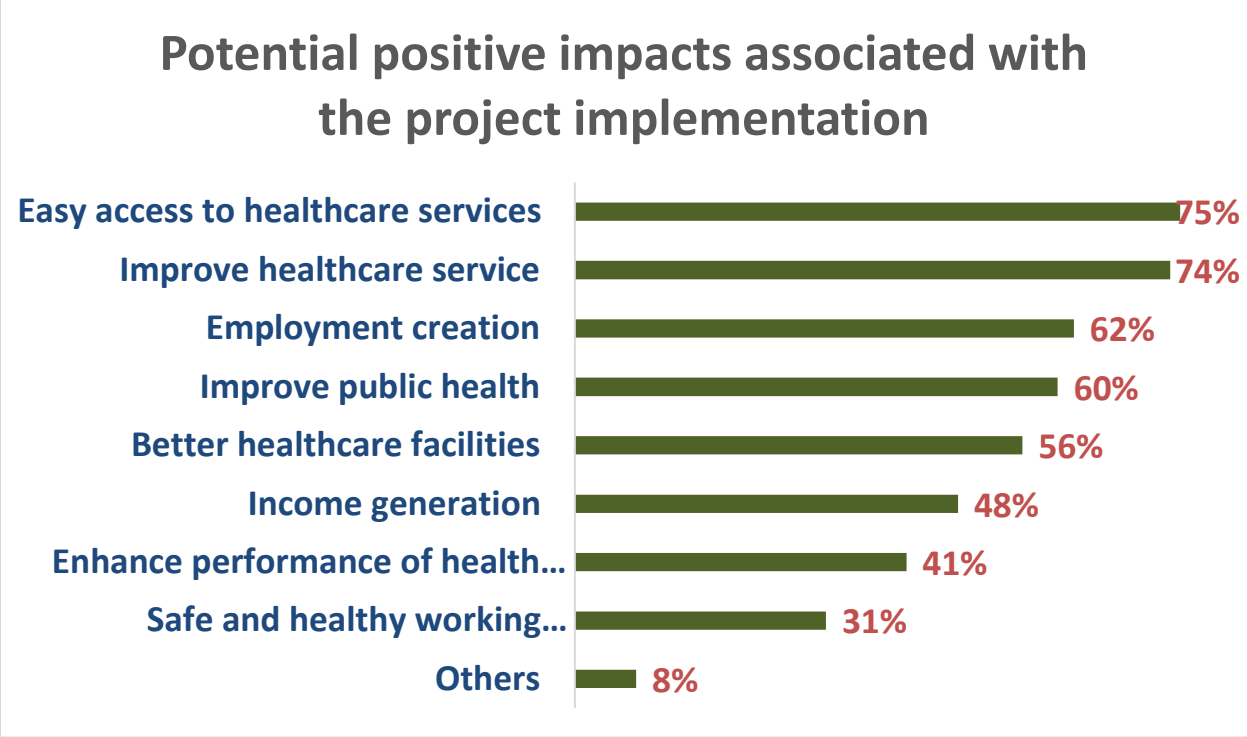


Figure 21: Description of the current Healthcare Facilities and Services

When asked about the positive environmental and social impact of the project, the majority of the respondents reported easy access to healthcare services (75%), improved healthcare services (74%), employment creation (62%), improved public health (60%), better healthcare facilities (56%), income generation (48%), enhanced performance of healthcare workers (41%), safe and health working environment (31%) as shown in **Figure 21.**

For the potential negative impacts that the project is likely to have to cause were reported as noise pollution (59%), waste generation (49%), dust pollution (41%), accidents and injuries to workers (35%), soil pollution/contamination (11%), gaseous emission from vehicles and heavy machinery (10%), and water pollution/contamination (9%) as shown in **Figure 22.** In terms of the potential

negative impacts associated with the project implementation, the majority cited noise pollution (52%) followed by waste generation (48%), dust pollution (46%), and accidents and injuries to workers (45%).



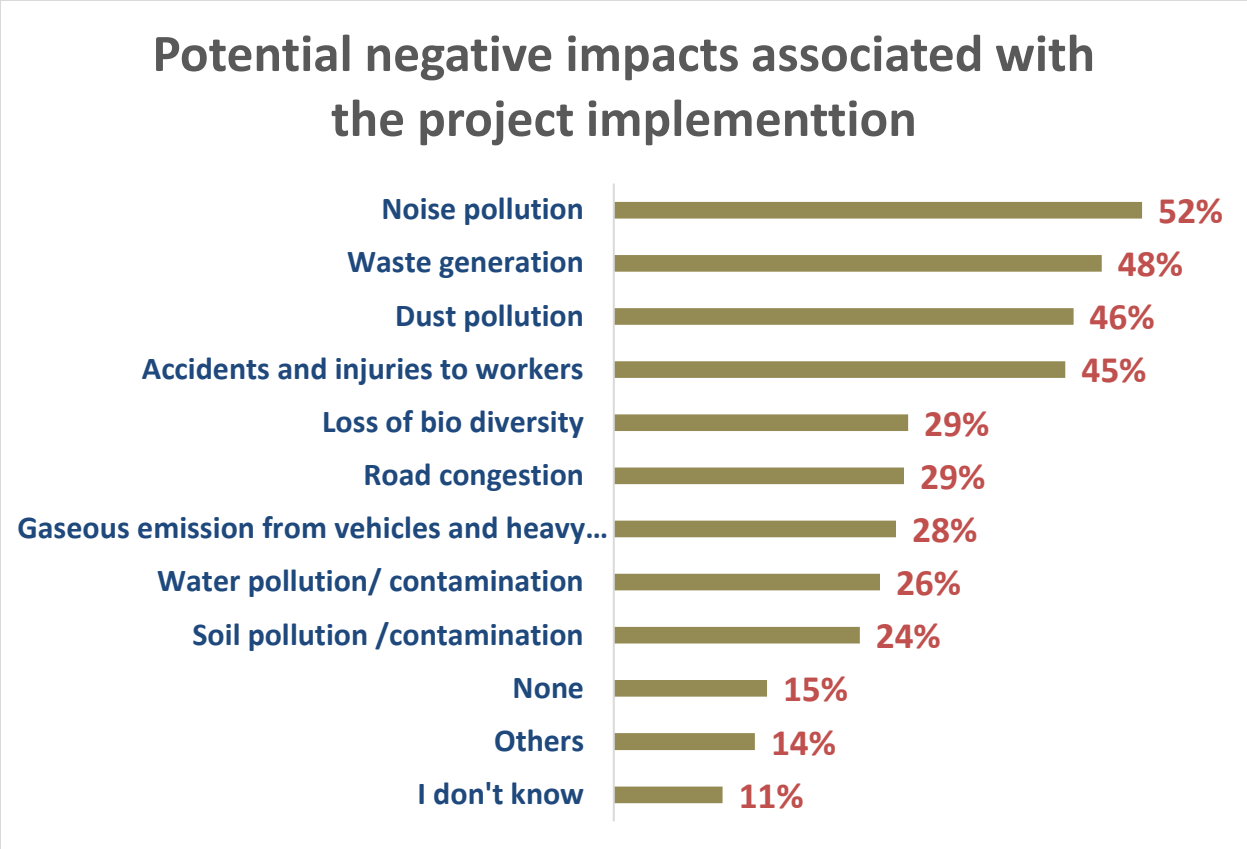


Figure 22: Potential Positive and Negative Impacts of the Project

Regarding what can be done to avoid or prevent the potential negative impacts, the majority of the respondents proposed proper waste management (69%), dust control and suppression measures (53%), use modern equipment with less emission (50%), minimization of vegetation removal (40%), health training and awareness for the workforce (39%), re-vegetation/planting of native trees (32%) (**see Figure 23**).

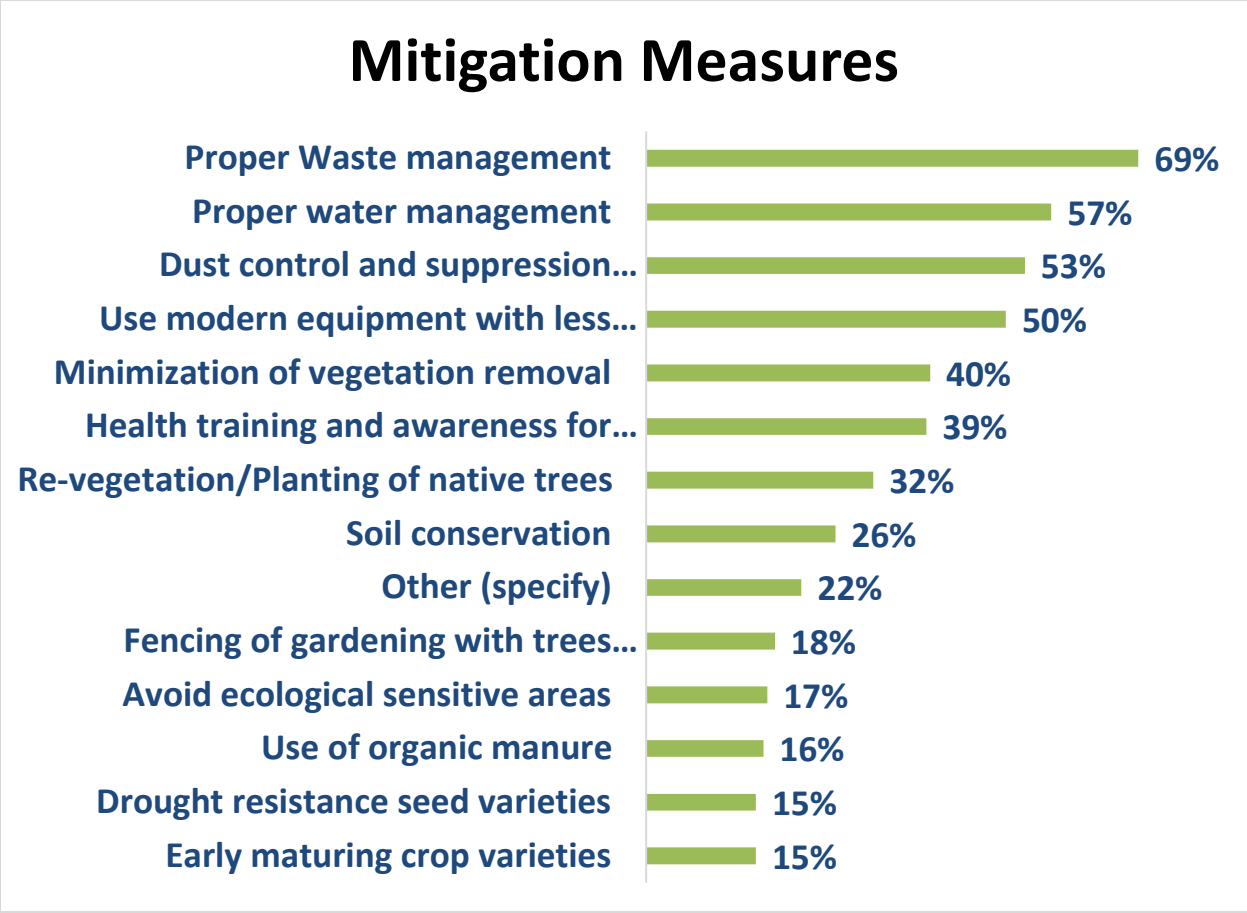


Figure 23: What Do You Think Can Be Done to Avoid/Mitigate Against the Potential Negative Impacts?

6. POTENTIAL IMPACTS AND MITIGATION MEASURES

This chapter focuses on the potential positive and negative impacts on environmental and social aspects arising from the proposed project's pre-construction, construction, operation, and decommissioning phases.

6.1. Potential Positive Impacts During Planning and Design Phase

6.1.1. Employment Opportunities

During the planning and design phase, employment opportunities will be created for engineers, surveyors, environmental experts, health and safety, public health experts, and sociologists among others. These opportunities can add value for such actors.

6.2. Potential Negative Adverse Impacts

The proposed project will be executed in different stages and the procedure utilized in the identification and assessment of the potential impacts took into account the various phases of the project. The main potential impacts associated with the project activities during the planning and design (pre-construction), construction, and operation phases of the project are presented in Table 23.

Table 23: Environmental Indicators Interaction Matrix of the Project Activities

Project Phase	Pre-construction/renovation and Construction/renovation Phase									Operation Phase				
Project activities/Impacts	**Site clearing**	**Recruitment & presence of workers (non-native)**	**Movement of machinery & vehicles**	**Civil works**	**Transportation of construction materials (sand, gravel, cement**	**Waste generation**	**Use of construction equipment and tools**	**Consumption of resources (water, energy**	**Repair of equipment and machinery – soil spillage**	**Waste generation, storage, handling and**	**Maintenance of facilities**	**Repair of equipment**	**Consumption of resources (water, energy)**	**Movement of vehicles in and out of facility**
Air Quality														
Dust and particulates	■		■	■	■									■
Gaseous emissions (NO_X, SO_X, CO_X, GHGs etc.)			■		■									
Water Quality														
Underground water contamination/pollution			■	■	■				■					
Soil Quality														
Soil contamination				■					■					
Soil erosion and siltation	■													
Change in topography/natural drainage				■										
Sensory Perceptions														
Noise Disturbance			■	■	■		■					■		
Vibration Disturbance			■	■	■		■					■		

Project Phase	Pre-construction/renovation and Construction/renovation Phase									Operation Phase				
Project activities/Impacts	**Site clearing**	**Recruitment & presence of workers (non-native)**	**Movement of machinery & vehicles**	**Civil works**	**Transportation of construction materials (sand, gravel, cement**	**Waste generation**	**Use of construction equipment and tools**	**Consumption of resources (water, energy**	**Repair of equipment and machinery – soil spillage**	**Waste generation, storage, handling and**	**Maintenance of facilities**	**Repair of equipment**	**Consumption of resources (water, energy)**	**Movement of vehicles in and out of facility**
Terrestrial Ecology-Flora														
Forested areas (removal)														
Habitat fragmentation														
Terrestrial Ecology - Fauna														
Avifauna (degradation and removal of habitat)														
Rodents and mammals (degradation and removal of habitat)														
Socio-economic, Cultural, Human Health														
Traffic congestion														
Waste generation (solid and liquid)														
Public health (air and water quality)														
Occupational Health and Safety (increased accident potential)														
Employment opportunities														
Impact on livelihood														

Project Phase	Pre-construction/renovation and Construction/renovation Phase									Operation Phase				
Project activities/Impacts	**Site clearing**	**Recruitment & presence of workers (non-native)**	**Movement of machinery & vehicles**	**Civil works**	**Transportation of construction materials (sand, gravel, cement**	**Waste generation**	**Use of construction equipment and tools**	**Consumption of resources (water, energy**	**Repair of equipment and machinery – soil spillage**	**Waste generation, storage, handling and**	**Maintenance of facilities**	**Repair of equipment**	**Consumption of resources (water, energy)**	**Movement of vehicles in and out of facility**
In-migration/labour influx														
Gender-based violence; Sexual Exploitation and Abuse; Sexual and communicable diseases														
Spread of communicable diseases														
Occupational Health and Safety Risks														

6.3. Potential Negative Impacts During Planning and Design Phase

Although planning and design studies do not allow for any large-scale destruction and disturbance of the biodiversity, potential risks may arise due to poor siting of the facilities such as the A&E or non-adherence to the Ministry of Health (MoH) guidelines and NSPA specifications on the infrastructure design. Additionally, the mobilization of skilled experts and consultations with key stakeholders and community members may lead to unnecessary heightened expectations and speculations, especially on employment opportunities for the surrounding communities' members.

6.4. Proposed Mitigation Measures

At the planning and design phase, it is expected that there will be minimal to no negative impacts. Nonetheless, the design team, NSPA Safeguard team shall take the necessary measures to mitigate risks through:

- Coordinating with the relevant Technical Government Ministries and departments in the development of the designs;
- The Project Management Team (PMT), specifically the NSPA Safeguard team, should ensure the design requirements are adhered to in the planning stage.
- Ensure all the legally required permits, such as getting the designs approved and acquiring the EIA approved License before undertaking the construction activities;
- The contractor bidding documents should contain clauses on Environmental Social Health and Safety (ESHS) requirements to guide the contractor on the key requirements;

6.5. Potential Positive Impacts During Construction Phase

6.5.1. Creation of Market for Construction Materials

The project will require building and construction materials such as sand, cement, basalt, lining, steel bars/rods, glass, soft boards, aluminum bars among others. Such construction materials should be sourced locally to assist in providing a ready market for suppliers of such materials within and outside the project area.

6.5.2. Source of Short-Term Employment Opportunities

The construction work will require services from machine operators, other skilled and unskilled workers. It is recommended that such people be sourced from the local community as first option. Machine operators will be engaged in excavation, site clearance, compaction, and backfilling. Several workers, including casual workers, plumbers, electricians, engineers, and health and safety experts, are expected to work on the site for a qualified period. Semi-skilled, unskilled, and formal employees are also expected to obtain gainful employment during the construction phase. In addition, the project will offer a source of income to the women through the sale of food items to the workers, thereby enabling them to earn additional income to support their families. However, this is to be a

medium positive impact of a short-term nature. It is estimated that at least 40 people will benefit from the project in terms of short-term employment opportunities. This would benefit the local community but short-term in nature and can be enhanced through publicizing available project work opportunities in community meeting places "Bantabas", mosques and churches, print and electronic media outlets, and social media platforms.

6.6. Potential Negative Impacts During Project Construction Phase

6.6.1. Interference with Physical Setting

As the current proposed site for the construction/renovation is an existing health facility in use, the construction/renovation will involve excavation works that will interfere with the physical setting of the environment. Any excavated area should be well secured before it could be backfilled or before construction can be carried out to make it safe.

Table 24: Impact Assessment Summary for the Interference with the Physical Setting

Impact Assessment Summary	
Types of impacts	Interference with the Physical Setting
Project activities	Excavation and digging activities, Site clearing and removal of vegetation, movement of machinery and vehicles
Impact characterization	Adverse, Direct, Short-long term, Reversible
Impact Significance	Medium to high
Propose Mitigation Measures	
The contractor should ensure that there is minimal disturbance to the topography of the area; o The project designs should be such that they do not interfere with local drainage or, change the topography or introduce physical changes that are not in harmony with the physical setting of the project area. Any topographical change needed should be made to avoid soil erosion or storm water drainage issues; o Restoration shall be undertaken to ensure that the original setting is as much as possible retained; o All workers participating in the construction of the center and associated structures should be provided with adequate and appropriate PPE, be trained on their appropriate use and enforce on use, and o The contractor should observe measures stipulated in the ESMP for sustainable project implementation.	

6.6.2. Improper management of construction-related solid waste

Solid waste generated during construction includes paper used for packing, plastics, scrap wood, glass cullet, metal, and debris. Dumping around the site will interfere with the aesthetic status and directly affect the surrounding community. Disposal of the solid waste off-site could also be a social inconvenience if done in the wrong places. The off-site effects could be vector or pest breeding,

pollution of physical components of the environment, including water resources, soil/land, invasion of scavengers, and informal recycling by communities.

Construction will involve earthworks and excavation, which could lead to spoil generation. If not well managed and finally disposed of, it could become an eyesore, creating hiding and breeding sites for rodents and other undesired creatures.

Table 25: Impact Assessment Summary for Improper Management of Construction Related Solid Waste

Impact Assessment Summary	
Types of impacts	Construction-related solid wastes
Project activities	Waste from excavation and digging activities, civil works, etc.
Impact characterization	Adverse, Direct, Normal, Short-term,
Impact Significance	Medium
Propose Mitigation Measures	
o The contractor shall prepare waste management plan as part of the C-ESMP to be implemented at the site (storage, provision of bins, site clean-up, bin clean-out schedule, etc.) before the commencement of any works, which should promote waste minimization and recycling. o The contractor shall handle and dispose properly of all construction and related waste. o Encourage efficient use of materials to avoid and minimize waste production as much as possible. o Ensure waste is recycled/reused before opting to dispose of it. o Designate temporal waste/garbage holding areas at the site. o Use of waste receptacles that encourage segregation to hold waste on-site before its collection o The open burning of waste and indiscriminate disposal of the resulting ash shall not be permitted, and signage should be erected to direct such a process. o Maximize the re-use of excavated materials in the works as far as feasible to ensure that no permanent spoil dumps are created; o Spoil dumping should be away from any water resources to avoid possible water pollution from siltation/sedimentation;	

6.6.3. Extraction, Use and Management of Solid Waste from Construction Materials

Construction materials that will be used include timber, cement building blocks, basalt, sand, gravel extracted from quarries and other natural resource banks such as rivers and land or obtained from hardware shops.

Table 26: Impact Assessment Summary for Extraction, Use and Management of Solid Waste from Construction Materials

Impact Assessment Summary	
Types of impacts	Extraction, Use and Management of Solid Waste from Construction Materials

Project activities	Mining, structural works, civil works activities, etc.
Impact characterization	Adverse, Direct, Normal, Short-term,
Impact Significance	Medium
Propose Mitigation Measures	
To check on the impacts of material extraction, use, and management of non-hazardous wastes, both solid and liquid, the following is recommended: o The contractors should source construction materials such as sand and basalt from registered and NEA-approved and licensed quarries and sand mining firms/groups and/or from suppliers of such firms are expected to apply acceptable environmentally friendly processes in their operations; o During the transportation of construction materials, fine earth materials (sand and gravel) should be covered using tarpaulins to prevent spillage, dust, and particulate matter emission; o The contractor should adhere to the procurement plan and only order for what will be required through accurate budgeting and estimation of actual construction material requirements; o Contractor shall prepare a waste management plan to be implemented at the site (storage, provision of bins, site clean-up, bin clean-out schedule, etc.) before the commencement of any works, which should promote waste minimization and recycling; o Contractor shall be responsible for handling and disposal of all construction and related waste; o Encourage efficient use of materials to as much as possible avoid and minimize waste production; o Ensure waste is recycled/reused before opting to dispose of it; o Designate temporal waste/garbage holding areas at the site; o Use of waste receptacles that encourage segregation to hold waste on-site before its collection; o Use of durable, long-lasting materials that shall not need to be replaced often; o Engage NEA in the disposal of hazardous waste and have waste destruction certificate and waste transfer notes; o Waste disposal by burning shall not be permitted and signage should be erected;	

6.6.4. Noise and Vibration Generation

Construction activities of the proposed project will most likely result in noise emissions and vibrations due to the machines that will be used, e.g., excavation equipment and construction vehicles delivering materials to the site. Construction workers could also generate noise.

Table 27: Impact Assessment Summary for Noise and Vibration Generation

Impact Assessment Summary	
Types of impacts	Noise and Vibration Generation
Project activities	Excavation and digging activities, movement of machinery and vehicles, Transportation of construction raw materials (i.e. sand, gravel, etc.)
Impact characterization	Adverse, Direct, Normal, Short-term, Reversible
Impact Significance	Medium
Propose Mitigation Measures	

The NSPA Safeguard team, through the contractor, shall put in place several measures that will mitigate noise pollution during the construction phase, including the following:

- Noise suppression measures must be applied to all construction equipment, such as installing portable barriers to shield compressors and other small stationary equipment, cover the engine of generators where necessary;
- Use of quiet equipment (i.e., equipment designed with noise control elements such as those that utilize electricity as opposed to those which utilize diesel or petrol) and ensure all the equipment used on site is well maintained and in good working condition;
- Limit pickup trucks and other small equipment to a minimum idling time and, observe a common-sense approach to vehicle use, and encourage workers to shut off vehicle engines whenever possible;
- Provision of appropriate PPE (hearing protection - ear muffs/plugs) to the workers and any other person visiting the construction and renovation site, especially in work areas with heightened noise levels;
- Limit high noise-generating construction activities to during day time between 8am and 7pm;
- Consider manual labour-based construction methodologies and
- Construction workers should be made aware of the sensitive nature of the workplace and advised to limit verbal and other forms of noise

6.6.5. Air pollution through Dust and Emissions

Dust could most likely be emitted during the clearing of the site and pre-construction preparation activities. It also includes excavation activities, construction material stock piles, and related earthworks that could lead to air-borne particulate matter pollution. Gaseous emissions are also expected from the construction vehicles. This is likely to affect site workers and neighboring community members in extreme situations that lead to respiratory problems.

The planned civil works during the project's construction phase is expected to include excavation, dealing with cements, and uncovered deposited sand and gravels, which may cause the release of fugitive dust, which may be harmful to health facility users and service providers. The impact of these activities on the air quality is expected to be higher during the dry season.

Table 28: Impact Assessment Summary for Air Pollution Through Dust and Emissions

Impact Assessment Summary	
Types of impacts	Air pollution (dust and emissions)
Project activities	Excavation and digging activities, Site clearing and removal of vegetation, movement of machinery and vehicles, Transportation of construction raw materials (I.e., sand, gravel, etc.)
Impact characterization	Adverse, Direct, Normal, Short-term, Reversible
Impact Significance	Medium
Propose Mitigation Measures	

To mitigate on these, the following measures are proposed:

- Minimize the number of motorized vehicles in use and limit vehicle speeds to a maximum of 15Km/Hr around and within the project site;
- Make use of predetermined routes when bringing in construction material or the transportation of solid waste generated;
- Periodically service all the equipment and machinery and ensure in good working condition to minimize emissions;
- Wet all active construction areas as and when necessary to reduce dust,
- Cover the stock-piled construction materials and spoil generated from the excavations,
- Provide appropriate PPE (dust mask) to workers and enforce on use;
- When transporting construction material, ensure vehicles are covered with tarpaulins to minimize dust emissions; and
- Burning of solid waste material should not be permitted at the project site.

6.6.6. Vegetation Loss

The proposed project is expected to be implemented within the Brikama District Hospital premise. The project site may include clearing of some vegetation for the expansion of structures if required. There are few fully grown indigenous and fruit trees within the premise.

Table 29: Impact Assessment Summary for Vegetation Loss

Impact Assessment Summary	
Types of impacts	Vegetation Loss
Project activities	Site clearing and removal of vegetation
Impact characterization	Adverse, Direct, Normal, Long-term, Irreversible
Impact Significance	Medium-High
Propose Mitigation Measures	
To mitigate on potential negative impacts related to vegetation loss, the following mitigation measures are recommended: o The contractor will ensure proper demarcation of the project area to be affected by the construction works to limit total vegetation removal on-site; o Strict control of construction vehicles to ensure that they operate only within the area to be disturbed and designated access routes; o Ensure retention of grass and mature trees close to the site to the extent possible; and o Re-vegetate the area in the disturbed sections and surrounding environment after completion of works	

6.6.7. Accidental Spills and Leakages

The main chemicals to be used on the site during the construction phase are likely to be fuel lubricants, oil and grease (from construction vehicles/ equipment), paints and pest control substances to be applied on the wooden structures and foundations. Spillage of such compounds is likely to immediately impact the local water resources (storm water) and consequently on the terrestrial and aquatic flora and fauna.

Table 30: Impact Assessment Summary for Accidental Spills and Leakages

Impact Assessment Summary	
Types of impacts	Accidental Spills and Leakages
Project activities	Site clearing and removal of vegetation
Impact characterization	Adverse, Direct, Normal, Short-term, Reversible
Impact Significance	Low
Propose Mitigation Measures	
This can be checked by observing the following measures: o Temporal storage in specifically designated areas on site of all hazardous/toxic substance will be in safe containers, labelled with details of composition, properties and handling information including safety data sheets and away from storm water runways or exposure to weather elements such as rains and for use only for construction works; o Ensure proper storage of chemicals/materials, and if possible, in secondary containers just in case of accidental puncturing and away from storm water runways or exposure to weather elements such rains; o Ensure proper handling, storage and disposal of waste oil, lubricants, oil filters and fuel from vehicles. Hazardous waste would be contained and properly disposed of by authority responsible for hazardous waste handling, o The contractor should provide appropriate PPE (medical mask, gowns, heavy-duty gloves, eye protection and boots) to workers on site; o During the course of the construction works, temporary drainage channels should be constructed to encourage dispersal of meteoric waters; o The contractor to have spill prevention and response procedures, including all necessary equipment and that of workers are trained; and o Contractor to immediately report to NSPA Safeguard team for any spills or accidental releases.	

6.6.8. Increased Water Demand

Water, to be sourced from the facility supply, will mostly be used during construction for mixing materials (concrete casting) wetting surfaces or cleaning/curing completed structures and use by the construction workforce thus create an increased demand for water in addition to the existing demand by the facility activities.

Table 31: Impact Assessment Summary for Increased Water Demand

Impact Assessment Summary	
Types of impacts	Increased Water Demand
Project activities	Water for block laying, civil works, and use by workers
Impact characterization	Adverse, Direct, Normal, Short-term, Reversible
Impact Significance	Low - Medium
Propose Mitigation Measures	
To check on its sustainable use, the following mitigation measures have been proposed: ○ The proponent, through the contractor, shall ensure that water is used efficiently at the site by sensitizing construction staff to avoid irresponsible water use; ○ Install a discharge meter at water outlets to determine and monitor total water usage and enable the contractor to pay for the water he utilizes or wastes. Alternatively, the contractor should source water from own-drilled boreholes investigated and approved by the Department of Water Resources; ○ Encourage prompt maintenance of water pipeline leaks; and ○ Upon commissioning of the hospital, the management will be required to supply water to the facility at its cost for normal operations. We recommend that water-conserving taps that turn-off automatically when water is not being used be installed at the facility coupled with waterless urinals and cisterns of low water volume use.	

6.6.9. Occupation/Public Health and Safety Impacts

Construction works unavoidably expose workers to OHS risks such as accidents and injuries from accidental falls from heights, slips due to wet surfaces, burns from welding, electrocution and use of faulty hand tools and construction equipment. Concerning public safety, there will be risks related to use of heavy equipment at the construction site and construction materials storage areas. There will also be an increased risk of traffic-related accidents caused by vehicles transporting construction materials.

Table 32: Impact Assessment Summary for Occupation/Public Health and Safety Impacts

Impact Assessment Summary	
Types of impacts	Occupation/Public Health and Safety
Project activities	Construction of structures (concrete mixing activities, masonry-concrete, framework, electricity, handling of hazardous materials and chemicals, use of construction equipment and tools for the structures finishing works, etc.), maneuvering of construction equipment and machinery.
Impact characterization	Adverse, Direct, Normal, Short-term, Reversible
Impact Significance	Low - Medium
Propose Mitigation Measures	

- The contractor shall prepare an OHS plan as part of their C-ESMP for the construction works and should include input from NSPA Safeguard team on potential health and safety risks associated with the construction activities and meet all OHS requirements in Gambia labour laws and regulations, and AfDB OS5;
- All construction workers should be sensitized on the health and safety requirements while at the project sites and risks associated with construction work;
- Workers should be provided with suitable PPE such as safety helmets, safety shoes, gloves, masks and overalls;
- Provision of clean and accessible sanitary facilities and drinking water to workers;
- Protect the active work sites to limit entry of unauthorized people such as health staff and patients. Use of screens and nets to avoid flying debris and ensure good housekeeping at the construction site;
- Trenches over 0.5m deep or wherever soil conditions dictate should be secured against accidental fall by workers and the public;
- Install information and safety signage along the work areas;
- Site should have an accessible grievance redress mechanism to allow workers/community to raise safety issues and propose improvements of project sites;
- Electrical installations works should be done by a trained and certified experienced personnel;
- Task based risk assessment should be done on daily basis to assess the risks and hazards thereby prescribing the appropriate prevention measures;
- A health and safety officer/safety champion shall be designated at the construction site and shall maintain a log of incidents (safety register) on site and report on any fatalities related to the project within 24 Hrs;
- Vehicle speeds should not exceed 15km/hr within and around the project site; and
- Have a traffic control person within the around project site; and
- The contractor shall report any worker death or serious accident immediately to NSPA Safeguard team.

6.6.10. Increased Spread of Communicable Diseases

During the construction phase there is a risk of spread of communicable diseases such as tuberculosis, HIV/AIDS and pulmonary infections. With the concentration of people at one place during construction, there will be a likelihood of increase in diseases such as typhoid, tuberculosis, diarrhea diseases, dysentery, and cholera and, respiratory diseases like the COVID-19. There is also potential increase in STIs given the labour requirements during construction phase.

Table 33: Impact Assessment Summary for Increased Spread of Communicable Diseases

Impact Assessment Summary	
Types of impacts	Increased Spread of Communicable Diseases
Project activities	Construction phase through several current activities requiring more onsite and community-level workers.

Impact characterization	Adverse, Direct, Normal, Short-term, Reversible
Impact Significance	Low
Propose Mitigation Measures	
Proposed mitigation measures include the following: o Treat affected local and non-native workers which will control the spread of disease vectors (through contaminated water and between people); o Provision of adequate and accessible sanitation facilities in good condition with adequate water supply; o Create awareness to workers on proper sanitation and personal hygiene to promote proper health; o To mitigate risk from food-related contamination amongst construction workers, food supplies will be from the vendors with public health certificate; o Sensitize the workers on HIV and link them to testing and care services as necessary. o Hiring workers from the local community to prevent social challenges associated with STIs;	

6.6.11. Labour Influx Effects

The project will attract an average of 25 workers when construction/renovation is ongoing as workforce. It is recommended that the contractor, in conjunction with the NSPA Safeguard, ensure that unskilled labourers are recruited from within the project locality to prevent risks of communicable infections from other communities and disputes related to allegations of discrimination of the locals from unskilled job opportunities. Real or perceived disruption to normal community life through the domestic activities of a workforce should be avoided. Imported workers tend to introduce new lifestyles and activities that may be foreign to the host communities. Individuals are likely to permanently migrate into the area, which may cause conflict with resident communities and pressure resources and infrastructure. This challenge increases demand for existing infrastructures and resources such as water supply, electricity, health facilities, and many others due to the influx of people to the project's influencing communities. Differences in nationality, ethnicity, religion, etc, may lead to discrimination and harassment, and differences (perceived or real) in working conditions between workers may lead to resentment

Table 34: Impact Assessment Summary for Labour Influx Effects

Impact Assessment Summary	
Types of impacts	In-migration of workforce
Project activities	Recruitment, all works onsite and presence of workers.
Impact characterization	Adverse, Indirect, Abnormal, long-term
Impact Significance	Medium
Propose Mitigation Measures	

- The employees are hired from within the community hence limited movement or very short distances from their homes;
- The contractor to ensure that the hiring process is done with fairness and gender sensitivity;
- Effective contractual obligations for the contractor will be done with workers to adhere to the mitigation of risks against labour influx;
- Contractor to keep proper and updated records of the labourers on site (including resident county, age, gender and skillsets);
- Fair treatment, non-discrimination and equal opportunity for all labourers;
- All workers to sign a CoC that will have provisions on individual responsibilities; and
- Include provisions in the site code of conduct to deter employees from abusing the trust of food vendors/stallholders (those provisions will explain what behavior is not acceptable-including SEA/SH and what sanctions will be applicable in case of misconduct)
- Take gender into account (give a quota to women employed) and extensively sensitize and raise awareness of all workers on issues related to SEA/SH.
- That the workers have access to an operational GRM.
- Training for all staff in acceptable behaviour with respect to community interactions.
- Sensitize the personnel of project site with respect to the habits and customs of the population.

6.6.12. Social Exclusion, Gender-Based Violence (GBV), Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) and Violence Against Children (VAC)

The nature of the work to be done generally requires a predominantly male workforce from which women and vulnerable groups are often excluded. Women and vulnerable groups are, therefore, likely to be excluded or offered fewer work opportunities or to be confined to secondary tasks that are devalued and less paid.

The works, through their potential socio-economic impacts, could cause an aggravation of already existing gender inequalities to the detriment of women and children and thus prevent the participation and benefit of men and women in the development.

Women may also endure various forms of violence on and off the project sites. The presence of a large male population may encourage the practice of prostitution- including human trafficking of women and children to project areas for this purpose expose women to sexual violence, harassment, and discriminatory practices or violations of fundamental rights (lack of employment contracts or blackmail/request for sexual favors to obtain a job, abusive dismissal, underpayment, lack of leave). The Labour Act of 2023 prohibits children under 18 from engaging in agricultural, industrial, or non-industrial work for economic gains.

In addition, rivalries between outside workers and the local male population related to extra-marital affairs may arise. Finally, family cohesion is likely to be put to the test when local workers,

thanks to the remuneration received from their employment on the site, would lead them to increase their consumption of alcohol, a factor increasing the risks of domestic violence.

There is a risk of using children as laborers during project implementation, particularly during pre-construction for site cleanup. Children playing in facilities and around work sites may be subject to verbal, physical, or sexual exploitation and abuse at construction sites, in addition to accidents/incidents occurring at construction sites. These risks of GBV, SEA/SH, and VAC, are to be considered, especially during the implementation stages of the project.

Table 35: Impact Assessment Summary for GBV/SEA/VAC

Impact Assessment Summary	
Types of impacts	Gender-based violence (GBV), Sexual exploitation and abuse (SEA), Violence against Children (VAC)
Project activities	Presence of workers
Impact characterization	Adverse, Indirect, Abnormal, Long-term
Impact Significance	Medium
Propose Mitigation Measures	
○ Ensure that the Code of Conduct (CoC) is developed and signed by all personnel and workers and that they attend regular training on SEA/SH, the content of CoC and sanctions. ○ Action Plan for Implementing ESHS and OHS Standards and Preventing Gender Based Violence (GBV) and Violence Against Children (VAC) must be rigorously applied and monitored for compliance. These Codes will also be included in the Contractor's ESMP. ○ Ensure that the SEA/SH Action Plan is developed and implemented prior to the physical start of civil works. Develop and implement a complaint/grievance mechanism (GM) sensitive to GBV, SEA/SH, VAC, and other forms of discrimination with accessible entry points to submit complaints, referral to GBV service providers, and confidential, survivor-centered procedures for verifying and managing complaints. ○ Conduct regular awareness-raising campaigns about the project and the risks of GBV, SEA/SH, and VAC with workers and community members (and with women in separate groups with a woman facilitator) ○ Include provisions in the site's internal regulations to discourage employees from abusing the trust of food vendors/stallholders and using GBV, SEA/SH, or VAC. ○ Report and sanction all forms of GBV related to the project activities. ○ Formally prohibit child labour ○ Monitor changes in women's status and the project's potential impacts on them by conducting regular focus group consultations with women in a sample of surrounding communities (in small groups facilitated by a woman).	

6.6.13. Child Labour Risks

Incidence of child workers may occur during construction especially in light of the rising livelihood needs at the households level as a result several causes. It will be useful for the contractor management to protect the project from such incidence by ensuring that recruitment complies with the national laws and that continuous monitoring is done within the phase to ensure non-occurrence of such incidences.

Table 36: Impact Assessment Summary for Child Labour Risks

Impact Assessment Summary	
Types of impacts	Child labour risks
Project activities	Any activities could involve children
Impact characterization	Adverse, Indirect, Abnormal, Long-term
Impact Significance	Low
Propose Mitigation Measures	
o The contractor will develop and implement a Children Protection Strategy that will ensure minors are protected against negative impacts associated by the Project including on SEA/SH. o All staff must sign, committing themselves towards protecting children, a contract that clearly defines what is and is not acceptable behavior. o Children under the age of 18 years should not be hired on site as provided by Labour Act, 2023 o Wherever possible, ensure that another adult is present when working in the proximity of children o Not to invite unaccompanied children to workers' home, unless they are at immediate risk of injury or in physical danger. o Project workers must refrain from hiring children for domestic or other labor. o Comply with all relevant local legislation, including labor laws in relation to child labor specifically provisions of Gambia's Labour Act of 2007. o Ensure that recruitment inventory indicates the ages of employment applicants and age verification is done using the national identification cards.	

6.7. Potential positive impacts during the Operational phase

6.7.1. Improve Medical Services at the Health facility

The project will positively impact Gambians' health by easing access to quality medical care currently non-existent in Brikama health facility. The construction and installation of medical equipment will enable currently ineffective healthcare facilities provide new or improved services to patients.

A key benefit to women is the opportunity to safely deliver children in a medical environment where existing healthcare facilities could not handle complicated deliveries through medical/theatre operations.

6.7.2. Improvement in Livelihood and Local Economies

Improved healthcare will reduce morbidity and improve labour productivity and household incomes, leading to long-term benefits of improved local economies.

6.7.3. Employment Opportunities

Equipping healthcare facilities with modern equipment, enabling the provision of new healthcare services and the resultant increase in visiting patients may create additional long-term technical and non-technical job opportunities for medical professionals, janitors, security guards, among others.

6.8. Potential Negative Impacts during Operational Phase

6.8.1. Improper Healthcare Waste Management

During its operation, the waste treatment microwave will be handling medical waste generated from several clinical activities including sample collection disease suspected patients, laboratory practices and procedures (performing and handling of specimen and chemicals) from activities in isolation area; vaccine waste from general vaccination services; which all need to be treated in an appropriate medical waste treatment facility before final disposal. Improper disposal of medical waste would have environmental and public health impacts: for example, open burning and incineration of medical waste can result in emissions of dioxins, furans, and particulate matter, and result in unacceptable cancer risks.

Table 37: Impact Assessment Summary for Improper Healthcare Waste Management

Impact Assessment Summary	
Types of impacts	Improper Healthcare Waste Management
Project activities	Operational waste from vaccination, laboratory, and surgical procedures
Impact characterization	Adverse, Indirect, Abnormal, Long-term
Impact Significance	Medium
Propose Mitigation Measures	

- To prepare, operate, and maintain an Infection Control and Health Care Waste Management Plan (ICHWMP) adequate for the scale and type of activities and identified hazards consistent with the National regulations, and the AfDB OS guidelines for Health Facilities, and WHO guidelines.
- Waste should be identified and segregated at the point of generation. Non-hazardous waste, such as paper, cardboard, glass, aluminum, and plastic, should be collected separately and recycled. Food waste should be segregated and composted. Infectious and/or hazardous wastes should be identified and segregated according to their category using the colour-coded system at their place of production to reduce the health risk from the smaller potentially infectious fractions (typically waste items contaminated with body fluids and used sharps);
- Staff receive instruction on three-bin waste segregation and safe handling and storage of health-care wastes; Staff are aware of how to protect themselves from injuries and infection from waste; Waste containers and storage areas are cleaned regularly.
- Prevention and minimization of waste production (integrating systems and practices to avoid waste creation into facility design and management and equipment and consumables purchasing).
- Transport waste to storage areas on designated trolleys/carts, which should be cleaned and disinfected regularly.
- Instructions on how to handle the infectious waste from isolation and treatment centers should be displayed/made available to the waste handlers.
- Ensure the safety and health of the healthcare waste handlers through the provision of appropriate PPEs, vaccination against Hepatitis B and tetanus, and post-exposure prophylaxis (PEP) and ensure periodic maintenance of the waste treatment equipment.

6.8.2. Fire Risk

Without provisions for fire safety, there is a risk of a fire outbreak at the Health facility. Fires can start from the high-voltage electricity, chemical spills, ignitable materials within the hospital, accidents/elevated emissions associated with the existing incinerator, cigarette smoking in non-designated places or old electrical connections.

Table 38: Impact Assessment Summary for Fire Risk

Impact Assessment Summary	
Types of impacts	Fires can cause serious harm to people, infrastructure, and the environment.
Project activities	During construction and operation, risk of fire due to electrical faults at the facility or from vehicles
Impact characterization	Adverse, Indirect, Normal, Long-term
Impact Significance	Medium
Propose Mitigation Measures	

- Provide sand buckets, fire extinguishers at strategic positions within the health facility and ensure servicing is done.
- Fire emergency telephone numbers should be well displayed at the facility in the communal areas including wards and consultation rooms
- Undertake regular fire drills targeting the key staff/security, to gauge the levels of preparedness and test on emergency response and use the results to improve on the response mechanism, and

6.9. Potential Impacts during the Decommissioning Phase

Appropriate equipment operation and maintenance, accompanied by good practices on healthcare waste management, will contribute to increased access and quality healthcare for the users. The decommissioning exercise will have both positive and negative impacts: During the decommissioning stage, demolition or renovations will be done, creating job opportunities for the youth and women. Renovation works will also be undertaken for the proposed project site to restore it to its original state. This will include replacing the topsoil and re-vegetation, which will enhance the area's aesthetic value. There will be a need to employ people involved in the site's reclamation to near its original state. The earth-moving works during topsoil replacement will significantly deteriorate the acoustic environment within the area and the surrounding areas. This will be due to the noise and vibration experienced by machines and the workforce being utilized. Dust will also be emitted, affecting the surrounding environment. The proponent will put in place mitigation measures for noise and dust pollution during the decommissioning phase. Grievances and conflicts may also arise due to dissatisfaction of stakeholders with the decommissioning process or resulting from a lack of consultations. Therefore, it will help activate GRM awareness at this phase and ensure proper and meaningful stakeholder consultations.

6.10. Project vulnerability to climate change

The project is considered Category 2 due to potential moderate vulnerability to climate change. Extreme weather conditions such as storms and flooding may also affect the subproject component concerning accessibility, efficient means of communication and possible damage to infrastructure, particularly electrical works and fittings.

7. ENVIRONMENT AND SOCIAL MANAGEMENT PLAN (ESMP)

7.1. Introduction

This Environmental and Social Management Plan (ESMP) for the proposed construction/renovation of the Brikama Health facility is a management tool and standalone component of an ESIA that assures that the mitigation measures developed for the significant impacts of a proposed project are implemented and monitored throughout the project life cycle. It identifies parties responsible for monitoring actions, associated costs, indicators, training or capacity building needs, and reporting on the proposed project. It specifically states how the project proponent's commitments will be implemented to ensure sound environmental practice. Essentially, the aim of ESMP is to:

- Ensure that all mitigation measures prescribed in the ESIA document for eliminating, minimizing, and enhancing the project's adverse and beneficial impacts are fully implemented; and
- Provide part of the basis and standards needed for overall planning, monitoring, auditing, and review of environmental and socio-economic performance throughout the project activities.

It is worth noting that key factors and processes may change through the life of the project and considerable provisions have been made for dynamism and flexibility of the ESMP. As such, the ESMP will be subject to regular periodic reviews on a necessary basis. Several activities will be carried out during the various phases of the proposed project to ensure adequate E&S impact management. The phases and activities for the project is outlined in Table 39.

Table 39: The Phases and Activities for the Project

Phase	Activities/actions
Project Preparation (Pre-construction)	○ Collection of baseline data in relation to ambient noise or air quality for monitoring purposes. ○ Training of the relevant project staff in E&S management. ○ Review and appreciation of project design details; layout and specifications. ○ Inclusion of environmental health and safety specifications in Tender Documents, and development of CoC for the Contractor.
Construction Phase	○ Implementation of mitigation measures, through development of contractors E&S Management Plan (C-ESMP) that shall include an elaborate approach on how to handle the following aspects: OH, HIV/AIDS management, labor management, update of health facility, Waste Management, Emergency Preparedness and Response, among others. ○ The contractor should prepare an occupational/community safety

Phase	Activities/actions
	and health plan and a C-ESMP for use during project construction, operation, and decommissioning to be reviewed and approved by the NSPA PIU and HCF prior to the start of any construction works. o Enforcement of Environmental and OHS requirements (conditions at the contractor's yard, materials storage, condition of equipment, use of PPE, etc.) by the Safeguard Expert, as provided in the ESMP. o Environmental monitoring on air quality by a hired Air Quality expert, noise and vibration levels by air quality noise and vibration levels consultant. o Treatment and disposal of construction solid, liquid, and sanitary wastes in an acceptable manner and in conformance with regulations. o Ensuring that the contractor is following the CoC and environmental health and safety specifications as provided in ESMP and C-ESMP. o Training the contractor's workforce in environmental and social awareness and responsibility. o Liaison with local administration and community leaders in matters of disturbance to the public, security issues, and other matters arising from the project. o Ensure engagement with the key stakeholders o Undertake monitoring to ensure that requisite contractor/facility systems are in place to mitigate against inherent social risks (GBV/SEA/SH, Insecurity, child labour influx, child labour, grievance relating to the sub-project).
Operation Phase	o Development (or updating existing) and implementation of Health Safety and Environmental Management Plan, Waste Management Plan (for all facility wastes), and Emergency Response Plan; o Operation and maintenance, calibration and checking of all equipment as specified in respective manuals or as required by the regulations; o Monitoring of emissions, discharges, waste management (generation, treatment, disposal), HSE incidents (leakages and spills, accidents, etc.; o Treatment and disposal of solid and sanitary wastes in an acceptable manner and in conformance with the regulations; o Compliance with OHS manual to be prepared by project proponent/ center management during the project operational

Phase	Activities/actions
	phase; ○ Observing Standard Operating Procedures (SOP) designed for the proposed construction of installation of center equipment, including incinerators for waste management; ○ Monitoring the implementation of the ESMP including monitoring to ensure that requisite systems are in place to mitigate against inherent social risks (GBV/SEA/SH, Insecurity, child labor influx, child labor, grievance relating to the sub-project).; and ○ Observing and implementing all the guidelines in Health care Waste Management (HCWM) and guidelines on infections spread control and other facets of human interactions vis a vis environmental bearing of these interactions.
Decommissioning	○ Decommissioning is an important phase in the project cycle and comes last to wind up the operational activities of a particular project. It refers to the final disposal of the project and associated materials at the end of the project lifespan. During this phase the contractor will be required to prepare a decommissioning management plan that will guide the decommissioning process and seek approvals/ permits from all the relevant government agencies such as NEA, MoH, among others. ○ Any concerns/grievances from stakeholders that may emanate from the decommissioning activities must be monitored and addressed appropriately.

To minimize adverse impacts during different phases of project lifecycles, mitigation measures and responsibilities for its implementation and supervision of the project intervention are given in **Table 40.**

Table 40: Environmental and Social Risks and Mitigation Measures during Project Implementation Phases

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
Pre-Construction/Renovation Phase				
Site preparation and mobilization of equipment/machinery movements	Air (dust & gaseous emissions) and noise pollution affecting health and property Traffic accidents due increase traffic of trucks and light vehicles	Medium	○ Water spraying within the facility to suppress dust ○ Cover or wet construction materials such as sand, gravel to prevent dust pollution during transportation. ○ Ensure that all vehicles involved in the transport of construction material and staff, and machinery used in construction is properly maintained and services. ○ Reduce the idling of vehicles that may occur and thus reduce the gaseous emission from vehicles in the area. ○ Reduce vehicle speed within the facilities.	Contractor and NEA
Construction/Renovation Phase				
Site clearing	Interference with the physical setting	Medium	○ Ensure there is minimal disturbance to the topography of the facility area; including the ○ local drainage Restoration shall be undertaken to ensure that the original setting is as much as possible retained; ○ Ensure proper demarcation of the health facility area to be affected by the new construction/renovation works to limit vegetation removal from the health facilities, ○ Ensure retention of trees close to the site to	Contractor

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			the extent possible and o Re-vegetate the facility area in the disturbed sections and sounding environment after completion of works.	
Renovation/construction activities (All components)	Air pollution affecting health and property	Medium	o Access to pre-construction sites by the public must be prohibited by placing appropriate signs, barriers and security attendance. o Workers must be provided with personal protective gear. o Trucks transporting earth material must be covered to prevent dust and flying debris. o Provide appropriate PPE (dust masks, gloves etc.) to workers and enforce on use, o All works must be carried out during daytime to reduce noise nuisance. Contractors must be warned in their agreement clauses to address the ESMP.	
Noise and vibration generation	Noise emissions from machineries and vibration from construction activities	Medium	o Contractor must determine the time in the day to engage in activities that will likely cause very loud and prolong noise nuisance in the neighborhood. o Noise suppression measures must be applied to all construction equipment such as; o Install portable barriers to shield compressors and other small stationary equipment, cover engine of generators where necessary;	Contractor

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ Use of quiet equipment (i.e., equipment designed with noise control elements such as those that utilize electricity as opposed to those which utilize diesel or petrol) and ensure all the equipment used on site are well maintained and in good working condition, ○ Limit pickup trucks and other small equipment to a minimum idling time and observe a common-sense approach to vehicle use, and encourage workers to shut off vehicle engines whenever possible; ○ Provision of appropriate PPE (hearing protection - ear muffs/plugs) to the workers and any other person visiting the construction and renovation site especially in work areas with heightened noise levels, ○ Limit construction activities causing extreme noise during day time, between 8am and 7pm; ○ Consider manual labour-based construction methodologies; and ○ Construction workers should be made aware of the sounding residents and advised to limit verbal and other forms of noise.	
	Visual disturbance from unpleasing landscape	Low	○ Sites must be cleared off equipment and machinery after all Project activities. ○ All waste and unused material will be removed for management according to the	

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			waste management plan in the C-ESMP. o Stockpiles of materials should be organized and located at strategic locations within the specified facility properties where the works will be.	
	Effects of public health and safety risks	Medium	o Install warning and safety signs - Integrate staff training, especially drivers on defensive driving o Forbid access to the sites o Ensure supervision of workers o Do not employ children o Create awareness on GBV, SEA/H, VAC and penalties for non-compliance o Provide information on the use of the GRM	Contractor
	Effects of Occupational health and safety risks	Medium	o Comply with OSH rules and regulations as stipulated in the Labour Act, 2007 o Provide training and safety information to all workers and visitors o Provide on-the-job training and knowledge on procedures to reduce risks o Workers should be trained in good practices and contingency measures prior to the start of works. o Provide proper conditions of work, including access to toilets, drinking water and waste disposal facilities. o Implement a health and safety program to	Contractor, Labour Department

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			effectively identify and correct risky conditions routinely, protect the workers and public from hazards, provide personal protective equipment and emergency equipment such as fire extinguishers and first aid kits plus training on their use. o Record and report incidents and near-misses o Where possible, use local workers o Educate workers on the risks and prevention methods of communicable diseases; carry out surveillance.	
	Interruption of the services	Medium	o Healthcare services disruption during the renovation activities will be mitigated by making advanced arrangements for spaces for the continuity of services	NSPA, Regional Health Directorate, Contractor
	Effects of renovation/construction-related wastes	Medium	o Prepare waste management plan as part of the C-ESMP to be implemented at the site (storage, provision of bins, site clean-up, bin clean-out schedule, etc.) before commencement of any works, which should promote waste minimization and recycling. o Encourage efficient use of materials to avoid and minimize waste production as much as possible. o Ensure waste is recycled/reused before opting to dispose of	Contractor, Brikama Council, NEA

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ Reuse waste plastic materials (deform bottle containers) as feedstock for plastic product production. ○ Organic waste generated can be composted and use as manure. ○ Designate temporal waste/garbage holding areas at site. ○ Appropriate storage, handling and management of clinical waste ○ Use of waste receptacles that encourage segregation to hold waste on site before its collection ○ Use of durable, long-lasting materials that shall not need to be replaced often. ○ Engage the Area Council to dispose of hazardous waste and have waste destruction certificate and waste transfer notes. ○ Waste disposal by burning shall not be encouraged/permitted and signage should be erected. ○ NEA to identify waste disposal sites with strict adherence to health and safety of the environment ○ Prohibit burning of solid waste material at project site (to identify designated dump site).	
	Accidental spills and leakages	Low	○ Temporal storage on site of all hazardous /toxic substance will be in safe containers, labelled with details of composition,	Contractor, and NEA

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			properties and handling information including safety data sheets o Ensure proper storage of chemicals / materials, and if possible, in secondary containers just in case of accidental puncturing and away from storm water runways or exposure to weather elements such rains o Ensure proper handling, storage and disposal of waste oil, lubricants, oil filters and fuel from vehicles. Hazardous waste would be contained and properly disposed by licensed hazardous waste handler o Provide and use appropriate PPE (medical mask, gowns, heavy duty gloves, eye protection and boots) to workers on site o Have spill prevention and response procedure including all necessary equipment and that of workers are trained.	
Noise and vibration generation	Noise emissions from machineries and vibration from construction activities	Medium	o Contractor must determine the time in the day to engage in activities that will likely cause very loud and prolong noise nuisance in the neighborhood. o Noise suppression measures must be applied to all construction equipment such as; o Install portable barriers to shield compressors and other small stationary equipment, cover engine of generators	Contractor Safeguard Officer,

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			where necessary; o Use of quiet equipment (i.e. equipment designed with noise control elements such as those that utilize electricity as opposed to those which utilize diesel or petrol) and ensure all the equipment used on site are well maintained and in good working condition, o Limit pickup trucks and other small equipment to a minimum idling time and observe a common-sense approach to vehicle use, and encourage workers to shut off vehicle engines whenever possible; o Provision of appropriate PPE (hearing protection - ear muffs/plugs) to the workers and any other person visiting the construction and renovation site especially in work areas with heightened noise levels, o Limit construction activities causing extreme noise during day time, between 8am and 7pm; o Consider manual labour-based construction methodologies; and o Construction workers should be made aware of the sounding residents and advised to limit verbal and other forms of noise.	
	Extraction and use of construction materials	Low	o Construction materials should be sourced from registered and NEA licensed quarry and sand mining within the project area	Contractor, NEA Regional Officer

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ Designate a place for the extraction of building materials within the region	
	Effects of increased water demand for mixing materials, wetting surfaces or cleaning/curing completed structures	Low – Medium	○ Ensure that water is used efficiently at the site by sensitizing construction staff to avoid irresponsible water use. Alternatively, the contractor should source own water by drilling a borehole specifically for the construction/ renovation works; ○ Encourage prompt maintenance of water pipeline leaks, and ○ Upon commissioning, the health center management will be required to supply water to the facility at its cost for normal operations. The area is not connected to the national water grid. It is recommended that water conserving taps that turn-off automatically when water is not being used be installed at the facility coupled with waterless urinals and cisterns of low water volume use.	Contractor, Department of Water resources and Brikama District Hospital Management
Recruitment of workers	Labour influx	Medium	○ Implement a no hiring 'at the gate' policy when hiring construction workforce: It will be made clear that there will be no recruitment of workforce and people "at the gate", and the formal recruitment process will be clearly advertised, so as to discourage settlement of opportunistic demands and tension.	Contractor, NSPS Safeguard Officer and Regional Social Welfare Officer.

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ Hire from within the locality, hence will limit movement or very short distances from their homes; ○ Effective contractual obligations for the contractor will be done with workers to adhere to the mitigation of risks against labour influx, ○ Keep proper and updated records of the labourers on site (including Age, Gender, and Resident Community) while avoiding child and forced labour; ○ Fair treatment, non-discrimination and equal opportunity for all labourers. ○ All workers are to sign a code of conduct that clearly discourages labour influx ○ Ensure that workers and the community are informed about the Grievance Redress Mechanism (GRM) ○ GBV focal person at Brikama District Hospital should be part of the GBV team	
	Human rights and gender inequalities / violation	Low – Medium	○ During the recruitment of workers, there will be no discrimination against one gender either by design or oversight; ○ Ensure the provision of the necessary basic sanitary facilities for gender – provide separate sanitary facilities for each gender; ○ Ensure mechanisms are in place for reporting and addressing gender discrimination incidences and other human	Contractor, Health Social Welfare Officer

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			rights violations. o Treat women, children and men with respect; o Report any violations of the CoC to workers' representative, HR or grievance redress committee and ensure that no employee who reports a violation of the CoC in good faith will be punished in any way; and o Comply with the National Gender and Equality Act, 2011.	
	Gender-based violence (GBV), Sexual exploitation and abuse (SEA), Violence against Children (VAC)	Medium	o Develop a code of conduct that encompasses clear warning to workers on any SEA/SH, to be signed by all contractor workers on site o project staff must adhere to project CoC, which encompasses clear warning to workers on any SEA/SH and to be signed by every worker on site; o Mechanisms to be in place where workers are free to report any sexual advances and abuse to the senior management without fear of intimidation; o Share information with the community on the GRM; o Share information on GBV/SEA/SH services around/near the facility for survivors' support o Ensure that staff are sensitized on	Contractor, NSPA, Health Social Welfare Office

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			GBV/SEA/SH risk management.	
	Grievances arising from construction activities	Medium	○ Putting in place grievance mechanisms ○ Assigning a contractor-based GRM Focal Person ○ Putting in place channels to allow people to the complaint- e.g. Telephone, Email, registers, WhatsApp platform for workers, suggestion box, among others ○ Raising awareness among all stakeholders on the existing GRM and sensitizing them to the need to register their dissatisfaction with the contractor or the facility. ○ Resolving complaints within the project timeline (acknowledging within seven days and resolving within 21 days or as soon as possible ○ Immediately after reception of GBV/SEA/SH complaints refer the survivors to GBV services for assistance and inform the PIU and the World bank within 24 hours of reception of GBV/SEA/SH complaints ○ Ensure that complaints reports using the annexed formats are reported to the PMT monthly	Contractor, NSPA and Regional Health Directorate
	Child labour	Low	○ Develop and implement a Children Protection Strategy that will ensure minors are protected against negative impacts	Contractor, Health Social Welfare Office and Regional Health

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			associated with the Project, including on SEA/SH. o All staff must sign, committing themselves to protecting children, a contract that clearly defines what is and is not acceptable behavior o Children under the age of 18 years should not be hired on-site as provided by the Child Rights Act (Amendment) 2014. o Wherever possible, ensure that another adult is present when working in the proximity of children. o Not to invite unaccompanied children to workers' homes, unless they are at immediate risk of injury or in physical danger. o Refrain from physical punishment or discipline of children). o Refrain from hiring children for domestic or other labor, which is inappropriate given their age or developmental stage, which interferes with their time available for education and recreational activities, or which places them at significant risk of injury. o Comply with all relevant local legislation, including labor laws about child labor,	Directorate
	Labor disputes	Low	o Fair terms and conditions shall be applied for project workers (guided by relevant	Contractor, NSPA and Department of Labour

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			labour laws), and the project LMP o The project shall also have GRMs for project workers (direct workers and contracted workers) to address their workplace grievances promptly; o Project shall abide by the provision of the project LMP, and o The project shall respect the workers' right to labor unions and freedom of association; o Ensure equal compensation for excess working hours	
Operational Phase				
Health care Facility Operation	Improper Healthcare waste management	Medium	o The health center shall prepare, operate, and maintain a Health Care Waste Management Plan (HWMP) that is adequate for the scale and type of activities and identifies hazards consistent with the AfDB OS guidelines for Health Facilities and WHO guidelines (section 4.5.2). o Waste should be identified and segregated at the point of generation. Non-hazardous waste, such as paper, cardboard, glass, aluminum, and plastic, should be collected separately and recycled. Food waste should be segregated and composted. Infectious and/or hazardous wastes should be identified and segregated according to their category using the colour-coded system.	Brikama District Hospital Management, Brikama Area Council and Regional Health Directorate

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ Prevention and minimization of waste production (integrating systems and practices to avoid waste creation into facility design and management, equipment and consumables purchasing). ○ Reuse or recycling of wastes to the degree feasible ○ Seal and replace waste bags and containers when they are approximately three-quarters full. Full bags and containers should be replaced immediately. ○ Identify and label waste bags and containers properly before removal. ○ Transport waste to storage areas on designated trolleys/carts, which should be cleaned and disinfected regularly. Never transport infectious and non-infectious waste together. ○ Instructions on handling infectious waste from isolation and treatment centers should be made available to the waste handlers. ○ Ensure the safety and health of the healthcare waste handlers through the provision of appropriate PPEs, vaccination against Hepatitis B and tetanus, and post-exposure prophylaxis (PEP). ○ Waste storage areas should be located within the center and sized to the quantities of waste generated,	

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ Unless refrigerated storage is possible, storage times between generation and treatment of waste should not exceed 48 hours during cool season, and 24 hours during the hot season. ○ Packaging containers for sharps should be puncture-proof ○ Ensure microwaved and shredded waste are secured to prevent pieces of shredded waste from scattering as particles during transportation to the final disposal site. ○ Routine monitoring of shredded waste for quality assurance of the de-contamination. ○ Properly transport treated waste to a disposal facility (i.e. the inert waste to a sanitary landfill)	
	Risk of fire outbreak	Medium	○ Provide sand buckets and fire extinguishers at strategic positions within the center and ensure servicing. ○ Stand-by generator operators shall have basic training in fire control. ○ Fire alarm cards containing emergency telephone numbers should be well displayed at the hospital. ○ Undertake regular fire drills targeting all center staff to gauge the levels of preparedness, test emergency response, and use the results to improve the response mechanism.	Brikama District Hospital Management, and the Fire and Rescue Department

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ Provision of a fire assembling point	
	Occupational Safety and Health Risks for Healthcare Workers	Medium	○ Update and implement center emergency response plan. ○ Ensure identification of risks (Job Risk Assessment) and instituting proactive measures, ○ Train the healthcare workers on the potential OHS risks relevant to their work; of particular interest are the operators of the generators and equipment, who must be trained on the contents of the health and safety plan, including on the general functioning of the treatment facility, including heat recovery and flue-gas cleaning technologies, where appropriate; Health, safety and environmental implications of treatment operations; Technical procedures for operation of the plant; Recognition of abnormal or unusual conditions; Emergency response, in case of equipment failures and alarms; Maintenance of the plant and record keeping; Surveillance of the final waste treated product. ○ Provision of adequate and required personal protective equipment (PPE) to health workers and enforce on use. This includes a single-use medical mask, gown, Apron, eye protection, boots or closed	Brikama District Hospital Management, and Regional Health Directorate

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			shoes. o Provision of a system for disinfection of the multi-use PPE if not available. o Implement a systemic risk management plan comprising risk prevention, evacuation of accident victims, evaluation and improvement measures. o Limit access to the waste treatment area only to authorized persons; o Warning and safety signage to be placed at the areas within the microwave site; o All personnel involved with the HCWM process should be subjected to medical surveillance; o The waste holding area/chambers should be well sheltered from direct rainfall, sunlight, and strong winds but should be adequately aired; o All machinery and equipment involved in the waste treatment and disposal process should be washed and disinfected before leaving the site; o Thorough, complete and up to date records on healthcare waste management, incidents accidents and grievances should be kept. o Provide adequately stocked first aid kits to be placed at strategic locations to allow ease of access by workers on-site;	
	Environment pollution due	Low –	o The Brikama District Hospital	Brikama District

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
	to solid waste generation	Medium	Management, and Regional Health Directorate shall prepare a waste management plan to be implemented at the health facility (storage, provision of bins, site clean-up, bin clean-out schedule, etc.) to promote waste minimization and recycling. o The Brikama District Hospital Management, and Regional Health Directorate shall be responsible for handling and disposal of all waste originating from the waste treatment microwave area, o Encourage efficient use of materials to avoid and minimize waste production as much as possible. o Designate temporal waste/garbage holding areas at the site. o Use of waste receptacles that encourage segregation to hold waste on-site before collection. o Use durable, long-lasting materials that do not need to be replaced often. o Engage NEMA registered waste contractor to dispose of hazardous waste and have waste destruction certificate and waste transfer notes. o Waste disposal by burning shall not be permitted, and signage should be erected.	Hospital Management, and Regional Health Directorate

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ Depending on the service level and tasks of the hospital, the wastewater might contain chemicals, pharmaceuticals and contagious biological agents, and might even contain radioisotopes. A major part of liquid chemical waste is disposed of via the sink. The most important chemicals in center wastewater are anesthetics, disinfectants, chemicals from laboratory activities, developer and fixer solutions from photographic film processing, and iodinated X-ray contrast media. Note that sludge and sewage from healthcare facilities generated by a basic wastewater-management system should never be used for agricultural or aquaculture purposes. Effluents from the basic treatment should not be discharged into water bodies used nearby to irrigate fruit or vegetable crops, produce drinking water, or for recreational purposes.	
	Improper waste disposal	Medium	○ Ensure regular monitoring of solid-liquid waste management practices and waste treatment; ○ Ensure proper management of pharmaceutical waste by engaging a consultant to develop measures and guidelines for the hospital; ○ To ensure proper sewage management; ○ Install appropriate drainage channels within	Brikama District Hospital Management, and Regional Health Directorate

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			the health facility; o The center management should undertake regular assessments of waste generation quantities and categories to facilitate waste management planning and investigate opportunities for waste minimization continuously, o Separate residual chemicals from containers and dispose of the containers to reduce the generation of secondary contamination, especially wastewater; o Ensure the healthcare waste generated in the center is disinfected, treated, and safely disposed of appropriately	
	Increased energy use	Medium	o Use load shedding on the lighting system and other equipment to avoid creating peaks in demand, o Turn lights off using automated sensors or a building automation system, o Install a sub-meter throughout to monitor its power usage and o Install solar energy resources to provide additional security lighting within the waste management area in case of power outages	Brikama District Hospital Management and NAWEC
	GBV/SEA/SH	Medium	o Continuous sensitization of staff on SEA/SH risk management o Provision of GRM channels for reporting SEA/SH cases	Brikama District Hospital Management, and Regional Health Directorate

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ Ensuring that the GBV/SEA/SH one pager is placed on strategic points of the facility ○ Document available GBV/SEA/SH referral pathways for survivors information and support ○ Develop an Action plan for all GBV/SEA/SH incidences to avoid presence ○ Ensure the facility is well light to avoid hiding places for SEA/SH perpetrators ○ Provision of separate helping places for men and women ○ To include prohibition of GBV/SEA in Employees Code of conduct e.g. discouraging the use of inappropriate language or behavior, harassing, abusive, sexually provocative, demeaning or culturally inappropriate language towards women or children. ○ Prohibiting sexual activity with children under 18 years—including through digital media and promoting respect to the rule of law in respect to children's rights.	
	Security and conflict	Low	○ Ensuring that security personnel undertake adequate surveillance ○ Stock taking of the equipment and accessories to ensure there is no loss ○ Ensuring proper fencing and lighting	Brikama District Hospital Management, and Regional Health Directorate

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			arrangement. o Improve security surveillance, e.g., by installing CCTV cameras at a strategic point to enhance security and ensure proper check-in and check-out arrangements. o Consider public police reinforcement in incidences of escalated insecurity.	
Decommissioning Phase				
Equipment/ Machine decommissioning				
Demolition Wastes	Soil pollution/air pollution/water resources pollution	Medium	o Use an integrated solid waste management system i.e. through the hierarchy of options 1. Source reduction 2. Recycling, 3 Composting and re0use 4. Combustion. 5 Sanitary landfilling o Provide appropriate waste skips that encourage waste segregation o Ensure proper waste collection, storage, treatment and disposal of waste generated o Donate reusable demolition waste to charitable organizations, individuals and institutions o Properly dispose of the demolition debris when it is no longer considered useful	Brikama District Hospital Management, and Regional Health Directorate, and NEA
	OHS/ Public Safety	Medium	o The decommissioning contractor should have a well-developed EHS plan for the decommissioning exercise with the supervision of an EHS Officer.	Brikama District Hospital Management, and Regional Health Directorate, and NEA

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			○ A qualified EHS officer should be stationed at the decommissioning site during the entire decommissioning period to ensure compliance with the health and safety plan. ○ Ensure the workers are provided with adequate and appropriate PPE (dust mask, ear plugs, helmets, gloves) on-site and enforce the use ○ While working at height, provide safety harnesses and scaffolding equipment ○ Fence off/ barricade the site before demolition to minimize health and safety risks ○ Restrict demolition activities during daytime between 0080hrs to 1600 hrs. ○ Provide a well-stocked first aid kit and ensure one of the workers can administer first aid.	
	Grievances arising from project decommission	Medium	○ Ensuring that there is an operational GRM that is responsive to stakeholders' concerns ○ Inclusive stakeholder engagement to raise awareness of the project decommissioning, clarify issues and consider the input of the affected and interested parties in the process ○ The center should continue to create awareness about the GRM mechanism in place for all workers and patients. ○ Ensure appropriate and mutually acceptable	Brikama District Hospital Management, and Regional Health Directorate

Key Activities/Issues	Potential Impacts	Impact level	Proposed Mitigation Measures	Responsible part(ies)
			redress actions are identified and implemented to the satisfaction of complainants. ○ Ensuring that there is a workable mechanism for opening complaints reported through suggestion boxes ○ Document and report on all sub-project-related grievances	

Table 41: ESMP Guidelines for Mitigation Measures Implementation Phases

Activities	Impacts	Indicators	Means of verification	Timelines (preparation, construction, exploitation, Closing phases)	Responsible for			Implementation Cost (US$)
					Execution	Monitoring	Aftercare	
○ Site clearing and preparation. ○ Civil during renovation. ○ Removal of vegetation ○ Movement of machinery and vehicles	Air Quality	• Systematic watering of site and spoil (at least twice a day in the dry season) • Number of covered trucks • Up-to-date maintenance booklet for machinery • Waste tracking form • Number of cases where speed limits were exceeded • Percentage of staff wearing the correct PPE	Report of air sample analysis	Renovation and operation phase	Project contractor	NSPA PIU, NEA ESIA Working Group	Health Facility Management	2,000
○ Use of sanitary facilities by staff ○ Run-off water ○ Oil spill ○ Solid waste and effluent discharge	Water Quality	• Level of compliance of discharges (pH, COD, BOD, SS, coliforms, etc.) with the applicable water quality standard • The existence of an HSE manual and its implementation • Level of compliance with World Bank Group EHS guidelines • The existence of an approved and implemented waste	Reports of water sample analysis	Renovation and operation phase	Project contractor	NSPA PIU, NEA ESIA Working Group, Department of Water Resources Regional Officer	Health Facility Management	2,000

Activities	Impacts	Indicators	Means of verification	Timelines (preparation, construction, exploitation, Closing phases)	Responsible for			Implementation Cost (US$)
					Execution	Monitoring	Aftercare	
○ Presence of workers on site ○ Onsite civil work/floor concrete ○ Painting and coating ○ Disposal of construction / renovation waste ○ Domestic and sanitary waste generated by workers ○ Biomedical waste	Waste generation	• Existence of an approved and implemented WMP • Waste tracking slip • Existence of labelled bins for waste collection • The existence of a clean-up kit on site • Effectiveness of the waste recovery and treatment contract	Records on waste management	Renovation and operation phase	Project contractor	NSPA PIU, NEA ESIA Working Group, Regional Health Directorate	Health Facility Management	3,000

Activities	Impacts	Indicators	Means of verification	Timelines (preparation, construction, exploitation, Closing phases)	Responsible for			Implementation Cost (US$)
					Execution	Monitoring	Aftercare	
○ All civil works ○ Material transportation and handling ○ Working conditions ○ Workers' behaviour	Occupational Health and Safety (increased accident potential)	• Existence of a Workforce Management Plan • Number of awareness campaigns conducted among the population • Number of accident cases involving site activities • Number of workers equipped with PPE • Number of workers made aware of safety measures • Level of compliance with health and safety requirements of the labor code • Level of compliance of collective protection equipment with project risks • Effectiveness of the implementation of mitigation measures	Report on work related accidents, injuries, near misses and illnesses.	Renovation and operation phase	Project contractor	NSPA PIU, NEA ESIA Working Group, Regional Health Directorate	Health Facility Management	3,000

Activities	Impacts	Indicators	Means of verification	Timelines (preparation, construction, exploitation, Closing phases)	Responsible for			Implementation Cost (US$)
					Execution	Monitoring	Aftercare	
		• Number of training and awareness sessions on occupational health and safety • The existence of first aid kits at work sites • Effectiveness of posting safety instructions • The existence of an HSE agent on site						
○ Recruitment, All works onsite. ○ Presence of workers	In-migration (Risk of conflicts related to the use of labor)	• The number of local community workers recruited • Number of skilled workers from the community recruited by the project • Conflict prevention and management committee established and functioning • Number of workers with PPE • Level of compliance with the requirements of the labor code in terms of health and safety at work • Number of workers who have benefited from capacity building	Record of employees hired	Renovation and operation phase	Project contractor	NSPA PIU, NEA ESIA Working Group, Regional Health Directorate	Health Facility Management	5,000

Activities	Impacts	Indicators	Means of verification	Timelines (preparation, construction, exploitation, Closing phases)	Responsible for			Implementation Cost (US$)
					Execution	Monitoring	Aftercare	
○ Interaction of the workforce with community members	Gender-based violence (GBV), Sexual exploitation and abuse (SEA), Violence against Children (VAC)	• The existence of a complaint management mechanism that is sensitive to GBV, SEA, SH • Number of people sensitized on GBV (disaggregated by sex) • Number of awareness sessions for staff on SEA/SH and the content of the code of conduct • Number of awareness raising campaigns for communities in GBV/SEA/SH/VAC • Number of complaints received and treated • Percentage of SEA/SH related complaints that had been referred to GBV service providers for assistance • Percentage of all staff and workers who signed the code of conduct The number of consultations with women done in separate groups led by a woman.	GBV, SEA, SH Complaint report Report on GBV/SEA/SH sensitization	Renovation and operation phase	Project contractor	NSPA PIU, NEA ESIA Working Group, Civil Society	Health Facility Management	8,000
Total		•						23,000

7.2. Monitoring and Reporting Arrangements

Monitoring is a tool to ensure adherence to agreed actions, to access compliance to environmental and social standards, to provide enhanced data for risk management purposes and to facilitate any needed project design or operational changes. It provides feedback to the management on what is working and what is not working. The monitoring will be undertaken to ensure that the proposed mitigation measures for negative impacts are implemented. For this reason, it is important that environmental and social monitoring be included in the project planning.

The essential objectives are:

- To measure the level of completion (success or failure) of implementation of mitigation measures.
- Identifying unpredicted impacts; and
- Facilitate integration of environmental and social management in the project implementation interventions.

Monitoring the implementation of mitigation measures and proponent commitments is essential in the sustainable implementation of the proposed undertaking. Key monitoring issues proposed include:

- Vegetation loss and remedial restoration measures instituted;
- Air pollution and noise pollution control measures in place and how they operate;
- Erosion control measures;
- Control measures for traffic accidents;
- OHS measures for workers and the center staff;
- Community health and safety;
- Public health observance;
- Waste management measures and performance;
- Water Supply and Wastewater;
- Energy Use;
- Material storage;
- Employment opportunities;
- STI interventions and related sexual behaviors among workers;
- Labour recruitment by gender and age;
- GRM including the number of complaints received and resolved within the project timeline;
- Number of stakeholders consulted during the sub-project period;
- Number of staff inducted on safeguards requirements and those who have signed the CoC;
- Security incidences and systems; and
- GBV/SEA/SH prevalence reported in the facility.

Table 42: Monitoring Plan

Potential Impact	Indicator Parameter	Monitoring Method and Location	Timeline/ Frequency	Responsibility	Cost for Monitoring (US$)
Air Pollution	Dust and particulate matters ($PM_{2.5}$ & PM_{10})	Use of Air-sampling instrument/ Point measurements at the project sites	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant	2,000
	Gaseous emissions (CO, SO2, Nox)	Outdoor air quality monitoring measurements and analysis	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant	2,000
Noise and vibration	Noise level in dB(A) (Leq, Leq day, Leq night, and hourly Leq) ≤49.2 dB(A) daytime (7am-10pm)	Onsite measurement of noise level and frequency of vibration	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant	2,000
Soil Contamination	Soil properties - Soil pH within the 6.0-8.5 range; heavy metals (As, Pb, Cd, Hg) below WHO limits at all test locations	Collection of soil sample from sites and analysis	End of Project Audit	ESIA – Working Group (WG); Project Environmental Officer; Consultant	3,000

Potential Impact	Indicator Parameter	Monitoring Method and Location	Timeline/ Frequency	Responsibility	Cost for Monitoring (US$)
Water Pollution	Temp., Turbidity, pH, EC, TDS, Salinity, Color, Odor, Taste, TSS, PO_4^{3-}, NO3-, NO2−, Fe, Cl-, Alkalinity, Hardness, Ca, Mn, DO, As, F^-, SO2−4, NH4, TC and FC	Sample collection (and analysis) from water sources (of closest surface waterbody or borehole)	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant	8,000
Waste	Types, quality, quantity, collection system, and disposal locations.	Visual checks to assess the situation and record-keeping including photographs if applicable.	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant ESIA – Working Group (WG); Project Environmental Officer; Consultant	3,000
Social life impact/Socio-cultural conflict	Cultural conflicts, norms, social vices, project-perception of community leaders, hospitality of indigenous	Continuous effort of Consultations (at all levels); review of implementation of Community Engagement Plan in the host community	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant	5,000
Influx of people	Number of workers from outside the host community -	Monitor and record the number of workers employed		ESIA – Working Group (WG); Project Environmental	2,000

Potential Impact	Indicator Parameter	Monitoring Method and Location	Timeline/ Frequency	Responsibility	Cost for Monitoring (US$)
			Quarterly	Officer; Consultant	
Occupational health and safety	Frequent illness in the workforce, workplace accidents, medical fitness	Observation, interviews, and the use of Job-Hazard-Analysis reports and reports from nearby healthcare facilities	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant	2,000
Community Health Impact	Common/prevalent diseases in the host communities	Use of questionnaires within the host communities as well as the collection of health statistics from the nearest healthcare centre (Brikama)	Annual Environmental and Social Performance Audit	ESIA – Working Group (WG); Project Environmental Officer; Consultant	4,000
Hazard-exposure to the workforce	Frequent illness in the workforce, workplace accidents, medical fitness	Observation, interviews, and the use of the Job-Hazard-Analysis report	Biannually	ESIA – Working Group (WG); Project Environmental Officer; Consultant	2,000
Gender Impacts (GBV, SEA/SH)	Report of GBV, SEA/SH cases - reported cases resolved within 30 days	Investigation of reported cases, interview with affected and non-affected victims	Quarterly	ESIA – Working Group (WG); Project Environmental Officer; Consultant	10,000
TOTAL					**45,000**

7.3. Waste Management Plan

The generation of waste is anticipated during the implementation and operation phases of Brikama District Hospital. Thus, a Waste Management Plan (WMP) is important for sustainable waste management, including proper collection, storage, transportation, treatment, and disposal. It addresses the management of healthcare waste and all solid and liquid refuse, including hazardous and non-hazardous waste, produced as a result of project activities at the Brikama District Hospital.

As per the renovation/construction activities, some waste will always be generated regardless of the project's scope and size. Thus, a Waste Management Plan (WMP) is key to sustainable waste management. It addresses the management of Healthcare Wastes and all solid and liquid refuse, including hazardous and non-hazardous waste, produced as a result of Project activities.

7.4. Healthcare Waste Management

A detailed Infection Control and Waste Management Plan (ICWMP) has been developed for The Gambia and is detailed in **Table 42** The MOH is responsible for providing the legal framework for managing environmental and social risks in the health sector and developing various instruments to address priority health issues. These instruments include the National Health Policy, the Health Sector Strategic Plan, the Health Care Waste Management (HCWM) Plan, and the HCWM Policy. The national health policy emphasizes the provision of preventive, promotive, curative, and rehabilitative services, and is buttressed by the HCWM Policy, which specifically highlights HCWM as a priority. The HCWM plan then defines in a clear and precise way the roles, responsibilities, and field competencies of actors involved in HCWM, outlining the processes of HCW collection, transportation, storage, and treatment. The plan sets out the health promotion and prevention actions that can be used to prevent diseases and injuries that can be caused by poorly managed HCWs.

To operationalize the HCWM plan, the MOH has developed Health Care Waste Management – Standard Operating Procedures (HCWM SOP). The SOP has been designed as a means of accomplishing what is embodied in the HCWM policy and plan. It provides instructions on how to carry out the policy expressed in the plan and communicates who will perform the task, what materials are necessary, where the task will take place, when the task shall be performed, and how the responsible person will execute the task. The SOP covers all the relevant activities that are necessary to manage any HCW that can be generated from any healthcare facility. It traces the activities from "cradle to grave". These provisions will be strictly followed at each HCF and other participating clinics and facilities.

In the project intervention region (WCR), waste collection and disposal is a joint responsibility of the respective Local Government Area and the Regional Health Directorate but the roles and responsibilities are not clearly defined regarding who provides financial and material resources, and management and technical supervision. Nevertheless, monitoring is the responsibility of the Regional Health Directorate.

Table 43: Health Care Waste Management Procedures

General Instructions	All healthcare waste produced during the care of patients must be considered as infectious waste and should be segregated and collected safely in designated containers and bags, treated, and then safely disposed of (WHO). Train the staff who are assigned to handle, treat, and dispose of waste management Train staff on how to put on and remove PPE. Ensure necessary PPE (Gown, gloves, face mask, goggles or face shield,

	gumboots) is provided to all staff, as required. Ensure staff wear PPE when handling and disposing of waste according to HCW guidelines. Undertake proper segregation at source, including: Ensure all staff are provided training on color coding and handling of infectious and hazardous waste All departments, laboratories and service delivery areas should be provided with appropriate equipment (needle cutters; sharps boxes) and color-coded bins
General Waste – Food waste, paper, disposable cups, plates, spoons etc.	Collect them in a black bag Close and tie when 2/3rd full Transfer the waste to a temporary storage point for general waste along a specified route at a fixed time point and store the waste separately at a fixed location Transport to landfill away from facility
Infectious Waste – Gown, gloves, apron, shoe cover, disposable items, mask etc.	Collect in small biohazard red bags Close, seal the bag with cable ties and tie lose when 2/3 full Transfer the waste to a temporary storage point for medical waste along a specified route at a fixed time point and store the waste separately at a fixed location Securely transfer to approved and professionally managed MOH incinerators Transport other infectious waste according to general medical waste protocols
Sharp Waste and needles	Put in a puncture proof plastic container Close the lid and seal the container when 2/3 full Put in the red bag and tie the lose Transfer the waste to a temporary storage point for medical waste along a specified route at a fixed time point and store the waste separately at a fixed location Securely transfer out for incinerating or appropriate disposal

7.5. Legislative Requirements

Although there is no detailed general Waste Management Plan developed for The Gambia, this Waste Management Plan (WMP) is based on several legislations in the Gambia, including:

- **National Environment Management Act 1994**

***The act specifies that "waste** includes any matter prescribed to be waste,..and any rejected matter, whether liquid, solid, gaseous, or radioactive, which is discharged, emitted, or deposited in the environment in such volume, composition or manner likely to **adversely affect** the environment[8];…*

- **Anti-Littering Regulations, 2007**

The regulation states that waste "includes any substance or object, whether or not intended as waste that, when deposited in a place other than a litter receptacle or other place lawfully designated for the deposit, is or is likely to become unsightly, nauseous or unsanitary, whether by itself or with any other substance or object and regardless of its size or volume or the extent of the deposit;[9]

7.6. Waste Management Principles

The waste principle presents a waste management hierarchy commencing with the preferable option to the least preferable option. Waste prevention is the most preferred option for reducing volumes of

[8] National Environment Management ACT. 1994. https://faolex.fao.org/docs/pdf/gam6275.pdf
[9] The Gambia Anti-Littering Regulations, 2007. https://faolex.fao.org/docs/pdf/gam173305.pdf

waste is a priority, followed by reuse, recycling, and recovery, including energy recovery, and the last option is safe disposal. This Plan is the primary tool to guide employees toward waste management.

An integrated waste management flow on site is needed. Such a waste management flow is presented in the table 44 below.

Table 44: Waste Flow Management Options

Stages	Waste Management Options	Description
1	**Prevention**	Minimize the production of waste materials in the construction process by o Assessing and taking into consideration the resultant waste from different design and construction options o Purchasing materials that will result in less waste and minimal packaging are pre-cut or fabricated. o Not over-ordering products and materials
2	**Reuse**	Ensure that, wherever possible, materials are reused either onsite or offsite. o Identify all waste products that can be reused o Put systems in place to separate and store reusable items o Identify the potential applications for reuse both onsite and offsite and facilitate reuse
3	**Recycling**	Identify all recyclable waste products to be produced on site o Provide systems for separating and stockpiling recyclables o Provide clear signage to ensure recyclable materials are separated o Process the material for recycling either onsite or offsite
4	**Recovery**	Recovery of waste is usually most successful when done in bulk. Therefore, a centralized recovery facility is preferable. Forms of recovery include: o anaerobic digestion, o incineration with energy recovery, o gasification and pyrolysis produce energy (fuels, heat, and power) and materials from waste.
5	**Disposal**	Waste products that cannot be reused or recycled will be removed and disposed of. The following will need to be considered: o Ensure the chosen waste disposal contractor complies with OEH requirements o Implement regular collection of bins

7.7. Analysis of Waste Generation by the Brikama District Hospital Renovation and Construction Project

Throughout the cycle, including site preparation, renovation, exploitation and closure phases, different categories of reusable and recyclable wastes will be generated from every construction process in connection with temporary or permanent works. Solid waste generation from project activities will generally include domestic waste, commercial waste, construction and demolition debris, sanitation residue, and street waste. These wastes will be in solid or semi-solid form and potentially include very low quantities of industrial hazardous wastes. Solid waste generation in the project will include domestic waste, commercial waste, construction and demolition debris, and sanitation residue. The major waste generation anticipated will include:

- Biodegradable waste (food and kitchen waste, green waste (vegetables, flowers, leaves, fruits), etc.;

- Recyclable material (Plastic, paper, and cartons from pre-formed products and packaging, cardboard, wood, glass, bottles, cans, metals, certain plastics, etc.);
- Inert waste (construction and demolition waste, dirt, rocks, housekeeping, debris, etc.)
- Scrap metals from off-cuts, rebar, steel pipes, unusable/surplus concrete/grout etc.
- Chemical waste - engine oils, hydraulic fluids, cleaning fluids, used oil filters and car batteries etc., and
- General refuse - generated from the onsite workforce.

7.8. Waste Assessment / Inventory

- The NSPA Environmental Safeguard specialist must develop, implement and maintain a waste inventory reflecting all waste generated during construction for general and hazardous waste streams.
- Given waste reduction, reuse, and recycling opportunities, construction methods and materials should be carefully considered.
- Once a waste inventory has been established, targets for waste recovery (minimization, reuse, recycling) should be set.

7.9. Waste Collection, Handling, and Storage

- The project contractor must implement the waste recycling system, i.e., separate bins for food waste, plastics, paper, wood, glass, cardboard, metals, etc.
- In the case of fixed and portable toilets, they must be monitored and maintained daily.
- Below-ground storage of septic tanks must withstand the external forces of the surrounding environment. The area above the tank must be demarcated to prevent vehicles or heavy machinery from driving around the area.
- The project contractor must provide waste collection bins and hazardous waste containers and place in various areas around the site to store organic, recyclable, and hazardous waste.
- A dedicated waste area must be established onsite to store all waste streams before removal.
- Signage/ colour coding of waste bins must be used to differentiate disposal areas for the various waste streams (i.e., paper, cardboard, metals, food waste, glass etc.).
- The location of all temporary waste storage areas must aim to minimize the potential for impact on the surrounding environment, including prevention of contaminated runoff, seepage, and vermin control.
- Waste storage shall be in accordance with all Regulations and best-practice guidelines, and under no circumstances may waste be burnt on site.
- Vegetation removed from the site must be chipped, removed, and disposed of at an appropriate waste disposal facility or used as mulch onsite.
- A dedicated waste management person/team must be appointed and responsible for ensuring the continuous sorting of waste and maintenance of the area. They must be trained in all areas of waste management and monitored by the project contractor.

7.10. Management of waste storage areas

- The position of all waste storage areas must be located away from water courses and ensure minimal degradation to the environment. The main waste storage area must have a suitable stormwater system separating clean and dirty stormwater.
- Waste storage areas must be under the roof, or the waste storage containers must be covered with tarpaulins (or similar material) to prevent water ingress.

- Collection bins placed around the site and at subcontractors' camps must be maintained and emptied regularly by the principal contractor.
- Waste must be stored in designated containers and not on the ground.
- Inspections and maintenance of bunds must be undertaken daily. Bunds must be inspected for leaks or cracks in the foundation and walls.

The Project Contractor will practice necessary design, proper planning, and good site management to minimize specific waste generated during the project cycle. Table 45 presents proposed waste management strategies for specific waste types.

Table 45: Specific Waste Management Strategies

Waste Type	Management
Chemical Waste	○ Repair and maintenance of plants and vehicles on site are not encouraged but minimized as far as practicable to reduce the generation of chemical waste on site. ○ Plants in poor condition will not be deployed onsite. ○ Chemical wastes expected from the Contract include engine oils, hydraulic fluids, waste fuel, spent solvent, spent cleaning fluids, spent lubricating oil, contaminated sawdust/sandbags, paint residual, and used oil filters. ○ All chemical waste generated by the construction works should be properly labelled, packaged, and temporarily stored at designated chemical waste storage areas within the construction site.
Solid/General Refuse	○ Enclosed bins for general refuse other than construction and chemical wastes should be provided at convenient locations within the site to collect general refuse from the workforce. ○ The bins and their storage areas should be cleaned regularly. Refuse should be removed from the site by a reputable waste hauler regularly. Burning of refuse on site is strictly prohibited. ○ Suppose volumes are large enough to warrant such collection. In that case, outside waste recycling companies will provide three-colored recycling bins to collect and segregate aluminum cans, plastic bottles, and paper waste onsite for subsequent collection.
Packaging Materials	○ Construction materials will be ordered as far as practicable in bulk quantity or in a container that requires the least packaging or wrapping. ○ For materials delivered to the site, reusable and recyclable cardboard, packaging materials, and pallets will be reused, recycled or returned to the supplier. Suppliers who accept the return of pallets and reusable and recyclable cardboard and packaging materials should be identified and given priority for the business. ○ Sufficient space will be provided for a proper stockpile of such recovered materials in dry condition and with cover to prevent cross-contamination by other Renovation/Construction materials. ○ The recovered materials will be arranged to be collected by or delivered to recycling contractors on a regular basis.
Plastic	○ As plastic is now considered a highly recyclable material, much of the plastic generated during construction will be diverted from landfill and recycled. ○ The plastic will be segregated at the source, kept clean, and stored in a dedicated skip.
Timber	○ Timber waste will be generated from the construction work as off-cuts or damaged pieces of timber or from demolished buildings. Timber that is uncontaminated, i.e., free from paints, preservatives, glues etc., will all be recycled. It will be collected onsite in a designated area and collected recycled.

Scrap Metal	○ Steel is highly recyclable, and numerous companies will accept waste steel and other scrap metals. ○ A segregated skip will be available onsite for steel/metal storage, pending recycling.
Bedrock, Blocks and Concrete	○ Most of the renovation/construction waste will be clean, inert material and it is proposed to reuse it for construction purposes where possible. If bedrock is encountered during excavations, it will either be crushed onsite and used for infill during construction or be removed from the site by appropriately permitted waste collectors. Rock recovered from the site will be recovered at an authorized site locally.

7.11. Disposal

The strategy for management and disposal of all renovation/construction materials arising from the project will be based on the principle of avoidance, minimizing, segregation, and salvage for reuse or recycling on or offsite, wherever practicable, followed by the last resort of disposal to landfill as appropriate. The following approach should be adopted.

- Waste generated on site must be removed regularly, as determined by the Project Contractor. This frequency may change during construction depending on waste volumes generated at different stages of the construction process.
- Waste must be removed by a suitably qualified contractor and disposed of at an appropriately licensed landfill site. The contractor must provide proof of appropriate disposal.

7.12. Training

Although designated individuals shall be assigned to manage waste to ensure commitment, operational efficiency and accountability during the renovation/construction phases of the project, training and awareness regarding waste management shall be provided to all employees and contractors as part of the toolbox talks or onsite awareness sessions.
All site employees and sub-contractors will be required to attend a site-specific induction that will outline the components of the WMP and explain the site-specific practicalities of the waste reduction and recycling strategies outlined in the WMP. All employees must clearly understand which products are being reused/recycled onsite and where they are stockpiled. They are also to be made aware of waste reduction efforts in regard to packaging. The site manager will post educational signage in relation to the recycling activities on site in breakout areas, lunch rooms, etc

7.13. Record Keeping

Records will be kept for all waste material that leaves the site, either for reuse on another site, recycling, or disposal. A system will be put in place to record the construction waste arising onsite. The waste manager or delegate will record the following:

- Waste taken offsite for reuse
- Waste taken offsite for recovery
- Waste taken offsite for recycling
- Waste taken offsite for disposal
- Waste (soil & stone) accepted onsite for recovery

For each movement of waste offsite, a signed waste collection docket will be obtained by the waste manager (or delegate) from the contractor. This will be carried out for each material type. This system will also be linked with the delivery records.

7.14. Monitoring of Waste Management Activities

Records must be kept of the volumes/ mass of the different waste streams collected from the site throughout the project's life. The appointed waste contractor is to provide monthly reports to the operator containing the following information:

- Monthly volumes/ mass of the different waste streams collected;
- Monthly volumes/ mass of the waste that is disposed of at a landfill site;
- Monthly volumes/ mass of the waste that is recycled; and
- Data illustrating progress compared to previous months.

This report will aid in monitoring the progress and relevance of the waste management procedures.

7.15. Responsibilities

The roles and responsibilities inherent to the WMP are presented in Table 46 below.

Table 46: Roles and Responsibilities

Entity	Responsibilities
Local Government Area Council/NEA/NSPS	○ Enforce the Waste Management Plan. ○ Contractually obligate the Enterprises to meet the requirements of the Waste Management Plan. ○ Manage the Solid Waste Management Area or appoint an appropriate contractor.
Contractor	○ Provide a minimum of two garbage receptacles for wet and dry waste segregation. An additional bin for hazardous waste is highly recommended. ○ Develop a site-specific Waste Management Plan for the Contractor's activities. ○ Site-specific Waste Management Plan must be aligned with the full site WMP and approved by the NSPA OS before work commences. ○ Educate all members of staff on the waste hierarchy. ○ Educate all staff members on site-specific WMP and the Waste Management Plan for the Brikama District Hospital renovation/construction project. ○ Education is to be provided to each staff member before the commencement of work. Regular refresher sessions will be undertaken through toolbox talks or training sessions throughout the contract period.

7.16. Institutional Arrangements

7.16.1. Institutional Structure and Responsibilities

7.16.1.1. Roles and Responsibilities of Stakeholders

Various Government Ministries, Departments and Agencies have different mandates and thus, their roles and responsibilities towards the implementation and monitoring of the environmental and social impacts of this project differ based on their mandates. Table 46 presents relevant stakeholders together with the description of their unique roles and responsibilities in implementing mitigation measures and monitoring plan.

The institutional responsibility of implementing this ESMP rests with the NSPA Safeguard Team. The key roles include:

- Review consultants' reports for compliance with the ESMP;
- Monitoring the implementation of mitigation actions by contractors
- Coordinating training and capacity building where planned
- If required, through the NSPA Executive Director, report to the AfDB

Table 47: Roles and Responsibilities of Various Stakeholders

Institution	Mandate	Interest in Project	Possible Role/Responsibility in the Implementation of ESMP	Gaps in the Delivery of its ESMP Responsibility	Nature and Title of Capacity Building to Achieve its Mission in The ESMP
National Social Protection Agency (NSPA)	The Agency is mandated to provide social protection including access and use of basic social services such as health care.	This project will be implemented through the NSPA	It is the responsibility of the NSPA to ensure that the enhancement and mitigation measures in the ESMP are implemented The Agency will work with other stakeholders to monitor the E&S safeguards. They will shoulder the E&S monitoring of the project.	NSPA does not currently have a Social Specialist who can help in the monitoring of the implementation of the ESMP.	Hire a competent Social Specialist
Ministry of Health	Responsible for the policy drive of health in the Gambia The ministry is the implementing partner of this project	The Ministry of Health interface between the benefiting sector and NSPA Works closely with the NSPA to ensure the project is successfully implemented while adhering to E&S safeguards	The ministry also supports all initiatives that are geared toward health care service delivery The Ministry through the Regional Health Directorate ensures the project is implemented as planned.	The RHD has limited capacity to properly monitor the ESMP	Train and continuously engage the RHD focal person on Environmental and social safeguards of the project
National Environment Agency	The NEA through the EIA working group is mandated government Agency for ensuring compliance of projects	The project has the potential to generate negative environmental and social effects if proposed surveillance	Direct monitoring of the implementation of the enhancement and mitigation measures and submission of quarterly monitoring reports	The Agency lacks basic field equipment for monitoring such as testing devices to monitor air, water and	Need to purchase equipment and train staff on the use of these devices.

Institution	Mandate	Interest in Project	Possible Role/Responsibility in the Implementation of ESMP	Gaps in the Delivery of its ESMP Responsibility	Nature and Title of Capacity Building to Achieve its Mission in The ESMP
	with national environmental management laws	activities are not properly implemented.	to PMU. To advise the PIU on required adjustments to the enhancement and mitigation programs. Quarterly environmental monitoring with key stakeholders	soil quality on site.	
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 in line with policy goals in the sound management of the environment and conservation of natural resources	The Ministry co-opted in the monitoring to ensure adopted policies are in line with our national environmental laws Support in the monitoring of greenhouse gases (i.e. methane) and waste management in intervention sites	Most of the staff are overwhelmed with many assignments	Identify a focal person to work closely with the ESIA working group on the project.
Department of Water Resources	Responsible for dealing with water resources and hydrological issues	Support in the design, installation and operationalization of the irrigation system and effective use of water resources	Ensure water resources are used wisely Support in preventing water contamination and monitoring water quality	Lack of field hand-held water quality testing tools	Purchase hand-held water quality testing tools that can collect and analyse samples onsite.
Local Government Authorities	Regional authority within whose administrative area the project falls and a	Project compliments responsibilities to the beneficiaries	Potential contributor towards the cost of sustainability of the project after implementation and life	Lack of expertise to monitor the social aspect of the project	Train key staff on how to monitor social aspects of the project such as GBV/SEA/SH, Child labor etc.

Institution	Mandate	Interest in Project	Possible Role/Responsibility in the Implementation of ESMP	Gaps in the Delivery of its ESMP Responsibility	Nature and Title of Capacity Building to Achieve its Mission in The ESMP
	potential supporter in both project and post project era		cycle in terms of technical and human resources as this would not be the project's responsibility		
Department of Public Health Services	The project has implications for public health issues	Monitor and assist in controlling public health issues relating to the project activities	Key stakeholders in the monitoring and controlling of public health issues	Lack of the capacity to properly manage healthcare waste generated in the health facilities	Train staff and regularly supervise the management of healthcare wastes
Healthcare center	Provide health care services to the facility users	Ensure that the renovation work is done properly according to the contract and standards	Monitoring the workforce and the work activities at the health facility	Lack of expertise in environmental and social safeguards	An environmental and social safeguard specialist should be attached to the healthcare facility during the construction/renovation phase of the project
Beneficiaries' communities of Kombo North, Kombo South and Foni	communities within the selected health facility's catchment areas or the users of the facilities	The project enhances the livelihood of beneficiaries through easy access to quality healthcare services	o in-kind contributions, especially free labour towards plan implementation o Record keeping aiding the monitoring program. o Provide relevant information during project monitoring	Lack of knowledge of construction-related environmental and social impacts and mitigations	Sensitize the beneficiary communities of the negative impacts of the project and mitigation measures as well as monitoring techniques.

Institution	Mandate	Interest in Project	Possible Role/Responsibility in the Implementation of ESMP	Gaps in the Delivery of its ESMP Responsibility	Nature and Title of Capacity Building to Achieve its Mission in The ESMP
Health Focus Non-governmental Organizations	the organizations working with beneficiary communities in the area of healthcare	The project complements efforts in supporting RHD in providing basic healthcare services	○ Share and provide expertise in the implementation of the mitigation and monitoring programs. ○ Share expertise and resources in building the capacity of the beneficiaries.	No financial support to conduct training and sensitization of project beneficiaries and construction workforce on GBV, SEA, SH, and Child labor	Provide support for training and sensitization of project beneficiaries.
Ministry of Transport,Works and Infrastructure	The Ministry is mandated for planning and constructing essential infrastructure, such as roads and utilities that benefit communities, promoting integration, and collaborating with other governmental bodies and NGOs to align social and infrastructure initiatives for sustainable development	The Project in line with policy goals for sustainable social and infrastructural development	Supervise the technical implementation of ESMP during construction and Monitor mitigation measures and advise NSPA and other stakeholders	Most of the staff are overwhelmed with many assignments	Identify a focal person to work closely with the PIU NSPA and ESIA working group on the project
Contractors	Carry out the	Ensure that the	○ Prepare and submit the	Inadequate knowledge	Must have a Health, Safety and

Institution	Mandate	Interest in Project	Possible Role/Responsibility in the Implementation of ESMP	Gaps in the Delivery of its ESMP Responsibility	Nature and Title of Capacity Building to Achieve its Mission in The ESMP
	environmental and social measures and respect the directives and other environmental prescriptions contained in the works contracts.	renovation/construction works are done properly according to the contract and standards	(C-ESMP) including all the site-specific plans for each activity of the project 30 days before the physical start of the civil works.	and expertise in environmental and social safeguards	Environment Manager who will be responsible for implementing the various safeguard documents and drafting reports on the implementation of the said ESMP

7.17. Capacity Development and Training

During the development, renovation or upgrading phase of the project, induction training will be conducted for every worker to be engaged in the project. The training will be provided by the Project Contractor(s). The training will include but is not limited to:

- Planned tasks for new workers
- Safe work procedures at the work site
- Use, of personal protective equipment on the site
- Emergency responses and warning notices
- Personal hygiene and site sanitation
- First Aid training
- Environmental protection
- Occupational and incident reporting
- Occupational Health and Safety
- Community Health and Safety issues
- GBV, SEA/SH, VAC
- Grievance mechanism, etc.

The Project Contractor's Environmental and Social Development Specialist will train employees in environmental, social, health, and safety issues management programs, plans, and procedures. The training will educate employees on the occupational and environmental hazards associated with the work. Training will include induction training for the appointment, specialist training, and refresher training as required. All the staff will be trained in the following issues but not limited:

- National legislation, policies, and guidelines relevant to the proposed project operation
- Relevant Environmental and Social Framework guidelines
- Screening and preparation of Environmental and Social Impact Assessment
- Specific roles and procedures
- Implementation of Environmental and Social Management Plans
- Efficient use of resources and prevention of pollution
- Environmental compliance monitoring and audit
- Stakeholder mapping and engagement including Grievance Mechanism
- Emergency Procedure and Response Plan
- Labor Management Plans
- Community and Occupational Health and Safety
- GBV and SEA/SH risk in the project and its implementation, need to understand and sign the Code of Conduct
- Construction waste management.

In addition, special training regarding the environment, social, health, and safety will be given to the HSE personnel. The following training is proposed for them but is not limited to:

- Day-to-day monitoring activities
- Use of monitoring equipment, operation, and maintenance

- Collection and analysis of environmental attributes (air, noise, water, etc.) samples
- Monitoring of water effluents
- Industrial hygiene
- Occupational health and safety
- Emergency procedures
- Grievance Mechanism
- Monitoring report preparation

Furthermore, tailor-made training will be conducted for project beneficiaries based on the area of project intervention. The following training is proposed for them but not limited to:

- Road safety
- Implementation of Environmental and Social Management Plans
- Monitoring environmental and social impacts
- Understand the emergency management plan
- Waste management
- GBV, SEA/SH & VAC

Table 48: Information/Sensitization Measures & Capacity Building

No	Identified activities	Themes	Beneficiary	Budget (USD)
Institutional Capacity - Technical Skills Development and Awareness Raising				
1	Workshops and meetings to strengthen the human resource capacity of relevant stakeholders to manage ESIAs and ESMPs.	• Workforce management and incidents and accidents, risk prevention and procedure for reporting • Implementation and monitoring of environmental and social issues of project intervention sites. •	EIA Technical Working Group. PCU Other stakeholders	10,000 USD
2	Capacity building of relevant staff PIU and IPs	• Understanding of environmental and social safeguard issues • Understanding of the roles and responsibilities of NSPA PCU and NEA staff in the implementation of the ESMP • Workforce management and incidents and accidents risk prevention and procedure for reporting • Role and functioning of the GM.	Project Safeguard Team Project Coordinator M & E Officer	6,000 USD

No	Identified activities	Themes	Beneficiary	Budget (USD)
3	Information/ Awareness of the contractor's personnel	• Implementation and monitoring of an HSE plan • Prevention of construction site accidents and implementation of an emergency evacuation plan • Prevention and management of GBV/SEA/SH/VAC, GM • Raising awareness about diseases (HIV-AIDS, STI).	Construction Manager Works managers HSE expert Workers supervisors	4,000 USD
Public Awareness - Education, Communication and Information Provision				
4	Beneficiary Communities Awareness Raising Campaign	• Raising public awareness on project issues (environmental and social issues, GBV, SEA/SH, VAC and GM, Emergency preparedness, etc.) • Assessment and prevention of accidents related to civil works and the movements of machines. • Prevention and management of GBV/SEA/SH/VAC, GM • Public awareness of diseases (HIV-AIDS/STI).	Local communities, CSOs/NGOs The public, especially the communities where the project will be implemented	10,000 USD
TOTAL:				**30,000 USD**

7.18. Grievance and Redress Mechanism

It should be expected that grievances or disputes/complaints could arise in the implementation of the measures. The ESIA studies recognized three types of disputes and grievances during the implementation of feeder road activities and as such proposed a mechanism to redress any grievance or complaint that may arise.

The first type refers to the dispute between the project and/or the contractor and the local community, the second one refers to the dispute between the contractor and its workforce, and the third to the dispute between the contractor and the client.

The project should establish GRM committees at the Community level and Project Level. The said committees should receive training on GRM matters related to the project, including reporting, registering, and investigating grievances or disputes/complaints, among others.

The composition of the said structures could be assessed to observe the adequacy of members where necessary add those relevance personnel to the team and provide more training/sensitizations specifics to feeder roads.

2. The following process should be followed in receiving and responding to grievances.
    i. the grievance is received by the Chairperson of the Committee and recorded in a grievance register by the Secretary.
    ii. the Chairperson summons a meeting within seven calendar days of receiving the grievance, inviting the representative of the Project in the Region
    iii. if the Committee agrees to an immediate action to satisfy the complainant, the latter shall be briefed by the Chairperson of the remedial action and how it will be implemented.
    iv. for a corrective action that requires a longer period, again the Chairperson will inform the complainant of the action and proposed timeline for correction.
    v. in either 'iii' or 'iv' above, the Chairperson gets written satisfaction from the Complainant on the action taken and formally close the case in the Register.

In managing grievances, a Grievance Redress Mechanism will be employed, and it will include:

- Setting up of a site-level GRM/Grievance Redress Mechanism Committee (GRMC) for the adaptation and implementation by the contractor with regular reporting to the NSPA PIU.
- The NSPA PIU will constantly engage project-affected people through its Stakeholder and Public Disclosure Plan. This will keep the communities informed of developments on the project, including planned activities, project impacts and mitigation measures, grievance mechanism, the right to submit complaints and the compensation process.
- Building capacity of the project team and site level GRMC to ensure they can engage the communities, record and ensure grievances are resolved.
- Alternative Dispute Resolution Mechanisms will also be used as a key element of GRM.

Grievances are expected to be communicated either verbally (in a language of choice) or in writing to the GRMC through a Short Code called (Toll free Number) which will be shared with all the committees for ease of communication. Upon receipt of complaints, timely responses are expected to be given. If grievances cannot be resolved locally, they are expected to be referred quickly to the region for resolution.

Actions to be taken to address the grievance will be agreed upon by the GRMC, and progress of implementation of agreed measures reported to the Local community, and PIU and monthly. A grievance management procedure indicating activities and timeframe for resolution of issues is shown in **Figure 24**

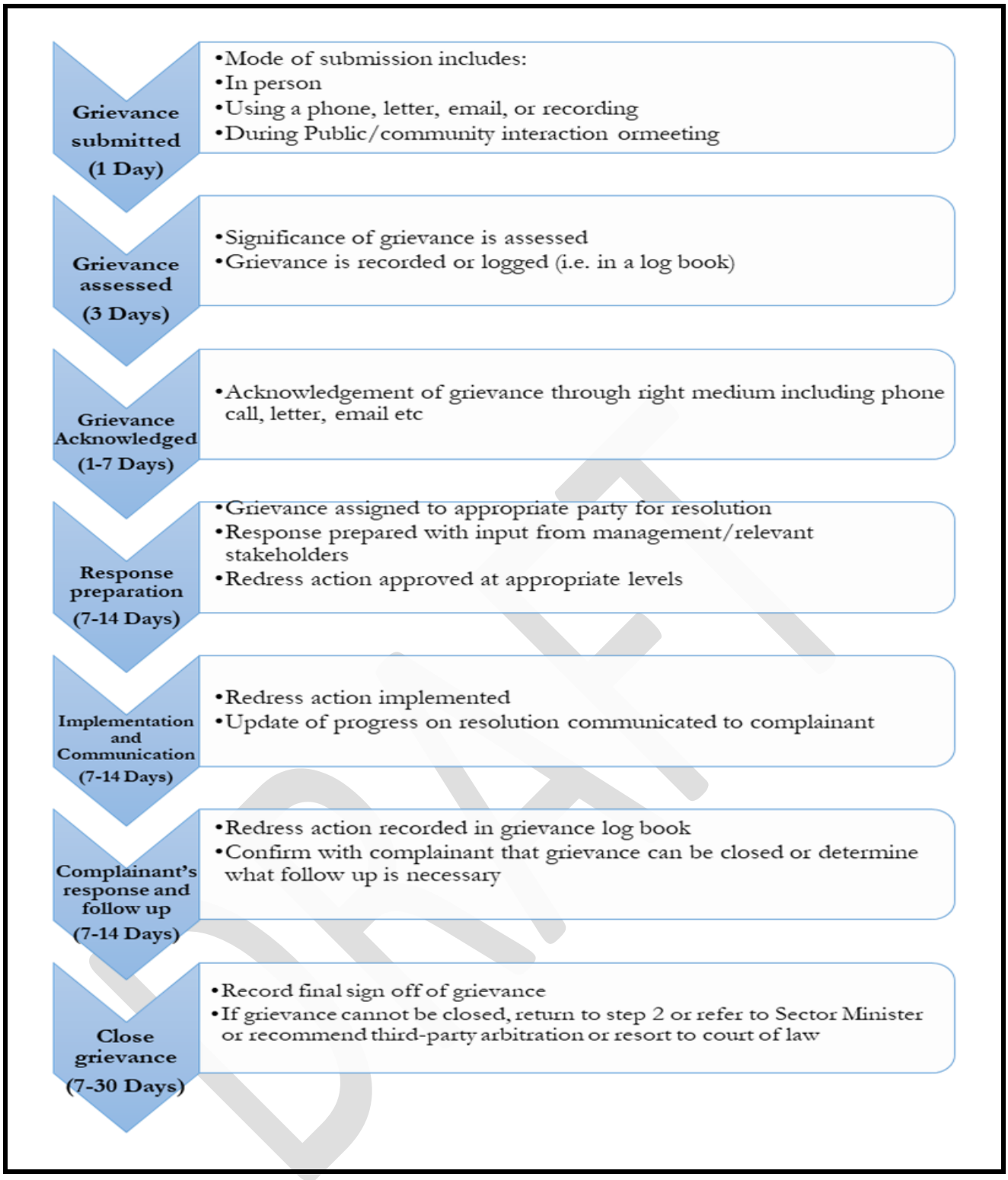


Figure 24: Procedure for Grievance Redress

Table 49 presents the operating budget of the GRM. This budget is estimated at USD 26,000.

Table 49: GRM Implementation Budget Summary

Headings	Unit	Quantity	Unit cost (USD)	Total cost (USD)
Reproduction and distribution of forms	Lump sum	1	1,000	1,000
Organization of GRM awareness and public campaigns in the project area	Session	6	2,000	12,000
Training of GRMC on the GRM specific to the center construction/renovation.	Session	1	3,000	3,000
Support for the operation of complaints management committees	Lump sum	1	10,000	10,000
Total cost of the implementation of GRM				**26,000**

7.19. Implementation Schedule and Cost Estimates

The environmental and social management plan will be implemented in line with the finalized project schedule, as well as activities integrated into the project design. There would be a need for the contractor to update the safeguards instruments based on the final design of the construction, renovation or upgrading works. The estimated cost for implementation of the mitigation measures and monitoring plan proposed in the ESMP for the project is approximately US$ 191,000 as shown in Table 50.

Table 50: ESMP Implementation Budget

#	Activity	Role/ Responsibility	Responsible for financing	Estimated Cost (USD)
	Mitigation Measures	NSPAPIU/NEA /Contractor/ RHD	GoTG AfDB	23,000
8.	Capacity building of NSPA PIU, Contractors, Workers, and other stakeholders involved in ESMP implementation	NSPAPIU/NEA /RHD/ Consultant	GoTG AfDB	30,000
9.	ESMP Monitoring - Regular supervision – environmental and social aspects - Support to NEA to enhance its capacity for effective participation in the implementation of the project activities and delivery (MoU with NEA)	PIU/NEA/ RHD NEA	GoTG AfDB	45,000 24,000
10	GRC reinforcement and operations	Local community/NSPA PIU/Contractor	GoTG AfDB	26,000
11	Environmental and Social Aftercare Programs	NSPA PIU/NEA/RHD	GoTG AfDB	11,000
12	Healthcare Waste Management Plan	RHD/NEA	GoTG AfDB	10,000
13	Annual Audit	NSPA PIU/Consultant	GoTG AfDB	22,000
	TOTAL			**191,000**

7.20. Reporting Responsibilities of ESMP during Implementation

Reporting of the ESMP implementation and monitoring should be harmonized with the main Project monitoring and evaluation reporting system, to ensure holistic and effective communication amongst the stakeholders. Monthly and Quarterly reporting of ESMP implementation and monitoring is recommended by the Project Contractor and NEA and the project safeguard team, respectively; NEA shall evaluate the reports and coordinate immediate improvement, where necessary. An annual monitoring report shall be submitted to the Project for consideration.

7.21. ESMP Disclosure

After this ESIA /ESMP report is approved, the NSPA will ensure it is published on the NSPA and Ministry of Health websites. NEA will also publish it on its website, including its Library at its head office in Kanifing and the NEA Regional office in WCR, where the project is located. The Africa Development Bank will disclose it on its website. Additionally, hard copies of the report will be made available at designated locations for review by members of the general public. This will enable all interested stakeholders to read and understand how they stand to be affected by the project

A key element of sustaining stakeholders' support in any project execution is to consult and communicate with the stakeholders effectively and to engage them as early as possible with the project, which has been done in the course of preparation of the intervention work and further enhanced during the preparation of the ESMP.

7.22. Environmental and social aftercare programmes

To reduce and manage the impacts of the proposed project, the surrounding local communities and the environment, the following are recommended for implementation as environment and social aftercare programmes in line with the ESMP for sustainability:

Community and environmental education programme

Water quality management programme

Waste management programme

Air quality management programme

Occupational Health and Safety Management Programme

Gender, SEA/SH& Social Management Programme

It should be noted that the proposed ESMP under this assessment will form the benchmark for any upcoming management programmes and related plans as well as addressing the monitoring factor in line with relevant laws and good practices for sustainable development.

7.23. Environmental Audit

This is a systemic review of the Project activities against the ESMP to ensure that it is implemented in an environmentally sustainable manner. The audit may also identify possible new risks that have not been anticipated due to changes in the design of Project activities or changes at the site. Thus, new or alternative means of mitigation may be suggested. Therefore, an independent environmental audit is recommended midway of the Project implementation.

8.CONCLUSION AND RECOMMENDATIONS

This ESIA study report has been conducted to equip the Project and its stakeholders such as the NSPA, Ministry of Health, and the National Environment Agency with relevant and sufficient information about the intended activities of the Project and their potential environmental and social impacts. It is hoped that the project will use the findings in this assessment to address the environmental and social impacts during the proposed Brikama Health facility site preparation, construction/renovation, and operation and decommission phases.

The potential negative environmental impacts that have been identified and are associated with the implementation of this project can be addressed by implementing the mitigation measures proposed to ensure that they pose no threat to the environment and to the communities. Some of these measures are part of the responsibilities of the NSPA PIU, potential contractor and will bring no added cost to the implementation process. The benefits of implementing the project are enormous and will address persistent problems of the health sector in Gambia and subsequently address the access to quality health care services for the people of this district and region at large.

In general, the overall potential negative environmental and social impacts that were anticipated because of project activities would develop as a result of site preparation, mobilization of construction materials, civil works and operation of heavy machinery/equipment etc. that may cause dust pollution,, soil pollution, water contamination, loss of flora and fauna, noise and vibration, and socio-cultural conflict due to the influx of worker, gender-based violence, sexual exploitation and abuse and violence against children.

Based on the above, the envisaged potential negative impacts with respect to project activities could be addressed through the application of mitigation measures recommended as clearly detailed in this ESIA document. When implemented according to strict adherence to this ESIA, there shall be controlled negative impacts that shall not compromise the project benefits or resources for future generations. Thus, it is concluded that the implementation of activities could be very successful if considered in a holistic manner and potential impacts managed.

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GoTG (1994) Hazardous Chemicals and Pesticides Control and Management Act

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GoTG (1999) Environmental Quality Standards Regulations

GoTG (2003) National Council for Arts and Culture Act, 2003

GoTG (2005) The Children's Act (2005)

GoTG (2007) Anti-littering Regulations

GOTG (2007) Labour Act

APPENDICES

Appendix A: Interview Guide – Local Communities (Including Women and Youth)

The preferred methodology is focused group discussions with (i) a mixed group, (ii) women only group and (iii) men only group. Information will be collected from all three groups. Note: questions can be asked in groups and/or on an individual basis. This form is a guide to relevant questions.

Name of community			
For groups: Type of Group	Mixed	Women	Men
For individuals: Name of interviewee(s)			
Gender			
Position in the community group			
Place			
Date / time			
Interviewer(s)			

Introduction:

Introduction:

The Government of The Gambia received funding from the African Development Bank to provide vulnerable groups, particularly out-of-school youth and women, with market-oriented skills and access to a range of services (financial and nonfinancial, basic social services) to tackle the multidimensional aspect of poverty and vulnerability. A portion of the grant was allocated for the renovation of Brikama District Hospital and Brikama Health as Lot 1.

The development is anticipated will have positive impacts on the health and livelihood of the local community and beyond, as well as attract numerous other developments and opportunities. On the other hand, the project might pose adverse negative impacts and thus there is the need to conduct an Environmental and Social Impact Assessment (ESIA) study. The ESIA study is to identify and assess potential impacts of project activities and develop enhancement and mitigation measures.

Stakeholder consultation is a core activity in the ESIA process. Thus, this consultation is initiated to determine public awareness about the proposed project development and to assess public views and perceptions about the project as well as get their recommendations for the improvement of the project.

To develop a robust Environmental and Social Management Plan (ESMP), this questionnaire is geared towards finding out your view/opinion on the proposed project activities. The information you provide will assist the study team to understand your concerns/fears and also proffer better operating procedures and ensure sound environmental and social management practice in the course of the execution of the project.

Please, kindly answer honestly and complete the question contained herein. Please, be assured that all information provided will be kept strictly confidential and used in combination with other opinions gathered.

If you have any concern about privacy, please contact Mrs Ndey Sering Bakurin (3331719) or Dr. Paul Bass (5327279).

Thank you for taking time to do this interview.

1. **Please tell us briefly about your background.**

✓ *For individuals:* social background and areas of responsibilities in your community

i. Age:
ii. Marital status:
iii. Education level:
iv. Economic activity/Employment:
v. Role in the community:

✓ *For community group:* about the community:

i. Population size:
ii. Number of households:
iii. Language/ethnicity:
iv. Religion (Majority and minority):
v. Economic activities/Employment:
vi. Social amenities (*School, health facility, playground etc.*):
vii. Source of domestic water (*borehole or NAWEC*):
viii. Source of electricity (*NAWEC, generator, solar system*):

Transcript:

2. What is the state of the environment in your community now?

i. Air quality (i.e. clean air or polluted air):.....
ii. Water quality (i.e. clean or polluted water):.....
iii. Water quantity (scarce or abundant):….....
iv. Soil quality (fertile or infertile soil, contaminated soil):.....
v. Vegetation (rich or poor vegetation; dominant types of trees):.....
vi. Animal species (wildlife, livestock animals):…….

3. What do you think about the construction or renovation of the healthcare facilities and its expected results/outcomes?

i. *Project Perception (Give your perception about the project: support or not in support):*
……
……
Give reasons:

Good/Support	*Bad/Not in support*

ii. *What are the potential positive impacts the project might bring to your community?*
……
……
How do you think the project can potentially enhance the above positive impacts for the benefit of the community?
……
……

iii. *What are the potential negative impacts the project might bring to your community?*
……
……
How do you think the project can potentially mitigate the above negative impacts to minimize the effect on the community?
……
……

4. Do you think the project activities (pre-construction, construction, operation) will have impact on the physical and biological environment of the community?

i. *Air Quality (yes/no):*
If no, explain why?
……
……
If yes, explain how?
……
……

i. *Water Quality and quantity (yes/no):*
If no, explain why?
……
……
If yes, explain how?
……
……

i. *Soil quality (yes/no):*
If no, explain why?

……
……
If yes, explain how?
……
……

i. *Biological environment (vegetation and animal species) (yes/no):*
ii. *If no, explain why?*
iii. ……
……
iv. *If yes, explain how?*
v. ……
……
vi. *Waste generation (yes/no):*
If no, explain why?
……
……
If yes, explain how?
……
……

5. Do you think the project activities (pre-construction, construction, operation and decommissioning) will potentially have impact on the socio-economic condition of the community?

i. *Employment opportunities (yes/no):*
If no, explain why?
……
……
If yes, explain how?
……
……
ii. *Public health (yes/no):*
If no, explain why?
……
……
If yes, explain how?
……
……
iii. *Improve livelihood and income earning (yes/no):*
If no, explain why?

……
……
If yes, explain how?
……
……

iv. *Incidents and accidents (yes/no):*
If no, explain why?
……
……
If yes, explain how?
……
……

v. *Social stability/cohesion (yes/no):*
If no, explain why?
……
……
If yes, explain how?
……
……

vi. *In-migration of workforce (yes/no):*
If no, explain why?
……
……
If yes, explain how?
……
……

vii. *Change in lifestyle and culture (yes/no):*
If no, explain why?
……
……
If yes, explain how?
……
……

vii. *Increase traffic congestion & road accidents (yes/no)*
If no, explain why?
……
……
If yes, explain how?

……
……

Gender-based violence (yes/no)

If no, explain why?

……
……

If yes, explain how?

……
……

viii. *Child labor (yes/no)*

If no, explain why?

……
……

If yes, explain how?

……
……

6. Do you have structures to address grievance? If yes, please explain the grievance mechanism structure and how grievances are received and managed.

7. Is there anything important you think we have forgotten to ask about?

Transcript:

8. Do you have any questions feedback or concern you want to raise?

Transcript:

Thank you for taking time for the interview. Please feel free to contact us if any other issues come to mind that you think we should be aware of.

Appendix B: Interview Guide – Experts (Government, NGOs, Private Sector)

The preferred methodology is individual semi-structured interviews.

Name of institution	
For individuals: Name of interviewee(s)	
Gender	
Position	
Place	
Date / time	
Interviewer(s)	

Introduction:

For the Government of The Gambia to improve quality and utilization of essential health services in the country, funds were provided by the World Bank in support of the proposed Gambia Essential Health Services Strengthening Project (P173287). The financial support from the Bank was geared towards supporting the implementation of The Gambia National Health Strategic Plan (2021 – 2025). A portion of the grant was allocated for the construction of the new Brikama Health Hospital.

The development is anticipated to have positive impacts on the health and livelihood of the local community and beyond, as well as attract numerous other developments and opportunities. On the other hand, the project might pose adverse negative impacts and thus there is the need to conduct an Environmental and Social Impact Assessment (ESIA) study. The ESIA study is to identify and assess potential impacts of project activities and develop enhancement and mitigation measures.

Stakeholder consultation is a core activity in the ESIA process. Thus, this consultation is initiated to enhance public awareness about the proposed project development and to assess public views and perceptions about the project as well as get their recommendations for the improvement of the project.

To develop a robust Environmental and Social Management Plan (ESMP), this interview is meant to elicit information on your view/opinion on the impact of the proposed project activities will have on the environment and society. The information you provide will assist the study team to understand your concerns/fears and also proffer better operating procedures and ensure sound environmental and social management practice in the course of the execution of the project.

Please, kindly answer honestly and complete the question contained herein. Please, be assured that all information provided will be kept strictly confidential and used in combination with other opinions gathered.

If you have any concern about privacy, please contact Dr. Muhammed Lamin Sanyang (7930099).

Thank you for taking time to do this interview.

1) What do you think about the construction of the new centerand its expected results/outcomes?
    - *Project perception*

……
……

2) What are the positive impacts the project might pose on the environment and socio-economic condition of the host community and the country?

……
……

3) How do you think the project can potentially enhance the above positive impacts for the benefit of the host community and the country?

……
……

4) What are the potential negative impacts the project might pose on the environment and socio-economic condition of the host community and the country?

……
……

5) How do you think the project can mitigate the above potential negative impacts to minimize the effect on the host community and the country?

……
……

6) What do you think of the cCRRent state of the healthcare facilities?

……
……
……

7) What would be the role of your institution in the implementation of this proposed project ?

……
……

8) What Capacity Building needs should be addressed to enable other partners and your active participation in the implementation of the proposed project ?

……
……

9) How can your Institution support to enhance the positive impacts and mitigate the negative impacts of the proposed project activities?

……
……

10) Do your Institution have any legal document (Policies, Regulations, Acts etc.) that is relevant to the implementation of the proposed project?

……
……

11) Are there anything more you would like to share on issues related to the proposed project and the way forward (Projects Impacts/Concerns and Recommendations)?

……
……

Thank you for taking time for the interview. Please feel free to contact us if any other issues come to mind that you think we should be aware.

Appendix C: Perception Survey – Individual Questionnaire (Including Patient, Staff, Medical/Nursing/Public Health Students)

SURVEY IDENTIFICATION INFORMATION QUESTIONNAIRE DESCRIPTION

COVER
No sub-sections, No rosters, Questions: 8.
CONSENT

No sub-sections, No rosters, Questions: 1, Static texts: 2.

DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENT

No sub-sections, No rosters, Questions: 15.

PROJECT AWARENESS AND SUSTAINABILITY

No sub-sections, No rosters, Questions: 11.

ENVIRONMENTAL IMPACT OF PROJECT

No sub-sections, No rosters, Questions: 17.

SOCIAL IMPACT OF PROJECT

No sub-sections, No rosters, Questions: 21.

APPENDIX C — CATEGORIES LEGEND

Generated by Alieu, Feb 09, 2025 20:45
Questionnaire owned by Alieu, Feb 09, 2025 17:37
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Not shared with anyone

Sections: 6, Sub-sections: 0, Questions: 74.
Questions with enabling conditions: 34
Questions with validation conditions:3
Rosters: 0
Variables: 0

Survey Solutions

Perception Survey - Individual_Questionnaire (Including Patient and Staff) V2

SURVEY IDENTIFICATION INFORMATION QUESTIONNAIRE DESCRIPTION

Basic information

Title	Perception Survey - Individual_Questionnaire (Including Patient and Staff) V2
Version identificator	version 1
Version notes	This is the first draft of questionnaire

Survey data information

Study type	Household Survey
Kind of data	Sample survey data [ssd]
Mode of Data Collection	Face-to-Face

Survey information

Country	Gambia, The
Year	2025
Languages	English
Unit of analysis	Individual/Group/Community
Coverage	Nationwide
Universe	All those affected by construction activities of The Gambia health strengthening project

COVER

Respondent's ID #	TEXT	id_num
Region	SINGLE-SELECT 01 ○ WCR 02 ○ CRR North	region
District Name	SINGLE-SELECT: CASCADING 01 ○ Kombo Central 02 ○ Nianija	district
Settlement	TEXT	settl
Supervisor	TEXT	supervisor
Enumerator	TEXT	enumerator
Date	DATE: CURRENT TIME	Date
GPS	GPS N W A	gps

CONSENT

STATIC TEXT

The Government of The Gambia received funding from the African Development Bank to provide vulnerable groups, particularly out-of-school youth and women, with market-oriented skills and access to a range of services (financial and nonfinancial, basic social services) to tackle the multidimensional aspect of poverty and vulnerability. A portion of the grant was allocated for the renovation of Brikama District Hospital and Chamen Health as Lot 1. The development is anticipated will have positive impacts on the health and livelihood of the local community and beyond, as well as attract numerous other developments and opportunities. On the other hand, the project might pose adverse negative impacts and thus there is the need to conduct an Environmental and Social Impact Assessment (ESIA) study. The ESIA study is to identify and assess potential impacts of project activities and develop enhancement and mitigation measures. Stakeholder consultation is a core activity in the ESIA process. Thus, this consultation is initiated to determine public awareness about the proposed project development and to assess public views and perceptions about the project as well as get their recommendations for the improvement of the project. To develop a robust Environmental and Social Management Plan (ESMP), this questionnaire is geared towards finding out your view/opinion on the proposed project activities. The information you provide will assist the study team to understand your concerns/fears and also proffer better operating procedures and ensure sound environmental and social management practice in the course of the execution of the project. Please, kindly answer honestly and complete the question contained herein. Please, be assured that all information provided will be kept strictly confidential and used in combination with other opinions gathered. If you have any concern about privacy, please contact Mrs Ndey Sering Bakurin (3331719) or Dr. Paul Bass (5327279). Thank you for taking time to do this interview.

STATIC TEXT

Hello, my name is Mr./Ms %enumerator% We are conducting a survey on Environmental & socio-economic Impact Assessment of the Constructions Works being implemented by Ministry of Health under the Health Strengthening Project funded by the World Bank. This survey will assess the current levels of environmental impact and what mitigation measures can be adopted to reduce or eliminate these adverse effects and maximise the potential benefits of the action. The assessment will be a key component to developing a sustainable intervention that has minimal environmental impact. The results of the assessment will also provide an evidence base to inform policy makers and other value chain actor. I would like to seek your consent to participate in the survey. The interview will take about 40 to 45 minutes. All the answers you provide will be kept confidential and will not be shared with anyone other than members of the survey team.

Would you like to participate in this survey?	SINGLE-SELECT 01 ○ Yes 02 ○ No	consent
Name of facility E consent==1 V1 (self==1 && region==1) || (self==2 && region==2) M1 You selected the wrong health centre, cross check the region!	SINGLE-SELECT 01 ○ Brikama HC 02 ○ Chamen HC	facility
Target Group of Respondent (at %facility%) E consent==1	SINGLE-SELECT 01 ○ Users (HF) 02 ○ Staff (HF)	target_HC

DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENT

E $consent

1. Telephone Numbers	TEXT tele_num_1
2. Gender of respondent	SINGLE-SELECT gender 01 ○ Male 02 ○ Female
3. Marital Status	SINGLE-SELECT marital_status 01 ○ Never married 02 ○ Married 03 ○ Divorced 04 ○ Separated 05 ○ Widow
4. Employment Status	SINGLE-SELECT empl_status 01 ○ Employed 02 ○ Self-employed 03 ○ Unemployed
5. What is the respondent's occupation E empl_status.InList(1,2)	SINGLE-SELECT occupation 01 ○ Agricultural farming 02 ○ Non-agricultural labor 03 ○ Large/Medium business/Sm all business 04 ○ Industrial worker/factory W orker 05 ○ Transport worker 06 ○ Service (Govt./NGO/Private) 07 ○ Fisherman 99 ○ Others
5_Others, please specify E occupation==99	TEXT occupation_os
6. Have been to school (Convention or madaras a)?	SINGLE-SELECT been_to_school 01 ○ Yes 02 ○ No
7. If yes, which convention or madarasa? E been_to_school==1	SINGLE-SELECT conv_madrsa 01 ○ Convention 02 ○ Madarasa

8. Highest Educational Attainment (Conventional and Madrassa)

g conv_madrsa.InList(1,2)

SINGLE-SELECT education_level

01 ○ Early Childhood Development

02 ○ Primary

03 ○ Lower Secondary

04 ○ Upper Secondary

05 ○ Technical/Vocational

06 ○ Tertiary

9. What is the average monthly income level in your household?

r self>0 && self<200000

l Value entered seem to be too high or low!

NUMERIC: INTEGER monthly_income

10. What is your household size?

I Household size should include respondent and all children

r self>0 && self<200

l Value entered seem too be too high or low!

NUMERIC: INTEGER hhsize

11. Do you have any member of your household who is into any of the following occupations?

I Tick all that apply!

MULTI-SELECT hh_occup

01 ☐ Farming

02 ☐ Trading

03 ☐ Civil servant

04 ☐ Service, Shop and Market Sales Workers

05 ☐ Technician/Carpentry/Welding or related fields

06 ☐ Student

07 ☐ Unemployed

09 ☐ Others

11_Others, please specify

g hh_occup.Contains(9)

TEXT hh_occup_os

12. Which health centre do you frequently seek health care?

SINGLE-SELECT hc_freq_sk_hc

01 ○ Brikama HC

02 ○ Basse HC

03 ○ Other HC

12_ Other health centre please specify

g hc_freq_sk_hc==3

TEXT hc_freq_sk_hc_os

13. How frquently do you seek health care in this health care?

SINGLE-SELECT freq_visit_HF

01 ○ Rarely

02 ○ Sometimes

03 ○ Often

04 ○ Always

PROJECT AWARENESS AND SUSTAINABILITY

[E] consent==1

1. Are you aware any construction of a new hospital in Manduar/Giroba?	SINGLE-SELECT aware_project 01 ○ Yes 02 ○ No
2. From whom did you first learn about the project? [I] Tick all that apply! [E] aware_project==1	MULTI-SELECT sour_info 01 ☐ Ministry of Health 02 ☐ Health worker 03 ☐ Members of the community 09 ☐ Others
2_Others, Please Specify [E] sour_info.Contains(9)	TEXT sour_info_os _____
3. At what stage did you know that there will be construction work of an new hospital at Manduar/Giroba? [E] aware_project==1	SINGLE-SELECT know_constr_wk 01 ○ When project was approved 02 ○ Before the project was approved 03 ○ After the project was approved
4. How satisfied are you with your or other stakeholders involvment in the project? [E] aware_project==1	SINGLE-SELECT satis_involment 01 ○ Satisfied 02 ○ Normal 03 ○ Dissatisfied
5. Do you think users/staff of the facility are well informed of plans to undertake construction Manduar/Giroba?	SINGLE-SELECT com_peo_infom 01 ○ Yes 02 ○ No 03 ○ Can't tell
6. Are you aware of any management structure in place to ensure the sustainability of the project?	SINGLE-SELECT mgt_pln_sustainbt 01 ○ Yes 02 ○ No 03 ○ No Idea

ENVIRONMENTAL IMPACT OF PROJECT

[consent==1

1. How do you best describe the current health care services in your community/area?	SINGLE-SELECT des_helt_serv 01 ○ Good 02 ○ Fair 03 ○ Poor 05 ○ I don't know
2. How do you best describe the status of curre nt healthcare facilities in this community/area?	SINGLE-SELECT des_hel_fac 01 ○ Good 02 ○ Fair 03 ○ Poor 05 ○ I don't know
3. What constraints do you face due to the poo r condition of the healthcare facilities? [Tick all that apply!	MULTI-SELECT const_face 01 ☐ Healthcare services 02 ☐ Long waiting hours 03 ☐ High rate of mortality 04 ☐ Unmotivated healthcare wo rkers 09 ☐ Others
3_Others, Please Specify [const_face.Contains(9)	TEXT const_face_os _____
4. Do you think the project activities will follow best environmental practices?	SINGLE-SELECT pro_act_ff_EP 01 ○ Yes 02 ○ No
5. What are the positive environmental and soc ial impacts that you think will be associated wit h the project implementation in your communi ty/area? [Tick all that apply	MULTI-SELECT env_soc_impact 01 ☐ Improve healthcare service 02 ☐ Enhance performance of he alth workers 03 ☐ Improve public health 04 ☐ Employment creation 05 ☐ Income generation 06 ☐ Better healthcare facilities 07 ☐ Easy access to healthcare se rvices 08 ☐ Safe and healthy working en vironment 09 ☐ Others

5_Others, Please Specify E env_soc_impact.Contains(9)	TEXT environ_impact_os
6. What are the potential negative health safety and environmental impacts that you think will be associated with project implementation in y our community/area? I Tick all that apply	MULTI-SELECT helth_saf_env_imp 01 ☐ Noise Pollution 02 ☐ Dust pollution 03 ☐ Gaseous emission from vehi cles and heavy machineries 04 ☐ Waste generation 05 ☐ Water pollution/contaminati on 06 ☐ Soil pollution/contamination 07 ☐ Accidents and injuries to wo rkers 08 ☐ Road congestion 09 ☐ Loss of biodiversity 10 ☐ None 11 ☐ I don't know 99 ☐ Others
6_Others, Please Specify E helth_saf_env_imp.Contains(99)	TEXT hth_saf_evn_os

7. What do you think can be done to avoid / reverse the potential negative environmental impacts? I Tick all that apply! E helth_saf_env_imp.ContainsAny(1,2,3,4,5,6,7,8,9,99)	MULTI-SELECT reves_neg_env_imp 01 ☐ Use modern equipment with less emission 02 ☐ Dust control and suppression measures 03 ☐ Soil conservation 04 ☐ Proper water management 05 ☐ Proper Waste management 06 ☐ Minimization of vegetation removal 07 ☐ Re-vegetation/Planting of native trees 08 ☐ Use of organic manure 09 ☐ Avoid ecological sensitive areas 10 ☐ Health training and awareness for workforce 11 ☐ Drought resistance seed varieties 12 ☐ Early maturing crop varieties 13 ☐ Fencing of gardening with trees (Agro-forestry) 99 ☐ Other (specify)
7_Please specify E reves_neg_env_imp.Contains(99)	TEXT reves_neg_env_imp_os _____
8. To what extent do you agree or disagree that the Project Implementation Organization will do enough to address your main environmental concern?	SINGLE-SELECT do_engh_ifn_cons 01 ○ Agree 02 ○ Neither Agree nor Disagree 03 ○ Disagree
9. What is your observation on the quality of the air within the facility/community/area?	SINGLE-SELECT qual_air_com 01 ○ Clean 02 ○ Not clean 03 ○ Don't Know

10. What do you think could be responsible for polluting the air? I Tick all that apply! E qual_air_com==2	MULTI-SELECT air_pollutant 01 ☐ Bush fires 02 ☐ Dust from construction activities 03 ☐ Smoke generated from vehicle 04 ☐ Smoke from burning agricultural by-products 05 ☐ Open burning of waste 06 ☐ Household smoke/Cooking 07 ☐ Smoking 09 ☐ Others
10_Others, please specify E air_pollutant.Contains(9)	TEXT air_pollutant_os _____
11. How do you find the quality of the water within the facility/area/community?	SINGLE-SELECT qual_water_com 01 ○ Clean 02 ○ Not clean 03 ○ Don't Know
12. What do you think could be responsible for polluting the water in your community? I Tick all that apply! E qual_water_com==2	MULTI-SELECT water_pollutant 01 ☐ Dumping of solid waste in water bodies 02 ☐ Discharge of liquid water into water bodies 03 ☐ Oil spillage 04 ☐ Agrochemicals 09 ☐ Others
12_Others, please specify E water_pollutant.Contains(9)	TEXT water_pollutant_os _____

10. What do you think could be responsible for polluting the air? I Tick all that apply! E qual_air_com==2	MULTI-SELECT air_pollutant 01 ☐ Bush fires 02 ☐ Dust from construction activities 03 ☐ Smoke generated from vehicle 04 ☐ Smoke from burning agricultural by-products 05 ☐ Open burning of waste 06 ☐ Household smoke/Cooking 07 ☐ Smoking 09 ☐ Others
10_Others, please specify E air_pollutant=.Contains(9)	TEXT air_pollutant_os _____
11. How do you find the quality of the water within the facility/area/community?	SINGLE-SELECT qual_water_com 01 ○ Clean 02 ○ Not clean 03 ○ Don't Know
12. What do you think could be responsible for polluting the water in your community? I Tick all that apply! E qual_water_com==2	MULTI-SELECT water_pollutant 01 ☐ Dumping of solid waste in water bodies 02 ☐ Discharge of liquid water into water bodies 03 ☐ Oil spillage 04 ☐ Agrochemicals 09 ☐ Others
12_Others, please specify E water_pollutant=.Contains(9)	TEXT water_pollutant_os _____

SOCIAL IMPACT OF PROJECT

E consent==1

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1. Do you think the construction of the new hospital can cause voluntary resettlement of business activities within or around the facility?

SINGLE-SELECT resettlement

01 ○ Yes
02 ○ No

---

2. What impacts do you anticipate the construction works will have on economic activity around the facility/community/area?

I Tick all that apply!

MULTI-SELECT ov_impact_EA

01 ☐ Positive
02 ☐ Negative
03 ☐ No idea

---

3. Positive impacts will the construction works have on economics activity

I Tick all that apply!
E ov_impact_EA.Contains(1)

MULTI-SELECT posit_impact_EA

01 ☐ Job Creation
02 ☐ Growth of local businesses
09 ☐ Other specify

3_Please specify

E posit_impact_EA.Contains(9)

TEXT posit_impact_EA_os

_____

---

4. Negative impacts will the construction works have on economics activity

I Tick all that apply!
E ov_impact_EA.Contains(2)

MULTI-SELECT nega_impact_EA

01 ☐ Disruption to local businesses
02 ☐ Increased traffic congestion
09 ☐ Other specify

4_Please specify

E nega_impact_EA.Contains(9)

TEXT negat_impact_EA_os

_____

---

5. What do you think can be done to address the negative impact on Economic Activity?

E IsAnswered(nega_impact_EA)

TEXT adre_negativ_impct

_____

---

6. Do you think after completion the construction of the health centre is going to improve health service provision?

SINGLE-SELECT improve_health_prov

01 ○ Yes
02 ○ No

---

7. How will the construction affect health service delivery in the community?

I Tick all that apply!
E improve_health_prov==1

MULTI-SELECT hth_service_delvry

01 ☐ Reduce congestion at service points
02 ☐ Provision of new services
03 ☐ Improve quality of services
04 ☐ Improve physical condition of health infrastructures
05 ☐ Expansion of facility to handle more health cases
09 ☐ Others

6_Others, Please Specify [!] hth_service_delvry.Contains(9)	TEXT hlth_ser_devry_os
8. Do you think the construction will have negative effect on health service delivery in this community?	SINGLE-SELECT aff_hel_delvry 01 ○ Yes 02 ○ No 03 ○ No idea
9. How will it negatively affect health care delivery? ! Tick all that apply! [!] aff_hel_delvry==1	MULTI-SELECT hw_aff_hel_devry 01 ☐ Unavailability of some services in the community 02 ☐ Increase congestion at the facility 03 ☐ longer waiting time at facilities 09 ☐ Others
9_Please specify [!] hw_aff_hel_devry.Contains(9)	TEXT hw_affct_hlth_os
10. What is/are your expectation concerning this project in terms of contributing to the socioeconomic wellbeing of users of the facility? ! Tick all that apply!	MULTI-SELECT exp_soc_impact 01 ☐ Improve business opportunities 02 ☐ Create employment opportunities 03 ☐ Increase accessibility to services 04 ☐ Reduce cost of using services 09 ☐ Others
10_Others, Please Specify [!] exp_soc_impact.Contains(9)	TEXT exp_soc_impact_os
11. What will be the overall impact of this project on your livelihood?	SINGLE-SELECT impact_livhd 01 ○ Positive 02 ○ Neutral 03 ○ Negative
12. Do you forsee the project having an impact on land availability and use in your community/ area?	SINGLE-SELECT impact_land 01 ○ Yes 02 ○ No

13. If yes, how does it affect land availability? I Tick all that apply! E impact_land==1	MULTI-SELECT if_yes_land_avlb 01 ☐ Reduce land available for farming 02 ☐ Reduce land available for housing 03 ☐ Reduce land available for recreation 09 ☐ Other specify
13_Please specify E if_yes_land_avlb.Contains(9)	TEXT if_yes_land_avlb_os
14. What are the potential negative social impacts that you think will be associated with project implementation? I Tick all that apply	MULTI-SELECT ove_social_impact 01 ☐ Unfair treatment and discrimination to workers 02 ☐ Displacement of businesses 03 ☐ Disruption of healthcare services 04 ☐ Increase gender-based violence 05 ☐ Increase in communicable diseases and STDs 06 ☐ Promote child or forced labor 07 ☐ High in-flux of workforce 09 ☐ Other Specify
14_Other specify E ove_social_impact.Contains(9)	TEXT ove_social_os

Appendix D: Attendance Register

Environmental and Social Impact Assessments (ESIA) for Lot 1: Brikama Health and Chamen Health Centers of Vulnerable Youth and Women Support Project (VYWoSP)

National Social Protection Secretariat

Consultation Register

No	Name		Designation/Department/Community	Date	Contact	Signature/ Thumbprint
1.	Alieu Sowe	M	Ag. Director, DPHS	10.03.2025	3573733	
2	Ousman Jaiye	M	Deputy Director (DNMS)	10/03/25	7925591	
3	Hon. Amadou Camara	M	NAM - Niamina Constituency	10/03/25	7388680	
3	Dr. Mamadou T. Nyassi	M	Director of Health Services	10/03/2025	3113556	
4	Fatoumata Komma P		Coordinator for Partnership	10/3/25	7565251	

AFRICAN DEVELOPMENT BANK GROUP

PROGRESS PEACE PROSPERITY

Environmental and Social Impact Assessments (ESIA) for Lot 1: Brikama Health and Chamen of Vulnerable Youth and Women Support Project (VYWoSP)

National Social Protection Secretariat

Consultation Register -Institutional/Stakeholder Engagement

No	Name of Respondent	Sex	Institution/Department	Contact	Date	Signature
1	Mr Lamin Camara	M	NEA	9966995	5/3/25	
2	MUSTAPHA S KOLI	M	MOGCSW	7260103	5/03/25	

Environmental and Social Impact Assessments (ESIA) for Lot 1: Brikama Health and Chamen Health Centers
of
Vulnerable Youth and Women Support Project (VYWoSP)

National Social Protection Secretariat

Consultation Register

No	Name	Designation/Department/Community	Date	Contact	Signature/ Thumbprint
1	Jeandarc Jatju	Regional Director HHS	7/3/25	3936658	
2.	Karim Jarboe	RHD - WR2	7-3-25	3042795	
3	Rose Mendy	RHD WCR2	7/03/2025	3610255	
4	Morro Jarbo	Ag. RPNO RHD WHR2	7/3/25	7056788	
5	Aminata Sillah	RHPCO - RHD - WR2	7/3/25	3114062	
6	Magie Samba	RDM - RHD - WR2	7/3/25	7888561	
7	Mustapha Sima	RLTCO - RHD WR2	7/3/25	5069372	

Environmental and Social Impact Assessments (ESIA) for Lot 1: Brikama Health and Chamen Health Centers
of
Vulnerable Youth and Women Support Project (VYWoSP)

National Social Protection Secretariat

Consultation Register

No	Name	Designation/Department/Community	Date	Contact	Signature/ Thumbprint
1	Isatou Nicole Bojang	NO OPD / A&E	7/3/25	2663150	
2	Fatima Camara	NO AIW	7/3/25	7586019	
3	Mamjaren Sanyang	CHM/LTI TB clinic	7/3/25	5854161	
4	Fatou Ceesay	pharmacy Tech /pharmacy	7/8/25	7999249	
5	Fatou Sowe	SCHM / NHIA	7/3/25	2880774	
6	Alieu Daffeh	NHIA	7/3/25	3709199	
7	Cecilia Mendy	SNO/RM / Admin	7/3/25	6928055	
8	Mamodou L. Jagne	Health Manager	7/08/25	3377202	
9	Haddijatou Drammeh	RH / Peadiatric ward	7/8/25	3594812	

Environmental and Social Impact Assessments (ESIA) for Lot 1: Brikama Health and Chamen Health Centers
of
Vulnerable Youth and Women Support Project (VYWoSP)

National Social Protection Secretariat

Consultation Register TAC

No	Name	Designation/Department/Community	Date	Contact	Signature/ Thumbprint
1	Aunce Touray	DSP	7/03/25	3251799	
2	Hamalkhar Jallow	NDMA	7/03/2025	3144100	
3	Yusupha Bojang	GRTS	07-03-2025	2782784	
4.	Hamadi Sowe	NAS	07-03-2025	3908456	

Environmental and Social Impact Assessments (ESIA) for Lot 1: Brikama Health and Chamen Health Centers
of
Vulnerable Youth and Women Support Project (VYWoSP)

National Social Protection Secretariat

Consultation Register

No	Name	Designation/Department/Community	Date	Contact	Signature/ Thumbprint
1	Hon. Binta Senghore	Youth Rep	07/03/25	3074402	
2.	Hon. Tamang Camara	Councilor Kembujeh ward	07/03/25	3842152	
3.	Hon Mamadou Jaw Jallow	Nyambai Ward	07/03/25	7518442	
4	Hon. Lamin Sanbou	Mamakissa Island	07/03/25	7801066	
5	KAMIEH BUBACARR M.	Councillor BAC	07/03/25	3533426	

Environmental and Social Impact Assessments (ESIA) for Lot 1: Brikama Health and Chamen Health Centers
of
Vulnerable Youth and Women Support Project (VYWoSP)

National Social Protection Secretariat

Consultation Register

No	Name	Designation/Department/Community	Date	Contact	Signature/ Thumbprint
	Kaddy Touray	Pirang	19/03/25	5257117	
	Fatou K. Bojang	Brikama Jamburr	19/03/25	3300824	
	Penda Jallow	Brikama Sanchaba	19/03/25	7659993	
	Fatou Yaffa	Marakissa	19/03/25	3475319	
	Kaddijatou Sinyang	Brikama Sanchaba	19/03/25	7525770	
	Aminata Saidykhan	Brikama Kaira Kunda	19/03/25		
	Rohey Conta	Kuloro	19/03/25	5075628	
	Fatou Kongira	Kitty	19/03/25	7738549	
	Aminata Njie	Njaba Kunda	19/03/25	7616887	
	Mariama Fajaba	Brikama Kaira Kunda	19/03/25	2106404	
	Jalika Camara	Brikama Gidda	19/03/25	2276263	

Environmental and Social Impact Assessments (ESIA) for Lot 1: Brikama Health and Chamen Health Centers
of
Vulnerable Youth and Women Support Project (VYWoSP)

National Social Protection Secretariat

Consultation Register

No	Name	Designation/Department/Community	Date	Contact	Signature/ Thumbprint
	Isatou Camara	Brikama Gidda	19/03/25	2276263	
	Isatou Jammeh	Kuloro	19/03/25	7615625	
	Fatou Sanno	Kitty	19/03/25		
	Isatou Daffeh	Kitty	19/03/25	7334137	
	Amie Cham	Gidda	19/03/25	2527962	
	Aminata Daffeh	Brikama Kitty	19/03/25	9262958	
	Fatoumata Samureh	Serrekunding	19/03/25	7817015	
	Surata Badjie	Kitty	19/03/25	3865759	
	Kaddy Soule	Brikama Sanchaba	19/03/25	3191034	
	Kaddy Njie	Kitty	19/03/25	2681847	
	Fatou Jammeh	Brikama Kabaafita	19/03/25	7522920	

Environmental and Social Impact Assessments (ESIA) for Lot 1: Brikama Health and Chamen Health Centers
of
Vulnerable Youth and Women Support Project (VYWoSP)

National Social Protection Secretariat

Consultation Register

No	Name	Designation/Department/Community	Date	Contact	Signature/ Thumbprint
	Adama Camara	Brikama Gidda	19/03/25	5385410	
	Kaddy Bachilly	pirang	19/03/25	2690813	
	Tida Drammeh	Kitty	19/03/25	5353563	
	Kaddy Saidy	Kitty	19/03/25	3014527	

Environmental and Social Impact Assessments (ESIA) for Lot 1: Brikama Health and Chamen Health Centers
of
Vulnerable Youth and Women Support Project (VYWoSP)

National Social Protection Secretariat

Consultation Register

No	Name	Designation/Department/Community	Date	Contact	Signature/ Thumbprint
	Isatou Dalenda Bah	Jamisa	27-03-25	7692917	
	Neneh Darboe	Jamisa	27-03-25	2419970	
	Ma Sefanatou Jallow	Jamisa	27-03-25	2038834	
	Tida Kandeh	Jamisa	27-03-25	7489257	
	Ousman Korka Jallow	Jamisa	27-03-25	2190026	
	Adama Nyang	Jamisa	27-03-25	7920149	
	Binta Sariba Jammeh	Jamisa	27-03-25	7817551	
	Fatou Janju	Jamisa	27-03-25	7409251	
	Fatoumatta Binta Jallow	Jamisa	27-03-25	7150231	
	Jainaba Jallow	Jamisa	27-03-25	3347336	
	Pollef mendy	Jamisa	27-03-25	7587167	

Environmental and Social Impact Assessments (ESIA) for Lot 1: Brikama Health and Chamen Health Centers
of
Vulnerable Youth and Women Support Project (VYWoSP)

National Social Protection Secretariat

Consultation Register

No	Name	Designation/Department/Community	Date	Contact	Signature/ Thumbprint
	Fatoumata Fatty	Jamisa	27-03-25	7512872	
	Fatoumata Binta Jallow	Jamisa	27-03-25	7113760	
	Sabada Mdela	Jamisa	27-03-25	2486771	
	Fatou Secka	Jamisa	27-03-25	736984	
	Mbaye Jagne	Jamisa	27-03-25	7330787	
	Jankaba Darboe	Jamisa	27-03-25	3332834	
	Nyima Sanneh	Jamisa	27-03-25	2827745	
	Lena mendy	Jamisa	27-03-25 2827745	7694470	
	Binta Njie	Jamisa	27-03-25	2457749	
	Jainaba Baldeh	Jamisa	27-03-25	3025378 4	
	Fatou Saidba	Jamisa	27-03-25	2742584	

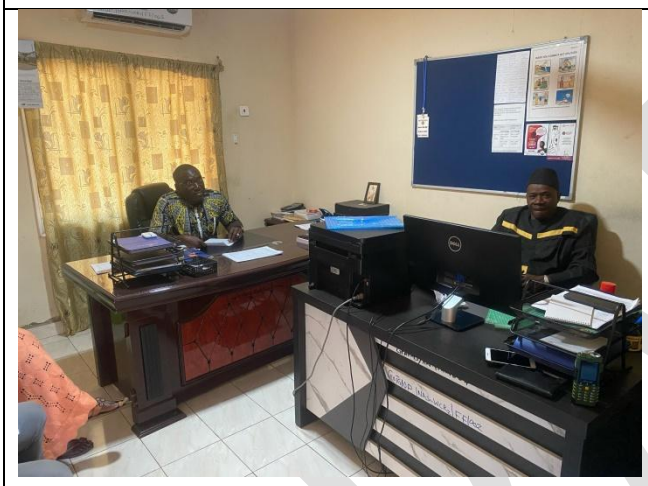
Appendix E: Selected Pictures Taken During Consultations and Site Visit

National Assembly Select Committee on Health Chairperson

Directorate of Health Services, MoH

Directorate of Nursing Midwifery and Public Health Services

RHD, Western Health region 2, WCR



TAC, Governor's Office, WCR

Brikama Area Council

Brikama Health Center Consultation

Brikama RCH clinic

Jamisa RCH Clinic

Appendix F: Stakeholder Engagement Plan

Activity	Identified Stakeholders	Reason/Justification for Consultation	Period/Frequency	Communication Method	Responsibility
Disclose ESIA report	NSPA;AfDB; NEA;MoH communities and other partners	1. In compliance with Bank and NEA requirements 2. Ensures compliance with ESMP to mitigate negative impacts 3. Stakeholders and Communities to determine if their concerns and views are integrated into report	Upon approval of report	Bank's website; NSPA website,NEA website; national dailies; distribution of ESIA documents and public participation;	AfDB, NSPA PIU; NEA
Awareness raising	BDH staff; NEA; NSPA PIU team, communities & other partners	1. In compliance with Bank and National requirements 2. Understanding of the project to promote informed decision by stakeholders 3. Ensure that impact mitigation measures are implemented and monitored for compliance	During project implementation	During site visits; meetings,FGDs, consultation and public participation;	NSPA PIU Safeguard team, NEA
Consultation start of construction works	NSPA PIU team, MoTWI Contractors &Partners	1. Information sharing on planning of works 2. Create awareness on potential impacts of works and method of mitigating impacts 3. Inform and build capacity on grievance redress mechanism (GRM) 4. Build capacity of stakeholders including NSPA PIU team on implementation of ESMP	Before commencement of works	Radio announcement; newspaper announcement; local and traditional means of communication	NSPA PIU ESS Safeguard team, MoTWI focal person
Start of construction works as above	NSPA PIU team & partners	1. Information on schedule of works and progress 2. Awareness creation on potential impacts and 3. mitigation measures 4. Review ESMP and	During the Implementation of the works	Community meetings; Stakeholder meetings; periodic progress reports	NSPA PIU ESS Safeguard team, MoTWI focal person

		mitigation measures 5. Training on SEAH/SEA/GBV & Labour related matters			
End of construction/renovation works and decommissioning of construction equipment	NSPA PIU team & Partners, Contractor	1. Information on schedule of works and progress 2. Awareness creation on potential impacts and mitigation measures	Decommissioning period	Community meetings; Stakeholder meetings; Periodic progress reports	Safeguard team Consultants
Operation and Maintenance (O&M) of project site	NSPA PIU team; MoH, Affected communities;	1. O&M requirements 2. Roles and responsibilities 3. Review GRM	During period of O&M	Stakeholder meetings; training	NSPA Team & Partners