REPUBLIC OF THE GAMBIA

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

FOR

THE GAMBIA AGRICULTURE AND FOOD SECURITY PROJECT (GAFSp)

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LIST OF ACRONYMS AND ABBREVIATIONS

| ANR | Agriculture and Natural Resources |
|---------|-------------------------------------------------------------------------|
| AEZ | Agro-Ecological Zones |
| AfDB | African Development Bank |
| AREP | Adaptation Review and Evaluation Procedures |
| CFAN | Commercial Farmers Agribusiness Network |
| CFC | Chlorofluorocarbon |
| CRR-N | Central River North |
| CRR-S | Central CRR South, |
| CSS | Climate Screening System |
| DPWM | Department of Parks and wildlife Management |
| DSA | Deep Sandstone Aquifer |
| DWR | Department of Water Resources |
| EI | Environmental Inspector |
| EIA | Environmental Impact Assessment |
| EN | Endangered |
| ESHS | Environment Social and Health Standards |
| ESIA | Environmental and Social Impact Assessment |
| ESMF | Environmental and Social Management Framework |
| ESMP | Environmental and Social Management Plan |
| ESS | Environmental Safeguards Specialist |
| FASDEP | Food and Agriculture Sector Development Project |
| FBO | Farmer Based Organization |
| GPO | Gender and Protection Officer |
| GAFSP | Global Agriculture and Food Security Program |
| GAFSp | The Gambia Agriculture and Food Security Project |
| GBOS | Gambia Bureau of Statistics |
| GBV | Gender-based violence |
| GERMP | The Gambia Electricity Restoration and Modernization Project |
| GNAIP | Gambia National Agriculture Investment Program |
| GRC | Grievance Resolution Committee |
| GRM | Grievance and Redress Mechanism |
| HGSF | Home-Grown School Feeding |
| IPM | Integrated Pest Management |
| IUCN | International Union for the Conservation of Nature |
| LC | Least Concern |
| LRR | Lower River Region |
| MC's | Mothers' Clubs |
| MOA | Ministry of Agriculture |
| MOBSE | Ministry of Basic and Secondary Education |
| NACOFAG | National Co-ordinating Organisation for Farmer Associations, The Gambia |
| NAWEC | National Water and Electricity Company |
| NBR | North Bank Region |
| NEA | National Environment Agency |
| NEMA | National Environment Management Act |
| NGOs | Non-Governmental Organization |
| NNP | Nuimi National Park |
| NRA | National Roads Authority |
| | |

| NT | Near Threatened | | |
|-------|--------------------------------------|--|--|
| OHS | Occupation Health and Safety | | |
| OS | Operational Safeguard | | |
| PMT | Project Implementation Unit | | |
| PMT | Project Management Team | | |
| PSC | Project Steering Committee | | |
| RAP | Resettlement Action Plan | | |
| RPO | Regional Program Officer | | |
| RVCDP | Rice Value Chain Development Project | | |
| SEP | Stakeholder Engagement Plan | | |
| SME | Small and Medium Enterprises | | |
| SPO | Senior Program Officer | | |
| SSA | Shallow Sand Aquifer | | |
| TAC | Technical Advisory Committees | | |
| URR | Upper River Region | | |
| VAC | Violence Against Children | | |
| VDC | Village Development Committees | | |
| VU | Vulnerable | | |
| WCR | West Coast Region | | |
| WFP | World Food Program | | |
| WHO | World Health Organization | | |

EXECUTIVE SUMMARY

This report is the Environmental and Social Management Framework (ESMF) of The Gambia Agriculture and Food Security Project (GAFSp) in fulfilment of the requirement of the African Development Bank's (AfDB's) Integrated Safeguards System (ISS), which requires that all Bank-funded Projects either avoid completely negative impacts, or minimize such impacts.

PROJECT COMPONENTS

Specifically, the three Project components are:

Component 1: Developing Sustainable Food Systems for Improved Livelihoods, Productivity and Climate Resilience

Given that smallholder farmers are in the front line of the climate change impacts, the ecosystems on which they rely are increasingly degraded and their access to suitable agricultural land is declining. This component therefore aims to increase the productivity, post-harvest management systems, climate resiliency and business development services for the smallholder farmers. At the same time, the component will create an enabling environment nationally by accelerating the transition from subsistence agriculture to commercial agriculture, and in the process improve the smallholder farmers' livelihoods.

To achieve this objective, activities will address challenges related to: (i) weaknesses in the smallholder agriculture development capacity; (ii) constraints in the smallholder agriculture input markets and post-harvest management.

Selected crops will include rice, beans, millet, cassava, vegetables, groundnuts and poultry, (products that are based on the current HGSF food basket). Some of these crops are mainly produced by women and other vulnerable groups, and integrating their production into the Project will ensure a sustainable demand-supply process, guaranteeing a sure market purchase at a fair price for smallholders; it will improve their agricultural productivity, production, and market access.

Climate-change is also being taken into consideration for the selection of food products. In this regard, the Project aims to support farmers by consolidating and improving climate resilient and low carbon post-harvesting procedures, drying, processing and value addition, storage, logistics, distribution and business development. Specifically, the Component will address two sub-components:

Sub-component 1.1: Strengthening Skills, Productivity, Commercialization and Climate Resilience

Sub-component 1.1.1: Climate Smart Agriculture and Production Support

Under this sub-component the following will be realized:

Increased production and productivity of the smallholder farmer

Targeting rural women farmers, this will involve intensified adoption of improved and appropriate farming and poultry production practices including:

- o development of training curriculum
- o sensitization and organization of farmers into learning groups
- establishment of training/equipping extension workers/facilitators and farmer group leaders
- o training sessions for farmers, producers and horticulturalists
- monitoring and evaluation

• Civil works and inputs provision to smallholders

This will involve:

- o development of input financing schemes and agro dealer networks to assist women farmers
- support establishment of facility for on-farm mechanization leasing/hiring through private sector equipment hiring entities
- service schemes through farmer organization, youth groups, village development communities, and private entrepreneurs
- facilitate creation of e-registration schemes for input distribution (improved seeds, fertilizer and other agro-chemical) to enhance timely availability
- upgrade of feeder roads and small irrigation schemes (including tidal/pump rice irrigation, boreholes) to catalyze the production and post-harvest management

• Capacity strengthening to service providers and Farmer Based Organizations (FBOs)

This will involve organizing producers (especially women) into crop-specific grower associations with due consideration to any existing traditional groups, women and youth. The institution will be developed, strengthened financially and technically with environment-specific and dynamic governing rules. The leaderships will be trained in areas of decision making, resource mobilization, accounting and management, communication and conflict resolution to facilitate the coordination and operationalisation of the production system on sustainable bases.

Service providers will also receive skills and knowledge training, and they will be enhanced through human resource development to improve extension service delivery, including climate smart agriculture and organizational development.

Sub-component 1.1.2: Post-harvest Management and Commercialization Investments

Activities under this sub-component will support smallholder farmers by consolidating and improving climate resilient and low carbon post-harvesting procedure such as drying, processing and value addition, storage, logistics, distribution and business development. This will involve:

• Support for Development of Storage Infrastructure and other civil works/infrastructure works for post harvesting

Specific activities include:

- o refurbishing existing warehouses at strategic locations (at the farmers and schools' levels)
- supporting the establishment of bulking facilities at strategic locations (e.g. major weekly market sites); bulking facilities (cereal banks) built and/or upgraded
- establishing multipurpose storage/processing facilities (stock piles) and collection centers for horticulture produce/poultry products (possible cold chains); post-harvest facilities constructed and/or rehabilitated

• Support for Value Addition and Quality Management

This will be aimed at quality management to reduce post-harvest losses on priority food crops, poultry and vegetables; farmers will be trained and receive support in processing and value-addition practices and resources (inputs and services). Activities will include:

- upgrading/providing post-harvest processing and marketing facilities within improved communal gardens (as well as farms)
- training, as part of capacity strengthening for individuals, on foodstuff processing and preservation techniques

• Prevention and management of food and nutrition cyclical crises.

This, essentially will be in the bid to improve vulnerability and resilience of households in food and nutrition cyclical crises. The interventions will:

- support and strengthen the information and early warning systems on crisis risks and developing the harmonized framework analysis
- support and strengthen capacity in national and community food reserves/cereal banks/stores

• Support for market development and linkage facilitation

Investments in this area will include:

- establish/reactivate and strengthen producer and processor (especially women and youth) cooperatives (e.g. tomato producers and GACH Global)
- promote contract farming
- o promote access to improved market information system and promote/link

Sub-component 1.2: Improved Business Support for Food and Nutrition Security

Specifically, this will support the private sector to create a sustainable environment for food and nutrition sector sustainability through the *Promotion and Support for Agribusiness Development*. The sub-component will support:

Sub-component 1.2.1: Promotion and Support for Agribusiness Development

The private sector is recognized as a critical stakeholder and partner in economic and social development, a provider of income, jobs, goods, and services to enhance people's lives and help them escape poverty. However, in many low-income countries such as The Gambia, the private sector faces many constraints; there is a large number of micro-enterprises and some large firms, but very few small and medium enterprises (SMEs), otherwise the so-called "Missing Middle". This scarcity of SMEs hinders growth. In most high-income countries, it is SMEs that comprise upwards of 60-70% of private sector employment and account for the bulk of new job creation. Thus this sub-component will support a "private sector development support facility".

• Private Sector Development (PSD) Support Facility

This facility will support project preparation, playing a key role in filling the "Missing Middle". By working directly with SMEs to strengthen business plans, conduct market analyses and environmental impact assessments and structure their finances, project preparation can "buy down" risk for to obtain multilateral development banks resources, and, therefore, unlock investment for promising investment projects. Activities will include:

 business management training (including training tools that cover the whole range of target groups from illiterate micro entrepreneurs to growth oriented small and medium scale entrepreneurs)

- o develop and scale business models to strengthen value chains
- o design and deliver training programs to build capacity of suppliers and staff
- o build multi-stakeholder initiatives to drive cross-industry improvements

Component 2: Reducing Vulnerability through Social Protection

Component 2 aims to expand the national social protection system by improving vulnerable households' access to food, which is essential for adequate nutrition, particularly for women and children. It is aligned with on-going national programs within the context of the National Nutrition Policy, as well as other national social protection policy instruments, aimed at strengthening the country's social protection and resilience initiatives related to food and nutrition security.

Specifically, the activities will be linked to the structured demand led by the current HGSF program, which buys the produce of vulnerable women in the rural communities for use within the program. The component consists of the following sub-components:

Sub-component 2.1: Fostering Inclusive Transformation

This sub-component aims at improving the level of food and nutrition security standards in the country and providing nutrition-sensitive interventions, with special attention to women, youth and vulnerable populations. Its objective is to improve food and nutrition security at household and community levels; prevent and control micronutrient malnutrition among the population, especially women and children; and improve food standards, quality and safety. It consists of:

Sub-component 2.1.1: Prevent and control micronutrient malnutrition among the population, especially women and children

Key interventions in this area include: (i) increase household consumption of iodized salt; (ii) eliminate Vitamin A Deficiency and its consequences; (iii) promote fortification of foods with micronutrients; (iv) promote the production and consumption of bio fortified crops (e.g. African leafy vegetables, orange flesh sweet potato, pearl millet, etc.); and (v) increase awareness through IEC on the importance of micronutrient and their consumption.

Sub-component 2.1.2: Gender-sensitive training for school communities

This is an individual capacity strengthening component. Social protection outcomes will be supported by the mentoring school and communities' girls benefiting from the program. Mothers' Clubs (MC), in close collaboration with school management committees and implementing partners, will promote girls' school attendance and retention, and, in secondary education ensure that girls' living and studying conditions are adequate. UN partners will ensure that MC members are trained on nutrition, health, hygiene and sanitation, reproductive health, and other related issues and are empowered to provide coaching to the adolescent girls.

Sub-component 2.2: Food and Nutrition Security Resilience and Food Safety Nets

In this sub-component, the Project will provide direct nutritional support particularly targeting primary schoolage children and children under five years through the national HGSF program through the following:

Sub-component 2.2.1: Nutritious school meals planning delivery

This activity aims to provide nutritious meals including fortified commodities for at least 195 school days to 131,900 primary school children and pre-schoolers – 52% are girls (where they are co-located with primary schools) in regions WCR, LRR and CRR.

It will also include the training of cooks and storekeepers, for safe food preparation and storage practices, to strengthen food quality management in schools.

Sub-component 2.2.2: Schools Upgrade Program

The Project intends to upgrade/improve facilities and infrastructure in schools across the HGSF program regions. This will include six main types of interventions in each school: Fenced school gardens with supplies of initial seeds and fertilizers; School kitchen equipped with essentials; Clean toilets blocks separated by gender; Borehole and storage tank and rainwater harvesting; School Stores; and Contracted supplies of food from the communities.

Component 3. Project Management and Evaluation

This component will focus on the operation of the Project Management Team (PMT), which will reside at WFP. Activities to be linked with this component will include (i) Project coordination and management of operational costs, and social and environmental safeguards at the central and decentralized levels; (ii) M&E activities and information systems; (iii) communications strategy and information dissemination; (iv) baseline and impact evaluations; (v) mid-term and final project evaluations; and (vi) project results dissemination.

The PMT will comprise a technical team, supplemented by external consultants, to manage the following activities: project management and coordination, financial management, technical advisory and assessment initiatives, procurement, advocacy and events preparation, monitoring & evaluation, technology & information, among others.

The PMT will be responsible for the implementation and execution of all monitoring and evaluation activities, presenting quarterly reports on the project's development objective, as well as intermediate outcome indicators. These indicators will be collected, synthesized and agreed with the participating stakeholders to be presented to the AfDB and the Project Steering Committee (PSC). They will also be used as a performance tool for the Project. Experience from FASDEP will also be used and up scaled in this case.

Given the above description and objectives of the three components, the ESMF will focus mainly on the following: Sub-component 1.1.1 (Climate Smart Agriculture and Production Support); Sub-component 1.1.2 (Post-harvest Management and Commercialization Investments); and Sub-component 2.2.2 (Schools Upgrade Program).

PROJECT OBJECTIVES

To increase food and nutritional security, and household incomes, particularly for vulnerable households in the project area through establishment of a sustainable Home Grown School Feeding Program.

The Development Objective of the Project is to increase food and nutritional security for school children, and household incomes, particularly for vulnerable households in the Project's area of influence. This will involve efforts to achieve increased agriculture production and productivity, post-harvest management and commercialization, linking smallholders to assured institutional markets, and active private sector participation. Specifically, the Project proposes to:

a. Structure food demand and improve smallholders' productivity by increasing food production, post-harvest management, market access and resilience for the identified food chains

This objective will be achieved through strengthening resources and capacities of smallholder farmers, especially women and youth, and other food chain actors (i.e. private sector, Farmer Based Organizations - FBOs and NGOs). The food chains include rice, maize, beans, cereals (millet and maze), cassava, vegetables, groundnuts and poultry. The rationale for these products is based on the fact that certain sectors, (the agriculture, livestock, and fisheries) have been identified as important business opportunities. Among these however, agriculture especially horticulture and fruit/vegetable processing, led mostly by rural women, has the potential to make significant contributions to the economy alongside the tourism industry to diminish structural vulnerabilities. Climate components are essential within this objective.

b. Promote social protection and food safety net programs to reduce food and nutrition security of vulnerable populations in the Project areas

To achieve this objective, the Project will support the resilience building and social protection programs, such as the on-going Home-Grown School Feeding Program (HGSF), and complementary national nutrition initiatives to address the challenge of income poverty; this inhibits children from smallholder families from attending school when confronted with meeting basic non-fee costs such as uniforms, transportation fares, and school materials. Other downside factors that affect girls more than boys (impacting on school retention) are cultural, such as teenage marriage, performing household chores and support to farming and money-making activities.

c. Strengthen national capacities for ownership and good governance of the Food and Nutrition Sector (FNS)

This objective will be aimed at institutional strengthening of the public and private sectors, through a South-South and Triangular cooperation framework, and a strong support for the Agriculture and Natural Resources (ANR) policy coherence to provide an enabling environment. According to the World Bank and AfDB (2013-2016), the Gambia's public administration lacks the capacity to efficiently deliver essential services, and its institutional deficiencies are a major obstacle to reform. Thus, the Project will support Government's efforts to increase the capacity of the public administration to deliver services with stability.

SUBPROJECT TYPES

The types of subprojects and activities that are subject to screening include the following:

- i. Upgrading and/or construction of rural feeder roads
- ii. Food crop production, including rice and vegetable garden irrigation; other crops include beans, cassava, grains (millet)
- iii. Use of agro-chemicals (inorganic fertilizers and pesticides)
- iv. Poultry production
- v. Construction and operation of bulking, storage and grain processing facilities, garden fences, and toilets
- vi. Construction and operation of poultry and vegetable cold storage facilities

MAJOR ENVIRONMENTAL AND SOCIAL RISKS DURING PROJECT IMPLEMENTATION

Overall, the major environmental risks of the Project will include temporary air and surface water pollution; vegetation clearing and destruction of forest trees with its indirect impact on dependent wildlife; land degradation causing erosion and invasion of environmentally sensitive areas that could impact biodiversity.

Potential social risks will include public and occupational health and safety risks, such as traffic accidents with the upgrading of the feeder roads; risks from imported contagious diseases; violence against vulnerable groups; child employment; destruction of cultural/historical sites of importance; and instability in the affected communities.

INSTITUTIONAL FRAMEWORK, LAWS AND REGULATIONS/PROCEDURES RELEVANT TO THE PROJECT

Government institutions are not expected to benefit from the Project, especially from training activities. Nonetheless implementation of the Project will be carried out within the context of the respective policies and laws for which Government institutions have legal oversight. The institutions that will participate in the PSC of the GAFSp, and those that will provide technical support and advice are listed in the respective Tables below.

Institutional Framework (PSC membership)

| Institution | Responsibilities |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ActionAid | To be involved in training, extension and other support services to farmers and villages in the Project areas |
| CFAN | Represents commercial farmers and other small (private) business in the agriculture sector, will provide and support initiatives to leverage private sector development and engagement in Project implementation |
| NACOFAG | Apex of a national network of agriculture producers' associations, will focus on coordinating farmer associations in production and post-harvest management |
| WFP | Execute and implement Project on behalf of Government; host the GAFSp PMT, PSC, GRM/GRC |
| UNFPA | Will use national experience in support of the health and wellbeing of women; use its expertise in building and setting up management of commercial activities; support the PSC, especially related to gender-sensitive activities of the Project |

Institutional Framework to Provide Technical Advice

| Institution | Responsibilities | |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| NEA | The NEA enforces the NEMA, 1994 and EIA Regulations 2014 including sub-project classification, approves environmental statements and monitoring sub-project ESMPs, etc. This responsibility could be delegated to a private entity if necessary, but in consultation with Agency | |
| Ministry of Lands and Regional Administration | Oversees all the local government authorities and enforces all legal regulations on land administration and land use. Its regional representatives are the TACs located in the offices of the Regional Governors. The TACs will support the implementation and monitoring processes of the Project at Regional level | |
| Ministry of Health | Responsible for overall formulation and direction of the national health agenda, planning and health infrastructural development. Local health facilities will potentially manage the Project's health and safety risks such as the impacts of air and water pollution on the populations; malaria and other water-borne diseases due to long-term inundation of rice fields | |
| Ministry of Women, Children and Social Welfare | Ministry will serve on the Grievance Redress Committee (GRC) within the Grievance Redress Mechanism to oversee issues related to GBV/SEA/VAC. Women's Bureau will train members of GRC on GBV and VAC; play the role of the Service Provider using its experience and ability to support survivors of GBV | |
| Department of Forestry (DOF) | Agricultural land for vegetable and rice production will be required for implementation of the Project. Siting of fields could impact forest areas, especially as sixty-six gazetted Forest Parks are located in various parts of the country, some of which could be impacted by the Project. DOF will therefore monitor project activities near forested areas to maintain national forest cover. | |
| Department of Parks and Wildlife Management | Loss, fragmentation and degradation of habitat through land clearance for agriculture, or new roads and upgrading of existing roads may be avoided or minimized with advice from DPWM | |
| Offices of the Governors of CRR, LRR, and WCR | Oversee the ANR/EIA Working Groups of the Regional Technical Advisory Committees (TACs). The TACs will be responsible for monitoring Project implementation within the Regions based on the ESMPs. | |

The Relevant Legal Framework is indicated below.

The Legal Framework Relevant to GAFSp

| Legislation | Description | Relevance to GAFSp |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| National Environment Management Act, 1994 | Principal legislation in environmental management; Part V of Act provides for certain projects listed under Schedule A to be considered for ESMF/ESIA | This Project falls under Schedule A which requires an ESMF/ESIA |
| Environmental Impact Assessment | The EIA Regulations elaborate on the requirements for EIA procedure, | The Regulations provide more details for the ESIA of sub-projects and |

| Regulations, 2014 | environmental impact statements, approval, environmental monitoring, etc. | implementation of the sub-project ESMPs |
|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hazardous Chemicals and Pesticides Control and Management Act, 1999 | Act provides for the control and management, manufacture, distribution and use of hazardous chemicals and pesticides, and to make provisions for the matters connected therewith | Pesticides and other hazardous chemicals could be used in the production of crops |
| | It also provides protection to human health and the environment through the control of hazardous chemicals | |
| Ozone Depleting Substances (ODS) Regulations 2009 | Sets out rules on the production, import, export, placing on the market, use, recovery, recycling, reclamation and destruction of substances that deplete the ozone layer | The potential for the Project to use ODS in the cooling of products will be guided by this Regulation. |
| Local Government Act, 2002 | Act makes provisions for decentralized administrative structures including devolution of functions, powers and duties to local authorities | Implementation of the Project will require the participation of decentralized institutions including the Offices of the Governors of CRR, LRR, and WCR as well as their respective Technical Advisory Committees (TACs) |
| The Forest Act, 2018 | Provides framework for implementation of Forestry Policy, and framework for the reservation and management of forests | Sixty-six gazetted Forest Parks are located in different parts of the country, including proposed project sites; some of these may potentially be affected by the project |
| The National Biodiversity Strategy and Action Plan (NBSAP), 2015 | The NBSAP recognizes the conservation and sustainable use of biodiversity | Seven gazetted national parks and wildlife reserves are in various parts of the country that could be impacted by the Project |
| Gambia Roads Technical Services Authority Act, 2003 | Act empowers National Roads Authority to be responsible for the maintenance, construction, and safety of the national road network, including feeder roads | The feeder roads to be financed by the Project should abide by the provisions of the Act |
| Public Health Act, 1990 | Protects public and environmental health including abatement of nuisances and any condition that may be injurious to health | Relevant to Project since dust, noise and other risks can be associated with the Project |
| Labor Act (2007) | Provides the legal framework for administration of labor, recruitment and hiring of labor, and protection of wages | The project hiring and management of its labor force should adhere to this framework |
| The Children's Act 2005 | Act sets out the rights and responsibilities of children and provides for their care, protection and maintenance | Rights of children impacted by the Project need to be protected |
| The Women's Act 2010 | Aims to advance women's rights to land and natural resources in order to promote their economic and social | Relevant to this Project in view of potential impact on agricultural land farmed by women; need to avoid |

| | empowerment | gender based violence (GVB) and sexual exploitation and abuse (SEA) |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Anti-littering Regulations, 2007 | Addresses waste management and pollution issues in relation to environmental health and hygiene | The Project must ensure that all waste produced during all phases is well managed |
| 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 potential to generate dust, and to pollute surface fresh waters, ground waters as are found within the project's area of influence. |
| 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 in to surface waters (such as rivers or streams) | Project implementation has potential to discharge potentially polluting liquids into the tributaries and other surface water bodies as may be found with the project's Aol |

The Relevant National Policies

Table below pesents the national policies that will guide GAFSp implementaion.

Relevant National Policies

| Policy | Description | Relevance to GAFSp |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gambia Environment Action Plan, GEAP (2019-2029) | Integrated environment and natural resources management | Provides guidance in general environmental planning and natural resources management |
| National Climate Change Policy (2016 – 2025) | Policy provides the framework for managing climate risks, building institutions, capacities, and opportunities for climate-resilient development | Project will promote and encourage climate smart agriculture options |
| National Agricultural Sector Strategy (NASS, 2014) | Provides framework for the development of the sector; aims to reduce Gambian dependence on food imports, and improve food security and nutrition | GAFSp activities aim to improve national food security and nutrition for poor rural school children |
| ANR Sector Policy (ANRP, 2017- 2026) | Provides the framework for the development of the Agriculture sector in the medium-term. | Provides the national Policy support for the GAFSp |
| The National Home-Grown School Feeding Policy | In draft form, this is an important institutional framework that needs further development and finalization | The HGSF Policy has the potential to assist projects such as the Governmnet and WFP-run home-grown school feeding activities. Policy needs to be adopted to support the HGSF Program |
| The National Health Policy, 2012-2020 | Protects public and environmental health including nuisance and other risks associated with this Project | Relevant to the Project since dust, noise and other risks can be associated with the Project's activities such as in vegetable and rice production, feeder road construction/upgrading |
| National Council for Arts and Culture Act, 2003 | Act empowers the Council to assume control and preserve, restore any monument, relic, ethnographical article, or other article of archaeological, ethnographical, or historical relevance | There is a possibility of finding cultural heritage by chance, particularly during land clearing and preparation for works. These may be disturbed or lost due to lack of knowledge in managing cultural heritage discovered by chance |
| Forestry Policy (2010-19) | Promotes state and community forest development and management | Agricultural land for vegetable and rice production will be required for implementation of the Project. Siting of fields could impact forest areas, especially |

| | | as sixty-six gazetted Forest Parks are located in various parts of the country, some of which could be impacted by the Project Seven gazetted national parks and wildlife reserves |
|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The National Biodiversity Strategy and Action Plan (NBSAP), 2015 | The NBSAP provides the framework for the conservation and sustainable use of biodiversity | are in various parts of the country that could be impacted by the Project. In addition, other ex-situ biological diversity could be impacted as well |
| 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 it will benefit both men and women equitably |
| Gambia National Gender & Women Empowerment Policy (2010–2020) | To mainstream gender in national and sectoral planning and programming to ensure equity and equality | Women will be consulted widely, and will be involved in the local monitoring and evaluation process during project implementation |
| National Development Plan (2018-2021) | This is the principal national Policy blue print that provides the overall direction for the country from 2018- 2021. It lays emphasis on priority areas for development within this planned period | Project is aimed at developing sustainable food systems for improved livelihoods national, this is one of the target areas of the NDP |
| National Transport Policy, (2018- 2027) | Defines the priorities and objectives in the road transport sector, aimed to serve the country's development goals | GAFSp plans to construct/upgrade feeder roads which must abide with this Policy |
| National Youth Policy (2009–2018) | Policy aims to mainstream youth issues into the advancement of all sectors | Successful project implementation will enhance the youths' engagement in agriculture and related value-chain activities which could reduce youth underemployment |
| The Gambia National Social Protection Policy 2015-2025 | Policy aims to establish an inclusive, integrated and comprehensive social protection system that will safeguard the lives of all poor and vulnerable groups in The Gambia | Successful implementation of Project will promote social protection and food safety net programs to reduce food and nutrition security of vulnerable populations in the Project areas |

Relevant Bank safeguards policies triggered by the Project

| Ор | erational Safeguards | Description | Relevance to GAFSP | |
|----------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| OS 1: Environmental and Social Assessment | | Sets out the Bank's overarching requirements to identify, assess, and manage the potential environmental and social risks and impacts of a project. Requirements include: climate change vulnerability assessment; public consultation; appraisal and treatment of vulnerable groups; grievance procedures | Preliminary evaluation (literature reviews, etc.) has identified potential negative environmental and social impacts. There is therefore need for environmental assessment to ensure appropriate mitigation measures are put in place during all stages of the Project | |
| | | OS1 requires that the siting, design, construction and operation of projects should avoid significant damage to cultural heritage (both physical and intangible). These include culturally sensitive sites such as mosques, cemeteries, historical relics and artefacts | During Project implementation, there is possibility of finding items of cultural heritage by chance, particularly during land clearing and preparation for works. These may be disturbed or lost due to lack of knowledge in managing cultural heritage discovered by chance | |
| OS-2: | Involuntary resettlement: land acquisition, population displacement and compensation | Seeks to ensure displaced persons due to Project activities are treated fairly, equitably, and in a socially and culturally sensitive manner; that they receive compensation and resettlement assistance so that their standards of living, income-earning capacity, | There is likelihood of social impacts which may lead to compensations; these may include loss of economic trees, agricultural crops, temporary loss of earnings, etc. as a result of the Project | |

| OS-3: Biodiversity, renewable resources and ecosystem services | production levels and overall means of livelihood are improved; and that they share in the benefits of the project that involves their resettlement Policy prescribes requirements to identify and implement opportunities to conserve and sustainably use biodiversity ¹ and natural habitats ² | There are sixty-six gazetted Forest Parks and seven National Wildlife Parks and Reserves in different parts of the country, including potential Project sites. Project activities could be implemented within or near some of them, resulting in land conversion, natural habitat loss, deforestation, etc. |
|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Climate Safeguards System (CSS) | The CSS provides a set of decision- making tools and guides to enable the Bank to screen projects for risks associated with climate change. Following screening the Project will be classified | GAFSp and similar Projects are usually classified as Category II, indicating that it will be affected by climate change impacts |
| OS-4: Pollution Prevention and Control, Greenhouse Gases, Hazardous Materials and Resource Efficiency | This safeguard covers the range of impacts of pollution, waste, and hazardous materials for which there are agreed international conventions and comprehensive industry-specific standards, particularly the Environment Health and Safety (EHS) Guidelines (See Appendix 3.1) | Project implementation will result in generation of various forms and types of waste, and other gaseous and liquid pollution. Activities such as agricultural production, (e.g. land preparation and use of agro-chemicals); use of fuel wood in food preparation for schools; post-harvest processes (e.g. milling operations, cold-chains in the processing of poultry products and vegetables); road construction and rehabilitation works, etc. that will be carried out during Project implementation |
| OS 5: Labor Conditions, Health and Safety | Policy outlines the need for contractors and other actors to: protect workers' rights; establish, maintain, and improve the employee–employer relationship; protect the workforce from inequality, social exclusion, child labor, and forced labor; establish requirements to provide safe and healthy working conditions | The Project hiring and management of its labor force should adhere to this framework |

RISKS AND GENERIC POTENTIAL IMPACTS OF EACH TYPE OF ELIGIBLE SUBPROJECT

i. Upgrading and/or construction of rural feeder roads could lead to:

- Interruption of hydrogeology and groundwater flows
- Pollution of groundwater from discharges and accidental releases
- Release of hazardous substances during construction, or operation (e.g. vehicle spills) leading to soil, surface or groundwater contamination
- Air quality deterioration from dust during construction; emissions during construction and operation
- Use of heavy equipment, traffic, and activities during construction and maintenance at worksites may disturb human and fauna

- Loss, fragmentation and degradation of habitat
- Impact on cultural heritage

ii. Food crop production, including rice and vegetable garden irrigation; other crops include beans, cassava, grains (millet). Activities could result in:

- Interruption or disruption of surface and groundwater flows due to construction, excavation and land clearance, and reduced flows during operation
- Lowering of water table due to excessive abstraction results in salinization, especially in coastal areas in WCR
- Non-point source pollution caused by runoff of nutrients from fertilizers, and pesticides
- Accidental spills and leaks of hazardous materials during construction and maintenance leading to soil, surface or groundwater contamination
- Dust and emissions from construction and maintenance activities, could affect human health, vegetation and wildlife
- Noise and vibration from construction and maintenance equipment, traffic and activities, may disturb sensitive noise receptors (human, fauna)
- Construction of infrastructure and facilities (storage tanks, canals, etc.) cause loss, degradation or fragmentation of protected or ecologically sensitive areas (e.g. wetlands, migration routes)
- Impacts on habitats and species from habitat alteration and degradation (e.g. from reduction in water supply, changes in water flow and drainage, soil erosion, pollution of water, soils or air, introduction of invasive species)

iii. Use of agro-chemicals (inorganic fertilizers and pesticides) could result in:

- Deterioration of both ground and surface water through leaching and runoff
- High concentrations of nitrates and phosphates can lead to eutrophication in rivers, lakes and coastal waters.
- High levels of nitrogen and phosphorus cause the depletion of oxygen in lakes and reservoirs through excessive algal and bacterial growth (eutrophication), eventually reducing aquatic life
- Improper application of pesticides, overuse, and neglect of safety periods between application and harvest often result in high residues in harvested crops and processed food
- Agrochemical residues persist in contaminated clothing
- Pesticides may move off target and poison fish, cattle, beneficial insects, pollinators and soil organisms
- Misuse of pesticides can cause elimination or suppression of the natural enemies that keep insect pest populations under control.
- Suppression leads to outbreaks of secondary pests previously not considered important
- Misuse of pesticides can lead to the build-up of resistance in insect pests, pathogens and weeds.
- Pesticides can kill bees and other beneficial insects that are essential for the pollination of indigenous plants, honey production, etc., thus causing negative impacts on the food production, livelihoods and incomes of poor rural communities

iv. Poultry production and management

- Poultry facilities are a source of odor and attract flies, rodents and other pests that create local nuisances and carry disease
- Odor emissions, caused by a large number of contributing compounds including ammonia (NH₃), volatile organic compounds (VOCs), and hydrogen sulphide (H₂S), from poultry farms adversely affect the life of people living in the vicinity

- During land clearing and use of other aggregates to include building of houses, related wastes such as cleared vegetation, solid waste such as cement bags, iron and other pieces of materials, could cause secondary pollution if not cleared in time
- In addition to construction rubble, poorly managed solid waste can result in creation of dumpsites which can have environmental health impacts
- Improper disposal of poultry carcasses can contribute to air and water-quality problems especially in areas prone to flooding or where there is a shallow water table

v. Construction and operation of bulking, storage and grain processing facilities, garden fences, and toilets

- Pollution and generation of dust
- Gaseous pollution
- During land clearing and use of other aggregates including building of houses; related wastes such as cleared vegetation; solid waste such as cement bags, iron and other pieces of materials, could cause secondary pollution if not cleared in time
- Indiscriminate waste dumping will affect vegetation and water flow while also impacting the aesthetics of the immediate vicinity.
- In addition to construction rubble, poorly managed solid waste can result in creation of dumpsites which can have environmental health impacts
- As waste will be produced during all phases of the Project, effects from improper management may be long-term with localized negative impacts on aesthetics, health and safety.
- Noise and vibration from construction and maintenance equipment, of grain mills may disturb sensitive noise receptors (human, fauna)

vi. Construction and operation of poultry and vegetable cold storage facilities

- For impacts and mitigation associated with construction of buildings etc. see (v above)
- Ozone depletion (if CFCs used) resulting from leaks in refrigeration tubes decreases the earth's ozone layer
- Odor problems with poor management of solid wastes and effluents
- Gaseous pollution
- Processing of fruits, vegetable and poultry typically generates large volumes of effluents that contain high organic loads, cleansing and blanching agents, salt and suspended particles such as fibers and soil particles
- They may also contain pesticide residues washed from the raw materials
- Floor and equipment washing and sanitation produces a wastewater containing organic matter, oil and grease, and traces of the chemicals used for neutralization and sanitation
- Solid wastes are generated from the following operations:
 - The fruit and vegetable trimming, peeling and sorting; the rejects impact soil
 - In poultry, waste generated include: blood, offal/viscera, feathers, fat, waste water, etc.
 - Biological wastewater treatment plant, which generates sludge; suspended solid impact water bodies
- In addition to construction rubble, poorly managed solid waste can result in creation of dumpsites which can have environmental health impacts

PUBLIC CONSULTATION UNDERTAKEN IN ESMF DEVELOPMENT

In developing the ESMF, extensive consultations especially with the affected communities and traditional leaders in the Project areas could not be carried due to the COVID-19 pandemic, as the public has been advised by the Government and the World Health Organization (WHO) to exercise social distancing, among other precautionary methods. Furthermore, emergency regulations instituted by the Government, and currently in place prohibit public gatherings (including religious prayer gatherings in mosques and churches)

to prevent and reduce the risk of transmission of the virus. Thus, in the start-up meetings during the inception period of this contract, it was agreed that visits to potential Project sites should be postponed for the time being, given the current COVID -19 pandemic.

Nonetheless, taking into account the need for compliance with national laws, as well as WHO advise, measures were taken to identify project activities for which engagement is critical and cannot be postponed without having significant impact on Project timelines. Large public meetings were avoided, and instead consultations with local and national government agencies, on one on-one consultations, or in small-group sessions were conducted, including telephone conversations, where possible. Consultations were held with Mr. Kebba Jarju, Coordinator of the current FASDEP, National Environment Agency (NEA), the WFP CO, ActionAid, CFAN, and Ministry of Basic and Secondary Education (MOBSE).

STAKEHOLDER ENGAGEMENT

Since stakeholder consultations and engagement is a continuous process, it is expected that ongoing engagement activities will be managed by the GAFSp and its Contractors as the Project moves into the implementation phase. Continuous consultation can be facilitated with the aid of a Stakeholder Engagement Plan (SEP).

The Plan provides a formal commitment, defines responsibilities, and ensures that adequate funds are made available to carry out the process of consultation. It includes a timetable for the different stages of the consultation process, a description of any consultations that have already taken place, a budget, a definition of the reporting procedures and a description of institutional responsibilities for consultation.

FRAMEWORK ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (FRAMEWORK ESMP)

Generic environmental and social impacts, and the proposed mitigation and management measures have been developed by subproject type, and reflected in Chapter 6. Appendix 7.1 is a Flowchart summarizing the ESIA process for GAFSp subprojects.

CAPACITY ENHANCEMENT FOR ESMF IMPLEMENTATION

During the consultations in the course of writing this Report, it became evident that certain institutions that will be involved in the Project will need to have their capacity enhanced; employees of the institutions will equally need to be trained in specific skills and competences, mostly in the form of training workshops and seminars.

Training workshops on the implementation of the ESMF/ESMPs, and AfDB safeguard policies would be organized for staff of the PMT, as well as those of ActionAid, NACOFAG, and the private sector participants (such as CFAN and Project consultants/contractors).

Other forms of institutional capacity building relate to the skills to implement the relevant Codes of Conduct and Action Plan to implement the Project's OHS and ESHS Standards, and preventing GBV/VAC. Typically the new GRC members need to be trained and sensitized on these protocols. To effectively serve on the GRC, members must undergo training prior to the commencement of their assignment to ensure that they are sensitized on GBV and Child Protection.

Individual capacity building needs will involve the Contractors, their managers and employees on the various aspects of ESMF/ESMP implementation, as well as the Codes of Conduct and Action Plan. All employees will attend an induction training course prior to commencing work on site to ensure they are familiar with the Company's commitments to ESHS and OHS standards, and the Project's GBV and VAC Codes of Conduct.

Community members and farmers will need to be trained in appropriate methods of application of agrochemicals, since inappropriate methods of use can result in unacceptable toxic residues on agricultural products and unnecessary financial burdens because of over application. In this regard, appropriate management of their use (timing, dosage, mode of application, etc.) is necessary to reduce to acceptable levels the environmental risks they pose. In addition, the farmers will be trained in IPM approaches.

GRIEVANCE REDRESS MECHANISM (GRM)

During the preparation of the GAFSp and its implementation, complaints may arise from national institutions with respect to, for example breach of laws; project affected persons on land ownership and land use issues; pollution nuisance and choice of beneficiaries, amongst others. To maintain stability, mechanisms need to be put in place to redress any grievance and conflict that may arise from the Project. It is in this regard that the Bank's OS-1, requires that a "credible, independent and empowered local grievance and redress mechanism" be established in the Project. The mechanism will essentially comprise the following, as indicated in Table below.

| Step | Process | Description / Required Action | Time-frame | Responsible Agency / Person | | |
|------|---------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------|--|--|
| 1 | Receipt of complaint | Document date of receipt, name of complainant, nature of complaint | GAFSp (specifically the GPO) | | | |
| 2 | Acknowledgement of grievance | By letter, email, phone | 1-5 days | GPO in the GAFSp PMT | | |
| 3 | Screen and establish the foundation or merit of the grievance | Visit the site; listen to the complainant/community; assess the merit | 7-14 days | GRC members including the GPO, complainant and his/her representative | | |
| 4 | Implement and monitor a redress action | Where complaint is justified, identify and carry out the redress | 21-30 days, or at a time specified in writing to the complainant | GAFSp Coordinator, GPO/ESS to coordinate the implementation of redress action | | |
| 5 | Extra intervention for a dissatisfied scenario | Review the redress steps and conclusions, provide intervention solution | 2-4 weeks of receiving status report | GAFSp Coordinator and GRC to review and react | | |
| 6 | Judicial adjudication | Take complaint to court of law | No fixed time | Complainant | | |
| 7 | Performance review | Stakeholder Meetings | Quarterly | GRC | | |

ESMF IMPLEMENTATION MONITORING

ESMF monitoring indicators will include both environmental and social indicators some examples of which are indicated in Table below.

| Impact Issue | Implementation Tool | Monitoring Indicators | | | | | |
|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| Biophysical Assessment | | | | | | | |
| Air/noise pollution | Contractors' maintenance programs or plans for equipment/ machinery | Implementation of Monitoring Plan; Grievances recorded | | | | | |
| Water Pollution | Industry-specific standards, particularly the Environment Health and Safety (EHS) Guidelines; Contractors' construction site management plans | No. of times oil and other pollution materials visible on water bodies Reports based on implementation of Actions Plans | | | | | |
| Solid waste generation and disposal | Contractors' waste management plans Industry-specific standards, particularly the EHS Guidelines | Number of waste bins Final disposal records | | | | | |
| Loss, fragmentation and degradation of habitat, and severance of animal migration routes and pathways | AfDB's OS-3 | Presence of sensitive habitat Minutes of meetings with DPWM Area rehabilitated Long-term monitoring and corrective | | | | | |
| | Social Assessment | plans and actions | | | | | |

| Marginalisation of women and other vulnerable | ESMF | Number of women benefiting from Project activities | |
|--------------------------------------------------|------|-----------------------------------------------------------------------|--|
| groups | | Number of women and other vulnerable groups trained in various skills | |

INSTITUTIONAL ARRANGEMENT - STAKEHOLDER ROLES AND RESPONSIBILITIES IN ESME IMPLEMENTATION

The WFP will be the executing agency, where the Project will be domiciled. The institutional arrangement for the implementation of the ESMF will consist of the following:

Project Steering Committee (PSC)

A Project Steering Committee (PSC), will be created to oversee the activities of the GAFSp. Strategic oversight for policy guidance and implementation will be played by the PSC. It will review annual work plans and budgets, progress and quality of project implementation.

The PSC shall comprise WFP; National Coordinating Association of Farmers (NACOFAG) representing civil society organizations; The Association of Non-Governmental Organizations (TANGO) represented by Action Aid International The Gambia (AAITG); the private sector represented by Commercial Farmers Agribusiness Network (CFAN) and, United Nations Fund for Population Activities (UNFPA).

• Project Management Team (PMT)

The day-to-day management of the Project will be vested in a dedicated Project Management Team (PMT at the WFP Country Office (CO), and will comprise WFP CO officers as well as others that will be competitively recruited. These will include an Environmental Safeguards Specialist (ESS) who will be responsible for all aspects of the ESMF/ESIA/ESMPs of the Project. The Gender Protection Officer (GPO) at WFP CO will be responsible for all gender and social issues of the Project.

The key tasks of the PMT will comprise management of operations including; technical, fiduciary (procurement and financial management); M&E activities, communications; ensuring social and environmental safeguards, reporting; baseline and impact evaluations; and, mid-term and final project evaluations. It will comprise: Project Coordinator (Team Leader), Financial Management Expert, Finance Associate, M&E Specialist (Country Office), Head of Supply Chain/Procurement Officer, Logistics Associate and two Business Support Assistants. The PMT will be supplemented by external consultants, as and when required.

Central and Local Authorities

These include central and local government institutions whose support is critical to the success of the Project. These have regulatory functions, and continuous engagement with them is often required. Even though they may not benefit from any capacity building and training activities offered by the Project, local government authorities may have long-established relationships with affected communities and other local and national stakeholder groups, and therefore can play a role, for example, in convening and facilitating discussions between the Project and stakeholders.

This category of stakeholders will include the MOBSE, MOA, the Technical Advisory Committees (TACs) in the Offices of the Regional Governors in CRR, LRR, and WCR, etc.

National Environment Agency

The NEA has a monitoring and supervisory role and shall be responsible for the screening of sub projects, reviewing and clearing subproject-specific safeguard instruments and conducting compliance monitoring in accordance with national laws and regulations. In addition, the NEA shall provide technical support and participate in training and sensitization of stakeholders to enhance understanding of the national environmental and social safeguard instruments.

ESTIMATED BUDGET FOR ESMF IMPLEMENTATION

| # | ltem | Unit Cost Unit | | Total | | Source of | |
|---|------------------------------------------------------------------|-------------------|---------|-----------|-----------|-----------|-----------|
| # | item | Unit | Local | US\$ | Local | US\$ | financing |
| 1 | Preparation of subproject ESIA/ESMPs, GBV/VAC Action Plans | 8 reports | 400,000 | 8,000 | 3,200,000 | 64,000 | GAFSp |
| 2 | Capacity Building | 3 sessions | 150,000 | 3,000 | 450,000 | 9,000 | " |
| 3 | Implementation of Stakeholder Engagement Plan | | 750,000 | 15,000 | 750,000 | 15,000 | " |
| 4 | Monitoring ESMF Implementation | | 250,000 | 5,000 | 250,000 | 5,000 | " |
| 5 | Implementation of specific ESMPs/GBV Action Plans | 8 reports | 100,000 | 2,000 | 800,000 | 16,000 | " |
| 6 | Mid-term audit of ES performance | 1 | 250,000 | 5,000 | 250,000 | 5,000 | " |
| 7 | Completion audit of ES performance | 1 | 250,000 | 5,000 | 250,000 | 5,000 | " |
| | Total | | | 5,950,000 | 119,000 | " | |

CHAPTER 1.0 INTRODUCTION AND PROJECT BACKGROUND

This report is the Environmental and Social Management Framework (ESMF) of The Gambia Agriculture and Food Security Project (GAFSp) in fulfilment of the requirement of the African Development Bank's (AfDB's) Integrated Safeguards System (ISS), which requires that all Bank-funded Projects either avoid completely negative impacts, or minimize such impacts.

The Project is a grant provided by the Global Agriculture and Food Security Program (GAFSP) based on The Gambia's submission outlined in its response to the Special Call for Proposals for GAFSP Financing in March 2019. The global Program is a demand-led and recipient-owned partnership dedicated to fighting hunger, malnutrition, and poverty. The Program also supports resilient and sustainable agriculture in developing countries, and benefits and empowers poor and vulnerable smallholder farmers, particularly women. The GAFSP investment total is US \$16.62 million, consisting of US \$16 million grant from the global Program, and a Gambia government and beneficiary contribution of US \$0.62 million.

In the development of Gambia's proposal, support was provided from the AfDB and the World Food Program (WFP), and the Project aims to strengthen resources and capacities of smallholder farmers, especially women and youth, and other food chain actors; these include the private sector, Farmer Based Organizations (FBOs), and NGOs. It will also contribute to resilience building and social protection programs, such as the Home-Grown School Feeding (HGSF), and complementary nutrition initiatives in the Project area. The WFO has been selected as the executing agency, and the AfDB as the supervising agency.

1.1 Project Objectives

To increase food and nutritional security, and household incomes, particularly for vulnerable households in the project area through establishment of a sustainable Home Grown School Feeding Programme.

The Development Objective of the Project is to increase food and nutritional security for school children, and household incomes, particularly for vulnerable households in the Project's area of influence. This will involve efforts to achieve increased agriculture production and productivity, post-harvest management and commercialization, linking smallholders to assured institutional markets, and active private sector participation. Specifically, the Project proposes to:

d. Structure food demand and improve smallholders' productivity by increasing food production, post-harvest management, market access and resilience for the identified food chains

This objective will be achieved through strengthening resources and capacities of smallholder farmers, especially women and youth, and other food chain actors (i.e. private sector, Farmer Based Organizations - FBOs and NGOs). The food chains include rice, maize, beans, cereals (millet and maze), cassava, vegetables, groundnuts and poultry. The rationale for these products is based on the fact that certain sectors, (the agriculture, livestock, and fisheries) have been identified as important business opportunities. Among these however, agriculture especially horticulture and fruit/vegetable processing, led mostly by rural women, has the potential to make significant contributions to the economy alongside the tourism industry to diminish structural vulnerabilities. Climate components are essential within this objective.

e. Promote social protection and food safety net programs to reduce food and nutrition security of vulnerable populations in the Project areas

To achieve this objective, the Project will support the resilience building and social protection programs, such as the on-going Home-Grown School Feeding Program (HGSF), and complementary national nutrition initiatives to address the challenge of income poverty; this inhibits children from smallholder families from attending school when confronted with meeting basic non-fee costs such as uniforms, transportation fares, and school materials. Other downside factors that affect girls more than boys (impacting on school retention) are cultural, such as teenage marriage, performing household chores and support to farming and money-making activities.

f. Strengthen national capacities for ownership and good governance of the Food and Nutrition Sector (FNS)

This objective will be aimed at institutional strengthening of the public and private sectors, through a South-South and Triangular cooperation framework, and a strong support for the Agriculture and Natural Resources (ANR) policy coherence to provide an enabling environment. According to the World Bank and AfDB (2013-2016), the Gambia's public administration lacks the capacity to efficiently deliver essential services, and its institutional deficiencies are a major obstacle to reform. Thus, the Project will support Government's efforts to increase the capacity of the public administration to deliver services with stability.

1.2 Geographical Scope of the Project

Building up on the activities of FASDEP (funded under the same Program that will close in June 2020) the Project target area will cover the three administrative regions of CRR-N/S, LRR, and WCR. The choice for these regions is based on four main criteria: poverty levels; malnutrition of children under five years; food insecurity; and highly favorable agro-climatic conditions for the selected commodities.

The target areas have particularly high productive potential. CRR-N/S are key rice and leafy vegetables growing areas with relatively fertile lowland soils, which have been key areas for food development to increase national food security. In addition, there is the existence of some supporting infrastructure (including past experience in irrigation agriculture).

These areas fall within Zone 2 of the three Agro-Ecological Zones (AEZ) of the country, (i.e. the Sudano-Sahelian Zone) which covers parts of CRR-N, and all of CRR-S, Upper River and North Bank Regions. The zone has savannah woodland vegetation interspersed with a network of tributary lowland valley system. These flood plains serve as excellent rice growing catchments under tidal swamp irrigation. See Table 3.1 for the Gambia's AEZs.

| AEZ | Region | Topography | Rainfall (mm/Y) | Total Land Area (ha) |
|--------------------------|-----------------------------|------------|-----------------|-------------------------|
| Zone 1: Sahelian | CRR North | Flat | >800 | 70 546 |
| Zone 2: Sudano/-Sahelian | CRR-N, CRR-S, NBR, URR, LRR | Flat | 790-970 | 418 742 |
| Zone 3: Sudano-Guinean | WCR, URR | Flat | 930-1034 | 129 464 |

Table 3.1: Some Characteristics of The Gambian Agro-Ecological Zones

Source: Adapted from "The National Agricultural Research System of The Gambia: Updated Analysis and Strategy for the Long Term- Draft Report (2013)"

Notes: WCR = West Coast Region; NBR = North Bank Region; LRR = Lower River Region; CRR-N = Central River Region-North; CRR-S = Central River Region-South; URR = Upper River Region

The uplands, particularly in the north of LRR, have high potential for the production of coarse grains which are important sources of household income for smallholders. The principal crops cultivated in this agroecology are early millet, groundnut, rain-fed upland and lowland rice.

The WCR (in AEZ 3- Sudano-Guinean Zone) is a key area for vegetable and other horticulture products, and provides opportunity for development of value chains and market linkages to urban areas, facilitating sales to schools in institutional purchases, as well as partnerships with private sector actors, such as export traders. Products from one area may also be purchased from other areas.

In view of the above, the geographic coverage of the GAFSp will focus on the areas with the most favorable agro-climatic conditions to the selected crops and demonstrated potential for production.

1.3 Objectives and Rationale for the ESMF

According to the AfDB's ISS, operations that finance multiple, small-scale sub-projects whose location, scope and design are not determined at the time that the Bank appraises and approves the operation, should develop an ESMF. This means that the location and site-specific environmental and social risks created by the investment will only be known during implementation of the Project. The features of the GAFSp which make an ESMF the appropriate requirement under the AfDB's Operational Safeguard 1 (OS 1) are listed below:

- A number of sub-projects and components will be implemented over time
- The sub-projects are spread over a wide geographic area (West Coast Region-WCR, Lower River Region-LRR, Central River Region-CRR/North and South)
- Design of the sub-projects and exact locations for implementation, even though their generic impacts can be predicted, their site specificities cannot be determined at this stage

In such instances an ESMF is required to establish a unified process to address all environmental and social risks that the sub-projects may cause, from preparation, through appraisal and approval, to implementation. It thereby ensures compliance with the Bank's safeguards (specifically the requirements of OS 1, concerning Projects categorized as II). The ESMF therefore, can create avenues for additional project funding to prepare more detailed plans (Environmental and Social Impact Assessment (ESIA) reports, including Environmental and Social Management Plans (ESMPs), and/or a Resettlement Action Plan (RAP) to be implemented at the sub-project level.

In addition, in The Gambia, the general framework for the assessment and management of environmental and social safeguards of development projects is provided in the National Environment Management Act (NEMA), 1994, the EIA Guidelines and Procedures, 1999, and the EIA Regulations, 2014. These instruments are under the purview of the National Environment Agency (NEA).

It will be recalled that the capacity of NEA and its national collaborating partner institutions in the EIA process was built by the World Bank through a capacity building environmental project; consequently, The Gambia's guidelines and procedures are essentially tailored after the World Bank's (which are essentially similar to the AfDB's ISS) but with modifications where appropriate, to suit the national circumstances. However, in the GAFSp process, where policy differences exist the AfDB's policies will prevail. The objectives of the ESMF include:

- To establish clear procedures and methodologies for the environmental and social planning, review, approval, and implementation of sub-projects to be financed under the GAFSp
- To provide information about scope of adverse environmental and social risks and impacts expected during sub-project planning, construction and operation; describe the approach to mitigation and monitoring actions to be taken; and cost implications
- To specify appropriate roles and responsibilities of the various stakeholders and interest groups within the Project, and outline the necessary reporting procedures for managing and monitoring the environmental and social risks related to the sub-projects
- To determine the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF
- To establish project funding required to implement the ESMF requirements
- To provide practical resources for implementing the ESMF, including general guidance on the development of sub-project specific ESIAs/ESMPs, RAPs and their implementation
- To provide lessons learned for application to future programs and projects

1.4 Method used in Developing ESMF

The approach to the development of the report consisted of:

1. Desk Review of Relevant Literature

Specifically, this involved:

- 1. A review of relevant literature on the GAFSP Project, and reports of similar projects
- 2. An analysis of relevant national and international policies and legal frameworks that will guide the development and implementation of the Project, including AfDB's new Operational Safeguards (OSs) documents; review of reports developed within the current FASDEP Project's area of influence, etc. A full list of the literature reviewed is indicated in the Bibliography section of the report.

2. Field Visit to Some Potential Project Sites

For a better understanding of the potential impacts of the Project, visits to potential project sites are a major activity that needs to be done. However, given that the country is observing some rules to control the spread of the Coronavirus, visits to potential project sites will be postponed for the time being. In the meantime, consultations with project beneficiaries will be carried out using other possible means of communication. Should the situation evolve to allow some limited tour of some potential sites, the opportunity will be seized to carry out the usual consultations.

Nonetheless, conducting field visits will afford the opportunity for direct observations, paying particular attention to the socio-economic, physical and environmental characteristics of the various potential sites, and also recognizing the relationship among resources, resource users, institutions, socio-economic and cultural setting. The process will involve data collection and interviews with the local people, drawing on the local knowledge with a view to acquiring and/or providing:

- i. Detailed description of the various proposed project sites
- ii. Baseline data and information on the current environment and social conditions in order to help predict how these may change during construction and operational phases of the Project

From the results of the analysis mentioned above, predict and evaluate the environmental and social impacts of each activity during all the phases of project implementation. From the analysis and evaluations, appropriate mitigation and cost-effective measures will be made for all significant negative environmental and social impacts to prevent, or minimize their adversity. These will form the basis of the ESMP of the sub-projects to be implemented.

The field visits will also be used as opportunity to conduct public consultation with the potential beneficiary communities in order to:

- i. Understand community dynamics, relations, and the broader social and economic context of the communities and possible impacts of this Project
- ii. Discuss the Project with potential beneficiaries, and other stakeholders, including its potential positive and negative impacts
- iii. Provide information about the GAFSp, highlighting the various components, and to acquire key social information, including schools, health and other social facilities
- iv. Facilitate transparency and inclusive participation of community members in the Project so they can voice their concerns and views about the Project's design and potential impacts,

and to ask questions. This will provide the communities the opportunity to participate in the entire process in the development of the ESMF/ESIA report, and thus contribute to both the design and implementation of the resultant ESMPs

v. Highlight potential roles and responsibilities of community members, during both the baseline survey period, as well as in community-level monitoring of ESMP implementation, which is one way to enhance their participation and promote sustainability in the Project

1.5 Assessment of Project Alternatives

i.

This section will identify and compare alternative options that could be considered for integration in the Project's design to make GAFSp more environmentally and socially resilient and sustainable. Specifically, it will compare alternative technologies or processes in terms of their potential environmental, resilience and social impacts, capital and recurrent costs, and suitability under local conditions. This will include such as the need for using existing land for rice and vegetable irrigation rather than opening up new areas; redesigning irrigation infrastructure; use of agro-chemicals (e.g. chemical fertilizers and pesticides against organic fertilizers and use of Integrated Pest Management (IPM)³ approaches to address pest infestation); use of solar power against fossil fuel–based power generation in the preservation poultry and vegetable products, etc.

Use of Existing Rice Perimeters and Vegetable Gardens

Within the targeted regions numerous areas are potentially available that have been lying fallow for many years, the farmers having stopped farming them for various reasons (including farms being relatively too far from their homes, and thus the need to walk long distances to get to them; availability of alternative lands somewhere else; the abandoned farms being exposed to hippos and other pests; etc.). Due to these, and any other number of other reasons, the Project could be tempted to open up new lands to locate rice fields, and this could result to extensive felling and vegetation clearing and burning. The current FADSEP opened up 100ha of such land in CRR-N (Jarju, personal communication).

Opening up new lands will disturb the regrowth and regeneration of the forests and vegetation of the fallow lands, and the important environmental functions of the forests and vegetation will be disrupted. These functions include soil erosion control, regulation of water quality and flow in the watersheds, thereby moderating floods from heavy rain. Forests also have the unique potential to contribute to climate change mitigation by reducing emissions and enhancing carbon sinks. In addition, depending on the extent of deforestation, reduced tree cover could result in reduced cloud cover and rainfall.

In addition, local ecological populations may be adversely affected by pollution incidents from fuel leaks and oil spills associated with construction, maintenance and decommissioning operations. Construction and activities could also result in the increased sediment loading of the nearby river banks and "bolongs", and changes in turbidity may impact adversely upon aquatic populations.

Similarly, clearance of terrestrial vegetation for vegetable gardens will expose dependent wildlife, causing them to move to other areas for food and shelter, with the probability of creating competition and potential nuisance if they move to other agricultural fields. Given the above the Project must not encourage farmers to open up new lands and sites.

³ IPM uses an understanding of the life cycle of pests and their interactions with the environment, in combination with available pest control methods, to keep pests at a level that is within an acceptable threshold in terms of economic impact, while giving rise to minimum adverse environmental and human health effects. Recommended IPM approaches include: use of biological controls such as predators, parasites and pathogens to control pests; use of pest-resistant varieties; mechanical and biological controls; and, as a last resort, chemical controls including synthetic and botanical pesticides. Other IPM approaches encompass pesticide application techniques that aim to increase the efficiency of chemical applications.

ii. Need for Re-design of Existing Rice Fields

There is a wide range of irrigation schemes which can accommodate many variations in the source, and availability of water and form of agriculture (e.g. the main Gambia River and its "bolongs", underground water for vegetable gardening, rainwater, etc.). Rice production in certain areas potentially targeted by GAFSp involve flooding the fields through tidal filling, the water flowing in and out of the fields with the rise and fall of the tide. During high tide, water is let into the fields when the main sluice gates are opened to flood the area, and as required, the gates are opened again when the farmers want to reduce the amount of water to carry out whatever activity is at hand. Alternatively, water pumping machines operated by diesel-operated generators are used in rice irrigation, an option which will not be recommended for use in this Project. The use of tidal irrigation is much cheaper, and more environmentally sustainable than the use of diesel-operated generators to lift water from the river.

In addition to this system, traditional irrigation schemes are located along the water bodies being used by smallholder farmers, and many of the irrigation perimeters lack adequate water control and irrigation structures that ensure continuous production. Fields are not protected with dikes and gates to control the flow, resulting in almost the entire fields being inundated; the situation is aggravated even more with heavy rains, leading to hardly any rice production in such fields.

Thus, any existing traditional fields that will be used by the Project should be redesigned and provided with appropriate perimeter dikes and gates to control the flow of water into and out of the fields. Support from the Project should be used to construct or rehabilitate weirs to provide effective and efficient supply of water.

Where the fields are located in hippo-prone areas, it is important that the animals are prevented from getting into the fields; this is a huge constraint for rice farmers located near the main River and "bolongs" especially in CRR-North and South. Hippos have frequently invaded rice fields, and ravaged entire years' crops, and even resulting to loss of lives of farmers occasionally. During maximum high tide when the water level rises close to the height of the bank or the main inlet gates, the hippo is able to float and reach the top of the bank, or dike of the protection canal and thereby get into the rice fields.

It is recommended that perimeter dikes in such areas be constructed as well as anti-hippo dikes to create a buffer at least about 75 meters away from the river. The construction of dikes shall provide a level of safety of farmers from hippo invasions to prevent attacks, destruction of fields and loss of produce. Some ways of preventing hippo entry include:

- a. Constructing concrete pillars in series around known hippo entry points and running barbed wire strands through holes made on the pillars to create a fence of barbed wire (up to 4 layers of barbed wire strands). On getting close to the wire, the hippo will be pricked by the sharp points of the wire, and this would stop it from making any more attempts. The downside of this is that it is too expensive, and very soon the barbed wire strand gets rusty, and it would need to be replaced when this happens
- b. Similar to the system above, any ordinary wire, or strong string is run through the holes of the concrete pillars. Tied to the strings are empty cans and pots containing stones or pebbles that would make some noise on contact with the hippo; the noise will scare the hippo away. This method is expected to be cheaper than with the barbed wire even though its replacement rate could be equally as frequent because the wire gets rusty as fast as in the above plan

In the production of vegetables, it is equally important that new areas are not opened up to accommodate the Project. Tracks of grassland, open forests and swamps (potentially relatively fertile lands) could be converted to gardens to account some for some of the projected 27 garden schemes earmarked for vegetable growing. This could lead to a shortage of horticulture land, pushing the relatively less resilient farmers and communities closer to the forests and with potential for increased conflict with traditional wildlife.

Irrigating the vegetable gardens will inevitably be through the use of boreholes powered by either the National Water and Electricity Company (NAWEC) electricity grid or solar, or even stand-by diesel-powered generators. Intensification of abstraction is expected, and consequently the potential for over extraction which

could lead to groundwater pollution through salinization especially within the Kombo peninsular where already there is a proliferation of boreholes by the hotels or for domestic purposes. Operating boreholes on generators would lead to increased cost of lifting the water as well to generation of both noise and air pollution.

Unfortunately, for a scheme such as is proposed in GAFSp, irrigation through borehole is essentially the main option that would enable the envisaged level of production; the use of hand dug shallow wells will be the other option, and would hardly meet the demand of these gardens. In this regard the Department of Water Resources should be consulted as often as possible for guidance in the rate of abstraction within the gardens located in the Kombo peninsula.

iii. Use of Agro-chemicals

Improving agricultural productivity is vital for poor rural smallholder farmers in the country to meet their food security needs and to promote sustained increases in income; agro-chemicals can be a powerful productivity enhancing input. For example, promoting inorganic fertilizer use is therefore crucial to sustainably increase the productivity of the targeted cops in the Project. Pests (including insects, weeds and pathogens) can be a significant constraint for the Project to achieve its production targets, and pesticides could potentially be required for their control.

Whilst agro-chemicals will intensify production in rice and vegetables in their respective zones, environmental problems may result from their increasing use and concentration, e.g. accelerated nutrient loading of receiving waters, resulting in algal blooms, proliferation of aquatic weeds, and deoxygenation. Therefore, careful selection of the type of inorganic fertilizers and management of their use (timing, dosage, mode of application, etc.) can reduce to acceptable levels the environmental risks they pose, while providing the needed benefits for increased production with lower financial and health risk costs.

Use of agro-chemicals (specially pesticides) in the current FASDEP has not been encouraged (Jarju, personal communication), and it is therefore recommended that it is not used in the Project. Nonetheless, if pesticides must be used in the Project it should be ensured that its application, storage and disposal, is in line with international standards. Appendix 6.1 shows the list of banned pesticides in the country. To enhance reduction in its use, the Project needs to enhance environmental awareness, and farmer training and field extension services in Integrated Pest Management (IPM) approaches.

Usually, smallholder farmers do not have much difficulty in reducing the dependence on pesticides; the promotion of indigenous farming practices, such as the cultivation of locally adapted crops and varieties, which are often resistant to local pests and diseases; the use of locally available natural bio-pesticides and pest-repellent crops, with adapted cultivation strategies (seeding periods and methods, etc.); the use of natural on-farm animal and green manure can significantly reduce the use or eliminate completely the necessity of pesticides.

iv. Use of Renewable Energy in Preservation of Poultry and Vegetable Products

GAFSp plans to integrate cooling facilities into the mix of project activities. Typically, this will be aimed at preservation of the poultry, as well as the vegetable products to enhance their wholesomeness when they reach the HGSF target schools. This can be achieved through the use of off-grid solar energy systems. Prototype solar PV cold storage facility has been constructed in the village of Kumbaniye, by ActionAid in CRR-S that GAFSp could replicate; this will reduce the Project' Carbon foot print. Reliable access to this clean energy will allow the cooling of these products, and is particularly important for the poultry farmers who are not connected to the NAWEC grid, or connected to an unreliable power supply. Indeed, most of the Project's target areas are not connected to the NAWEC power grid.

Off-grid solar systems can be used to operate the milling machines in the processing of the cereals targeted by the Project, and can reduce the workload and drudgery of the women related to domestic needs and processing food. The women will benefit from the labor-saving device. Overall, adopting renewables other than fossil fuel-based sources leads to reduction of carbon dioxide emissions and help mitigate global climate change.

Apart from the possibility of cooling the poultry and vegetable products, the social benefits of energy access in these localities are significant for the women and children. Electrification in smallholder farming communities facilitates access to health (refrigerator for medicines, light in a health center, etc.), access to social services (radio, television, telephone) and leads to higher educational achievement.

In a different, but related issue, "The Gambia Electricity Restoration and Modernization Project (GERMP)", a multi-donor (EIB, World Bank, and EU) funded solar energy Project is in the preparatory stages in the development of electricity generation through renewable sources. This will include an on-grid for the national NAWEC grid, and off-grid access to schools and health facilities. The school's component is being implemented by the MOBSE, and will include off-grid solar PV facilities with battery backup in 1,000 schools in the country. It is highly likely that some of the schools will be targeted by both the GERMP and GAFSp, and thus creating a possible synergy between the two Projects. The possibility is worth exploring.

In view of the above it is recommended to employ clean energy as the first option in providing power to the relevant Project activities.

CHAPTER 2.0 PROJECT DESCRIPTION

2.1 The GAFSp

The GAFSp is fully aligned with the Gambia National Agriculture Investment Program II (GNAIP II-2019-2026), and consists of three interlinked components to be implemented simultaneously, following the logical sequence of activities for each component. A five-year Project, (2020-2024), GAFSp will leverage on the infrastructure developed by the earlier GAFSP-funded Food and Agriculture Sector Development Project (FASDEP) and consolidate the gains made by it and other Projects such as the on-going AfDB-funded Building Resilience Against Food and Nutrition Insecurity in the Sahel (P2RS), and the Rice Value Chain Development Project (RVCDP) for rice production and optimize their utilization.

However, unlike FASDEP and other previous projects where the main focus was on production and infrastructure development, the approach in GAFSp will focus on a key bottleneck for farmers, particularly beyond the value-chain: post-harvest losses and management. Specifically, 125ha of smallholder farming was established under FASDEP's Component 2, *Agricultural production, diversification and commercialization;* these included 27 community garden gardens; 60 school gardens; and 20 poultry schemes, which will be scaled up by this Project. In addition, under FASDEP's *Resilience Building Component*, 10 community cereal/seed banks were constructed to provide storage for schools and farmers; the current Project will maximize on these gains as well.

Another key aspect that will differentiate this Project from other previous projects is the organization of the production component activities to become a procurement zone for the on-going national HGSF program, (under the Ministry of Basic and Secondary Education- MOBSE) which will provide an assured market for the smallholder famers. Under FASDEP's Component 2, *Reducing Vulnerability through Social Protection*, 102 schools benefitted from HGSF, covering up to 22,924 pupils in WCR and LRR. This Project will expand on this within the CRR, which was not part of the FASDEP. GAFSp will also keep promoting improved food production practices in targeted households through community-based nutrition and school education.

Essentially, the HGSF is a national school feeding program that procures its food needs from local smallholder farmers and in the process creating a "structured demand", and assured market outlet for their produce. The school feeding program is classified as a social safety net that assists vulnerable and food insecure people (predominantly school-aged children).

Specifically, in The Gambia, the HGSF model implemented by WFP through the current FASDEP, also achieved outcomes and impacts in the areas of agricultural and local economic development by providing local farmers and producers access to the market for their commodities, that a school feeding program might constitute. Currently schools in all six regions in the country are assisted either by FASDEP, through WFP, or by the Government, implementing catering, community-based and home-grown models. WFP implements only home-grown models in two modalities: in-kind and cash based, where schools covered by WFP buy to some extent from smallholder farmers. The Project's rationale is to extend the home-grown model to other schools in the regions where WFP and Government overlap to run school meals and to extend the program to non-covered schools.

In summary, Components 1 and 2 of the Project (described in detail below) will provide the required foodstuffs, and at the same time create a structured demand that will provide a stable market and price benchmark for smallholder production.

2.2 Project Components

Specifically, the three Project components are:

Component 1: Developing Sustainable Food Systems for Improved Livelihoods, Productivity and Climate Resilience

Given that smallholder farmers are in the front line of the climate change impacts, the ecosystems on which they rely are increasingly degraded and their access to suitable agricultural land is declining. This component therefore aims to increase the productivity, post-harvest management systems, climate resiliency and business development services for the smallholder farmers. At the same time, the component will create an enabling environment nationally by accelerating the transition from subsistence agriculture to commercial agriculture, and in the process improve the smallholder farmers' livelihoods.

To achieve this objective, activities will address challenges related to: (i) weaknesses in the smallholder agriculture development capacity; (ii) constraints in the smallholder agriculture input markets and post-harvest management.

Selected crops will include rice, beans, millet, cassava, vegetables, groundnuts and poultry, (products that are based on the current HGSF food basket). Some of these crops are mainly produced by women and other vulnerable groups, and integrating their production into the Project will ensure a sustainable demand-supply process, guaranteeing a sure market purchase at a fair price for smallholders; it will improve their agricultural productivity, production, and market access.

Climate-change is also being taken into consideration for the selection of food products. In this regard, the Project aims to support farmers by consolidating and improving climate resilient and low carbon postharvesting procedures, drying, processing and value addition, storage, logistics, distribution and business development. Specifically, the Component will address two sub-components:

Sub-component 1.1: Strengthening Skills, Productivity, Commercialization and Climate Resilience

Sub-component 1.1.1: Climate Smart Agriculture and Production Support

Under this sub-component the following will be realized:

• Increased production and productivity of the smallholder farmer

Targeting rural women farmers, this will involve intensified adoption of improved and appropriate farming and poultry production practices including:

- development of training curriculum
- o sensitization and organization of farmers into learning groups
- establishment of training/equipping extension workers/facilitators and farmer group leaders
- o training sessions for farmers, producers and horticulturalists
- monitoring and evaluation

Civil works and inputs provision to smallholders

This will involve:

- o development of input financing schemes and agro dealer networks to assist women farmers
- support establishment of facility for on-farm mechanization leasing/hiring through private sector equipment hiring entities
- service schemes through farmer organization, youth groups, village development communities, and private entrepreneurs
- facilitate creation of e-registration schemes for input distribution (improved seeds, fertilizer and other agro-chemical) to enhance timely availability
- upgrade of feeder roads and small irrigation schemes (including tidal/pump rice irrigation, boreholes) to catalyze the production and post-harvest management

• Capacity strengthening to service providers and Farmer Based Organizations (FBOs)

This will involve organizing producers (especially women) into crop-specific grower associations with due consideration to any existing traditional groups, women and youth. The institution will be developed, strengthened financially and technically with environment-specific and dynamic governing rules. The leaderships will be trained in areas of decision making, resource mobilization, accounting and management, communication and conflict resolution to facilitate the coordination and operationalisation of the production system on sustainable bases.

Service providers will also receive skills and knowledge training, and they will be enhanced through human resource development to improve extension service delivery, including climate smart agriculture and organizational development.

Sub-component 1.1.2: Post-harvest Management and Commercialization Investments

Activities under this sub-component will support smallholder farmers by consolidating and improving climate resilient and low carbon post-harvesting procedure such as drying, processing and value addition, storage, logistics, distribution and business development. This will involve:

• Support for Development of Storage Infrastructure and other civil works/infrastructure works for post harvesting

Specific activities include:

- o refurbishing existing warehouses at strategic locations (at the farmers and schools' levels)
- supporting the establishment of bulking facilities at strategic locations (e.g. major weekly market sites); bulking facilities (cereal banks) built and/or upgraded
- establishing multipurpose storage/processing facilities (stock piles) and collection centers for horticulture produce/poultry products (possible cold chains); post-harvest facilities constructed and/or rehabilitated

• Support for Value Addition and Quality Management

This will be aimed at quality management to reduce post-harvest losses on priority food crops, poultry and vegetables; farmers will be trained and receive support in processing and value-addition practices and resources (inputs and services). Activities will include:

- upgrading/providing post-harvest processing and marketing facilities within improved communal gardens (as well as farms)
- training, as part of capacity strengthening for individuals, on foodstuff processing and preservation techniques

• Prevention and management of food and nutrition cyclical crises.

This, essentially will be in the bid to improve vulnerability and resilience of households in food and nutrition cyclical crises. The interventions will:

- support and strengthen the information and early warning systems on crisis risks and developing the harmonized framework analysis
- support and strengthen capacity in national and community food reserves/cereal banks/stores

• Support for market development and linkage facilitation

Investments in this area will include:

- establish/reactivate and strengthen producer and processor (especially women and youth) cooperatives (e.g. tomato producers and GACH Global)
- promote contract farming
- o promote access to improved market information system and promote/link

Sub-component 1.2: Improved Business Support for Food and Nutrition Security

Specifically, this will support the private sector to create a sustainable environment for food and nutrition sector sustainability through the *Promotion and Support for Agribusiness Development*. The sub-component will support:

Sub-component 1.2.1: Promotion and Support for Agribusiness Development

The private sector is recognized as a critical stakeholder and partner in economic and social development, a provider of income, jobs, goods, and services to enhance people's lives and help them escape poverty. However, in many low-income countries such as The Gambia, the private sector faces many constraints; there is a large number of micro-enterprises and some large firms, but very few small and medium enterprises (SMEs), otherwise the so-called "Missing Middle". This scarcity of SMEs hinders growth. In most high-income countries, it is SMEs that comprise upwards of 60-70% of private sector employment and account for the bulk of new job creation. Thus this sub-component will support a "private sector development support facility".

• Private Sector Development (PSD) Support Facility

This facility will support project preparation, playing a key role in filling the "Missing Middle". By working directly with SMEs to strengthen business plans, conduct market analyses and environmental impact assessments and structure their finances, project preparation can "buy down" risk for to obtain multilateral development banks resources, and, therefore, unlock investment for promising investment projects. Activities will include:

 business management training (including training tools that cover the whole range of target groups from illiterate micro entrepreneurs to growth oriented small and medium scale entrepreneurs)

- o develop and scale business models to strengthen value chains
- o design and deliver training programs to build capacity of suppliers and staff
- o build multi-stakeholder initiatives to drive cross-industry improvements

Component 2: Reducing Vulnerability through Social Protection

Component 2 aims to expand the national social protection system by improving vulnerable households' access to food, which is essential for adequate nutrition, particularly for women and children. It is aligned with on-going national programs within the context of the National Nutrition Policy, as well as other national social protection policy instruments, aimed at strengthening the country's social protection and resilience initiatives related to food and nutrition security.

Specifically, the activities will be linked to the structured demand led by the current HGSF program, which buys the produce of vulnerable women in the rural communities for use within the program. The component consists of the following sub-components:

Sub-component 2.1: Fostering Inclusive Transformation

This sub-component aims at improving the level of food and nutrition security standards in the country and providing nutrition-sensitive interventions, with special attention to women, youth and vulnerable populations. Its objective is to improve food and nutrition security at household and community levels; prevent and control micronutrient malnutrition among the population, especially women and children; and improve food standards, quality and safety. It consists of:

Sub-component 2.1.1: Prevent and control micronutrient malnutrition among the population, especially women and children

Key interventions in this area include: (i) increase household consumption of iodized salt; (ii) eliminate Vitamin A Deficiency and its consequences; (iii) promote fortification of foods with micronutrients; (iv) promote the production and consumption of bio fortified crops (e.g. African leafy vegetables, orange flesh sweet potato, pearl millet, etc.); and (v) increase awareness through IEC on the importance of micronutrient and their consumption.

Sub-component 2.1.2: Gender-sensitive training for school communities

This is an individual capacity strengthening component. Social protection outcomes will be supported by the mentoring school and communities' girls benefiting from the program. Mothers' Clubs (MC), in close collaboration with school management committees and implementing partners, will promote girls' school attendance and retention, and, in secondary education ensure that girls' living and studying conditions are adequate. UN partners will ensure that MC members are trained on nutrition, health, hygiene and sanitation, reproductive health, and other related issues and are empowered to provide coaching to the adolescent girls.

Sub-component 2.2: Food and Nutrition Security Resilience and Food Safety Nets

In this sub-component, the Project will provide direct nutritional support particularly targeting primary schoolage children and children under five years through the national HGSF program through the following:

Sub-component 2.2.1: Nutritious school meals planning delivery

This activity aims to provide nutritious meals including fortified commodities for at least 195 school days to 131,900 primary school children and pre-schoolers – 52% are girls (where they are co-located with primary schools) in regions WCR, LRR and CRR.

It will also include the training of cooks and storekeepers, for safe food preparation and storage practices, to strengthen food quality management in schools.
Sub-component 2.2.2: Schools Upgrade Program

The Project intends to upgrade/improve facilities and infrastructure in schools across the HGSF program regions. This will include six main types of interventions in each school: Fenced school gardens with supplies of initial seeds and fertilizers; School kitchen equipped with essentials; Clean toilets blocks separated by gender; Borehole and storage tank and rainwater harvesting; School Stores; and Contracted supplies of food from the communities.

Component 3. Project Management and Evaluation

This component will focus on the operation of the Project Management Team (PMT), which will reside at WFP. Activities to be linked with this component will include (i) Project coordination and management of operational costs, and social and environmental safeguards at the central and decentralized levels; (ii) M&E activities and information systems; (iii) communications strategy and information dissemination; (iv) baseline and impact evaluations; (v) mid-term and final project evaluations; and (vi) project results dissemination.

The PMT will comprise a technical team, supplemented by external consultants, to manage the following activities: project management and coordination, financial management, technical advisory and assessment initiatives, procurement, advocacy and events preparation, monitoring & evaluation, technology & information, among others.

The PMT will be responsible for the implementation and execution of all monitoring and evaluation activities, presenting quarterly reports on the project's development objective, as well as intermediate outcome indicators. These indicators will be collected, synthesized and agreed with the participating stakeholders to be presented to the AfDB and the Project Steering Committee (PSC). They will also be used as a performance tool for the Project. Experience from FASDEP will also be used and up scaled in this case.

Given the above description and objectives of the three components, the ESMF will focus mainly on the following: Sub-component 1.1.1 (Climate Smart Agriculture and Production Support); Sub-component 1.1.2 (Post-harvest Management and Commercialization Investments); and Sub-component 2.2.2 (Schools Upgrade Program).

CHAPTER 3. 0 DESCRIPTION OF THE GENERAL ENVIRONMENTAL AND SOCIAL BASELINE CONDITIONS OF POTENTIAL PROJECT SITES

3.1 General Baseline Environmental Conditions

This section describes the general environmental baseline conditions of the potential areas to host the various Project activities within the three Regions identified. Given the small size of the country, the baseline conditions in general will not be very different from one Region to the next, especially where issues such as climate, relief, land form, forest and vegetation cover are concern; they are for the most part similar. In this regard the description will be general in nature, but where an issue of critical environmental, social and cultural significance to the Project is known to exist, it will be reviewed specifically, and addressed accordingly.

Nonetheless, it is important to note that the selected crops for the HGSF program, which is the main focus of the Project, are available in almost all the selected Regions, although certain crops among them (i.e. vegetables) are more commonly produced within the WCR, where the climate is more favorable for such crops. Conversely the CRR-N/S is more favorable for rice production given its unique environment of lowlands and proximity to the River Gambia and the numerous tributaries that branch off from the River, where tidal rice irrigation is common.

3.1.1 The Physical Environment

i. Climatic Conditions

The climatic condition in The Gambia is of the Sudano-Sahelian type, with two distinct seasons: a hot rainy season from May/June to October, and a dry season from November to May with rare occurrence of rainfall in May. Rainfalls are typically heavy nationally, but the south-western part of the country (mainly in the WCR) records more rain than the eastern portion. Table 3.2 below indicates the annual rainfall in six Regions; all within the three AEZs of The Gambia. July, August and September are the highest rainfall months. Please note that NBR and URR are not within the GAFSp target Regions.

In the rainy season, there is usually thundery activities due to the south-westerly monsoon winds, combined with heat from the continent, and the northward movement of the wind. These are usually accompanied by strong winds and heavy downpours, causing localized flooding and erosion, especially in the upland areas towards the lowlands resulting in siltation of rice irrigation zones. This is of vital importance in those proposed Project sites prone to erosion and flooding. Rice perimeter bunds in the lowlands can be impacted by this phenomenon.

| YEAR/REGION | WCR | LRR | NBR* | CRR-N | CRR-S | URR* | ANNUAL MEAN |
|---------------|---------|--------|--------|--------|---------|-------|----------------|
| 2009 | 1,418.7 | 999.4 | 1297.8 | 1002.1 | 655.2 | 940.8 | 1,074.6 |
| 2010 | 1,203 | 1194.1 | 1134.5 | 998.8 | 867.2 | 1116 | 1,080 |
| 2011 | 881 | 634.4 | 533.8 | 846.3 | 689.4 | 889.5 | 717 |
| 2012 | 1,374.1 | 1558.1 | 1515.2 | 901.8 | 922.4 | 808 | 1,254.3 |
| 2013 | 1022.4 | 900.7 | 788.2 | 896 | 1,039.8 | 933.7 | 929.4 |
| 2014 | 613.6 | 607.4 | 613.4 | 668.1 | 489.4 | 818.2 | 598.9 |
| 2015 | 1,253.5 | 984.1 | 1140.5 | 668.5 | 797 | 991.7 | 968.7 |
| 2016 | 822.2 | 1156.3 | 827 | 952.4 | 860.4 | 890 | 923.7 |
| 2017 | 868.1 | 930.6 | 943.9 | 696.6 | 813.3 | 897.8 | 850.5 |
| 2018 | 889.8 | 745.8 | 645.5 | 567.7 | 854.5 | 993.2 | 740.7 |
| Regional Mean | 1,034.6 | 971.1 | 943.9 | 819.8 | 798. 8 | 927.9 | |

Table 3.2: Recorded Annual Rainfall in Six Regions (mm) (2009-2018)

Source: DWR, 2019

*-Outside GAFSp Area

From December to April (in the dry season) north-easterly winds (the Hamattan) blow from the Sahara Desert towards the western coast of Africa resulting in the presence of dust particles in the air, and general cloudless skies and dry air. Much sunshine is received all year round throughout the country.

| Table 3.3: Annual Maximum | ו Mean Ter | nperature (°C |) in Six Re | aions |
|---------------------------|--------------|---------------|-------------|-------|
| | i mouni i oi | | , OIX | giono |

| Year/Region | WCR | LRR | NBR* | CRR-N | CRR-S | URR* | ANNUAL MEAN |
|---------------|------|------|------|-------|-------|------|----------------|
| 2009 | 32.1 | 36 | 36.2 | 35.8 | 36.2 | 36.3 | 35.4 |
| 2010 | 33.4 | 36.8 | 36.4 | 35.8 | 36.5 | 37 | 36 |
| 2011 | 33 | 36.3 | 36 | 35.8 | 35.2 | 37 | 35.6 |
| 2012 | 32.5 | 35.5 | 35.5 | 35.2 | 34.6 | 36.1 | 34.9 |
| 2013 | 32.5 | 36.6 | 36.2 | 37.7 | 35 | 36.4 | 35.7 |
| 2014 | 36.8 | 38.7 | 39.7 | 37.5 | 39.2 | 39.4 | 38.6 |
| 2015 | 36.6 | 38.3 | 39.1 | 38.5 | 38.5 | 38.8 | 38.3 |
| 2016 | 38.0 | 39.5 | 40.1 | 39.8 | 39.6 | 39.8 | 39.5 |
| 2017 | 38.5 | 39.2 | 39.8 | 39 | 38.7 | 39.3 | 39.1 |
| 2018 | 37.1 | 38.1 | 39.2 | 38.8 | 43 | 38.9 | 39.1 |
| Regional Mean | 35.1 | 37.5 | 37.8 | 37.4 | 37.7 | 37.9 | |

Source: DWR, 2019 *-Outside GAFSp Area

Table 3.3 above indicates annual maximum mean temperatures. Monthly mean temperatures in the rainy season vary between 29°C and 32°C, and from 15°C to 23°C in the cooler dry season.

ii. Topography and Land Form

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

Overall the topography is dictated by the River Gambia, and this has resulted in the following types of landforms:

- 1. Low hill landform: this is found mainly in the eastern portion of the country, and the hills are generally dome hills with even peaks and steep slopes, with elevation of 40-60m. There are sheer cliffs on both sides of the river as a result of erosion and cutting of the banks leading to creation of deep valleys in the upper reaches of the river
- 2. **Fluvial landform**: this consists of flood plains formed on both banks of the river at the middle reaches. These consist mainly of gravel, sand and clay layer
- 3. **Marsh and plain landform**: this type is found towards the west of Mansa Konko in the LRR on both sides of the River Gambia, with an altitude of 5m and a width of 1-5km
- 4. **Coastal landform**: this is characterized by craggy promontories, and broad, flat and sandy areas

iii. Hydrology

Surface Water

The surface hydrology within the potential Project locations is essentially the River Gambia, and it gets its source from the Fouta Djallon Highlands in Guinea. It flows westward towards the Atlantic Ocean, and drains the fields where some components of the GAFSp will be implemented. A mosaic of permanent "bolongs" ("bolong" is Mandinka meaning tributary) and seasonal freshwater lakes has branched off from the main river system and have become major areas of economic activity (including lowland rice irrigation schemes in the CRR-N/S, subsistence fishing, etc.) for the riparian populations through which the tributaries.

Another water source is rain water, and the run-off during the rainy season which empties into tributaries and adjacent flood plains.

Groundwater Resources

Within The Gambia, ground water is tapped mostly from two main groundwater sources; the Shallow Sand Aquifer (SSA) and Deep Sandstone Aquifer (DSA).

a) The Shallow Sand Aquifer (SSA) System

The Shallow Sand Aquifer (SSA), found throughout The Gambia and much of Senegal, is essentially where the local hand dug wells tap their supply within the potential target communities of the GAFSP. This aquifer system from the MioPliocene age occurs at depths between 15 and 120m below ground level.

Within the country, the SSA is subdivided into two, the Upper Phreatic Aquifer and the Lower Semiconfined Aquifer. The two are separated by a clay-silt aquitard. The SSA is composed in average of medium to coarse sand.

The Upper Phreatic Aquifer: This aquifer comprises mainly fine-to medium grained quartz sands with intercalations of silt and clay. The relatively thin aquifer (with a thickness of 1m and 20m) occurs at depths between 10m and 30m which is mostly the depths of local wells within the proposed Project sites. Indeed, all hand-dug wells and some shallow boreholes feed from this aquifer.

The Lower Semi-confined Aquifer: This aquifer depth varies between 10m and 50m below ground level, and the groundwater level is generally found at depth between 10m to 20m. The groundwater generally flows from South to North, and the transmissivity values range from 100 m²/day to over 750 m²/day. The hydraulic conductivity ranges from 5 to 20 m/day. The majority of boreholes (mostly provided by Government as portable water for the communities, as well as in communal women's vegetable gardens) in the various communities targeted by the Project tap this aquifer. It is constituted of mainly yellow-white fine-to medium-grained sands.

b) The Deep Sandstone Aquifer (DSA) System

The Deep Sandstone Aquifer (DSA), is constituted of Palaeocene and Maestrichtian sandstones; it underlies the whole of the Gambia and a large part of Senegal. It is confined by a 200m to 300m thick sequence of mainly clays and marls. The groundwater in this aquifer moves from east to west; it is of fossil origin and 4,000 to 40,000 years old. This aquifer is tapped in most countries in the sub-region. However, it is not used for drinking water supply in The Gambia.

3.1.2: The Biological Environment

i. The Forests and Vegetation Resources

The following vegetation types are found in the various potential Project locations of the selected Regions:

Riparian Vegetation

A riparian vegetation or riparian woodland is a forested or wooded area of land adjacent to a body of water such as a river, stream, lake, marshland, estuary, or reservoir. This vegetation type is found in areas with swampy and marshy environment such as the wetlands. The vegetation within these areas includes reeds, shrubs and herbaceous plants; it is likely that some Project activities will be located in parts of these habitats and vegetation, especially along the banks of the River Gambia in the northern part of LRR and CRR-N/S.

Mangrove Vegetation

One of the main habitat types along the "bolongs" in the northern part of the LRR is the mangrove habitat; it is found lining up the banks of the River Gambia and tributaries, and communities along the river system carry out rice farming within the mangrove swamp along the banks of the River. The species found are mainly the red mangrove (*Rhizophora spp.*), and the white mangrove (*Avicennia sp.*). In addition to rice farming, the communities utilize the mangrove as roofing material and other house construction activities, which increase the pressure on the vegetation. This eventually impacts the fauna, especially the Red Colobus monkey (*Colobus badius temmincki*) that inhabits the mangrove ecosystem.

There is also the salt tolerant plant, the bitter leaf (*Vernonia colorata*) and other woody species, as indicated in Table 3.4 below. The Table indicates their conservation status nationally as well as according to the IUCN Red List⁴.

⁴ The IUCN Red List is a critical indicator of the health of the world's biodiversity. Far more than a list of species and their status, it is a powerful tool to inform and catalyze action for biodiversity conservation and policy change, critical to protecting the natural resources.

| Scientific Name | Common English Name | National level Status | Status on IUCN Red List | Source of identification and IUCN status | | |
|-----------------|------------------------|-----------------------------|----------------------------|------------------------------------------|----------------------------|---------------------------|
| | | | | During site visit | Reported by Locals/DPWM | Bibliographic research |

EN

LC

LC

LC

LC

х

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х

х

х

х

Table 3.4: The Mangrove Vegetation Within Potential GAFSP Areas, National Status and in IUCN Red List

LC = Least Concern (LC): Evaluated as not being a focus of species conservation

Red mangrove

White mangrove

Black mangrove

Red mangrove

Bitter leaf

Rhizophora harissionii

Avicennia nitida

Rhizophora mangle

Vernonia colorata

Laguncularia racemosa

LC

LC

LC

LC

LC

Wooded Savannah

The wooded savannah is defined as having a canopy cover of more than 40 percent and reaching a height greater than 8m, and is found within most of the potential project locations within the three Regions. This ecosystem is usually found in the upland areas. The dominant species found within this vegetation type are the African locust beans (*Parkia biglobosa*), locally called "nete", its pods contain both a sweet pulp and valuable seeds, very popular as food within the villages. The seeds are crushed and fermented, and constitute an important economic activity. In addition, various parts of the locust bean tree are used for medicinal.

There is also the rose wood (*Pterocarpus erinaceus*), locally called "keno". The species is endangered, and is listed in Appendix II of the Convention on International Trade in Endangered Species (CITES)⁵ of wild fauna and flora. It is used for fuel wood, for medicinal purposes, as a woodworking material, and is useful as a nitrogen-fixing plant to improve nutrient-depleted farming land. Shrubby species found include the bush willows (*Combretum nigricans*), and the Chinese date (*Ziziphus mauritiana*). On the sandier soils, the woodland has a higher incidence of *Parinari macrophylla* (commonly called gingerbread plum), *Ficus spp.* (fig trees) and *Tamarindus indica* (the Tamarind).

Other forest trees found within the communities include the baobab (Adansonia digitata), which is planted for its shade as well as for food; its fruits are eaten and have certain uses as medicine; its leaves are used as vegetables, for sauces; its bark can be used as rope for tethering cattle. The "dimba" or "wula kono duto" (*Cordyla pinnata*), are also common within the farmlands and immediate village vicinities and are useful as food sources. The perennial Gamba grass (*Andropogon gayanus*), which reaches heights of over 2m, is common, and is considered one of the best grazing grasses; makes valuable hay and green fodder grass, and young shoots are preferred, but cattle will eat it up to time of flowering.

There is a wide range of weeds including weeds associated with arable or disturbed ground, including the Chinese violet (*Asystasia gangetica*), tropical spiderwort (*Commelina benghalensis*), and the Cinderella weed (*Synedrella nodiflora*). Other grasses which occur include *Echinochloa colona*, (commonly known as jungle rice) and *Chloris spp*. or windmill grass or finger grass. The above species are more dominant in locations where there has been clearance for agriculture in the past, or a high incidence of fire damage to the vegetation giving rise to bush-land or thicket. They are found within the various potential GAFSP sites. Table below presents the types of wooded savannah species found in the target Project locations.

⁵ CITES - Convention on International Trade in Endangered Species of Wild Fauna and Flora is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival

| Scientific Name | Common English Name | National level Status | Status on IUCN Red List | Source of identification and IUCN status | | | |
|-------------------------|----------------------|-----------------------------|-------------------------------|------------------------------------------|----------------------------|------------------------|--|
| | | | | During site visit | Reported by Locals/DPWM | Bibliographic research | |
| Parkia biglobosa | African locust beans | LC | LC | х | x | х | |
| Pterocarpus erinaceus | Rose wood | EN | EN | х | x | х | |
| Combretum nigricans | Bush willows | LC | LC | х | x | х | |
| Ziziphus mauritiana | Chinese date | LC | LC | х | | | |
| Parinari macrophylla | Gingerbread plum | LC | LC | х | x | х | |
| Ficus spp | Fig trees | LC | LC | х | x | | |
| Tamarindus indica | Tamarind | LC | LC | х | x | | |
| Adansonia digitata | Baobab | LC | LC | х | x | | |
| Cordyla pinnata | Bush mango | LC | LC | х | x | | |
| Andropogon gayanus | Gamba grass | LC | LC | х | x | | |
| Asystasia gangetica | Chinese violet | LC | LC | х | x | | |
| Commelina benghalensis) | Tropical spiderwort | LC | LC | х | x | | |
| Synedrella nodiflora | Cinderella weed | LC | LC | х | x | | |
| Echinochloa colona | Jungle rice | LC | LC | х | x | | |
| Chloris spp. | Windmill grass | LC | LC | х | x | | |

Table 3.5: Vegetation Found in Wooded Savannah within the Target Project Areas

LC = Least Concern (LC): Evaluated as not being a focus of species conservation; EN = Endangered

ii. Forest Parks

The Gambia's forest cover includes woodlands, savannah woodlands, mangroves and plantations. These forests supply the majority of the Gambian population with much-needed forest products for domestic and commercial use including environmental protection. The total forest cover of the country is about 350,000ha of which approximately, 32,734ha are Forest Parks, 30,000ha mangroves and the rest are the natural forests. They are broadly categorized into three types, based on either for production, protection or based on their functions as follows:

- 1. State forests, which include sixty-six gazetted Forest Parks and natural forests (protection)
- 2. Participatory managed forests which include Community forests (protection)
- 3. Private forests, which include private natural forests (protection) and private plantations

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

It is view of the importance of the forests that the government decided to conserve and manage, the gazetted forest parks (under the purview of the Department of Forestry) located in different parts of the country. It will therefore be important to note that some of the planned Project activities will possibly be sited in relative proximity of some of these parks, and could thus be potentially impacted. Forests have a unique potential to contribute to climate change mitigation by reducing carbon emissions and enhancing carbon sinks, and agricultural activities within these zones will contribute to the GHG burden through farming practices by farmers such as deforestation (tree felling), bush burning, etc. Therefore, the modest contribution of the mentioned forests to combating climate change will subsequently be reduced.

In addition, to a large extent the fauna (particularly the mammalian and avifauna) that would interact with the infrastructure and other facilities being planned by the Project could be potentially impacted since they are located in the nearby forests.

iii. Wetlands in GAFSP Target Areas

Wetlands in The Gambia are essentially three types; the marine and coastal types found mainly in shallow marine waters, estuarine waters, and intertidal mud flats; inland water type wetlands, which include permanent and seasonal rivers, riverine flood plains, freshwater marshes, seasonal freshwater lakes; artificial type wetlands which essentially are mainly irrigated land such as rice fields, and will form part of the intervention areas of GAFSp. Parts of some of these water bodies serve as fishing areas for the local communities, cattle drinking and watering points.

The proposed rice production areas for the GAFSp include the irrigated rice fields in the lowlands lining the River Gambia and its tributaries in the LRR and CRR-N/S. The irrigation infrastructure comprises mainly water inlet gates, sluice gates, earthen bunds, canals, etc. The fields are irrigated tidally, the water flowing in and out of the fields with the rise and fall of the tide; during high tide, water is let into the fields when the main sluice gates are opened to flood the area, and as required, the gates are opened again when the farmers want to reduce the amount of water to carry out whatever activity is at hand. Alternatively, water pumping machines operated by fuel operated generators are used.

Where the fields adjacent to the river lack perimeter dikes and gates (thus the water merely flows into and out of the field depending on the rise and fall of the tide) there is no control of flow into the fields, and this results in the entire field being flooded. This is more frequent during periods of unusually heavy rains, (due in part to climate change) an entire cropping season could be lost, and thus impact supplies to the HGFS.

iv. Wildlife Parks and Reserves

There are seven national Wildlife Parks and Reserves, and one Community Wildlife Reserve located in various parts of the country, including the regions targeted for GAFSp implementation; three of these have been designated as Wetlands of International Importance, under the Ramsar Convention. These are Nuimi National Park, (7,758ha), Tanji (Karinti) Bird Reserve, (612ha) and the Tanbi Wetland National Park, (6,000ha). The other Parks include the following:

- 1. Abuko Nature Reserve in WCR, (105ha)
- 2. River Gambia National Park in CRR-S, (589ha)
- 3. Kiang West National Park in LRR, (11,526ha)
- 4. Bao Bolong Wetland Reserve in NBR, (22,000ha)
- 5. Bolong Fenyo Community Wildlife Reserve in WCR, (379ha)

Mammalian Fauna

Given the distribution of the above Parks and Reserves nationally, and the spread of the GAFSP, the mammalian fauna within the Project area will be influenced by the presence of the Parks, in addition to the sixty-six Forest Parks, and open forests also located in all the Regions of the country.

Whilst in a few of the Parks the mammalian fauna is relatively rich, influenced mainly by the fairly undistributed habitats of parts of the Parks, (e.g. Nuimi National Park, Tanji Bird Reserve, and Kiang West National Park), the majority are of lesser significance in terms of their mammalian populations. In certain Parks (Table 3.6 lists the fauna within them). In the various locations proposed under the GAFSp are primates including the patas monkey (*Erythrocebus patas*), the Guinea Baboon (*Papio papio*) and the Red Colobus monkey (*Colobus badius temmincki*).

The Guinea baboon's habitat includes dry forests, gallery forests, and bush savannahs. It is a diurnal and terrestrial animal, but sleeps in trees or high rocks at night, away from predators. Thus, the number of suitable sleeping trees limits the group size and the range. According to the IUCN the species is "near threatened", globally; however, in The Gambia the population is of least concern, according to the DPWM. Nonetheless, the Biodiversity and Wildlife Act, 2003 accords general protection to certain species including the baboon, manatee and the otter which must be enforced more rigorously. The Red Colobus monkey is one of the other primates found in the Project's area of influence; it is one of the endangered animals of mangrove forests, and like many others, it is herbivorous, impacted specifically, due to logging, indiscriminate destruction of forests and clearing lands, as well as killing "bush meat" are the reasons behind its decline.

Other mammals of significance which occur within the "bolongs", include the African clawless otter (*Aonyx capensis*) classified as "Near Threatened" (NT), and the West African manatee (*Trichechus senegalensis*),

"vulnerable" globally (according to the IUCN Red List). and the hippopotamus (*Hippopotamus amphibious*). The hippo is the main concern for the rice famers due to their destructive habit of rice crops each year, which is a potential problem for the GAFSP in hippo prone areas of CRR-N/S. In spite of hippo protection dikes and canals constructed around some rice perimeters to stop them from entering the rice fields, hippos still present problems to the farmers.

The Reptiles recorded within the areas include the m9nitor lizard agama, etc. Table 3.6 below presents the fauna that occurs within the target GAFSP areas.

| Table 3.6: Mammalian Fauna Found within the GAFSp Target Area, Status Nationally and in IUCN | |
|----------------------------------------------------------------------------------------------|--|
| Red List | |

| Common English Name | Scientific Name | National level Status | Status on IUCN Red List | Source of identification and IUCN status | | | |
|---------------------|---------------------------|-----------------------------|-------------------------------|------------------------------------------|----------------------------|---------------------------|--|
| | | | | During site visit | Reported by Locals/DPWM | Bibliographic research | |
| Sun squirrel | Marmotini spp. | LC | LC | х | x | x | |
| Giant rat | Cricetomys gambianus | LC | LC | х | x | х | |
| Guinea Baboon | Papio papio | LC | NT | x | x | x | |
| Red Colobus monkey | Colobus badius temmincki | EN | EN | x | | х | |
| Green vervet monkey | Cercopithecus aethiops | LC | LC | x | | | |
| Hippopotamus | Hippopotamus amphibius | LC | VU | x | | x | |
| Common Wart hog | Phacochoerus africanus | LC | LC | x | x | | |
| Clawless otter | Aonyx capensis | NT | NT | x | | х | |
| W. African manatee | Trichechus senegalensis | VU | VU | | x | х | |
| Patas monkey | Erythrocebus patas | LC | LC | х | x | | |
| Galago senegalensis | Lesser bush baby | LC | LC | | | | |
| Red skink | Plestiodon fasciatus | LC | LC | х | х | Х | |
| Agama lizard | Agama africana | LC | LC | х | x | Х | |
| Rainbow lizard | Agama africana | LC | LC | х | x | Х | |
| Monitor lizard | Veranus indicus | LC | LC | х | х | Х | |

LC = Least Concern: Evaluated as not being a focus of species conservation; EN = Endangered; VU = Vulnerable; NT = Near Threatened

The Avifauna

The list of bird species recorded within the various Regions, like the mammalian fauna, are influenced by the gazetted Parks and open forests. They include Palearctic migrants⁶, resident species, and species with known African migratory populations occurring in The Gambia, which may include movements within Senegambia. For example, within the NNP, and Baobolong Wetland Reserve (BWR) in NBR, (not concerned with the GAFSp) approximately 300 bird species from 63 families, have been recorded. This diversity of birds results from the range of habitat present within the Parks, i.e. marine, estuary, fresh water swamp, etc.

In the early autumn (October – December) the Palearctic migration gets underway and a large diversity and abundance of species accumulate in the Parks. It is possible that many of these birds will use the areas to build up fat reserves after their migration, before dispersing further into the continent. This way, the Parks are apparently used as corridor to the inland areas of the continent as well as providing extensive wintering grounds for many species. In view of the above, the avifauna within the NNP is of both national and international significance, and the risk of disturbing their migratory activities, should be avoided or minimized.

In other Parks and open forested areas within the Project's area of influence bird species recorded include the starlings, black-billed wood-dove, and even the Quelea have been reported to occur, although in small numbers. However, about five years ago the Quelea birds ravaged rice fields in the LRR, and could

⁶ Palearctic migratory birds are migratory birds that are long-distance migrants that breed in Europe and Southern Asia and winter in sub-Saharan Africa

potentially destroy more rice fields if allowed to establish in these areas. Table 3.7 below presents the avifauna within the Project's potential sites.

| Table 3.7: The Avifauna Found Within GAFSp Target Areas, Status Nationally and Within IUCN Red | I |
|------------------------------------------------------------------------------------------------|---|
| List | |

| Common English | Scientific Name | National | Status | Source of identification and IUCN status | | | |
|----------------------------|------------------------------|-----------------|---------------------|------------------------------------------|----------------------------|------------------------|--|
| Name | | Level Status | on IUCN Red List | During site visit | Reported by Locals/DPWM | Bibliographic research | |
| | | Pheasan | ts | | | | |
| White-throated francolin | Peliperdix albogularis | LC | LC | | х | х | |
| Double-spurred francolin | Pternistis bicalcaratus | LC | LC | | х | х | |
| | | Starling | s | • | | | |
| Bronze-tailed starling | Lamprotornis chalcurus | LC | LC | x | x | х | |
| Chest nut bellied starling | Lamprotornis pulcher | LC | LC | х | x | х | |
| | | Weavers | 5 | • | | | |
| Black-headed weaver | Ploceus melanocephalus | LC | LC | x | x | х | |
| Black-necked weaver | Ploceus nigricollis | LC | LC | х | x | х | |
| Quelea | Quelea quelea | LC | LC | х | | | |
| | Haw | ks, Vultures a | and Eagles | | I | | |
| African harrier-hawk | Polyboroides typus | LC | LC | | | х | |
| Hooded vulture | Necrosyrtes monachus | CR | CR | x | | х | |
| | | Doves | | | | | |
| The red-eyed dove | Streptopelia semitorquata | LC | LC | х | x | Х | |
| Black-billed wood | Turtur abyssinicus | LC | LC | х | х | х | |

Source: Adapted from Nuimi National Park Management Plan

LC = Least Concern: Evaluated as not being a focus of species conservation; CR = Critically endangered

Aquatic Vertebrate Fauna

In the tributaries found within the GAFSp target areas fish species that occur include the African carp (*Labeo spp.*), Tilapia spp., freshwater catfish, (*Clarias lazera*), claroteid catfishes (*Chrysichthys spp.*), the black Nile Catfish (*Bagrus spp.*). Table 3.8 presents the families present.

| Common English Name | Scientific Name | National | Status on | Source of identification and IUCN status | | | | |
|------------------------|--------------------------------|-----------------|------------------|------------------------------------------|-------------------------------------------|--------------------------------------------|--|--|
| | | Level Status | IUCN Red List | During site visit During | Reported by Locals/DPWM Reported by | Bibliographic research Bibliographic | | |
| | | | | Site Visit | Locals/DPWM | Research | | |
| Tilapia | Cichlidae | LC | LC | х | х | х | | |
| African carp | Cyprinidae | LC | LC | х | х | х | | |
| Fresh water catfish | Claridae | LC | LC | x | х | x | | |
| Black Nile Catfish | Bagrus spp. | LC | LC | LC | х | | | |
| Claroteid catfish | Chrysichthys spp | LC | LC | LC | x | | | |
| Mullet | Mugilidae | LC | LC | х | х | х | | |
| Shad/Bonga | Clupeidae | LC | LC | х | х | х | | |
| Puffer fish | Tetraondontidae | LC | LC | х | х | х | | |
| Skipjacks | Elopidae | LC | LC | х | | | | |
| Pinkfin alestes | Alestes spp. | LC | LC | х | | | | |
| Snapper | Lutjanus agennes | DD | DD | х | х | х | | |
| Drums/ Croaker | Pseudotolithus senegalensis | EN | EN | x | x | x | | |
| Jack mackerel | Carangidae | LC | LC | х | Х | | | |

Source: Adapted from Nuimi National Park Management Plan LC = Least Concern: Evaluated as not being a focus of species conservation; DD = Data Deficient; EN = Endangered

Amphibians

The amphibian fauna is largely the Common African Toad (*Bufore gularis*), the Savanna Toad (*B. xeros*), Rocket Frogs (*Ptychadena spp.*) and the Puddle Frogs (*Phyrnobatrachus spp.*) that have been identified.

3.1.3 The Socio-economic Environment

Demography and Population of the Target Regions

This section describes the socio-economic setting of the communities in the three Regions where the Project will be implemented. Essentially the Regions further break down to 22 Distrcits as follows: WCR (8); LRR (6); CRR-N (5); and CRR-S (6). Predominantly agrarian, the three Regions have a combined population of 1,068,152 in 122,456 households, of which women make up 50.6%, (GBOS, 2019). See Table 3.9 below.

GAFSP will target essentially about half of the country's population which comprises four main ethnic groups Mandinka/Jahanka (33.8%); Fulani/Tukulur/Lorobo (22.1%); Wollof (12.2%); Jola/Karoninka (10.9%); Serahuleh (7%); Serere (3.2%); Manjago (2.1%); Bambara (1%); Creole/Aku Marabout (0.8%); Others (0.9%); non-Gambian (5.2%); no answer (0.7%), (GBOS, (2013). Table 3.9 presents the demography of the Regions that the Project will serve.

| Region | # Districts | #Households | Population | | |
|------------------------|-------------|-------------|------------|--------|----------|
| | | | Total | % Male | % Female |
| West Coast Region | 8 | 91,071 | 722,852 | 49.96 | 50.03 |
| Lower River Region | 6 | 10,837 | 101,171 | 47.84 | 52.15 |
| Central River Region-N | 5 | 8,576 | 108,930 | 47.24 | 52.75 |
| Central River Region-S | 6 | 11,972 | 135,199 | 47.92 | 50.07 |
| Total | 25 | 122,456 | 1,068,152 | | |

Table 3.9: Demography of the Potential Project Locations

Source: GBOS, 2019

Disadvantaged and Vulnerable Groups

During Project implementation, it is possible that certain individuals or groups are favored in participating in Project activities, or benefitting from Project inputs due, among other things to their gender, economic status, ethnicity, religion, cultural behavior, sexual orientation, language or physical and psychological health conditions. These, according to the Bank's ISS, are regarded as vulnerable individuals or groups; they are particularly marginalized or disadvantaged, and might thus be more likely than others to experience adverse impacts from a project. Vulnerable groups may also include, female-headed households, those below the poverty line, the landless, those without legal title to assets, ethnic, religious and linguistic minorities, Indigenous Peoples, etc.

According to the Table 3.9 above, women form more than 50% of the population of the communities; they are however generally often marginalized in the decision-making process, especially as it relates to the allocation of agricultural land. The impact of this marginalization is compounded by cultural norms and customs which tend to privilege men and boys over women and girls. In this regard, women benefitting from the Project could be jeopardized in that land use and tenure rights tend to disfavor women as important decisions relating to land are made by the men, including inheritance, ownership, among others. Even though women farmers engage in cash crop production, just as men, production inputs and assistance in the process of this Project's implementation could be tilted in favor of the men, given the male-dominated environment within these localities; the benefits would fall disproportionately on the women.

Given their social status therefore, women would be considered a disadvantaged and vulnerable group in the GAFSp. Another group of persons, includes the elderly and minors, and persons with disabilities. These persons are more likely to be adversely affected by the Project impacts and/or more limited than others in their ability to take advantage of the Project's benefits. They are also more likely to be excluded from, or unable to participate fully in the mainstream consultative process and as such may require specific measures and/or assistance to do so. Similarly, persons with disabilities and the elderly can also be affected; for example, they may be unable to attend meetings for reasons due to their inability to reach the venues, and in this way will be excluded, and their voices and opinions may not therefore be considered.

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

Gender and Gender-Based Violence (GBV)

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

Nonetheless, in traditional Gambian society it is the women who are more often subjected to GBV based on their cultural roles and responsibilities, to the effect that inequality between men and women is perpetuated. In 2018, The Gambia was ranked 150th out of 189 countries with a score of 0.620, according to the UNDP Human Development Report's Gender Inequality Index. It will be noted that the majority of the poor and extremely poor in the country is made up of the women; generally, their access to land is largely based on customary law where the land belongs to founding families, and the user rights of in-married women depend on the continuation of their marriage within the family. Furthermore, women often lack access to credit for income-generating activities, and generally have a limited role in decision-making that affects their lives. This disadvantaged position of women in the family is deeply rooted in gender inequality, and it contributes to gender-based intimate partner violence.

As it does happen often, GBV can cause economic harm to an individual through for example, property damage and restriction of access to resources; by impacting the person's personal health and safety, leading to social exclusion; and by fostering dependency on their partners for all material needs which can often perpetuate the cycle of violence. Given the traditional and customary set-up in communal land use as noted above, in the event of resettlement of, for example, lost crop, or for any other social impact the Project may cause, the women participating in the GAFSp could be impacted the most in accessing financial resources paid as compensation.

In view of the above, particular attention will be paid to the needs of those impacted, including women and children, those below the poverty line, the elderly, etc.

Violence Against Children (VAC)

Violence Against Children (VAC) is defined as physical, sexual, emotional and/or psychological harm, neglect or negligent treatment of minor children (i.e. under the age of 18), including exposure to such harm,⁷ that results in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power. The use of children for profit, labor⁸, sexual gratification, or some other personal or financial advantage is regarded as VAC. This also includes other activities such as using computers, mobile phones, video and digital cameras or any other medium to exploit or harass children or to access child pornography. During Project implementation, the potential areas where this can be manifested may include:

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

⁷ Exposure to GBV is also considered VAC.

⁸ The employment of children must comply with all relevant local legislation, including labor laws in relation to child labor and World Bank's safeguard policies on child labor and minimum age. They must also be able to meet the project's Occupational Health and Safety competency standards.

In this regard, the PMT and Contractors must ensure that no aspects of the Project works involve children under the minimum age of 16 for light work (as per *The Children's Act*, 2005) and none under the age of 18 for hazardous work, and work that impacts their schooling and social or moral development.

The Labour Act, 2007 prohibits children under 18 from engaging in agricultural, industrial or non-industrial work for economic gains. In addition, to strengthen and protect workers against possible violence and exploitation, the Bank's OS 5 (Labour conditions, health and safety) establishes that workers' conditions, rights and protection from abuse or exploitation must be protected.

Given the above, it will be emphasized that the Codes of Conduct and Action Plan for Implementing ESHS and OHS Standards, and Preventing Gender Based Violence (GBV) and Violence Against Children (VAC) (see Appendix 3.1) will be included in the Contractors ESMP, rigorously applied, and monitored for compliance.

Gender and Youth in the GAFSp

The youth within GAFSp target areas are an important part of the population that could benefit from the Project; nationally, they form an estimated 53.8% of the population, (that is the age cohort between 10-39 years), (GBOS, 2013), and this figure is expected to rise.

Unfortunately, the youth are disproportionately over-represented in the rank of the unemployed and underemployed, facing challenges such as limited job opportunities, inadequate employable skills, and limited access to productive assets. Ultimately, the high rate of unemployment causes frustration, dejection, desperation and dependency, and the situation has left the youth in a vicious cycle of poverty that daily erodes their confidence and bright future. A consequence of this is the high number of young people leaving the country to undertake work in Europe with potentialities for exploitative or unsafe work.

Youth inclusion therefore is expected to be an underlying principle of the GAFSp in all its design stages, implementation, monitoring, tracking and reporting results. The Project will, for example under Subcomponent 1.1 (*Strengthening Skills, Productivity, Commercialization and Climate Resilience)* design approaches to strengthen youth and women managed enterprises to have access to a dedicated technical assistance package that includes technology, business skills development, leadership coaching and networking for business management. It will also support establishment of Youth Enterprises along the HGSF value chain.

In addition to addressing issues related to the youth, the Project will focus on gender equality and empowerment specifically by:

- i. Identifying and analyzing gender and youth empowerment issues at all levels
- ii. Ensuring that the Project adopts a gender sensitive and youth empowerment approach during Project design and implementation for effective gender responsiveness in all activities
- iii. Utilizing an evaluation strategy that includes an analysis of the Project's gender and youthspecific impacts. A comprehensive gender and social analysis of the project will be done during appraisal

Access of the Population to Education

Given that the GAFSp is conceptually centered around schools in the three Regions, its design will emphasize HGSF, and use the schools as its unit of analysis, focusing the school-aged children. In addition, all the three target Regions have schools of different levels ranging from Lower Basic to Senior Secondary Schools, Colleges and a University. Indeed, the Project is targeting 200 schools in the three Regions.

Access of the Population to Health

Another set of social service that the populations in the three Regions have access to is the national health service. Like the schools, the population has access to various levels of government-run health facilities ranging from health posts, to Minor and Major Health Centers, and a Referral Hospital in Bansang in CRR-S. In LLR, there is the Medical Research Council (MRC) health facility in Keneba which covers the entire Region, but mainly the Kiang Districts; Mansakonko (the capital of LRR) hosts a major health facility that serves nearby Districts such as Jarra West, and Kiang Central.

A hospital is located in Brikama (capital of the WCR), in addition to other major and minor health centers located in various major towns in the Region, including Gunjur, Sukuta, Brufut, etc. The main referral Hospitals (Serekunda General Hospital and the main national Teaching Hospital in Banjul) are also available to the populations.

In addition to these public services various private Clinics and hospitals are located in the major towns and communities within the Regions.

Access of the Population to Electricity, Telephone Sevices

Given that much of the target areas in the Regions are far removed from major towns, elctricity supply from the NAWEC grid has not reached some locations, and thus, are without electricity; there is however the use of diesel or petrol powered generators, and also small off-grid private solar lighting facilities used by a relatively few households.

Since the Project plans to invest in post-harvest management of perishable produce such as vegetables and poultry products that require a cold-chain, further study in the application of stand-alone solar off-grid plants to power the target schools should be carried out. This will include possible replication of the ActionAid experience in CRR-S, used mainly for cooling poultry products.

Incidentally a World Bank/EU/EIB electricity modernization Project is planning to install off-grid solar plants for schools and health facilities in various parts the country. The GAFSp initiative in investing in cold-chains in schools could piggy-back on the solar-off-grid electricity Project under the MOBSE.

Mobile network services are operational within all three target Regions, operated by the national operator Gamcel, and other private companies such as Africell, Qcell, and Comium.

Chance Finds and Cultural Heritage and Archaeology

There is always a possibility of finding items or objects of cultural heritage by chance, particularly during land clearing and preparation for agriculture, and for civil works (including road construction, building of school infrastructure such as kitchens, grain storage and bulking facilities, etc.). These may be disturbed or lost due to lack of knowledge in managing cultural heritage discovered by chance.

Physical cultural heritage is considered a unique and often non-renewable resource that possesses cultural, scientific, spiritual, and/or religious value; they include moveable or immovable objects, sites, structures, groups of structures, natural features, or landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural value. Examples of different physical cultural heritage are:

- Archaeological sites
- Historic structures
- Mosques or similar place of worship
- Historic districts or cultural sites and landscapes, including cemeteries
- Archaeological artefacts

In this regard, the Bank's OS1 requires that the siting, design, construction and operation of Bank-funded projects should avoid significant damage to cultural heritage (both physical and intangible). Where cultural heritage is likely to be affected by the Project it shall be identified and qualified, and experienced experts called in to assess the GAFSp's potential impacts on the cultural heritage. Appendix 3.2 indicates the procedures to employ when a Chance Find is made during Project implementation.

Modes of Subsistence and Daily Chores in Potential GAFSp Locations

This section describes the various daily activities that are carried out by the populations within the target GAFSp communities to meet their daily subsistence needs. These activities include the listed below.

Agricultural Production

The communities within the Project area rely almost exclusively on agriculture for their subsistence. Like other parts of the country, Gambian agriculture is characterized by little diversification, and is mainly subsistence rain-fed, and semi-intensive cash crop production. Smallholder farmers, including women generally practice mixed farming, producing food crops comprising cereals (early millet, late millet, beans, maize, sorghum, rice and "findo"), although cash crops (including groundnuts, cotton, sesame), account for a greater portion of the production.

The cultivation of horticultural crops (vegetables and fruits) is also practiced mainly by women farmers growing pepper, bitter tomatoes, okra and sorrel, etc. operating in all in the Regions, but mainly operating in the WCR (being in AEZ 3- Sudano-Guinean Zone) a key area for vegetable and other horticulture products, where the climate is more favorable for such crops. Although the crops are mostly grown at subsistence level, some portions of the produce are auto-consumed and the balance commercially traded in the village markets, and where necessary at weekly markets. The operational constraints of the women farmers include the following:

- Lack of access roads to and within rice fields for easy access
- Production and processing hampered by lack of equipment such as power tillers tractors and threshers
- Inadequate inputs (seeds, and agro-chemicals)
- In adequate trainings on production and marketing technologies
- Lack of access to credit facilities

Trading, Shop keeping and Marketing of Agricultural Produce

Numerous shops and business outlets occur within the communities proposed for Project intervention, where items on sale include various types such as building materials (cement, corrugated iron sheets); food and beverages (rice, tomato puree, cooking oil, soft drinks); fruits and vegetables grown within the communities (mango, cassava, pumpkin); second hand clothes and shoes, etc.

In addition to these village shops, the regular village markets, (where they exist) some peri-urban markets are the outlets that the women rely upon to sell their produce. These markets are characterized by their small size, inadequate infrastructure, easy entry and exit, and operational imperfections devoid of proper price determination mechanisms.

Other marketing outlets include the weekly markets (locally called "loumo") which are held regularly in different places on different days; these markets form the biggest outlet for agricultural produce from the different communities. On "loumo" days there is usually a brisk trade from as early as 8 a.m. to 5 p.m., and people travel from various surrounding communities to sell and buy agricultural produce including vegetables, chicken, cattle, farming equipment, etc.

Generally, the "loumo" sites are too far from the vegetable gardens, and frequently results in post-harvest losses. Furthermore, prices are always "fixed" by buyers and middlemen, and the women have to sell at the price dictated by the middlemen, or they end up throwing away the produce at the end of the market day. Because they cannot afford to take the produce back home where they do not have storage facilities, they end up selling the produce at a loss. The constraints that the women farmers express include the following:

• Lack of water to irrigate their gardens; usually, the wells are too deep (being up to 8 to 10m deep) in some areas; they therefore request for boreholes

- Difficulty in accessing inputs such as seeds and fertilizer. Seeds and fertilizer are mainly purchased from "loumos" at very expensive prices, and often the quality of inputs cannot be guaranteed
- The need for good post-harvest storage facilities to reduce losses, particularly perishable ones such as tomatoes
- The need for capacity building in agro-processing the lack of which largely contributes to the high rate of perishability of their produce. Apart from okra and onions, their capacity for processing of horticulture produce is generally lacking
- Inadequate knowledge and skills related to business management
- Unorganized and lack of negotiation power by women groups to attract better prices of their produce

Harvesting Wood and Non-wood Forest Products

The Project will target communities where men and women, children, youth collect medicinal plants, herbs and the bark of trees, and wild fruits for personal consumption. These non-wood products include honey, the African locust bean, "neto", Chinese date "tomborong" and bush mango "wulakono duto", etc. The fruits are sometimes sold within the villages to supplement the household income. The "dimba" or "wulakono duto" is especially much loved by the local people in their diet, and is one of the reasons it is rarely felled on the farms.

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

Firewood Collection

Almost all the communities, particularly in LRR, and the CRRs are dependent on the vegetation and forest resources for the provision of firewood as fuel. These are collected from the forest for domestic and possibly livelihood use. Members of the communities collect firewood and sell by the road side to passersby. This is an important trade as this is the main form of fuel for domestic use in the Kombos and Greater Banjul Area.

It is not uncommon that unscrupulous persons use fire to kill the trees and thus ensure continuous supply of wood; clearly this practice could result in deforestation.

Livestock Rearing

Cattle are reared by the community members, allowed to range over the bush, and on crop residues after the harvest. Poultry are raised at the household level, and small ruminants (sheep and goats) graze close to the villages and are corralled within the compounds at night. Cattle are corralled by tying to stakes in areas peripheral to the village. Draft animals (donkeys, horses and mules) are also kept mainly for cultivation in the fields.

Fishing

This is another important economic activity within the communities. Local professional fishermen operate within the tributaries ("bolongs") and the main river, using traps and locally made equipment to catch fish mainly for home consumption, and any surplus is marketed within the village.

The species that make up their catches often include fish such as the tilapia, labeo, Black Nile Catfish (*Bagrus spp.*) "koso"; the thick-lipped, sucking mouth carp locally "kulundomo", (*Labeo spp.*); tilapia or "furo"; the fresh water cat fishes "konokono" (*Clarias spp.*); and "wali nyaba" (*Chrysichthys spp*).

In addition to the local species and catch, itinerant fresh fish traders do travel in pickup trucks loaded with fresh fish from the Atlantic coast; they would drop off quotas to commissioned fish traders who would break

up the bulk to sell at the local level. These species of salt water fish include the bonga, or "chalo" (*E. fimbriata*) and "yai boye" (*Sardinela spp*.)

CHAPTER 4.0 RELEVANT LEGAL AND INSTITUTIONAL FRAMEWORK

This section of the ESMF report describes key national policies and international treaties, (to which The Gambia is a signatory) national laws, regulations, that apply to the environmental, health, safety, human rights and social aspects of the proposed GAFSp.

National policies present the general principles that guide the Government of The Gambia in achieving its various strategic goals. The specific objectives of the regulatory framework review are:

- To identify policies, laws and regulations relevant to the environmental, health, safety, human rights and social aspects of the Project, and to the conduct of the ESIA
- To identify environmental standards prescribed under national legislation that are relevant to the Project (such as waste management, waste water discharge and air emissions)
- To identify international conventions to which The Gambia is a signatory that are relevant to the Project

4.1. The Relevant National Policies

Table 4.1 below pesents the national policies that will guide GAFSp implementaion.

| Table 4.1: Relevant | National Policies |
|---------------------|-------------------|
|---------------------|-------------------|

| Policy | Description | Relevance to GAFSp |
|--------------------------------|-----------------------------------------------------------|-------------------------------------------------------|
| Gambia Environment Action | Integrated environment and natural | Provides guidance in general environmental |
| Plan, GEAP (2019-2029) | resources management | planning and natural resources management |
| National Climate Change Policy | Policy provides the framework for | Project will promote and encourage climate smart |
| (2016 – 2025) | managing climate risks, building | agriculture options |
| | institutions, capacities, and | |
| | opportunities for climate-resilient development | |
| National Agricultural Sector | Provides framework for the | GAFSp activities aim to improve national food |
| Strategy (NASS, 2014) | development of the sector; aims to | security and nutrition for poor rural school children |
| | reduce Gambian dependence on | |
| | food imports, and improve food | |
| | security and nutrition | |
| ANR Sector Policy (ANRP, 2017- | Provides the framework for the | Provides the national Policy support for the GAFSp |
| 2026) | development of the Agriculture sector in the medium-term. | |
| | | |
| The National Home-Grown | In draft form, this is an important | The HGSF Policy has the potential to assist projects |
| School Feeding Policy | institutional framework that needs | such as the Governmnet and WFP-run home-grown |
| | further development and | school feeding activities. |
| | finalization | Policy needs to be adopted to support the HGSF |
| | | Program |
| National School Feeding Policy | The policy ensures that all school | An important thrust of GAFSp is ensuring nutritious |
| (2015) | going children in public schools | meals to scholl going children in the proposed |
| | have affordable nutritious school | Project areas |
| | meals, a sustainable school | |
| | feeding program, improved nutrition and health | |

| The National Health Policy, 2012-2020 | Protects public and environmental health including nuisance and other | Relevant to the Project since dust, noise and other risks can be associated with the Project's activities |
|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | risks associated with this Project | such as in vegetable and rice production, feeder road construction/upgrading |
| National Council for Arts and Culture Act, 2003 | Act empowers the Council to assume control and preserve, restore any monument, relic, ethnographical article, or other article of archaeological, ethnographical, or historical relevance | There is a possibility of finding cultural heritage by chance, particularly during land clearing and preparation for works. These may be disturbed or lost due to lack of knowledge in managing cultural heritage discovered by chance |
| Forestry Policy (2010-19) | Promotes state and community forest development and management | Agricultural land for vegetable and rice production will be required for implementation of the Project. Siting of fields could impact forest areas, especially as sixty-six gazetted Forest Parks are located in various parts of the country, some of which could be impacted by the Project |
| The National Biodiversity Strategy and Action Plan (NBSAP), 2015 | The NBSAP provides the framework for the conservation and sustainable use of biodiversity | Seven gazetted national parks and wildlife reserves are in various parts of the country that could be impacted by the Project. In addition, other ex-situ biological diversity could be impacted as well |
| National Policy for the | Policy provides a legitimate point of | Relevant to this Project since it will benefit both men |
| Advancement of Gambian | reference for addressing gender | and women equitably |
| Women and Girls (1999-2009) | inequalities at all levels of government and all stakeholders | |
| Gambia National Gender & | To mainstream gender in national | Women will be consulted widely, and will be |
| Women Empowerment Policy | and sectoral planning and | involved in the local monitoring and evaluation |
| (2010–2020) | programming to ensure equity and equality | process during project implementation |
| National Development Plan | This is the principal national Policy | Project is aimed at developing sustainable food |
| (2018-2021) | blue print that provides the overall | systems for improved livelihoods national, this is |
| | direction for the country from 2018- | one of the target areas of the NDP |
| | 2021. It lays emphasis on priority areas for development within this | |
| | planned period | |
| National Transport Policy, (2018- | Defines the priorities and | GAFSp plans to construct/upgrade feeder roads |
| 2027) | objectives in the road transport sector, aimed to serve the country's development goals | which must abide with this Policy |
| National Youth Policy | Policy aims to mainstream youth | Successful project implementation will enhance the |
| (2009–2018) | issues into the advancement of all sectors | youths' engagement in agriculture and related value-chain activities which could reduce youth underemployment |
| The Gambia National Social | Policy aims to establish an | Successful implementation of Project will promote |
| Protection Policy 2015-2025 | inclusive, integrated and | social protection and food safety net programs to |
| | comprehensive social protection system that will safeguard the lives | reduce food and nutrition security of vulnerable |
| | of all poor and vulnerable groups in | populations in the Project areas |
| | The Gambia | |

In addition to the above policies, several pending policies are envisaged, to enhance investment and implementation of GAFSp, and these include:

- The Agriculture Extension Policy, which when approved, will guide technological outreach to farmers for enhanced production and productivity
- The Irrigation Policy, which will guide water usage, charges, etc. for rational use of both surface and ground water resources and reduce dependence on rain-fed agriculture
- The School Feeding Policy (final draft stage) and Strategy, which will give precise orientations in terms of planning, implementation, menus, demand of foodstuff, budgeting, procurement guidelines, and other details related to the sustainable and

national implementation of the program. It will also include a transition (handover) strategy from WFP to the government

4.2 The Relevant International Conventions and Agreements

The Gambia is signatory to a number of international agreements relevant to the Project, and these are outlined in Table 4.2 below.

| Agreement/Convention | Objective | Relevance to GAFSp |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| United Nations Convention on Biological Diversity (CBD) | Convention has three main goals including: the conservation of biological diversity; the sustainable use of its components; and the fair and equitable sharing of benefits arising from genetic resources | Land clearing and potential burning in preparation of land for rice and vegetable production and to construct relevant infrastructure (storage facilities, etc.) will impact existing biodiversity in Project affected areas. Includes possible loss of trees/vegetation and dependent biodiversity |
| Convention to Combat Desertification (CCD) | To combat desertification and mitigate the effects of drought | Project's activities such as potential land clearing and burning in preparation for farming and construction of relevant infrastructure could create environments prone to encourage desertification |
| UN Framework Convention on Climate Change (UNFCCC) | Aims to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system | Relates to the farming activities of the Project especially in land and vegetation clearing. The loss of trees and vegetation will mean loss of "green cover" and loss of carbon capture footprint |
| Ramsar Convention | Aims for national action and international cooperation for the conservation and wise use of wetlands and their resources | Project will be implemented in wetland areas, which include irrigation rice perimeters in LRR, CRR-N/S. project must ensure wise use of these wetlands. |
| United Nations Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) and the Optional Protocol to the Convention on the Elimination of All Forms of Discrimination against Women (OP-CEDAW) | Convention highlights the right of women to own, manage, enjoy and dispose of property as central to their financial independence and may be critical to their ability to earn a livelihood and to provide adequate housing and nutrition for themselves and for their children | Women are the main targets of the Project, and will ensure that they have access to benefits of this Project in the same way as men |
| United Nations Convention on the Rights of the Child (UNICEF 1989) | Sets out the civil, political, economic, social, health and cultural rights of children. Other rights in the treaty include the right to education, the right to play, 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 rice perimeters |

4.3 The Legal Framework Relevant to GAFSp

The Table below presents the relevant legal framework that will guide GAFSp implementation.

Table 4.3: The Legal Framework Relevant to GAFSp

| Legislation | Description | Relevance to GAFSP |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| National Environment Management Act, 1994 | Principal legislation in environmental management; Part V of Act provides for certain projects listed under Schedule A to be considered for ESMF/ESIA | This Project falls under Schedule A which requires an ESMF/ESIA |
| Environmental Impact Assessment Regulations, 2014 | The EIA Regulations elaborate on the requirements for EIA procedure, environmental impact statements, approval, environmental monitoring, etc. | The Regulations provide more details for the ESIA of sub-projects and implementation of the sub-project ESMPs |
| Hazardous Chemicals and Pesticides Control and Management Act,1999 | Act provides for the control and management, manufacture, distribution and use of hazardous chemicals and pesticides, and to make provisions for the matters connected therewith It also provides protection to human health and the environment through the control of hazardous chemicals | Pesticides and other hazardous chemicals could be used in the production of crops |
| Ozone Depleting Substances (ODS) Regulations 2009 | Sets out rules on the production, import, export, placing on the market, use, recovery, recycling, reclamation and destruction of substances that deplete the ozone layer | The potential for the Project to use ODS in the cooling of products will be guided by this Regulation. |
| Local Government Act, 2002 | Act makes provisions for decentralized administrative structures including devolution of functions, powers and duties to local authorities | Implementation of the Project will require the participation of decentralized institutions including the Offices of the Governors of CRR, LRR, and WCR as well as their respective Technical Advisory Committees (TACs) |
| The Forest Act, 2018 | Provides framework for implementation of Forestry Policy, and framework for the reservation and management of forests | Sixty-six gazetted Forest Parks are located in different parts of the country, including proposed project sites; some of these may potentially be affected by the project |
| Biodiversity and Wildlife Act, 2003 | Provides for the protection of biodiversity and the establishment of protected areas | Seven gazetted national parks and wildlife reserves are in various parts of the country that could be impacted by the Project. In addition, other ex-situ biological diversity could be impacted as well |
| Gambia Roads Technical Services Authority Act, 2003 | Act empowers National Roads Authority to be responsible for the maintenance, construction, and safety of the national road network, including feeder roads | The feeder roads to be financed by the Project should abide by the provisions of the Act |
| Public Health Act, 1990 | Protects public and environmental health including abatement of nuisances and any condition that may be injurious to health | Relevant to Project since dust, noise and other risks can be associated with the Project |

| Labor Act (2007) | Provides the legal framework for administration of labor, recruitment and hiring of labor, and protection of wages | The project hiring and management of its labor force should adhere to this framework |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The Children's Act 2005 | Act sets out the rights and responsibilities of children and provides for their care, protection and maintenance | Rights of children impacted by the Project need to be protected |
| 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 in view of potential impact on agricultural land farmed by women; need to avoid gender based violence (GVB) and sexual exploitation and abuse (SEA) |
| Anti-littering Regulations, 2007 | Addresses waste management and pollution issues in relation to environmental health and hygiene | The Project must ensure that all waste produced during all phases is well managed |
| 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 potential to generate dust, and to pollute surface fresh waters, ground waters as are found within the project's area of influence. |
| 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 in to surface waters (such as rivers or streams) | Project implementation has potential to discharge potentially polluting liquids into the tributaries and other surface water bodies as may be found with the project's Aol |

4.4 The Relevant Institutional Framework

Government institutions are not expected to participate in the Project, or benefit from the Project, especially from training activities; they would neither be on the Project's PSC. Nonetheless its implementation will be carried out within the context of the respective policies and laws for which Government institutions have legal oversight. The institutions that will participate in the PSC will include the following listed in Table 4.4A. National institutions that can provide technical advice will include as listed in Table 4.4B

Table 4.4A: Institutional Framework

| Institution | Responsibilities |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ActionAid | To be involved in training, extension and other support services to farmers and villages in the Project areas |
| CFAN | Represents commercial farmers and other small (private) business in the agriculture sector, will provide and support initiatives to leverage private sector development and engagement in Project implementation |
| NACOFAG | Apex of a national network of agriculture producers' associations, will focus on coordinating farmer associations in production and post-harvest management |
| WFP | Execute and implement Project on behalf of Government; host the GAFSp PMT, PSC, GRM/GRC |
| UNFPA | Will use national experience in support of the health and wellbeing of women; use its expertise in building and setting up management of commercial activities; support the PSC, especially related to gender-sensitive activities of the Project |

| Institution | Responsibilities | |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| | • | |
| NEA | The NEA enforces the NEMA, 1994 and EIA Regulations 2014 including sub-project classification, approves environmental statements and monitoring sub-project ESMPs, etc. This responsibility could be delegated to a private entity if necessary, but in consultation with the Agency | |
| Ministry of Lands and Regional Administration | Oversees all the local government authorities and enforces all legal regulations on land administration and land use. Its regional representatives are the TACs located in the offices of the Regional Governors. The TACs will support the implementation and monitoring processes of the Project at Regional level | |
| Ministry of Health | Responsible for overall formulation and direction of the national health agenda, planning and health infrastructural development. Local health facilities will potentially manage the Project's health and safety risks such as the impacts of air and water pollution on the populations; malaria and other water-borne diseases due to long-term inundation of rice fields | |
| Ministry of Women, Children and Social Welfare | Ministry will serve on the Grievance Redress Committee (GRC) within the Grievance Redress Mechanism to oversee issues related to GBV/VAC. Women's Bureau will train members of GRC on GBV and VAC; play the role of the Service Provider using its experience and ability to support survivors of GBV | |
| Department of Forestry (DOF) | Agricultural land for vegetable and rice production will be required for implementation of the Project. Siting of fields could impact forest areas, especially as sixty-six gazetted Forest Parks are located in various parts of the country, some of which could be impacted by the Project. DOF will therefore monitor project activities near forested areas to maintain national forest cover. | |
| Department of Parks and Wildlife Management | Loss, fragmentation and degradation of habitat through land clearance for agriculture, or new roads and upgrading of existing roads may be avoided or minimized with advice from DPWM | |
| Offices of the Governors of CRR, LRR, and WCR | Oversee the ANR/EIA Working Groups of the Regional TACs. The TACs will be responsible for monitoring Project implementation within the Regions based on the ESMPs. | |

 Table 4.4B:
 Institutional Framework to Provide Technical Advice

4.5 Relevant Bank Policies

The AfDB ensures that its operations comply with its Operational Safeguards (OSs) by assessing environmental, climate change and the social risks and impacts as early as possible in the project cycle. Essentially the Bank has developed five OSs, and the Table below presents the relevant Policies that have been triggered by the GAFSp.

| Operational Safeguards | Description | Relevance to GAFSp |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OS 1: Environmental and Social Assessment | Sets out the Bank's overarching requirements to identify, assess, and manage the potential environmental and social risks and impacts of a project. Requirements include: climate change vulnerability assessment; public consultation; appraisal and treatment of vulnerable groups; grievance procedures | Preliminary evaluation (literature reviews, etc.) has identified potential negative environmental and social impacts. There is therefore need for environmental assessment to ensure appropriate mitigation measures are put in place during all stages of the Project |
| | OS1 requires that the siting, design, construction and operation of projects should avoid significant damage to cultural heritage (both physical and intangible). These include culturally sensitive sites such as mosques, cemeteries, historical relics and artefacts | During Project implementation, there is possibility of finding items of cultural heritage by chance, particularly during land clearing and preparation for works. These may be disturbed or lost due to lack of knowledge in managing cultural heritage discovered by chance |

| OS-2: Involuntary resettlement: land acquisition, population displacement and compensation | Seeks to ensure displaced persons due to Project activities are treated fairly, equitably, and in a socially and culturally sensitive manner; that they receive compensation and resettlement assistance so that their standards of living, income-earning capacity, production levels and overall means of livelihood are improved; and that they share in the benefits of the project that involves their resettlement | There is likelihood of social impacts which may lead to compensations; these may include loss of economic trees, agricultural crops, temporary loss of earnings, etc. as a result of the Project |
|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OS-3: Biodiversity, renewable resources and ecosystem services | Policy prescribes requirements to identify and implement opportunities to conserve and sustainably use biodiversity ⁹ and natural habitats ¹⁰ | There are sixty-six gazetted Forest Parks and seven National Wildlife Parks and Reserves in different parts of the country, including potential Project sites. Project activities could be implemented within or near some of them, resulting in land conversion, natural habitat loss, deforestation, etc. |
| Climate Safeguards System (CSS) | The CSS provides a set of decision- making tools and guides to enable the Bank to screen projects for risks associated with climate change. Following screening the Project will be classified | GAFSp and similar Projects are usually classified as Category II, indicating that it will be affected by climate change impacts |
| OS-4: Pollution Prevention and Control, Greenhouse Gases, Hazardous Materials and Resource Efficiency | This safeguard covers the range of impacts of pollution, waste, and hazardous materials for which there are agreed international conventions and comprehensive industry-specific standards, particularly the Environment Health and Safety (EHS) Guidelines (See Appendix 3.1) | Project implementation will result in generation of various forms and types of waste, and other gaseous and liquid pollution. Activities such as agricultural production, (e.g. land preparation and use of agro-chemicals); use of fuel wood in food preparation for schools; post-harvest processes (e.g. milling operations, cold-chains in the processing of poultry products and vegetables); road construction and rehabilitation works, etc. that will be carried out during Project implementation |
| OS 5: Labor Conditions, Health and Safety | Policy outlines the need for contractors and other actors to: protect workers' rights; establish, maintain, and improve the employee–employer relationship; protect the workforce from inequality, social exclusion, child labor, and forced labor; establish requirements to provide safe and healthy working conditions | The Project hiring and management of its labor force should adhere to this framework |

It is important to note that when national legislation and regulations differ from the standards and measures presented in the EHS Guidelines, whichever is more stringent would prevail.

⁹Biodiversity is "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species, and of ecosystems" (The Convention on Biological Diversity).

¹⁰ Habitat is defined as a terrestrial, freshwater, or marine geographical unit or an airway passage that supports complexities of living organisms and their interactions with the non-living environment (IFC PS 6 (Version 2010)).

CHAPTER 5.0 PUBLIC CONSULTATION AND DISCLOSURE

This chapter presents the approach to be taken by GAFSp and specialist consultants in order to conduct stakeholder consultation in the process of developing sub-project ESIAs/ESMPs, in line with AfDB's OS 1. It describes the process of public consultation and disclosure that must be undertaken in the design, development and implementation of the Project.

It will be noted however that in developing this ESMF, extensive consultations especially with the affected communities and traditional leaders in the Project areas could not be carried due to the COVID-19 pandemic. The public has been advised by the Government and the World Health Organization (WHO) to exercise social distancing, among other precautionary methods. Furthermore, Emergency Regulations instituted by the Government, and currently in place prohibit public gatherings (including religious prayer gatherings in mosques and churches) to prevent and reduce the risk of transmission of the virus.

Thus, in the start-up meetings during the inception period of this contract, it was agreed that visits to potential Project sites should be postponed for the time being, given the current COVID -19 pandemic. Nonetheless, taking into account the need for compliance with national laws, as well as WHO advise, measures were taken to identify project activities for which engagement is critical and cannot be postponed without having significant impact on Project timelines. Large public meetings were avoided, and instead consultations with local and national government agencies, on one on-one consultations, or in small-group sessions were conducted, including telephone conversations, where possible. The summary of the consultations is attached as Appendix 5.2, and the list of persons/institutions met is in Appendix 5.3. Figure 5.2 shows the meeting with the Executive Director of NEA



Figure 5.1: Consulting with members of CFAN

Source: Cham, 2020

Barring an extra-ordinary circumstance as has been experienced with the COVID-19 outbreak, it will be stressed that public consultation with the relevant stakeholders must be undertaken because it is an integral part of the ESMF/ESMP process. Therefore, in developing sub-project ESIAs/ESMPs by specialist consultants, extensive consultations with affected communities, including local traditional leaders in Project affected areas must be conducted.

Figure 5.2: Consulting with the Executive Director of NEA



Source: Cham, 2020

It is a process through which the stakeholders influence and share control over development initiatives and the decisions and resources that affect them. In practice this involves employing measures to: identify relevant stakeholders, share information with them, listen to their views, involve them in processes of development planning and decision-making, contribute to their capacity-building and, ultimately, empower them to initiate, manage and control their own self-development.

The key focus of meaningful consultation is equity and inclusivity; for example, the approach taken needs to ensure that all groups (including those that are disadvantaged or vulnerable) are included in the consultation process on equal terms, and that all groups are given the capacity to express their views with the knowledge that these views will be properly considered. From their contributions and recommendations, it is possible to modify or change the project design. Since it is a two-way process between the Project and its affected communities and other stakeholders, the process will allow GAFSp to provide information on the Project (mainly the objectives, scope, timing and potential environmental and social impacts and risks associated with it) in a way that can be understood by all. The process is depicted in the Box below:

Consultation 1.

- 1. Information-sharing: dissemination of documents, Public meetings, information seminars.
- 2. Listening and learning: field visits, interviews, consultative meetings.
- 3. Joint assessment: participatory needs assessment, beneficiary assessments

Participation 2.

1. Shared decision-making: public review of draft Documents, participatory project planning, workshops to identify priorities, resolve conflicts, etc.

2. Collaboration: joint committees or working groups with stakeholder representatives, stakeholder responsibility for implementation.

3.Empowerment: capacity-building activities, self-management support for stakeholder initiatives.

It will be emphasized that the approach to be adopted in the consultation process will be guided by the following principles:

Free: Engagement will be free of external manipulation or coercion and intimidation

- *Prior:* Engagement will be undertaken in a timely way and prior to decisions being made so that views expressed can be taken into account
- *Informed:* Relevant and understandable Project information will be disclosed to help stakeholders to understand the risks, impacts and opportunities of the Project

5.1 Stakeholder Identification and Analysis

Criteria used in the selection of stakeholders to be consulted will be based on the level of the different stakeholders' potential involvement in the Project. In this Project the following stakeholders should be consulted, and is further detailed out in Tables 5.1 and 5.2 below:

- Affected communities: These include the people or communities located in GAFSp area of influence, particularly those close to the existing or proposed project facilities, who are subject to actual or potential direct project-related risks and/or adverse impacts on their physical environment, health or livelihoods
- Local and national government agencies: These include central and local government institutions
 whose support is critical to the success of the Project. Continuous engagement with these regulatory
 and public service authorities is often required. Even though central and local government agencies
 are not involved directly in GAFSp, and so will not benefit from any capacity building and training
 activities offered by the Project, local government authorities may have long-established
 relationships with affected communities and other local and national stakeholder groups, and
 therefore can play a role, for example, in convening and facilitating discussions between the Project
 and stakeholders.

This category of stakeholders will include the NEA and the EIA Working Group¹¹, MOBSE, Ministry of Agriculture (MOA), the Technical Advisory Committees (TACs)¹² in the Offices of the Regional Governors in CRR, LRR, and WCR, and the National Roads Authority (NRA)

- **Traditional leaders**: Traditional leaders (such as District Chiefs, village leaders or Alkali, religious leaders, etc.) can play the same role as local and national government agencies in helping the Project establish a relationship with the affected communities, as well as in providing information
- NGOs and Community Based Organizations (CBOs): These can be sources of local knowledge, sounding boards for project design and mitigation; conduits for consulting with sensitive groups, and partners in planning, implementing and monitoring various project-related programs. These will include such as ActionAid, NACOFAG, CFAN, etc.

The NGOs will be consulted in view of their in-house capacity in managing rural agriculture extension projects; the consultations will provide the opportunity for consensus building about the way forward, including the definition of their respective potential roles and responsibilities in the ESMF/ESIA/ESMP process. The meetings will enable the identification of their strength and

- Provides expert advice on the EIA process and review impact statements and ESMPs upon receiving requests
- Approves impact statements and ESMPs
- Conducts periodic environmental audits
- Ensures that public consultations as part of the EIA process are done

¹¹ The EIA Working Group is one of nine multisector technical groups located at NEA. Nationally, NEA is the custodian of the ESIA process, and is supported by a multisector EIA Working Group which comprises the public sector, private sector and civil society, and at the Regional level, it is represented by the EIA/ANR (Agriculture and Natural Resources) Working Group sub committees of the Technical Advisory Committees (TAC). A major responsibility of the EIA Working Group (whether at central or regional level), is to provide support to the NEA in assuring the quality and integrity of the EIA process. Specifically, it:

The Technical Advisory Committee (TAC) is located at the Office of the Regional Governor, and it comprises representatives of national Technical Departments posted to the Regions to oversee the implementation of their respective Departments' regional activity plans. The TAC has subcommittees, including the ANR/ESIA subcommittee, that oversees implementation of regional ANR/ESIA plans. This subcommittee is the Regional equivalent of the national EIA Working Group located at the NEA.

weaknesses in relation to their potential roles and responsibilities in the implementation of the ESMF/ESMPs.

Another group within the communities that should be consulted is the Village Development Committees (VDC); practically every Gambian village has a VDC, and it comprises young men and women who play a vital role in the affairs of the village such as spearheading development initiatives

• **Vulnerable groups or persons**: The group's or person's vulnerable status can be determined by identifying its likelihood of facing harder conditions as a result of the Project, based on specific factors such as a group's gender, economic status, ethnicity, religion, health condition, etc.

| Project-Affected Communities | Other Interested Parties |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| The communities and community members, including women smallholder farmers; Schools (teachers and | Key government agencies and Ministries (national): NEA; MOBSE; MOA; NRA; Women's Bureau |
| students); the youth; Mothers' Clubs; children; etc. | Key government and agencies (local authorities): TACs Governors' offices in WCR, LRR, CRR-N/S |
| | NGOs: ActionAid; NACOFAG; WFP; CFAN |
| | Local Organizations: Women's Associations of each community |
| | Youth Associations of each community |
| | AfDB; GAFSP |

Table 5.1: Stakeholders to be Consulted in Sub-Project ESIA/ESMP Development

Table 5.2: Disadvantaged and Vulnerable Individuals and Groups

| Disadvantaged/Vulnerable Individuals Groups | Actions to Enhance Inclusion and Participation |
|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Women (including women-headed households, widows, women farmers) | Meet them without the presence of men during consultation so they can freely voice their opinions (focus groups) |
| | Accompany them during resettlement (should there be one) and monitor the RAP implementation to verify their opinion that the Project takes them into consideration |
| Those with insecure (including customary | Consult them |
| tenure holders, tenants, squatters, living below the poverty line, etc.) | Take into account customary rights during the ESIA, RAP processes and implementation to help them get fair compensation |
| The elderly | Consult them to know their expectations in order to take them into account when the mitigation measures are elaborated in ESMP/RAP |
| Persons with disabilities (hearing, sight, physical, intellectual) | Consult them to know their expectations in order to take them into account when the mitigation measures are elaborated in the ESMP/RAP; monitor these measures during the ESMP/RAP implementation |
| Persons living with chronic and acute illness | Consult them to know their expectations in order to take them into account when the mitigation measures are elaborated in the ESMP/RAP |
| | Collaborate with health services to define ways to help them, and monitor if these measures are actually implemented |
| Illiterate persons | Consult them in their own language |
| | Explain to them what the official documents are saying, and obtain their views |
| | Assist them during the elaboration and implementation of the ESMP/ RAP |
| Children | If they are 18 years of age and have the desire to work in the Project, employ them when the works start |

| Implement measures that would protect the children from abuse, accident or illegal employment |
|-----------------------------------------------------------------------------------------------|
| Monitor if these measures are being implemented |

5.2 Stakeholder Engagement Plan

Since stakeholder consultations and engagement is a continuous process, it is expected that ongoing engagement activities will be managed by the GAFSp and its Contractors as the Project moves into the implementation phase. Continuous consultation can be facilitated with the aid of a Stakeholder Engagement Plan (SEP), attached as Appendix 5.1; it includes cost of SEP implementation. The SEP is scaled to the project risks, impacts and development stage, and is tailored to the characteristics and interests of the affected communities. The Plan provides a formal commitment, defines responsibilities, and ensures that adequate funds are made available to carry out the process of consultation. It includes a timetable for the different stages of the consultation process, a description of any consultations that have already taken place, a budget, a definition of the reporting procedures and a description of institutional responsibilities for consultation.

The engagement process or consultation can take a number of forms, which will vary depending on the context and the individuals / groups subject to the consultation. Examples of consultation activities include:

Community meetings: these are usually the starting point of consultations within the community. They are a more formal, larger scale consultation grouping, to which all community members are invited to disseminate key messages and introduce key themes and topics, which will later be considered in more detail through smaller group discussions. However, during these meetings certain groups or categories of persons (vulnerable person/groups) might be unwilling to express their perspectives in such a formal setting

Focus groups: these are small group discussions, facilitated by a moderator who directs the conversational flow to the particular topic or issue under consideration. This method creates a more natural context for consultation and discussion, and it creates the possibility for participants to express their views with ease and confidence.

Sometimes, it will be necessary to hold sessions with different groups (such as with only women especially where they would feel more free and relaxed to express their views and concerns without fear of reprisal from the men). Children in the schools could be grouped together for a focus group session to bring out what they will not normally say in the presence of their teachers

Key informant interviews: these are one-on-one interviews with particular individuals who may have particular or specialized knowledge about the topic under discussion. The interviews are usually semi-structured, with particular questions framing the discussion, but with the capacity to allow the interviewee to elaborate on the topic; indeed, sometimes other topics may be covered during the interview that are not necessarily identified by the interviewer in advance of the interview

For example, in the context of the Project's impacts on the schools, head teachers may be identified as key informants. In the context of agricultural inputs and technologies (seeds, fertilizer, farming systems, etc.) key informants will normally include agronomists and experienced agricultural extension personnel, etc.

Household surveys: these are structured questionnaires that are administered at the household level, usually with households that are likely to face direct socio-economic impacts from a project, particularly in developing an Abbreviated Resettlement Action Plan (ARAP), or Full Resettlement Action Plan (FRAP).

The surveys tend to cover a broad range of topics, including basic demographics, health and education status, economic livelihood activities, resource dependence, asset base etc. They provide a high-level picture of the impacted community and produce largely quantitative statistical outputs

that should then be supplemented by more qualitative data, obtained through focus groups, key informant interviews etc.

5.3 Public Disclosure

Disclosure of the ESMF (and subsequently, the ESIAs/ESMPs) is a requirement of the AfDB, as well as PART V of NEMA, 1994. In addition, PART IV of the Environmental Impact Assessment Regulations, 2014, prescribes the following in their respective Sections:

- 19. Submission of the Environmental Impact Statement
- 20. Invitation of comments from the general public
- 21. Review of comments from the general public
- 22. Determination to make a decision or hold a general public hearing
- 23. General Public hearing
- 24. Persons eligible to make presentations at public hearings

In the process of disclosing the ESMF and other relevant safeguards reports, selected public places are identified (usually the offices of the Regional Governors where the Project will be implemented) by the NEA; the documents will be displaced for public review, and comments and views would be received by the Agency.

The invitation to the general public to make written comments shall be made in a daily newspaper and in radio announcements having a national circulation and coverage, and shall be exhibited in the newspaper or broadcast for such a period as the NEA considers necessary.

The invitation shall state the:

- a. nature of the project
- b. location of the project
- c. anticipated negative and positive impacts of the project
- d. proposed mitigation measures to respond to the negative impacts
- e. review period and selected centers
- f. contact information as e-mails for comments from stakeholders and the public

The general public hearing shall be held within such period as the Agency in consultation with the GAFSp may determine, but which period shall not be less than thirty working days, and not more than forty working days of receiving comments.

In addition to the national-level, the AfDB will disclose the summary of the ESMF for at least 30 days before taking the GAFSp to the Board for approval.

5.4 Grievance Redress Mechanism

During the preparation of the GAFSp and its implementation, complaints may arise from national institutions with respect to, for example breach of laws; project affected persons on land ownership and land use issues; pollution nuisance and selection of beneficiaries, distribution of project benefits, amongst others. To maintain stability, mechanisms need to be put in place to redress any grievance and conflict that may arise from the Project. It is in this regard that the Bank's OS-1, requires that a "credible, independent and empowered local grievance and redress mechanism" be established in the Project.

The Project therefore needs to ensure that any kind of complaints, suggestions, feedback from stakeholders and project beneficiary communities are captured, acknowledged, documented and addressed within a standard business time. Thus, a process that involves a grievance redress mechanism (GRM) needs to be instituted to ensure that community members, project beneficiaries and all relevant project stakeholders are

able to raise their concerns regarding project-related activities. This will help the PMT enhance operational efficiency in a variety of ways. For example, the process will create public awareness about the GAFSp and its objectives; deter corruption and fraud; provide Project staff with practical suggestions/feedback that will allow them to be more accountable, transparent and responsive to beneficiaries; assess the effectiveness of internal organizational processes; and increase stakeholder involvement in the Project. The mechanism will essentially comprise the following:

5.4.1 Grievance Resolution Committee (GRC)

In view of the above, a Grievance Resolution Committee (GRC) will need to be set up by the PMT to inform and coordinate the relevant stakeholders, and to provide resources for resolution activities. The Committee should be chaired by the GAFSp Coordinator, and will maintain all records from complaint to final decision for future reference. It will also ensure that public participation and consultation is always a part of the process to promote understanding and prevent unnecessary complaints and disputes.

The Committee will include permanent members, whilst others will be engaged as, and when necessary. It will consist of the following:

- The GAFSp Project Coordinator (Chair)
- The WFP CO Gender and Protection Officer (Secretary)
- The GAFSp Environmental Specialist
- Representative of the Ministry of Women, Children and Social Welfare to oversee issues related to GBV/VAC

Other members representing communities/beneficiaries affected by the Project, on an ad hoc basis (based on the source or origin of complaint(s); a credible local NGO.

5.4.2 Modalities for Conflict Prevention and Resolution to Redress Grievances

When they occur, grievances will be referred to the GRC for resolution using traditional and administrative mechanisms, or the law courts at national, regional and community levels. It is important that this grievance mechanism is designed to be legitimate and trusted by all relevant partners including the beneficiaries in particular. The operating principles of the Committee are transparency, accountability, fairness, impartiality, independence and accessible.

Where a complaint is not admissible or relevant, (for example, not related to the Project) the GRC will refer the aggrieved party(ies) to the relevant authority or other grievance process to address that complaint. This GRC grievance mechanism process will not impede access to independent judicial or administrative remedies outside the specific context of this project; on the contrary, it should complement and facilitate access to the courts.

The PMT is to be notified of any disputes, and the GRC will have to address grievances and conflicts immediately at the community level. The PMT should work closely with the communities and the community leaders to clarify and resolve any misunderstanding that could give rise to conflicts.

Where the dispute cannot be resolved at the community level, the affected persons or party will be advised to lodge a complaint to the GRC, and the PMT should advise the party on how and where to file the complaint. A standard grievance report form should be developed by the GPO at the PMT, and it includes name, address and contact details of complainant, date, and nature of complaint, among other details.

Where traditional and administrative procedures fail to resolve disputes, the aggrieved party has the right to take the matter to the courts in accordance with the Constitution of The Gambia, other national laws, and the Bank's OS-1.

5.4.3 The Grievance Redress Process

The structure or steps of the grievance mechanism will include:

- Have multiple and accessible uptake stations to receive complaints (text number, website/address, post boxes, help desks, suggestion boxes, hotline, others)
- Receive, register and acknowledge complaint in logbook
- Screen and establish the foundation of the grievance and if needed facilitate a referral
- Implement and monitor decision/conclusion to redress grievance
- Notify the complainant of the result and obtain a response if the resolution is satisfactory. If not, inform the complainant of escalation process and document.
- Advise for a judicial proceeding as last resort if necessary
- Document the experience for future reference
- Assess/review the performance of the system and make adjustments as necessary

A step-by-step process, with duration of each stage from the reception of the complaint to the notification of the resolution, with suggested timeframe and responsibilities is indicated in Table 5.3 below. Appendix 3.1 provides the "Codes of Conduct and Action Plan for Implementing ESHS and OHS Standards, and **Preventing Gender Based Violence and Violence Against Children**". It will be useful in the process of conflict resolution within the Project.

| Step | Process | Description / Required Action | Time-frame | Responsible Agency / Person |
|------|---------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1 | Receipt of complaint | Document date of receipt, name of complainant, nature of complaint | 1 day | GAFSp (specifically the GPO) |
| 2 | Acknowledgement of grievance | By letter, email, phone | 1-5 days | GPO in the GAFSp PMT |
| 3 | Screen and establish the foundation or merit of the grievance | Visit the site; listen to the complainant/community; assess the merit | 7-14 days | GRC members including the GPO, complainant and his/her representative |
| 4 | Implement and monitor a redress action | Where complaint is justified, identify and carry out the redress | 21-30 days, or at a time specified in writing to the complainant | GAFSp Coordinator, GPO/ESS to coordinate the implementation of redress action |
| 5 | Extra intervention for a dissatisfied scenario | Review the redress steps and conclusions, provide intervention solution | 2-4 weeks of receiving status report | GAFSp Coordinator and GRC to review and react |
| 6 | Judicial adjudication | Take complaint to court of law | No fixed time | Complainant |
| 7 | Performance review | Stakeholder Meetings | Quarterly | GRC |

 Table 5.3: Proposed GAFSp Grievance Redress Mechanism Process

Currently the WFP CO does not operate a dedicated GRM as described above across its range of national Program of activities. However, as part of its global operations, WFP operationalizes the *Commitments* to *Accountability to Affected Populations (CAAP)* through three core areas: consultation; information provision; and complaints and feedback mechanisms (CFM). The CFM is an essential component of accountability to affected populations, and functioning well, it can help build trust with WFP's stakeholders.

The WFP Gambia is therefore embarking on the process to consolidate its various CFM platforms to ensure coherence and uniformity across all its national activities, and this will be done for the GAFSp as well. Advance funds will also be used to set up this platform before project implementation rolls out. Meanwhile, the proposed mechanism in the ESMF will be reviewed in due course to take into account WFP CO's national experience in addressing complaints and grievances emanating from project implementation.

6.0 TYPOLOGY OF GAFSp SUB-PROJECTS, THEIR POTENTIAL IMPACTS AND PROPOSED MITIGATION

Given that at this stage of the Project cycle, specific locations of project activities have not yet been identified this Chapter will describe a more conceptual and generic scenario to identify the potential impacts resulting from the various GAFSp sub-project activities; it will describe the impact potential and propose mitigation and management measures to be put in place to sustainably implement the Project. Beneficial impacts are also identified. The following sections will describe the different types of sub-projects that will be subjected to ESIA/ESMP.

6.1 Principles and Methods to Evaluate Significance of Potential Impacts

The approach to be employed in evaluating the significance of the potential impacts of the sub-projects will take into consideration the characteristics of the impacts indicated in Table 6.1. Using qualitative and quantitative data from the literature review, the views from the consultations, and particularly subjective analyses using expert knowledge and experience, the following levels of significance will be employed:

(+2) *High positive significance*: Impacts that are highly likely to promote sustainable development by creating changes that will improve the environment

(+1) Low positive significance: Implies that there are some opportunities, possibilities and alternatives for benefits to be gained as a result of the change caused by the impact

(0) *Insignificant positive or negative impact*: No discernible impact or interference with the identified environmental parameters. The Project activity is not likely to create any beneficial or problematic change

(-1) Low negative significance: Limited adverse impacts caused by the Project activities, and not using sensitive resources. The prevention of such negative effects is also easily possible

(-2) *High negative significance*: High vulnerability and sensitivity; irreversible impact, and outcome of the impact affecting a wider area or population, etc.

Table 6.1: Factors used in Considering Significance of Impacts

| Impact receptors | Characteristics of the population such as distribution of women, youth and the elderly; | |
|-------------------|-----------------------------------------------------------------------------------------|--|
| | economic activities including dependence on agricultural production | |
| | Habits, distribution and protection status of animals and wildlife | |
| | Types of vegetation, land cover and land use including wetlands, forest and pa | |
| | historical or cultural sites | |
| | Roads, underground water infrastructure, telecommunications, or other infrastructure | |
| | that may be affected | |
| | Receiving and response capacity of the receptors from similar projects or past | |
| | incidents such as forest clearing, social conflict, air and soil pollution, etc. | |
| Nature of impacts | Direct or induced impacts on the receptor; link with non-project activities or other | |
| | projects | |
| | Timing: immediate or long-term effect; duration of the impact | |
| | Magnitude in relation to the total affected area; number of trees, farmland, animals or | |
| | people; geographical extent, households, or towns/villages | |
| | Probability of the impact occurring | |
| | Possibility of prevention or other mitigation measure; irreversibility of impact | |
| | Cumulative impacts that only become an issue in combination | |

6.2 Potential Cumulative Impacts

Cumulative impacts are those that are only significant when in combination, e.g. the impact of GAFSp on a receptor may be small but when combined with the small impact of another project within its sphere of influence, these effects together may cause significant impacts that would not have necessarily been relevant

individually. It could well be that the impact is as a result of natural phenomena. The distribution of such impacts may be local, regional or global.

Therefore, the potential cumulative impacts of this Project should be analysed as its implementation may exacerbate the impact of another project within its sphere of influence (or vice versa) on the same receptor. Thus, consideration of cumulative impacts may include combined effects of:

- one activity on existing/previously affected parameter
- many activities of the same project on various parameters/sites
- many projects impacting the same parameter
- many projects impacting multiple parameters

6.3 Identification and Evaluation of Potential Impacts

In order to ensure that the limited resources are properly used to mitigate (prevent, reduce, repair, or compensate) the potential impacts, it is important to identify which impacts are more significant for adequate consideration. The method described in Section 6.1 above will be used to evaluate the significance of the identified likely impacts as outlined in Table 6.2.

The impacts will be considered for the different phases of the Project i.e. design phase; construction phase of the various infrastructures and roads, land preparation; operational phase, including maintenance activities; and decommissioning phase. With regards to the decommissioning phase, the ESMF will consider clearance of any camp or informal base used for the storage of materials or equipment especially in the civil works (such as the feeder roads and construction of other infrastructure), and closure of any borrow pit specifically used for the GAFSp Project activities.

Potential Positive Impacts

With effective and efficient Project implementation, the following benefits will be expected from GAFSp:

- i. GAFSp will enhance social protection for vulnerable school children, particularly by supervising girls' results and attendance, investigate cases of absence and, in secondary education ensure that girls' living and studying conditions are adequate
- ii. "Mothers' Club" members will be trained on nutrition, health, hygiene and sanitation, reproductive health, and other related issues to empower them to provide coaching to adolescent girls in the Project communities
- iii. Resilience of communities will be strengthened to better manage climate shocks through the resilience-building initiatives of the Project, i.e. crisis prevention, technical capacity for resiliency building and crisis shock. Additionally, early warning systems and food banks will be strengthened to further support the communities' resilience
- iv. There will be increased production and productivity of the smallholder farmer due to the adoption of improved and appropriate farming and poultry production practices
- Development of input financing schemes and agro dealer networks will assist women farmers; support establishment of facility for on-farm mechanization leasing/hiring through private sector equipment hiring entities; service schemes for input distribution (improved seeds, fertilizer and other agro-chemical) to enhance timely availability
- vi. Civil works, such as construction of feeder roads and small irrigation schemes, though minimal, will create a number of skilled and unskilled jobs in for example, land clearing and preparation, and construction of accompanying structures. Employment resulting from Project implementation will create social benefits and improved standards of living, and the income will enhance the local village economy

Table 6.2: Significance Evaluation of Potential Environmental and Social Impacts

| PARAMETER | SOURCE OF POTENTIAL IMPACT | POTENTIAL IMPACT (positive or negative) | SIGNIFICANCE OF POTENTIAL IMPACTS DURING DIFFERENT PHASES | | |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-----------|-----------------|
| | | | Construction | Operation | Decommissioning |
| | | PHYSICAL | | | |
| Surface Water | Activities relating to the construction/upgrading of feeder roads and irrigation rice fields near water bodies; bulking and storage facilities | Pollution of surface water quality of the immediate vicinity of the river banks and "bolongs" can be affected | -2 | -1 | -2 |
| Ground Water | Drilling of boreholes for communal women's gardens and school gardens | Over extraction could lead to ground water pollution through salt intrusion, especially near coastal areas in WCR | -1 | -1 | 0 |
| Air Quality / Climate | Digging and excavations; use of heavy machinery and vehicles; quarrying | Dust, exhaust and other gaseous emissions | -1 | 0 | -1 |
| Geology / Soils | Use of heavy machinery and vehicles during works; improper waste management; quarrying | Soil erosion, compaction, and pollution | -1 | 0 | -1 |
| Noise / Vibration | Use of heavy machinery and vehicles during works | Noise and vibration nuisance | -1 | 0 | -1 |
| Landscape / Aesthetics | Feeder road and other construction works, post- harvest activities, etc. generate waste | Unsightly structures / waste dumps | -1 | -1 | -1 |
| | | BIOLOGICAL | | | |
| Aquatic Ecosystem | Activities relating to the construction of roads, storage and post-harvest infrastructure near water bodies | Change in water quality may lead to killing, disturbance, destruction of habitat, and effect on natural propagation of aguatic flora and fauna | -2 | -1 | -2 |
| Terrestrial Wildlife | Land clearing; felling of trees and vegetation for road and irrigation infrastructure create noise and vibration | Habitat destruction; disturbance; loss of species; secondary impacts from forced movement of wildlife to other areas | -2 | -1 | -1 |
| Forest / Vegetation | Felling of trees and vegetation to access project sites; felling within gazetted Parks, open forests | Increased risk of deforestation; forest fires, effects of waste dumping in forests | -2 | -1 | -1 |
| | and un-marked community forests | Loss of customary use of community forests | -1 | 0 | 0 |
| | | SOCIOECONOMIC | | • | |
| Public Health & Safety | During all construction, maintenance and decommissioning activities where the public risk contact with hazards | Impact of accidents such as loss of life or disability, interruption of traffic, waste, dust and noise, etc. | -2 | -1 | -1 |
| Occupational Health & Safety | During all construction, maintenance and decommissioning activities where workers are at risk | Impact of accidents such as loss of life or disability, dust, work related stress, handling large and heavy loads, etc. | -2 | -1 | -1 |
| Labor related issues | Influx of imported workers | Potential spread of imported diseases including sexually transmitted illnesses; introduction of social vices | -1 | 0 | -1 |
| | | Gender-based violence and violence against children, etc. | -1 | -1 | -1 |
| | Employment of children | Impacts of child exploitation and abuse | -1 | -1 | -1 |

| PARAMETER | SOURCE OF POTENTIAL IMPACT | POTENTIAL IMPACT (positive or negative) | SIGNIFICANCE OF POTENTIAL IMPACTS DURING DIFFERENT PHASES | | |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-----------|-----------------|
| | | | Construction | Operation | Decommissioning |
| Land Use / Land Ownership | Involuntary resettlement due to project activities | Land loss to project activities such as feeder roads, sites for fish ponds, new garden sites etc. loss assets, inheritance, or livelihoods | -2 | -1 | 0 |
| Income | Employment of various workers during Project implementation; long-term and continuous use of the available infrastructure | Enhancing skills and livelihoods; increased income and food security of vulnerable rural people; increase in household income from improved production of crops, improvement of various business activities | +2 | +2 | +1 |
| | | Youth will have more job opportunities in post-harvest management | +2 | +2 | +1 |
| Vulnerable groups | Compensation for involuntary resettlement | Women project affect persons (PAPs) offered lower, or inequitable compensation than men PAPs | -2 | 0 | 0 |
| | Influx of guest workers to communities | Effects of gender-based violence, and sexual exploitation and abuse such as fear, anxiety and reduced confidence | -2 | 0 | -2 |
| | Involvement of children during project implementation; non-protected camps and work sites | Effects of all forms of violence against children including health impacts, fear and anxiety | -2 | 0 | -2 |
| Community Stability | During siting of infrastructure | Conflict, complaints, reduced social cohesion | -2 | 0 | 0 |
| Cultural / Historical sites | Location of project infrastructure and activities in and around sensitive sites such as historical sites, cemeteries and mosques | Loss or reduction in value of cultural relics and artifacts; disturbance or destruction during works | -2 | 0 | 0 |

Matrix Key: 0 neutral (no discernible impact / insignificant impact); +1 (low positive significance); +2 (high positive significance); -2 (high negative significance); -1 (low negative significance)

6.4 Types of Potential Sub-projects

Subsequently, Consultants who will develop sub-project ESIA/ESMPs will use the generic scenarios expressed in the ESMF to develop greater detail mitigation and monitoring measures of the respective sub-projects. Typically, the implementation of GAFSp will involve investments in the following types of activities, and consequently sub-projects:

- Agriculture and land development (including mechanization, land clearing and burning, small irrigation schemes in rice and women's communal vegetable gardens; inputs (day-old chicks, seeds feed, medicines, fertilizer and other agro-chemicals), boreholes to catalyze the production
- Civil works (including upgrading of feeder roads; construction of post-harvest infrastructurerefurbishing existing ware houses, bulking and storage facilities for grains; fencing of school gardens, school toilets, school stores, borehole and water storage tanks and rainwater harvesting); processing and storage of highly perishable products (poultry); facility for fruit and vegetable cleaning, sorting, grading, packaging and storage built

Please note that the Policy and Regulatory Framework specified in Section 4.3 of the ESMF will guide the development of the report, and the impact assessment is based on the Project's adherence to these requirements.

6.4.1 Types of impacts associated with rural feeder road construction and upgrading To implement this activity, the equipment required will include heavy mobile plant (e.g. graders, bulldozers, excavators, rollers) and temporary fixed plant such as bitumen mixing plant, concrete batching plant and power generators. The specific components will include:

- Crossings (e.g. bridges, culverts), drainage and erosion control structures
- Safety and security measures (e.g. barriers and fencing)
- Road diversions and service areas
- Temporary construction facilities (e.g. workshops, base camps, and borrow pits)
- Access roads within and between temporary facilities and the road being developed

In addition, construction activities in upgrading feeder roads will include establishing temporary diversions where needed to manage existing traffic, clearance and levelling of the corridor, and major earthworks where required (e.g. cuttings, embankments). There will also be need for development of borrow pits (and possibly quarries), and the need to import materials, such as gravel; sourcing and establishing of a water supply from surface and/or groundwater will be needed. To cross water ways such as streams there will be need to improve existing drainage and/or introduction of new road drainage, including culverts if required.

During operation, the traffic is likely to include a range of different vehicle types including heavy and light vehicles, as well as other forms of traffic such as bicycles, donkey carts and pedestrians, all of which may contribute to direct and indirect impacts.

The temporary diversion developed during construction should be decommissioned and rehabilitated in accordance with a site-specific closure plan developed in consideration of international good practice. The closure process will include site clearance, removal of all equipment, and appropriate disposal of waste materials, soil ripping and re-grading where necessary. Given the above, Table 6.3 below presents the impacts associated with this sub-project.

| Impact Issue | Potential Impact | Mitigation Measures |
|----------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Geology/Hydrogeology | Interruption of hydrogeology and groundwater flows | Avoid areas with springs or where the water table is shallow |
| | | Limit sealed or compacted areas to maintain natural recharge of the water table |
| | | Avoid removing material below the water table |
| | Pollution of groundwater from discharges and accidental releases | Install sewage treatment to meet required standards; hygiene training for workforce |
| | Release of hazardous substances during construction, or operation | Institute materials handling and control procedures |
| | (e.g. vehicle spills) leading to soil, surface or groundwater contamination | Control construction vehicles' movements and prohibit vehicle washing in watercourses, and similar practices |
| | | Develop emergency response plans during construction (contractors and local authorities) and operation (local authorities) |
| Air Quality | Air quality deterioration from dust during construction; emissions during | Carefully select local route and siting of construction facilities |
| | construction and operation | Carry out dust control and suppression measures |
| | | Institute speed controls and other traffic calming measures to reduce excessive acceleration around towns |
| | | Use equipment that meet appropriate emissions standards, and regular preventative maintenance (specifically adhere to the Environmental Discharge Permit Regulation, 1999) |
| | | Do not use ozone depleting substances during construction |
| Noise and Vibration | Use of heavy equipment, traffic, and activities during construction and maintenance at worksites | Use local routes away from sensitive areas Site construction facilities away from sensitive areas |
| | may disturb human and fauna | Use equipment fitted with abatement devices (e.g. mufflers, noise enclosures); good maintenance regime |
| | | Institute strict controls of timing of activities, e.g. blasting and other high noise emissions; |
| | | Prohibit working at night working if possible Observe seasonal sensitivities (e.g. breeding seasons) |
| | | Institute speed controls and other traffic calming measures to reduce excessive acceleration around settlements/sensitive receptors; speed limits on unpaved roads through communities should be ≤50km/hr and near or at project site should be ≤30 km/hr |
| Resources and Waste | Construction will require supply of water from surface or groundwater, which could affect existing supply for | Carry out Water study prior to any abstraction, to inform a Sustainable Water Management Plan |
| | human communities and ecosystems | No abstraction without prior approval of relevant authorities at all locations |
| | | Promote water efficiency (including leak detection, preventative maintenance of equipment) and water recycling |

Table 6.3: Types of impacts associated with construction and upgrading of feeder roads
| | Inefficient waste management during construction and maintenance leading to overce materials | Prepare Waste Management Plan following the waste hierarchy, supported by staff training |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | excess materials consumption, generation of wastes/emissions, soils and | Design earthworks to achieve a balance between cut and fill wherever possible |
| | water pollution | Use authorized contractors for hazardous and any other wastes which the Project cannot dispose of safely |
| Loss, fragmentation and degradation of habitat | Land clearance for new roads and upgrading of existing roads may cause | Careful route selection and siting of all project components, with advice from DPWM |
| | loss or fragmentation of protected areas and other areas of conservation interest, and severance of | Establish buffer zones around conservation areas, watercourses, and other locations identified as ecologically sensitive |
| | animal migration routes and pathways | Avoid or minimize activity within these zones |
| | | Rehabilitate cleared areas with native species, and ecosystem restoration in habitats of conservation value, using specialist advice and input, backed up by a long-term monitoring program and corrective actions as necessary |
| | Severance of terrestrial | Do sensitive planning of road alignments |
| | routes and watercourses used for migration or for access to feeding and breeding areas | Design culverts and crossings for wildlife to avoid impacts on animal movement |
| | Clearance of vegetation may lead to loss of plant species and habitat of conservation interest | Careful route selection and siting of all project components, with advice from DPWM and wildlife specialists |
| | | Carefully plan phasing and timing of construction activities |
| | | Demarcate and avoid areas of conservation interest (high value species, feeding or breeding sites, migration routes, etc.) Where possible, carry out wildlife rescue and translocation where appropriate, under expert supervision |
| Cultural Heritage | Displacement or damage to cultural heritage sites by construction activities | Carefully select routes and siting of all project components, taking account of results of community consultations or specialist surveys |
| | | Develop a Cultural Heritage Management Plan covering tangible and intangible (e.g. local traditions and practices) cultural heritage |
| | | Implement a "Chance Finds" procedure during construction |
| Interaction between workforce and local communities | May increase occurrence of communicable diseases, including HIV/AIDS and sexually transmitted illnesses | Implement a health management system for the construction workforce, to ensure it is fit for work and that it will not introduce disease into local communities |
| | | Carry out training and awareness training for workforce and their dependents on HIV/AIDS and other sexually transmitted illnesses, and communicable diseases including malaria |
| | | Carry out health awareness raising campaigns for communities on similar topics. |
| | Real or perceived disruption to normal community life, through the physical presence of a construction | Adopt a Stakeholder Engagement Plan, as a framework for early and ongoing community consultation |
| | workforce | Implement a Grievance Redress Mechanism |
| | | Implement works procedures, defining a Code of Appropriate Conduct for all workers |

| | Train all staff in acceptable behavior with respect to community interactions |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Poor management of occupational health and safety could lead to accidents, injuries and illnesses among workers; mental health issues may arise due to remote or enclosed living | Employment practices and working conditions should conform to International Labor Organization (ILO) Standards and national regulations Rest and recreational facilities and time should be provided, and rules on alcohol and drugs defined and clearly communicated to workers |
| | The basis for differences in the standard of accommodation should be non- discriminatory; it should be documented and communicated transparently to the workforce Clear and comprehensive health and safety reporting and grievance procedure system should be established, and be freely available |
| | occupational health and safety could lead to accidents, injuries and illnesses among workers; mental health issues may arise due to remote or |

6.4.2 Types of impacts associated with rice and vegetable garden irrigation

GAFSp's rice and vegetable production schemes (3,000 farmers -50% youth and 50% women in rice; 1,500 farmers in vegetable-50% youth; 50% women) will be implemented through irrigation. This will include use of boreholes to irrigate the gardens, and by impounding rice perimeters. During construction equipment such as heavy mobile plant (e.g. graders, bulldozers, excavators), will be used where green fields will be converted into rice growing perimeters, or communal vegetable gardens for the women.

In operation the activities will include the abstraction of water from a local water source (in rice irrigation this will be mainly from nearby tributaries, or even the main River Gambia, as is usual with most rice irrigation projects); water storage in containment areas such as water tanks or reservoirs, as in the proposed women communal vegetable gardens; distribution of water to and within the rice fields through canals, and in gardens through reticulation pipes; and control and treatment of water runoff from these areas.

During decommissioning, roads that were used during the construction and operational stages of the Project to access the rice perimeters, and vegetable gardens should be decommissioned and rehabilitated in accordance with a site-specific closure plan developed according to international good practice. The decommissioning phase will include site clearance, removal of all equipment, appropriate disposal of waste materials, soil ripping and re-grading where necessary. The potential impacts and mitigation measures associated with these activities are indicated in Table 6.4 below.

| Impact Issue | Potential Impact | Mitigation Measures |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Geology/Hydrogeology | Interruption or disruption of surface and groundwater flows due to construction, excavation and land clearance, and reduced flows during operation Lowering of water table due to excessive abstraction results in salinization, especially in coastal areas in WCR | Design to take account of local hydrological conditions (e.g. avoid crossing permanent waterways; do not hamper drainage of surface water; avoid works in areas prone to flooding especially during rainy season Minimize water loss through leaks, evaporation and infiltration through canals and reservoirs (e.g. maintain vegetation along water canals) Ensure proper water management by adjusting pumped volumes annually |
| | | depending on aquifer recharge Establishing fees for water users, controlling access to irrigation water for other purposes |
| | | than irrigation |
| Pollution of Soils and Water | Non-point source pollution caused by runoff of nutrients from fertilizers, and pesticides | Ensure that drainage water complies with discharge standards and treat wastewater accordingly, as prescribed in the Environmental Discharge and Permitting Regulations (1999) |

| Table 6.4: Types | of Impacts | Associated | With | Rice | and | Vegetable | Garden | Irrigation | and | Their |
|--------------------|------------|------------|------|------|-----|-----------|--------|------------|-----|-------|
| Mitigation Measure | S | | | | | | | | | |

| | | Train farmers in appropriate, sustainable application of fertilizer and other agrochemicals |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| | | Implement standard good wastewater management procedures |
| | Accidental spills and leaks of hazardous materials during construction and maintenance leading to soil, surface or | Use storage and containment equipment that meet international standards |
| | groundwater contamination | Control construction vehicle movements and prohibit vehicle washing in watercourses, and similar practices |
| | | Develop emergency response plans during construction (contractors and local authorities) and operation (local authorities) |
| Air Quality | Dust and emissions from construction and maintenance activities, could affect human health, vegetation and wildlife | Contractor to do sensitive site selection and siting of construction facilities |
| | | Use equipment that meets appropriate emissions standards, and regular preventative maintenance |
| | | Dust control and suppression measures, such as dampening and sprinkling water on dry surfaces to suppress dust; use of vegetation hedges |
| | | Do not use ozone depleting substances during construction |
| Noise and Vibration | Noise and vibration from construction and maintenance equipment, traffic and activities, may disturb sensitive noise receptors (human, fauna) | Contractor to do sensitive local access road route selection and siting of construction facilities |
| | | Use well maintained equipment fitted with abatement devices (e.g. mufflers, noise enclosures) |
| | | Institute strict controls of timing of noisiest construction activities; prohibit working at night |
| | | Observe seasonal sensitivities (e.g. breeding seasons), and alteration of activity to reduce noise levels at that time |
| Loss, fragmentation and degradation of habitat, and | Construction of infrastructure and facilities (storage tanks, canals, etc.) | Carefully locate all project components, with advice from DPWM and wildlife specialists |
| severance of animal migration routes and pathways | cause loss, degradation or fragmentation of protected or ecologically sensitive areas (e.g. wetlands, migration routes) | Establish buffer zones around conservation areas, watercourses, and other locations identified as ecologically sensitive |
| | | Avoid or minimize activity within these zones |
| | | Rehabilitate cleared areas with native species, and ecosystem restoration in habitats of conservation value |
| | | Develop a long-term monitoring program and corrective actions as necessary |
| | Impacts on habitats and species from habitat alteration and degradation (e.g. from reduction in water supply, changes | Where development in sensitive areas cannot be avoided, mitigate as follow: |
| | in water flow and drainage, soil erosion, pollution of water, soils or air, introduction of invasive species) | Minimize area impacted, clear demarcation of remaining intact areas of habitat, and prohibit activity into those areas for any purpose |
| | | Prohibit or minimize activities in vicinity of sensitive areas |
| | | Rehabilitate habitat and ecosystem of areas no longer required to occur as soon as possible after construction |

| Direct Impacts on Flora and Fauna | Construction activities and clearance may lead to loss of plant species and | If loss of critical habitat is inevitable, develop and implement an Offsets Program Carefully select sites, and locate all project components with advice from DPWM and |
|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | habitats of conservation interest | wildlife specialists |
| | Animals could be displaced and their habitats disturbed during construction and operation (e.g. from noise, light | Careful plan phasing and timing of construction activities |
| | disturbance at night, general human presence) | Demarcate and avoid areas of conservation interest (high value species, feeding or breeding sites, migration routes, etc.) where possible |
| | | Carry out wildlife rescue and translocation where appropriate, under expert supervision |
| Physical and economic displacement of people, and assets | Development or upgrading of irrigation systems, especially allowing agricultural expansion including vegetable gardens, may physically displace people, or lead to loss of assets, e.g. loss of traditional | Avoid occupation of areas inhabited or regarded as of high value by communities (e.g. horticulture, community orchards) where possible |
| | agriculture or livestock grazing, or persons losing their land to the Project for vegetable garden development, etc. | Develop and implement a resettlement action plan (RAP) in accordance with AfDB's OS-2 where there is land-take, loss of earnings, etc. |
| Economic Development and Employment | Direct employment of local population in workforce, and stimulation of local economy through demand for goods and services will enhance livelihoods and economic activity in local communities | Contractor to develop an Employment Plan, with clear employment requirements and procedures for the construction and operational/ maintenance workforce |
| | | Develop transparent and culturally appropriate communication with communities regarding employment opportunities |
| | | Institute fair and transparent hiring and staff management procedures |

6.4.3 Types of impacts associated with the use of agro-chemicals in GAFSp

Increased food production is central to the development and implementation of the GAFSP, and agrochemicals (mainly fertilizers and pesticides) will be used to achieve higher yields per unit area. However, there are environmental concerns associated with the use of agrochemicals including undesirable soil and water contamination, acidification of soils, human health risks, pest resistance, damage to non-target organisms, and secondary pest problems.

The use of agrochemicals may also result in unacceptable toxic residues on agricultural products and unnecessary financial burdens because of over application. In this regard careful selection of the type of agrochemicals and management of their use (timing, dosage, mode of application, etc.) is required to reduce to acceptable levels the environmental risks they pose, while providing the needed benefits for increased production with lower financial and health risk costs. The Project should be explicit about the pesticides it proposes; unregistered, restricted-use or experimental-use pesticides should be avoided, unless their use in the has been reviewed and approved by the Food and Agriculture Organization of the United Nations (FAO)/World Health Organization (WHO) Joint Meeting on Pesticide Residues, or the Gambia's Hazardous Chemicals and Pesticides Control and Management Act, 1994 under the purview of the Hazardous Chemicals and Pesticides Control and Management Board.

It is Illegal to import, manufacture, formulate, offer, hold on stock, sell, use or advertize the members of a banned list of chemicals (attached as Appendix 6.1). Table 6.5 presents the environmental impact of agrochemicals and their mitigation measures.

| Impact Issue | Potential Impact | Mitigation Measures |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Water pollution | Use of agrochemicals may affect both ground and surface water through leaching and runoff | Ensure that dressings do not exceed recommended doses |
| | | Reduce leaching through appropriate choice of fertilizer to suit soil conditions, split applications and fertilizer placement |
| | | Reduce runoff through incorporation of fertilizer into soil, timing of applications to avoid erosive rains, and soil and water conservation measures |
| | High concentrations of nitrates and phosphates can lead to eutrophication in rivers, lakes and coastal waters. | Limit nitrate use in sensitive watersheds serving urban areas |
| | | Select non-ammonium sources of nitrogen such as urea |
| | High levels of nitrogen and phosphorus | Carry out liming (usually to pH 5.5 for tropical crops) |
| | cause the depletion of oxygen in lakes and reservoirs through excessive algal and bacterial growth (eutrophication), eventually reducing aquatic life | Explore the potential for increasing production without the use of chemical fertilizers, especially using indigenous technologies, including organic fertilizers, and supporting integrated soil fertility systems |
| | | Promote community education on improving indigenous practices to maximize production, avoiding chemical fertilizers in favor of local options that are available on farm |
| | | Support crop management practices that increase the nutrients available to crops, including by: |
| | | using more organic and less inorganic– fertilizer |
| | | increasing the efficiency of fertilizer use through appropriate fertilizer selection, timing and split applications |
| | | increasing nutrient recycling using crop residues and livestock grazing after crop harvest (mixed farming) |
| | | using nitrogen fixing tress, where feasible (agroforestry) |
| | | improving rotations (e.g. inclusion of legumes, multi-cropping) |
| Hazards to humans and animals | s Improper application of pesticides, overuse, and neglect of safety periods between application and harvest often result in high residues in harvested crops and processed food Agrochemical residues persist in | Promote the use of IPM (integrated pest Management) |
| | | For general use, the formulated product should be of a low enough concentration |
| | contaminated clothing Pesticides may move off target and poison fish, cattle, beneficial insects, pollinators and soil organisms | Use low-toxicity formulations: from least toxic to most toxic the options are granule, dust, wet-table powder, flow-able, emulsify- able concentrate, ultra-low volume and fumigant |

Table 6.5: Types of impacts associated with the use of agro-chemicals and their mitigation measures

| | | Use low-concentration granulars, seed dressings, bait formulations and pheromone traps which generally present the least hazard to users and are especially suitable for small-scale farmers unfamiliar with pesticide use |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | Protective clothing, including masks, gloves and boots, should be provided or promoted, especially for pesticides that are absorbed through the skin |
| | | Unless it is washed, protective clothing can become saturated with pesticides |
| Pest resurgence and resistance | Misuse of pesticides can cause elimination or suppression of the natural enemies that keep insect pest populations under control. Suppression leads to outbreaks of secondary pests previously not considered important | Training should be provided on the safety, use and cost-effectiveness of pesticides a range of actors will require education: users, operators, extensionists, retailers, health workers treating cases of poisoning |
| | Misuse of pesticides can lead to the build-up of resistance in insect pests, pathogens and weeds. | |
| Loss of bees and other beneficial insects | Pesticides can kill bees and other beneficial insects that are essential for the pollination of indigenous plants, honey production, etc., thus causing negative impacts on the food production, livelihoods and incomes of poor rural communities | |

6.4.4 Types of impacts associated with Poultry production

The Project intends to support 25 poultry production schemes to supply the HGSF Program in the various schools. The support may be directed at schools to produce their own supplies, as well as to private actors, the latter of whom will probably be involved in bigger and larger scale productions.

This section assesses the impact of this investment, particularly with environmental impacts related to backyard or mixed extensive systems (which are essentially the targets for this Project); the impacts are marginal because of the limited concentration of wastes and reliance on locally available sources of feed, such as food residues, crop residues or feed collected by free-ranging birds.

Construction of poultry houses will involve activities such as land clearing and burning of cleared vegetation, use of cement and sand /gravel aggregates. Daily operations will include feed preparation, feeding, cleaning and maintenance of structures and equipment, and periodically administering antibiotics and other medication to maintain good healthy birds.

During decommissioning, the activities will include site clearance, removal of all equipment, appropriate disposal of waste materials, etc. The potential impacts and mitigation measures associated with these activities are indicated in Table 6.6 below.

| Impact Issue | Potential Impact | Mitigation Measures |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Odor Emission and Air Quality | Poultry facilities are a source of odor and attract flies, rodents and other pests that create local nuisances and carry disease Odor emissions, caused by a large number of contributing compounds including ammonia (NH3), volatile organic compounds (VOCs), and hydrogen sulphide (H2S), from poultry | Minimize the surface of manure in contact with air Proliferation of flies and mosquitoes can be controlled by: Frequent collection of litter (once a week in dry seasons and twice a week in rainy seasons, (i.e. at shorter intervals than the length of the larvae development cycle) |

| Solid Waste Generation | farms adversely affect the life of people living in the vicinity | Closed storage (bags or closed sheds) Lowering litter's water content by the incorporation of hydrophilic products such as hashes, rice husk, peanut husk, dust or sawdust Applying deodorant products to feed or directly to animal houses Applying insecticides (this practice may however have significant public health-related side effects) Rat proliferation can be controlled by: Minimizing feed losses during storage and feeding Raising cats or keeping snakes in cages close to the poultry barn to scare rats Use of poison or traps Improved waste management measures shall be employed and enforced, and these will include the following, amongst others: Developing a waste management plan to include amongst others, the types of waste, expected quantities and frequency, proposed management procedures and |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | vegetation and water flow while also impacting the aesthetics of the immediate vicinity. In addition to construction rubble, poorly managed solid waste can result in creation of dumpsites which can have environmental health impacts As waste will be produced during all phases of the Project, effects from improper management may be long- term with localized negative impacts on aesthetics, health and safety. | responsibilities. The plan will indicate the following, among others: Minimizing the production of waste that must be treated or eliminated where waste generation cannot be avoided Identification and classification (hazardous or not, solid, gaseous or liquid) and estimate the likely type of waste to be generated such as cleared vegetation, packaging, excess aggregate and disused equipment, etc. If hazardous wastes are generated, proper procedures must be taken regarding their storage, collection, transportation and disposal as indicated in the Hazardous Chemicals and Pesticides Control and Management Act, 1994 Using the cleared vegetation, as firewood within the communities Reusing the solid waste e.g. top soil wastes generated from the excavation works as backfill while the rest will be disposed of in designated areas Other solid wastes (such as cement bags, metallic pieces, wooden planks, and leftover of aggregate material and debris) will be disposed of according to the <i>National</i> |

| | | Environment Management Act, 1994 and Antilittering Regulations, 2007 Identifying and demarcation of approved disposal areas, clearly indicating the specific materials that can be deposited in each; waste must not be discarded within, or close to gazetted forests and Wildlife Parks The Contractor to develop a well-organized internal supervision and monitoring system to ensure waste reduction and proper management through full implementation of the waste management plan Recommending that the work contracts include waste management measures (as indicated in Appendix 3.1) such as those described in World Bank's EHS Guidelines (1.6 Waste Management) |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Surface water impacts | Impacts are associated with waste spills, as well as surface runoff and subsurface flow. The oxygen demand and ammonia content of the waste can result in fish kills and reduced biodiversity Nutrients contribute to eutrophication and associated blooms of toxic algae and other toxic micro-organisms | Integrate all mitigation measures, from design to implementation, in order to prevent or mitigate potential changes of water quality. For example, designs and plans of poultry houses should ensure that their locations are at a minimum safe distance from water bodies Supervision of the works and environmental monitoring will ensure construction works and houses are not carried out close to water bodies Workers shall be careful to prevent spills and improper management of waste. Contractors will also ensure prescribed procedures are followed to protect water quality as required by the Environmental Quality Standards Regulations, 1999, and the Environmental Discharge (Permitting) Regulations, 2001 |
| Dead-bird management and disposal | Improper disposal of poultry carcasses can contribute to air and water-quality problems especially in areas prone to flooding or where there is a shallow water table | Use accepted practices including rendering, composing, incineration and burial A contingency plan should be in place for disposal of large numbers of dead birds in the event of disease outbreaks In addition, consideration should be given to impacts on the physical environment – e.g. burial pits should be at least 3 meters above the maximum groundwater table |

6.4.5 Types of impacts associated with construction and operation of garden fences, toilets, bulking, storage and grain processing facilities

In the construction of the above facilities, (including fences of school gardens) it is likely that trees and vegetation around the proposed sites will be cleared with the aid of heavy machines such as bull dozers or excavators. Alternatively, manual labor could equally be hired (preferably from within the communities) with the aid of machetes and cutlasses, shovels, and pickaxes to clear existing trees and vegetation, and to excavate to the required depth and width to build the facilities. The approximate areas required for any proposed base camp and other storage facilities is not known at this moment. However, given the expected areas of the facilities, relatively few trees and vegetation will be cleared.

Nonetheless, whatever methods are employed in the above works will generate dust within the immediate area of the works; this will include gaseous emissions, such as the oxides of carbon, etc. which will only temporarily affect ambient air quality around the activity sites. In addition to the high dispersion rates around the sites within open areas, the impact is considered low due to the localized and temporary nature during the works phases.

Apart from the workers who will be directly disturbed, this impact will be more significant in populated areas, where facilities are to be erected close to compounds and other relaxation or resting areas such as waiting sheds ("Bantaba") as compared to farms and open fields.

The construction and decommissioning phases of these facilities also have the potential to affect local air quality and climate. Heavy machinery and vehicles will also release hydrocarbon incomplete combustion gases to the air, affecting local air quality. Table 6.7 indicates the potential impacts associated with the activities.

| Table 6.7: Types of impacts associated with construction and operation of bulking, storage and grain | |
|------------------------------------------------------------------------------------------------------|--|
| processing facilities and their mitigation measures | |

| Impact Issue | Potential Impact | Mitigation Measures |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Air Quality | Pollution and Generation of dust | Wet road surfaces to suppress dust emissions (especially during construction of facilities) and prevent nuisance |
| | | Workers to be provided with personal protection gear with the aim of preventing dust-related health problems and other dust nuisances |
| | | Trucks transporting sand and gravel must be covered to prevent dust and flying debris |
| | | Special care will be taken when working near educational institutions, recreational grounds, mosques, and health facilities |
| | Occorrig Dellution | This will include erection of barriers and posting of sign boards to warn against intrusion of people into the work sites |
| | Gaseous Pollution | Contractors must be warned in their agreement clauses to reduce air pollution through use of well-maintained equipment. |
| | | Equipment must be serviced regularly and run below the optimal, as overloading strains the mechanisms that produce incomplete combustion. |
| | | High quality oils must be used to reduce dangerous air emissions. |
| | | Emission standards prescribed in the Environmental Quality, Permitting and Discharge Regulations must not be exceeded |
| | | Ensure that engines of vehicles and machines are not left operating idle |
| Solid Waste Generation | During land clearing and use of other aggregates to include building of houses, related wastes such as cleared | Improved waste management measures shall be employed and enforced, and these will include the following, amongst others: |
| | vegetation, solid waste such as cement bags, iron and other pieces of materials, could cause secondary pollution if not cleared in time Indiscriminate waste dumping will affect vegetation and water flow while also impacting the aesthetics of the immediate vicinity. | • Developing a waste management plan to include amongst others, the types of waste, expected quantities and frequency, proposed management procedures and responsibilities. The plan will indicate the following, among others: |
| | In addition to construction rubble, poorly managed solid waste can result in creation of dumpsites which can have environmental health impacts | ✓ Minimizing the production of waste that must be treated or eliminated where waste generation cannot be avoided |
| | Poor disposal of such waste may have secondary impacts with the potential of spreading of diseases, contamination of water bodies, degradation of aquatic | ✓ Identification and classification (hazardous or not, solid, gaseous or liquid) and estimate the likely type of waste to be generated such |

| | ecosystems, and generation of greenhouse gases if the waste is burnt. | as cleared vegetation, packaging, excess aggregate and disused equipment, etc. |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | As waste will be produced during all phases of the Project, effects from improper management may be long- term with localized negative impacts on aesthetics, health and safety. | If hazardous wastes are generated, proper procedures must be taken regarding their storage, collection, transportation and disposal as indicated in the Hazardous Chemicals and Pesticides Control and Management Act, 1994 |
| | | ✓ Using the cleared vegetation, as firewood within the communities |
| | | Reusing the solid waste e.g. top soil wastes generated from the excavation works as backfill while the rest will be disposed of in designated areas |
| | | Other solid wastes (such as cement bags, metallic pieces, wooden planks, and leftover of aggregate material and debris) will be disposed of according to the <i>National Environment Management Act, 1994</i> and Antilittering Regulations, 2007 |
| | | Identifying and demarcation of approved disposal areas, clearly indicating the specific materials that can be deposited in each; waste must not be discarded within, or close to gazetted forests and Wildlife Parks |
| | | The Contractor to develop a well-organized internal supervision and monitoring system to ensure waste reduction and proper management through full implementation of the waste management plan |
| Noise and Vibration | Noise and vibration from construction | Recommending that the work contracts include waste management measures (as indicated in Appendix 3.1) such as those described in World Bank's EHS Guidelines (1.6 Waste Management) Contractor to do sensitive local access road route |
| | and maintenance equipment, of grain mills may disturb sensitive noise receptors (human, fauna) | selection and siting of construction facilities Use well maintained equipment fitted with abatement devices (e.g. mufflers, noise enclosures) |
| | | Institute strict controls of timing of noisiest construction activities; prohibit working at night |
| | | Observe seasonal sensitivities (e.g. breeding seasons), and alteration of activity to reduce noise levels at that time |
| Air Quality | Dust and emissions from construction and maintenance activities, could affect human health, vegetation and wildlife | Contractor to do sensitive site selection and siting of construction facilities |
| | | Use equipment that meets appropriate emissions standards, and regular preventative maintenance |
| | | Dust control and suppression measures, such as dampening and sprinkling water on dry surfaces to suppress dust; use of vegetation hedges |
| | | Do not use ozone depleting substances during construction |
| Physical and economic displacement of people, and assets | Land and space for siting of bulking and storage facilities (including vegetable gardens) may physically displace people, or lead to loss of assets, e.g. | Avoid occupation of areas inhabited or regarded as of high value by communities (e.g. horticulture, community orchards) where possible |
| | traditional agricultural land, to the Project | Develop and implement a resettlement action plan (RAP) in accordance with AfDB's OS-2 |

6.4.6 Types of impacts associated with construction and operation of poultry and vegetable cold storage facilities

The Project plans to provide cold storage facilities to extend the shelf life of the vegetables and poultry products. In addition to the required inputs to effect cooling of the products, the construction of the buildings and stores will create similar environmental impacts as in the construction of the bulking and grain storage facilities (i.e. potential clearing and burning of vegetation cover, use of cement, sand and gravel aggregates, etc.)

The main raw materials used in this project will be mainly fruits and vegetables such as tomatoes, okra, sweet potatoes, potatoes, lettuce, onions, etc. and twenty-seven common user facilities will be established for fruit and vegetable cleaning, sorting, grading, packaging and storage. During sorting workers in the facilities will conduct visual inspection, and discard rotten pieces; fresh vegetables are dumped in water basin, or other types of receptacles, and the wastewater from this operation is high in suspended solids, BOD and floating material such as grass. Fruit and vegetable processing discharges mainly wastewater, high in organic load. The sources of pollution include waste water from the washing operations; and solid waste from vegetable preparation.

For poultry products, the main raw materials will be the chicks raised in the Project-supported poultry houses, and following, is an overview of poultry meat processing operation and generation of by products and waste. Delivery and holding of the chicks (waste is manure); in slaughtering, the waste is blood; defeathering will generate feathers as waste; evisceration will generate offal/viscera, manure, and waste water; trimming and carcass washing will generate waste such as fat, meat trimming, and waste water; boning will produce waste meat trimming, and waste water; chilling produces wastes such as fat, and waste water; and packaging generates waste water. For the two product types Table 6.8 provides the potential impacts and mitigation measures.

Refrigeration systems will include equipment and processes that cool the products below ambient temperature. The process involves a change in phase of a substance (refrigerant) either ammonia or freon so that it will be capable of abstracting heat. The refrigerant absorbs heat at low temperature by vaporization and gives it up at the condenser. Compressors are used for increasing the pressure of the vaporized refrigerant. The increase in pressure is accompanied by an increase in temperature that enables cooling water to condense the vapor, and the cycle is repeated.

Chemicals will be consumed at the facilities for different purposes such as detergents and antiseptics for cleaning; water is used as process water, as rinse water for equipment and floor, as cooling water and for domestic purposes. Water may be supplied from public water lines, wells or canals. The major pollutants can be noise from the compressors operation; waste cooling water, which could be contaminated with lube oil; hazardous materials, such as Chlorofluorocarbon (CFCs).

| Impact Issue | Potential Impact | Mitigation Measures |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Air Quality and Noise | For impacts and mitigation associated with construction of buildings etc. see (Table 6.7) Air emission in vegetable, fruit and poultry results in: Exhaust gases from fuel consumption used by generators results in generation of particulate matters (PM10), sulfur oxides, nitrogen oxides and carbon monoxide. Emissions include ash, soot and carbon compounds, which are often the result of incomplete combustion Particulates (smaller than 10µm (PMB10B) penetrate deeply into the lungs, causing a large spectrum of illnesses (e.g. asthma attack, cough, bronchitis) | Contractor to do sensitive local access road route selection and siting of construction facilities Use well maintained equipment fitted with abatement devices (e.g. mufflers, noise enclosures) Institute strict controls of timing of noisiest construction activities; prohibit working at night Observe seasonal sensitivities (e.g. breeding seasons), and alteration of activity to reduce noise levels at that time Use equipment that meets appropriate emissions standards, and regular preventative maintenance Do not use ozone depleting substances as refrigerants Frequent collection of solid waste (3 x a week) |

Table 6.8: Types of impacts associated with construction and operation of cold storage facilities for vegetable and poultry products and their mitigation measures

| | Ozone depletion (if CFCs used) resulting from leaks in refrigeration tubes decreases the earth's ozone layer | Convert waste to organic manure for use in vegetable gardens |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Odor problems with poor management of solid wastes and effluents Gaseous Pollution | Contractors must also be warned in their agreement clauses to reduce air pollution through use of well-maintained equipment. Equipment must be serviced frequently and run below the optimal, as overloading strains the mechanisms that produce incomplete combustion. High quality oils must also be used to reduce dangerous air emissions. |
| | | Emission standards prescribed in the Environmental Quality, Permitting and Discharge Regulations must not be exceeded |
| | | Ensure that engines of vehicles and machines are not left operating idle |
| Effluents | Processing of fruits, vegetable ad poultry typically generates large volumes of effluents that contain high organic loads, cleansing and blanching agents, salt and suspended particles such as fibers and soil particles | Establish a waste water management system to treat effluent before discharging into environment according to the national. Use the Environmental Quality, Permitting and Discharge Regulations as guide |
| | They may also contain pesticide residues washed from the raw materials | |
| | Floor and equipment washing and sanitation produces a wastewater containing organic matter, oil and grease, and traces of the chemicals used for neutralization and sanitation | |
| Solid Waste Generation | Solid wastes are generated from the following operations: | Improved waste management measures shall be employed and enforced, and these will include the following, amongst others: |
| | The fruit and vegetable trimming, peeling and sorting; the rejects impact soil In poultry, waste generated include: blood, offal/viscera, feathers, fat, waste water, etc. | Developing a waste management plan to include amongst others, the types of waste, expected quantities and frequency, proposed management procedures and responsibilities. The plan will indicate the following, among others: |
| | Biological wastewater treatment plant, which generates sludge; suspended solid impact water bodies | ✓ Minimizing the production of waste that must be treated or eliminated where waste generation cannot be |
| | In addition to construction rubble, poorly managed solid waste can result in creation of dumpsites which can have environmental health impacts | avoided ✓ Identification and classification (hazardous or not, solid, gaseous or liquid) |
| | Poor disposal of such waste may have secondary impacts with the potential of spreading of diseases, contamination of water bodies, degradation of aquatic ecosystems, and generation of | and estimate the likely type of waste to be generated such as cleared vegetation, packaging, excess aggregate and disused equipment, etc. |
| | greenhouse gases if the waste is burnt. As waste will be produced during all phases of the Project, effects from improper management may be long- | If hazardous wastes are generated, proper procedures must be taken regarding their storage, collection, transportation and disposal as indicated in the Hazardous Chemicals and Pesticides Control and Management Act, 1994 |

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|------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| term with localized negative impacts on aesthetics, health and safety. | ✓ Using the cleared vegetation, as firewood within the communities |
| | Reusing the solid waste e.g. top soil wastes generated from the excavation works as backfill while the rest will be disposed of in designated areas |
| | Other solid wastes (such as cement bags, metallic pieces, wooden planks, and leftover of aggregate material and debris) will be disposed of according to the <i>National Environment Management Act, 1994</i> and Antilittering Regulations, 2007 |
| | Identifying and demarcation of approved disposal areas, clearly indicating the specific materials that can be deposited in each; waste must not be discarded within, or close to gazetted forests and Wildlife Parks |
| | The Contractor to develop a well-organized internal supervision and monitoring system to ensure waste reduction and proper management through full implementation of the waste management plan |
| | Recommending that the work contracts include waste management measures (as indicated in Appendix 3.1) such as those described in World Bank's EHS Guidelines (1.6 Waste Management) |
| | External monitoring to be carried out by the TACs to remind the Contractors that they are being watched |

6.4.7 Types of impacts associated with climate change

Various environmental tools will be used to identify challenges that will affect the Project. Some of the tools will include the Climate Screening System (CSS) and the Adaptation Review and Evaluation Procedures (AREP). This will help identify appropriate adaptation actions including relevant activities for each subproject, as well as the capacity building needs for the Project implementing institutions such as WFP, ActionAid, NACOFAG, etc. Following the CSS procedure, the Project will be classified; usually, this type of Project is classified as Category II, indicating that it will be affected by climate change impacts.

Climate change impacts that could be experienced in the course of Project implementation will include erratic rainfall patterns, prolonged dry spells, heat waves, and flooding which cause infrastructure damage, crop failure, and ecosystem desiccation through increased salinization in freshwater wetland and mangrove ecosystems. Saltwater intrusion could push the saline front further into the Gambia River, affecting rice cultivation in certain portions of the LRR; irrigation demand will increase in the face of decreasing rainfall and increased evapotranspiration, placing additional pressure on irrigation systems, especially where they involve use of pumping machines.

On the other hand, soil erosion from increased rainfall intensity particularly from upland areas into the lowlands will affect watershed sustainability, and lead to sedimentation in reservoirs, with impacts on the operation of facilities. Some other impacts could include inundation of tidal irrigated fields mainly from three sources; increase in run-off from the upland into irrigated fields; increase in water level and volume from the river into the irrigated fields; and rainwater falling directly into the fields. Thus, inundation could lead to loss of production in the rice perimeters.

The Project will ensure that the crops and infrastructure are climate resilient by integrating into its design climate change resilience initiatives focusing on reducing the inundation of rice fields. The initiatives will involve changes in the engineering designs of some of the current tidal perimeters to control run-off from the upland in to the rice fields, and to release the over flow from the river and direct rainfall away from the rice

fields. The engineering designs will also protect ecosystems at risk from other natural or anthropogenic hazards.

In addition, the Project will encourage farmers to adhere strictly to the farming calendar to mitigate inundation of crops; adopt improved farming technologies and facilities which will minimize post-harvest losses; include capacity building for farmers to make them responsive and able to analyze risks properly. By improving markets and access roads, the Project will reduce transportation costs and thus improve farmers' incomes to reduce poverty and enhance resilience of the farmers. See Table 6.9 for types of impacts and mitigation measures.

| Impact Issue | Potential Impact | Mitigation Measures | | |
|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Prolonged dry spells and drought, and erratic rainfall pattern | Crop failure due to ecosystem desiccation and saltwater intrusion up the affecting rice cultivation in certain portions of the River Gambia in LRR | Increase access to seeds adapted (e.g. drought resistance seeds) to local conditions | | |
| | | Promote good agriculture practices such as sustainable land management for increased agricultural yields | | |
| | | Use of climate smart agriculture techniques and skills (conservation techniques), use of short cycle species, enhance utilization of river and ground water | | |
| | | Use early maturing and deep flooded crop varieties | | |
| Excessive rainfall and storm water run-offs | Inundation and flooding of rice fields and gardens resulting in plants submerged and loss of crops | Facilitate monitoring and early warning systems for floods and drought events | | |
| | submerged and loss of clops | Build capacity for agricultural planning and extension services to facilitate dissemination of climate information to farmers | | |
| | | Smallholder farmers must respect and adhere to the local farming calendar | | |
| | | Update infrastructure design standards | | |
| | | Support flood protection barriers along rivers | | |
| High post-harvest losses Loss of produce due to lack of storage facilities | Post-harvest losses lead increased poverty, as a result if decrease in the incomes of smallholders | Build capacity of delivery institutions and farmers on post-harvest techniques and skills | | |
| | | Develop quality storage facilities to reduce post- harvest losses | | |
| | | Provide simple machinery (post-harvest handling, processing and packaging) | | |

| Table CO. Tumos of in | manta ana sistad with Ol | lucate Ohenne and the lu | multimetien messeries |
|------------------------|--------------------------|--------------------------|-----------------------|
| Table 6.9: Types of Im | pacts associated with CI | imate Change and their | mitigation measures |

CHAPTER 7.0 ENVIRONMENTAL AND SOCIAL ASSESSMENT AND APPROVAL PROCESS FOR SUB PROJECT ACTIVITIES

This Chapter describes the process that will guide the development and approval of the ESIA reports of all the sub-projects to be implemented under the GAFSp. The process is guided by the Environmental Impact Assessment (EIA) Regulations (2014) as per Cap. 72.01 of the NEMA, (1994). The EIA Regulations are the key legislative regulations to which GAFSp sub projects' ESIA Reports must abide and comply with. NEA is the authority in the country with the main responsibility for enforcing this Regulation. The Regulations prescribe the requirements to produce an ESIA. Table 7.1 below provides a summary of the key issues, and Appendix 7.1 provides a flow-chart of the process, from screening to approval.

Table 7.1: Summary of the Environmental and Social Assessment and Approval Process

| | DECDIDITION | | | |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| PART/SECTION Part I: Preliminary Provisions | DESRIPTION Covers the general implementation of these regulations | | | |
| Part II: Environmental Impact Assessment | Sets out the EIA procedure including screening, scoping and public | | | |
| Procedure | participation in the environmental impact study | | | |
| Part III: Environmental Impact Statement | Covers Regulation 17 and 18 which deal with the requirements and content | | | |
| r art m. Environmentar impact otatement | of the Environmental Impact Statement (EIS) | | | |
| Part IV: Review of the Environmental Impact | The review of the EIS (Regulations 19 – 24) includes: | | | |
| Statement | Submission of the EIS | | | |
| | Invitation to the general public to provide comments on the EIS | | | |
| | Review of the comments submitted by the general public | | | |
| | • Determination to make a decision or hold a general public | | | |
| | meeting | | | |
| | Requirements for the general public meeting, including persons | | | |
| | eligible to make presentations at the public hearing | | | |
| Part V: Decision of the Executive Director on | Regulations 25 – 29 deal with the approval process, conditions of approval, | | | |
| Environmental Impact Statements | reasons for denial and cancellation of an environmental approval | | | |
| Part VI: Monitoring and Environmental Audits | Sets out the monitoring requirements including those for self-audits and | | | |
| | audits by an Agency | | | |
| Part VII: Miscellaneous Provisions | These include, environmental impact assessment of policies and programs, | | | |
| | effect of approval or rejection of a proposed project, offences, appeals and | | | |
| Schedules | delegation of powers and functions. The schedules include the screening form template, screening list classes | | | |
| Scheddles | and issues to consider in undertaking EIAs | | | |
| Schedule C | | | | |
| Ecological Considerations | Biological diversity including: | | | |
| | a) effect of proposal on number, diversity, breeding habits, etc. of wild | | | |
| | animals and vegetation | | | |
| | b) gene pool of domesticated plants and animals e.g. monoculture vs. wild | | | |
| | types | | | |
| | | | | |
| | Sustainable use including: | | | |
| | a) effect of proposal on soil fertility | | | |
| | b) breeding populations of fish and game | | | |
| | c) Natural regeneration of woodland and sustainable yield d) Wetland resource degradation or wise use of wetlands | | | |
| | | | | |
| | Ecosystem maintenance including: | | | |
| | a) effect of proposal on food chains | | | |
| | b) Nutrient cycle | | | |
| | c) Aquifer recharge, water run-off rates etc. | | | |
| | d) Areal extent of habitants | | | |
| Social Considerations | a) effect of proposal on generation or reduction of employment in the area | | | |
| | b) social cohesion or disruption | | | |
| | c) effect on human health | | | |
| | d) immigration or emigration e) communication - roads opened up, closed, re-routed | | | |
| | f) local economy | | | |
| Landscape | a) views opened up or closed | | | |
| | b) visual impacts (features, removal of vegetation, etc.) | | | |
| | c) compatibility with surrounding area | | | |
| | d) amenity opened up or closed, e.g. recreation possibilities | | | |
| Land Use | a) effects of proposal on current land uses and land use potentials in the | | | |
| | project area | | | |
| | b) possibility of multiple use | | | |
| | c) effects of proposal on surrounding land uses and land use potentials | | | |

Of particular relevance to this Project are Parts II, IV and VI, which have to be conducted, or coordinated by NEA. It is recognized that there is a "non-involvement" requirement of all Government institutions in the GAFSp, and this includes NEA. Nonetheless, the ESMF/ESIAs/ESMPs will have to be validated in order to issue the relevant permits, and legally this process is led by NEA. The Agency also is mandated to carry out compliance monitoring of ESMP implementation. For the latter role, a possible option could be for a local institution, firm or individual to be given the responsibility of monitoring, after due consultation with NEA.

7.1. Assessment Procedure

Upon receipt of an application for environmental approval from the GAFSp PMT, NEA shall issue the Project with a Screening Form (under Schedule A of the regulations) to complete and return to the Agency, (only one screening form must be used per project). Appendix 7.2 is sample of the Screening Form. The Project

proponent shall submit the completed forms together with any other required documentation, to the Agency for screening. The purpose of the preliminary screening is to:

- i. Determine whether sub-projects are likely to have potential negative environmental and social impacts
- ii. Identify appropriate mitigation measures for activities with adverse impacts
- iii. Incorporate mitigation measures into the project design
- iv. Review and approve project proposals
- v. Monitor environmental and social impacts and concerns during implementation

The screening process will also consider whether the AfDB's OS-2 has been triggered; thus, screening will cover both environmental and social issues of the Project.

The GAFSp PMT, which should include an Environmental Safeguards Specialist (ESS), will complete the Screening Form for each sub-project, and should there be doubts regarding completion of any section, NEA should be consulted for guidance.

Based on the outcome of the screening, any sub-project that is considered as Category A or B would require an ESMP prepared to guide its implementation. Appendix 7.3 is Schedule 1 of NEMA provides the list of projects for which ESIA is mandatory.

In view of the types of planned activities, GAFSp sub-projects will essentially fall under Category B, (requires an ESIA/ESMP); this is essentially equivalent to the AfDB's category II, and would equally require to be cleared by the AfDB, after complying with the Bank's OS-1. This policy provides guidance on the environmental assessment procedures for AfDB-funded projects. It will be recalled that the capacity of NEA and its national collaborating partner institutions in the EIA process was built by the World Bank through a capacity building environmental project; consequently, The Gambia's guidelines and procedures are tailored after the World Bank's (which are essentially similar to the AfDB's ISS) but with modifications where appropriate, to suit the national circumstances. However, in the GAFSp process, where policy discrepancy exists, whichever is more stringent will prevail. Sub-projects requiring NEA's clearance will only commence when an environmental permit has been received from NEA. The steps below will be followed by the GAFSp PMT to procure approval for the sub-projects.

Step 1: Environmental Registration of Project with NEA

The ESS in GAFSp PMT will inform NEA and request for clearance; upon receipt of the Screening Form from the Agency, the PMT will complete and return to NEA for screening and categorization. Following the outcome of the preliminary screening exercise, NEA will advise on which sub-projects should be subjected to ESIA. Refer to Appendix 7.3.

Step 2: Screening and Sub-Project Categorization

The Agency shall categorize the sub-project by placing it at the appropriate level of environmental assessment within 20 working days after receiving the Screening Form from GAFSp PMT. The results will be communicated, with reasons, which could be any of the following:

- Objection to the sub-project
- No objection to the sub-project and no further reporting required, or Category C; i.e. equivalent to AfDB's Category III Project. In this case the sub-project has only minor environmental and social risks; GAFSp may move to implementation in accordance with pre-approved standards or codes of practices or pre-approved guidelines for environmental and social management
- Preliminary environmental and social impact assessment (Category B), i.e. equivalent to AfDB Category II Project
- Environmental and social impact assessment (ESIA), i.e. equivalent to AfDB Category I Project

Step 3: Conduct environmental and social assessment studies

For NEA's Category B, or AfDB's Category II sub-projects, for which the decision is the conduct of an ESIA, stand-alone ESIA reports will be prepared. NEA and its national collaborating partner institutions in the EIA Working Group will prepare the Terms of Reference (ToR) within 20 working days for the ESIA study, and submit to the GAFSp to recruit consultants for the ESIA.

The ToR is prepared using issues identified during the screening and scoping exercise. The impact mitigation measures provided in this ESMF may provide some basis for the design of the ToR. Appendix 7.4 provides a template for the development of the ToR to conduct the ESIA study.

The ESIA will identify and evaluate potential environmental impacts for the proposed activities, evaluate alternatives, and design mitigation measures. The preparation of the ESIA will be done in consultation with stakeholders, including people who may be affected. Public consultations are critical in preparing a proposal for the activities of the projects likely to have impacts on the environment and population. For details on the consultative process refer to Chapter 5. The time-line for the duration of the ESIA/ESMP report development is determined by the GAFSp PMT. Guidelines for the development of the ESMP is in Appendix 7.5, and the Box below indicates the Content of the ESIA report.

| Executive Summary: |
|---------------------------------------------------------------------------------------------------------------------------------|
| Introduction: |
| Scoping: |
| Policy, Legal and Administrative Framework: |
| Project Definition: |
| Analysis of Alternatives Considered: |
| Project Baseline: |
| Evaluation of the Environmental and Social Impacts and their Significance |
| Expected Residual Effects: |
| Summary of Public Consultations and the Opinions Expressed: |
| ESMP, including Management Measures, Actions, Roles and Responsibilities, Timeframes, Monitoring and Cost of Implementation: |
| Annexes |

Content of ESIA Report

Step 4: Review and approval of the ESIA for GAFSp sub-projects

Upon submission of the ESIA report by the Consultant, the GAFSp PMT's ESS will submit the draft ESIA report to NEA for review, and subsequently for review by the national EIA Working Group. The review period is within 30 working days from date of submission. This process is aimed at:

- Assisting NEA in screening/reviewing all EIS Environmental Impact Statements (EIS), ESMPs and other related reports
- Making recommendations to the Executive Director of NEA for final decision-making
- Making recommendations on the adequacy or otherwise, of the assessment and any observed gaps

 Advising on the seriousness of such gaps and to recommend whether the mitigation measures as proposed can be accepted, and under what conditions, or not to be accepted and the reasons, as well as provide guidance on how any outstanding issue/areas may be satisfactorily addressed. Comments and pertinent views generated during the review period are forwarded to the GAFSp PMT and Consultant to incorporate for final review

7.2 Other related and relevant Bank procedures

Given that implementation of some GAFSp activities may have social risks, in addition to the environmental impacts, other relevant Bank safeguard instruments that could be triggered include OS-2 (Involuntary resettlement, land acquisition, population displacement and compensation). For example, siting of new communal gardens on land belonging to other people, construction or upgrading feeder roads that encroach unto other people's land, project activities that result in loss of earning of persons due to project impact, etc. will trigger OS-2.

The closest Gambian policy to the OS-2 is the Land Acquisition and Compensation Act (LACA), 1991, and it recognizes only those who have legal title to the land to be acquired. Consequently, those who do not have a legal (freehold, leasehold or customary) right to land are not entitled to any compensation should any person lose property or assets to the Project. In addition, there is no explicit requirement to minimize hardships; Gambian law does not provide for additional measures to aid livelihood recovery, or to provide special assistance to vulnerable groups.

Conversely, OS-2 covers economic and social impacts resulting in, for example relocation or loss of shelter, loss of assets or access to assets and loss of income sources or means of livelihood; in such instances a RAP is prepared. In this regard, should GAFSp implementation result in involuntary resettlement, the AfDB's OS-2 will be applied.

Step 5: Publication / Dissemination of ESIA/ESMPs see section 5.3

Where the draft ESIA report is found acceptable, NEA will notify GAFSp and the Consultant to submit eight hard copies and an electronic copy, following submission of which GAFSp shall be issued an Environmental Permit within 15 working days and issue gazette notices.

Fees pertaining to the environmental impact assessment process are as follows:

- (1). There shall be paid in respect of each application for consideration of a proposal for an environmental impact assessment, a fee of one thousand Gambian dalasi as cost of the screening form and the following amounts as processing fees after the screening of the project proposal-
 - (a) twenty-five thousand dalasi for Class "A" projects
 - (b) ten thousand dalasi for Class "B" projects
 - (c) five thousand dalasi for Class "C" projects
 - (d) one thousand dalasi where a proposal is non-profit, community-based and classified as "C"
- (2). For the purpose of granting environmental approval regardless of the class of the project, the fee for the environmental approval shall be 1% of the development cost of the proposed project
- (3). For projects classified as "A" and "B" the environmental approval shall be renewed annually at a fee equivalent to 5,000 and 3,000 dalasi respectively of their processing fee; Class "C" and community development-base projects shall pay a flat fee of 2,000 and 500 dalasi for annual renewal of their environmental approval
- (4). The Agency shall publish in the Gazette and the mass media and in such form as the Executive Director shall determine, notice of every environmental approval issued by him or her within three months of the date of issue of the permit

(5). The Agency, through the Admin and Finance Committee when and where necessary, would warrant the revision of the charges to reflect the prevailing circumstances

7.3 Relevant Clauses to be integrated into Contractors' Contracts

Very often Contractors implementing projects such as the GAFSp do not adhere to guidelines as indicated in ESMPs, and thus do not implement the recommended mitigation measures for project sustainability. The Contractors referred to in this report include any person, firm, or Consultant engaged to carry out a service, (design and construction and installation or any associated works, etc.).

The Contractor will be responsible for ensuring compliance with all the relevant laws as well as managing the potential environmental, social, health and safety impacts of all Project activities specified in all the approved environmental documents or reports such as the ESMF/ESMP. The Project should ensure, for example that gender-based violence/sexual exploitation and abuse/violence against children; discrimination against employment of women; in accessing Project and resettlement benefits, etc. are included in the Contractor's ESMP and bidding documents.

Codes of Conduct and EHS Guidelines (attached in Appendix 3.1), and Contract clauses (Appendix 7.6) should be included in Contractors' agreements as part of GAFSp bidding documents. In this regard the Contractor should engage the services of a Health, Safety and Environment specialist and a Community Liaison Officer to ensure proper application and compliance with principles and prerogatives in these Clauses.

CHAPTER 8.0 ESMF IMPLEMENTATION ARRANGEMENTS

Implementation of the ESMF is the main responsibility of the GAFSp PMT to be hosted by the WFP CO. Since the purpose of the ESMF is mainly to set the framework for future environmental and social management of subprojects, more specific roles and responsibilities shall be identified in the ESMPs. This section will therefore describe the implementation arrangements of the ESMF, and subsequent site-specific ESMPs.

It will be noted that other parties may have roles to play in ESMF implementation although these have to be initiated by the PMT; despite the fact that Government institutions are not to benefit from the Project, their regulatory and advisory roles will need to be recognized and utilized as and when necessary. For example, those public institutions that are important at the preparatory stage (mainly for technical advice and regulatory information provision) will include the NEA, who will be responsible for subproject screening and categorization, and eventually monitoring implementation of the subproject ESMPs; Department of Forestry who will be responsible for all forest related issues; Ministry of Agriculture (MOA) who will provide support in the selection of agricultural fields; MOBSE, as the implementer of the School Feeding Program; the local authorities such as the offices of the Regional Governors, and project affected persons are also relevant in project planning. Local government authorities have long-established relationships with affected communities, and therefore can play a role, for example, in convening and facilitating discussions between the Project and stakeholders.

8.1 Stakeholder Roles and Responsibilities in ESMF Implementation

The WFP will be the executing agency, where the Project will be domiciled. The institutional arrangement for the implementation of the ESMF will consist of the following:

• Project Steering Committee (PSC)

A Project Steering Committee (PSC), will be created to provide strategic oversight and policy guidance in GAFSp implementation. It will review annual work plans and budgets, progress and quality of project implementation. The PSC shall comprise entirely of non- governmental institutions such as WFP; National Coordinating Association of Farmers (NACOFAG) representing civil society organizations; The Association of Non-Governmental Organizations (TANGO) represented by Action Aid International The Gambia (AAITG); the private sector represented by Commercial Farmers Agribusiness Network (CFAN) and, United Nations Fund for Population Activities (UNFPA).

• Project Implementation Unit (PMT)

The day-to-day management of the Project will be vested in a dedicated Project Management Team (PMT at the WFP Country Office (CO), and will comprise WFP CO officers as well as others that will be competitively recruited. These will include an Environmental Safeguards Specialist (ESS) who will be responsible for all aspects of the ESMF/ESIA/ESMPs of the Project. The Gender Protection Officer (GPO) at WFP CO will be responsible for all gender and social issues of the Project.

The key tasks of the PMT will comprise management of operations including; technical, fiduciary (procurement and financial management); M&E activities, communications; ensuring social and environmental safeguards, reporting; baseline and impact evaluations; and, mid-term and final project evaluations. It will comprise: Project Coordinator (Team Leader), Financial Management Expert, Finance Associate, M&E Specialist (Country Office), Head of Supply Chain/Procurement Officer, Logistics Associate and two Business Support Assistants. The PMT will be supplemented by external consultants, as and when required.

Project Coordinator

A Project Coordinator will be in place to oversee the implementation of the Project. He will have the responsibility for initiating the ESIA/ESMP process of subprojects that require clearance from NEA.

Environmental Safeguards Specialist (ESS)

The environmental safeguards specialist, will complete the screen form for each sub project activity and submit to NEA for screening and categorization, and will follow up to approval level. ESS will provide progress reports on all environmental issues and activities including implementation of the ESMF and ESMPs. Progress reports will be submitted to the PMT for transmission to the PSC.

The ESS will ensure integration of environmental mitigation measures in the bidding documents; ensure that the contactor prepares his ESMP, gets it approved and integrates the relevant measures in the works breakdown structure or execution plan.

In collaboration with the GPO, the ESS will ensure that contract documents contain environmental and social safeguard clauses that contractors must fully implement.

Gender and Protection Officer (GPO)

The Gender Protection Officer will collaborate with the ESS to complete the screen form for each sub project activity and submit to NEA for screening and categorization. The GPO will provide progress reports on all social and gender issues, to be submitted to the PMT for transmission to the PSC.

The GPO will ensure integration of social and gender mitigation measures in the bidding documents; ensure that contract documents contain gender and social safeguard clauses that contractors must fully implement.

Monitoring and Evaluation Specialist (M&ES)

The Monitoring and Evaluation Specialist coordinates internal monitoring and evaluation of subprojects based on monitoring plans.

Monitoring and evaluation are fundamental components of the ESMF and they will be carried out on a continuous basis. Whilst monitoring of the ESMF implementation process is normally the responsibility of the PMT, evaluation is undertaken by an external agency.

• Central and Local Authorities

Even though they will not benefit from the Project, the central and local government institutions' support is critical to the success of the Project. They have regulatory functions, and continuous engagement with them is often required. These will include the NEA, MOBSE, MOA, the Technical Advisory Committees (TACs) in the Offices of the Regional Governors in CRR, LRR, and WCR, etc.

National Environment Agency

NEA is the national focal institution for the management of the environment, the coordinator of implementation of the Gambia Environmental Action Plan (GEAP), as well as the enforcer of the NEMA, 1994 and its supporting legislation; NEA will be responsible for overall coordination of the implementation of this ESMF and subsequent ESMPs. It will provide technical support and participate in training and sensitization of stakeholders (if requested) to enhance understanding of the national environmental and social safeguard instruments.

The Agency has a monitoring and supervisory role and shall be responsible for confirming the results of the screening process, reviewing and clearing subproject-specific safeguard instruments and conducting compliance monitoring, within the context of the national laws and regulations, as well as the AfDBs' policies and procedures.

Overall supervision and monitoring will be the responsibility of the Senior Program Officer (SPO) - EIA, based at NEA's headquarters in Kanifing. Within the context of the national EIA Working Group (to which the SPO – EIA is Secretary), s/he will be making periodic visits to the regional GAFSp sites to support the Regional Program Officers (RPOs) and Regional Environmental Inspectors (REIs). The SPO reports to the NEA Executive Director, as well as to the EIA Working Group on implementation progress.

At the Regional levels, the ANR/EIA subcommittees of the TACs will be responsible for the overall supervision and monitoring of implementation of the ESMF/ESMPs. The day to day supervision will be the responsibility of the RPOs and the REIs.

In project implementation, it is expected that pesticides and other agro-chemicals will be used, and it is the responsibility of NEA to monitor quality of the pesticide imported into the country with the aid of the Formulation Laboratory. The laboratory has not been functional in the past few years.

• The Regional Technical Advisory Committees (TACs)

The multi-sector TACs (specifically, the ANR/EIA Sub Committees) at the Offices of the Regional Governors will be the regional oversight bodies, to monitor ESMF/ESMP implementation at the regional levels.

On the ANR/EIA subcommittee sits the RPOs and REIs who will be responsible for the day to day supervision and monitoring of ESMP implementation. The RPOs will report to the ANR/EIA sub committees as well as to the SPO-EIA at NEA Headquarters. Selected members of the ANR/EIA sub committees (including the RPOs) will visit project sites periodically, as well as review reports prepared by the RPOs and EIs following field visits.

However, given that most of the members of the TACs are not trained in environmental issues (their respective sectoral backgrounds include mainly agricultural extension, veterinary and animal husbandry, water resources management, forestry, etc.) members will have problems in supporting the GAFSp at the Regions; the majority of the memberships are not familiar with general environmental management, and more so with specific ESIA preparation and implementation.

• The Plant Protection Services (PPS) – Ministry of Agriculture

As the lead institution in the implementation of the IPM Policy the PPS has a major role to play in the implementation of this ESMF and subsequent ESMPs, particularly as it relates to use of pesticides and inorganic fertilizers in both the vegetable gardens as well as the rice fields.

With the introduction of IPM as the main policy for addressing pests and pesticide issues, this institution will lead the implementation of IPM activities as is its mandate. The institution will provide technical support to the GAFSp, including providing trainers in IPM principles and practices.

The institution will build the capacity of extension workers (NACOFAG, ActionAid, CFAN, etc.) and beneficiary farmers in improved crop protection techniques, including pest monitoring, use of resistant varieties, minimal use of pesticides with emphasis placed on traditional and good cultural practices. In this way IPM principles will be widespread at farmer level and agricultural technicians' level.

• The Forestry Department

The role of the Department of Forestry (DOF) will be on all forest- related issues of the Project; DOF expertise will be required for supervision, especially when project activities are planned in close proximity to gazetted Forest Parks, or where virgin areas are involved in locating project activities.

• Department of Parks and Wildlife Management PWM

Technical expertise of DPWM will be required in the siting of project activities in certain areas (ecologically sensitive areas outside gazetted parks must be avoided), resulting in loss, fragmentation and degradation of habitat through land clearance for agriculture, or new roads and upgrading of existing roads. For example, in certain locations where hippos occur, rice farms are ravaged by hippos, resulting in loss of crops. DPWM have expertise in preventing hippo invasion of rice fields.

Women's Bureau

Under the Ministry of Women, Children and Social Welfare, the Bureau will be represented at the Regional level to lead in the process of integrating GBV and VAC issues into the work of the TACs in general, and particularly within the GAFSp in the three selected Regions.

During the studies it became evident that the focal institutions named above are in most cases presently overwhelmed by their current responsibility, and are trying to cope with limited human and technical resources. Their current capacities are inadequate to efficiently monitor and ensure implementation of the ESMF/ESMPs. For example, the capacity of NEA is generally weak, especially with regard to equipment and materials as well as technical skills; due to the lack of equipment and supplies the Formulation Laboratory is not operational.

CHAPTER 9.0 CAPACITY ENHANCEMENT FOR IMPLEMENTATION OF ESMF

This section is intended to identify the capacity building needs of the various institutions and persons that will be involved in the implementation of the ESMF/ESMPs, and it prescribes the approaches and methods that could be employed. The competence of the various actors, i.e. their ability to carry out their respective design, planning, approval, permitting, monitoring and implementation roles will, to a large extent, determine the success and sustainability or otherwise of the Project. For instance, the objectives and provisions of this ESMF cannot be achieved in the absence of relevant competencies in environmental and social management within the GAFSp PMT and other stakeholders. The following sections provide recommendations, based on the identified needs of some of the potential Project beneficiaries and implementers.

9.1 Capacity Assessment and Enhancement of Participating Institutions

GAFSp is not expected to train any of the public sector institutions named above; it will concentrate on developing the capacity of the private sector institutions to be involved in ESMF implementation (CFAN, ActionAid, NACOFAG, WFP CO, etc.).

The first step identified in the capacity building needs of the various stakeholders, is viewed as being more than training; it also involves organizational development, elaboration of relevant management structures, processes and procedures, not only within organizations but also the management of relationships between the different organizations and sectors (public, private and community) that will be involved in the Project. Capacity building also includes human resource development, and involves the process of equipping individuals with the understanding, skills and access to information, knowledge and training that will enable them to perform effectively.

In the development of the report it became clear that the proposed institutions that will be involved in the Project will need to have their capacity enhanced; employees of the institutions will equally need to be trained in specific skills and competences, mostly in the form of training workshops and seminars.

Training workshops on the implementation of the ESMF/ESMPs, and AfDB safeguard policies would be organized for staff of the PMT, (especially the Project Coordinator, and ESS) as well as the private sector participants (including Project consultants/contractors). The following training topics are proposed, especially for the proposed safeguard specialists:

- Environmental and social Screening of Sub-projects using the NEA Screening Form
- Preparation of Terms of Reference for ESIA

Other forms of institutional capacity building relate to the skills to implement the relevant Codes of Conduct and Action Plan to implement the Project's OHS and ESHS Standards, and preventing GBV/VAC. Typically the new GRC members to be included into the existing mechanism need to be trained and sensitized on these protocols. To effectively serve on the GRC, members must undergo training prior to the commencement of their assignment to ensure that they are sensitized on GBV and Child Protection. Thus, training and capacity building will be required in the following:

- Integration of environmental and social clauses in Contractors' contracts and bidding documents
- Implementation of the Project's GBV and VAC Codes of Conduct, GBV/VAC Action Plan, ESHS and OHS standards
- Operation of the Project's GRM/GRC

9.2 Individual Capacity Building Needs

This category includes the Contractors, their managers and employees on the various aspects of ESMF/ESMP implementation, as well as on the Codes of Conduct and Action Plan. All employees will attend an induction training course prior to commencing work on site to ensure they are familiar with the Company's commitments to ESHS and OHS standards, and the Project's GBV and VAC Codes of Conduct.

Community members and farmers will need to be trained in appropriate methods of application of agrochemicals, since inappropriate methods of use can result in unacceptable toxic residues on agricultural products and unnecessary financial burdens because of over application. In this regard, appropriate management of their use (timing, dosage, mode of application, etc.) is necessary to reduce to acceptable levels the environmental risks they pose. In addition, the farmers will be trained in IPM approaches including use of biological controls such as predators, parasites and pathogens to control pests. Cost of the capacity building exercise is presented in Table 10.2

The training program should aim to provide attendees with general understanding of environmental and social management issues, safeguard processes, relevant environmental policies and legislation, and the basic approach to implementing the guidelines provided in ESMF/ESMPs. Others will include the use of appropriate tools such as the screening forms, health and safety management, and internal monitoring and evaluation procedures.

In addition to the above, and in order to comply with best practices and international standards, Contractors and laborers should be provided with information, knowledge and skills, focusing not only on the construction phase but also operational phase of the Project.

CHAPTER 10.0 MONITORING AND REPORTING OF THE ESMF IMPLEMENTATION

This Chapter describes the monitoring and reporting requirements, and the responsibilities of institutions and personnel in the implementation of the ESMF. Monitoring may identify new issues or problems that were anticipated at the time of assessment, or due to changes in the design of Project activities, or at the sites that may require alternative means of mitigation. The aim of monitoring is to:

- i. Improve environmental and social management practices
- ii. Check the efficiency and quality of the environmental processes
- iii. Establish the scientific reliability and credibility of the ESMF for the Project

iv. Provide the opportunity to report on the safeguards results, impacts and proposed mitigation measures

The Project will be responsible overall, and will support and facilitate monitoring by all the identified stakeholders. It should also sensitize and train all relevant stakeholders on their expected roles and responsibilities to promote consistency and efficiency. The monitoring program will consist of three types:

i. Monitoring of compliance

During implementation, it is important to check if the recommended mitigation measures are being carried out effectively to ensure the Project is environmentally friendly. In the construction of the different subprojects, it is important that visits to Project sites are carried out to ascertain whether the proposed mitigation measures are being implemented by the contractors. During the operational and decommissioning phases of the various sub-projects compliance monitoring shall equally be carried out.

Monitoring of compliance of the ESMF/ESMPs, according to the laws of The Gambia, is the responsibility of NEA, but given the peculiar circumstance of the GAFSp, with due consultation with NEA this role can be performed by a private consultant. In addition, the beneficiary communities are the fulltime watchdogs that should internally monitor the activities of the implementing partners locally.

ii. Impact monitoring

This implies monitoring the implementation of the ESMF/ESMP of the Project; i.e. whether these are being implemented by the Contractor(s) as indicated in the respective documents. These reports will be an integral part of the bidding documents that will be provided to then Contractor(s). This will be the responsibility of the Project's ESS.

The Project should ensure that the Contractor(s) submits report on work progress and any challenges in implementing the safeguards documents. For cost-effectiveness and ease of monitoring and evaluation, the ESMF/implementation and monitoring should be mainstreamed in the main Project management system at all levels submitted to the AfDB, and WFP. The monitoring results should be copied to NEA for their records.

iii. Monitoring of cumulative impact

These types of impacts will essentially be the impacts of the GAFSP on the environmental and social resources within its area of influence in relation to the other existing (or planned) development projects or investments in the Project's area of influence. These will often include social service projects such as electricity transmission lines, telecommunications, or roads construction. These usually locate infrastructure within farmlands that could belong to GAFSP beneficiaries. This requires collaboration among these sectors in the planning and implementation mentation of their respective sectoral plans at both national and subnational levels to address cumulative impacts in a coordinated and harmonized manner.

10.1 Reporting

Effective communication is essential in ensuring an environmentally sustainable Project. Therefore, it is important the Project's ESS communicate effectively to the various stakeholders for speedy remedial action where necessary.

The Safeguards specialists will be required to provide monthly reports on progress of the ESMF implementation. These reports will be submitted to the PMT for transmission to the PSC, and to the AfDB. The PMT will compile the monthly monitoring reports for an integrated monitoring and evaluation Project report. Progress or lack of progress must be reported for necessary improvements and identified problems to be addressed on time. A yearly ESMP report will be produced, and by the end of the fifth year the PMT would have produced 4 annual ESMP reports. Table 10.1 describes the monitoring Program with suggested frequencies and indicators to monitor ESMF implementation.

10.2 Environmental Audit

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

take all practicable measures to ensure that the predictions made in the screening form or ESMF/ESMPs are complied with. It indicates that within a period of not less than twelve months, and not more than thirty-six months after the completion of the Project or the commencement of its operations, whichever is earlier, the GAFSp PMT shall undertake an initial environmental audit of the Project. An environmental audit report shall be prepared after each audit and shall be submitted to the NEA by the GAFSp PMT. An independent environmental audit is recommended by year 5 of the Project implementation.

Table 10.1: Project Monitoring Plan - Indicators and Roles

•

| Impact Issue | Proposed mitigation measure | Implementation tool | Monitoring Indicators | Means of verification | Monitoring frequency | Responsibility | Cost (US\$) |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------|------------------------|
| | | Physical a | nd Biological Impact As | ssessment | | I | |
| Air/noise pollution | Use local routes away from sensitive areas Site construction facilities away from sensitive areas Use equipment fitted with abatement devices (e.g. mufflers, noise enclosures); good maintenance regime Institute strict controls of timing of activities, e.g. blasting and other high noise emissions Prohibit working at night working if possible Observe seasonal sensitivities (e.g. breeding seasons) Institute speed controls and other traffic calming measures to reduce excessive acceleration around settlements/sensitive receptors | agreement with contractor Contractor's maintenance program or plan for equipment/ machinery Contractor's Plan on speed limits on unpaved roads through communities: should be ≤50km/hr and near or at project site should be | Maintenance plan implementation Grievances recorded | Independent checks by project engineers and ESS Maintenance records verified by project engineers and ESS Self-check by Contractor | Construction stage | Contractor (s) and ESS | Contractors' budget |

| Water Pollution | Control construction vehicles' movements and prohibit vehicle washing in watercourses, and similar practices Do not hamper drainage of surface water; avoid works in areas prone to flooding especially during rainy season Avoid over-extraction of ground water in vegetable sub-projects Reduce runoff through incorporation of fertilizer into soil, timing of applications to avoid erosive rains, and soil and water conservation measures Select non-ammonium sources of nitrogen such as urea | Industry-specific standards, particularly the Environment Health and Safety (EHS) Guidelines AFDB's OS-4 Construction site management plans | Visibility of oil and other pollution materials on water bodies Reports based on implementation of Actions Plans | Number of times oil and other polluting material seen on water bodies | Regular Monthly Occasional spot checks and observations by project engineers and ESS Periodic reports on performance by Contractor | Contractor and ESS of PMT | Contractors' budget |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------|
| Solid waste generation and disposal | Develop waste management plan including for hazardous waste; cleared vegetation, packaging, excess aggregate and disused equipment, etc. | Part of contract agreement with Contractor Contractor's waste management plan; Industry-specific standards, particularly the EHS Guidelines | Number of waste bins Final disposal records | Periodic reports | Monthly | Contractor(s) and ESS | Contractors' budget |

| Loss, fragmentation and degradation of habitat, and severance of animal migration routes and pathways | Carefully locate all project components, with advice from DPWM and wildlife specialists Establish buffer zones around conservation areas, watercourses, and other locations identified as ecologically sensitive Rehabilitate cleared areas with native species, and ecosystem restoration in habitats of conservation value Develop a long-term monitoring program and corrective actions as | AfDB's OS-3 | Presence of sensitive habitat Minutes of meetings with DPWM Area rehabilitated Long-term monitoring and corrective plans and actions | Activity and site visitation Reports | Pre-construction, construction and maintenance | Contractor and ESS of PMT | |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--|
| Impact on fauna | Demarcate and avoid areas of conservation interest (high value species, feeding or breeding sites, migration routes, etc.) where possible Carry out wildlife rescue and translocation where appropriate, under expert supervision | AfDB's OS-3 | Presence of sensitive habitat Minutes of meetings with DPWM Number of rescued and translocated fauna | Activity reports | Construction | Contractor/ESS | |
| Pesticide hazards to humans and animals | Promote the use of integrated pest Management Use low-concentration granulars, seed dressings, bait formulations and pheromone traps Use suitable Personal Protective Equipment (PPE). Train all construction workers in safe methods of working | Industry-specific standards, particularly the EHS Guidelines | Reports based on implementation of Actions Plans | Health and safety incident register Grievance records | EHS Guidelines under implementation Spot checks and observations by project engineers Periodic reports on performance by | Contractor and ESS of PMT | |

| | | s | ocial Impact Assessmer | ıt | | contractor to project engineers | | | |
|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------|------------------------------------|------------|------------------|--------|
| | | - | | | | | | | |
| Marginalisation of women and other vulnerable groups | Provide women and vulnerable groups with labor and time saving machinery Target the women and other vulnerable groups in allocation of Project resources and benefits | ESMF | Number of women benefiting from Project activities Number of women and other vulnerable groups trained in various skills Number women farmers/production schemes supported with purposive services (extension, mechanization, marketing and/or financial) | Periodic s Project reports | surveys and assessment | During Project operation | ESS/ESS | GAFSp b 5,000 | nudget |
| Physical and economic displacement of people, and assets | Avoid occupation of areas inhabited or regarded as of high value by communities (e.g. horticulture, community orchards) where possible Develop and implement a resettlement action plan (RAP) in accordance with AfDB's OS-2 | AfDB's OS-2 | Number of PAPs | RAP Number resettled | of PAPs | Before start of Project | ESS of PMT | | |

| Interaction | Implement o beatth | ESME: | Health and affects | Chat abadis | 0 n d | Construction | 0.0d | Contractor and ECC | [] |
|---------------|----------------------------------------------|----------------------|----------------------|-----------------------------|-------|--------------|------|------------------------------|----|
| Interaction | Implement a health management system for the | ESMF; | Health and safety | Spot checks observations | and | Construction | and | Contractor and ESS of PMT | |
| between | construction workforce, | Industry-specific | incident register | ESS/Contractor | by | operation | | | |
| workforce and | construction workforce, | standards, | Grievance records | ESS/Contractor | | | | | |
| local | Carry out training and | particularly the EHS | Glievalice recolus | Periodic reports | on | | | | |
| communities | awareness training for | Guidelines | Number of training | performance | by | | | | |
| | workforce and their | Ouldelines | and awareness | ESS/Contractor | by | | | | |
| | dependents on HIV/AIDS | | sessions held | LOO/COntractor | | | | | |
| | and other sexually | | | | | | | | |
| | transmitted illnesses, and | | Number of women | | | | | | |
| | communicable diseases | | and other vulnerable | | | | | | |
| | including malaria | | groups that | | | | | | |
| | including malana | | participated | | | | | | |
| | Carry out health awareness | | F | | | | | | |
| | raising campaigns for | | | | | | | | |
| | communities on similar | | | | | | | | |
| | topics | | | | | | | | |
| | | | | | | | | | |
| Labor and | Employment practices and | Industry-specific | Comprehensive | Periodic reports | on | Construction | and | Contractor and ESS | |
| working | working conditions should | standards, | health and safety | performance | by | operation | | of PMT | |
| conditions | conform to ILO standards | particularly the EHS | reporting and | ESS/Contractor | | | | | |
| | and national regulations | Guidelines | grievance procedure | | | | | | |
| | | | | | | | | | |
| | Institute a clear and | | | | | | | | |
| | comprehensive health and | ESMF | | | | | | | |
| | safety reporting and | ESIVIF | | | | | | | |
| | grievance procedure system | | | | | | | | |
| | freely available to all of the workforce | | | | | | | | |
| | WUNULE | | | | | | | | |
| Economic | Contractor to develop an | Industry-specific | Employment Plan | Periodic reports | on | Construction | and | Contractor and ESS | |
| Development | Employment Plan, with clear | standards, | 1 . 7 | performance | by | operation | | of PMT | |
| and | employment requirements | particularly the EHS | | ESS/Contractor | - 7 | | | | |
| Employment | and procedures for the | Guidelines | | | | | | | |
| | construction and operational/ | | | | | | | | |
| | maintenance workforce | ESMF | | | | | | | |
| | | | | | | | | | |
| | Institute fair and transparent | | | | | | | | |
| | hiring and staff management | | | | | | | | |
| | procedures | | | | | | | | |
| | | | | | | | | | |

| Impacts on | Carefully select routes and | Cultural Heritage | Cultural resources | Cultural Heritage | Pre-construction and | Contractor and ESS | |
|-------------------|---------------------------------|-------------------|--------------------|------------------------|----------------------|--------------------|-------|
| cultural heritage | siting of all project | Management Plan | existing | Management Plan | construction and | of PMT | |
| | components, taking account | | | | repairs/ recovery | | |
| | of results of community | Pre-construction | Number of | Periodic reports based | | | |
| | consultations or specialist | surveys/Chance | infrastructure | on implementation of | | | |
| | surveys | Finds procedure | encountered | Plan | | | |
| | Develop a Cultural Heritage | | Incidence register | | | | |
| | Management Plan covering | | | | | | |
| | tangible and intangible (e.g. | | | | | | |
| | local traditions and practices) | | | | | | |
| | cultural heritage | | | | | | |
| | Implement a "Chance Finds" | | | | | | |
| | procedure during | | | | | | |
| | construction | | | | | | |
| | | | | | | | |
| | | | | | | Total Cost | 5,000 |
| | | | | | | | |

10.3 Estimated Cost for Implementation of the ESMF

The proposed budget for implementation of the ESMF is indicated in Table 10.2 below.

| # | Item | Unit | Unit | Cost | Tot | tal | Source of financing |
|---|-------------------------------------------------------------------|------------|---------|--------|-----------|---------|------------------------|
| # | Rom | onne | Local | US\$ | Local | US\$ | interioring |
| 1 | Preparation of subproject ESIA/ESMPs, GBV/VAC Action Plans | 8 reports | 400,000 | 8,000 | 3,200,000 | 64,000 | GAFSp |
| 2 | Capacity Building (including sensitization on GAFSp | 3 sessions | 150,000 | 3,000 | 450,000 | 9,000 | u |
| 3 | Implementation of Stakeholder Engagement Plan | | 750,000 | 15,000 | 750,000 | 15,000 | u |
| 4 | Monitoring ESMF Implementation (including GRC visits to sites) | 4 trips | 250,000 | 5,000 | 250,000 | 5,000 | u |
| 5 | Implementation of specific ESMPs/GBV Action Plans | 8 reports | 100,000 | 2,000 | 800,000 | 16,000 | " |
| 6 | Mid-term audit of ES performance | 1 | 250,000 | 5,000 | 250,000 | 5,000 | " |
| 7 | Completion audit of ES performance | 1 | 250,000 | 5,000 | 250,000 | 5,000 | " |
| | Total | | | | 5,950,000 | 119,000 | " |

Table 10.2: Proposed budget for the ESMF implementation

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APPENDICES

Appendix 3.1: Codes of Conduct and Action Plan For Implementing ESHS and OHS Standards, and Preventing Gender Based Violence and Violence Against Children

Background

The purpose of these Codes of Conduct and Action Plan for Implementing ESHS and OHS Standards, and Preventing Gender Based Violence (GBV) and Violence Against Children (VAC) is to introduce a set of key definitions, core Codes of Conduct, and guidelines that:

- i. clearly define obligations on all GAFSp staff (including sub-contractors and day workers) with regard to implementing the Project's environmental, social, health and safety (ESHS) and occupational health and safety (OHS) requirements, and;
- ii. help prevent, report and address GBV and VAC within the work site and in its immediate surrounding communities.

The application of these Codes of Conduct will help ensure the Project meets its EHSH and OHS objectives, as well as preventing and/or mitigating the risks of GBV and VAC on the Project and in the local communities.

These Codes of Conduct are to be adopted by those working on the Project and are meant to:

- i. create awareness of the ESHS and OHS expectations on the Project;
- ii. create common awareness about GBV and VAC and:
 - (a) ensure a shared understanding that they have no place in the project; and,
 - (b) create a clear system for identifying, responding to, and sanctioning GBV and VAC incidents.

Ensuring that all GAFSp staff understand the values of the Project, understand expectations for all employees, and acknowledge the consequences for violations of these values, will help to create smoother, more respectful and productive project implementation thereby helping ensure that the project's objectives will be achieved.

Definitions

The following definitions apply:

Environmental, Social, Health and Safety (ESHS): an umbrella term covering issues related to the impact of the Project on the environment, communities and workers.

Occupational Health and Safety (OHS): Occupational health and safety is concerned with protecting the safety, health and welfare of people engaged in work or employment. The enjoyment of these standards at the highest levels is a basic human right that should be accessible by each worker.

Gender-Based Violence (GBV): is an umbrella term for any harmful act that is perpetrated against a person's will and that is based on socially ascribed (i.e. gender) differences between males and females. It includes acts that inflict physical, sexual or mental harm or suffering, threats of such acts, coercion, and other deprivations of liberty. These acts can occur in public or in private. The term GBV is used to underscore systemic inequality between males and females (which exists in every society in the world) and acts as a unifying and foundational characteristic of most forms of violence perpetrated against women and girls. The 1993 United Nations Declaration on the Elimination of Violence against Women defines violence against

women as "any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women."¹³ The six core types of GBV are:

- **Rape**: non-consensual penetration (however slight) of the vagina, anus or mouth with a penis, other body part, or an object.
- **Sexual Assault**: any form of non-consensual sexual contact that does not result in or include penetration. Examples include: attempted rape, as well as unwanted kissing, fondling, or touching of genitalia and buttocks.
 - Sexual Harassment: is unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature. Sexual harassment is not always explicit or obvious, it can include implicit and subtle acts but always involves a power and gender dynamic in which a person in power uses their position to harass another based on their gender. Sexual conduct is unwelcome whenever the person subjected to it considers it unwelcome (e.g. looking somebody up and down; kissing, howling or smacking sounds; hanging around somebody; whistling and catcalls; in some instances, giving personal gifts).
 - Sexual Favors: is a form of sexual harassment and includes making promises of favorable treatment (e.g. promotion) or threats of unfavorable treatment (e.g. loss of job) dependent on sexual acts—or other forms of humiliating, degrading or exploitative behavior.
- **Physical Assault**: an act of physical violence that is not sexual in nature. Examples include: hitting, slapping, choking, cutting, shoving, burning, shooting or use of any weapons, acid attacks or any other act that results in pain, discomfort or injury.
- Forced Marriage: the marriage of an individual against her or his will.
- Denial of Resources, Opportunities or Services: denial of rightful access to economic resources/assets or livelihood opportunities, education, health or other social services (e.g. a widow prevented from receiving an inheritance, earnings forcibly taken by an intimate partner or family member, a woman prevented from using contraceptives, a girl prevented from attending school, etc.).
- **Psychological / Emotional Abuse:** infliction of mental or emotional pain or injury. Examples include: threats of physical or sexual violence, intimidation, humiliation, forced isolation, stalking, harassment, unwanted attention, remarks, gestures or written words of a sexual and/or menacing nature, destruction of cherished things, etc.

Violence Against Children (VAC): is defined as physical, sexual, emotional and/or psychological harm, neglect or negligent treatment of minor children (i.e. under the age of 18), including exposure to such harm,¹⁴ that results in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power. This includes using children for profit, labor¹⁵, sexual gratification, or some other personal or financial advantage. This also includes other activities such as using computers, mobile phones, video and digital cameras or any other medium to exploit or harass children or to access child pornography.

¹³ It is important to note that women and girls disproportionately experience violence; overall 35 percent of women worldwide have faced physical or sexual violence (WHO, Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence, 2013). Some men and boys also face violence based on their gender and unequal power relationships.

¹⁴ Exposure to GBV is also considered VAC.

¹⁵ The employment of children must comply with all relevant local legislation, including labor laws in relation to child labor and World Bank's safeguard policies on child labor and minimum age. They must also be able to meet the project's Occupational Health and Safety competency standards.
Grooming: are behaviors that make it easier for a perpetrator to procure a child for sexual activity. For example, an offender might build a relationship of trust with the child, and then seek to sexualize that relationship (for example by encouraging romantic feelings or exposing the child to sexual concepts through pornography).

Online Grooming: is the act of sending an electronic message with indecent content to a recipient who the sender believes to be a minor, with the intention of procuring the recipient to engage in or submit to sexual activity with another person, including but not necessarily the sender.¹⁶

Accountability Measures: are the measures put in place to ensure the confidentiality of survivors and to hold contractors, consultants and the client responsible for instituting a fair system of addressing cases of GBV and VAC.

Contractors Environmental and Social Management Plan (CESMP): the plan prepared by the contractor outlining how they will implement the works activities in accordance with the project's environmental and social management plan (ESMP).

Child: is used interchangeably with the term 'minor' and refers to a person under the age of 18. This is in accordance with Article 1 of the United Nations Convention on the Rights of the Child.

Child Protection (CP): is an activity or initiative designed to protect children from any form of harm, particularly arising from VAC.

Consent: is the informed choice underlying an individual's free and voluntary intention, acceptance or agreement to do something. No consent can be found when such acceptance or agreement is obtained using threats, force or other forms of coercion, abduction, fraud, deception, or misrepresentation. In accordance with the United Nations Convention on the Rights of the Child, the World Bank considers that consent cannot be given by children under the age of 18, even if national legislation of the country into which the Code of Conduct is introduced has a lower age.¹⁷ Mistaken belief regarding the age of the child and consent from the child is not a defense.

Consultant: is as any firm, company, organization or other institution that has been awarded a contract to provide consulting services to the project, and has hired managers and/or employees to conduct this work.

Contractor: is any firm, company, organization or other institution that has been awarded a contract to conduct infrastructure development works for GAFSp and has hired managers and/or employees to conduct this work. This also includes sub-contractors hired to undertake activities on behalf of the Contractor.

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

GBV and VAC Allegation Procedure: is the prescribed procedure to be followed when reporting incidents of GBV or VAC.

GBV and VAC Codes of Conduct: The Codes of Conduct adopted for GAFSp covering the commitment of the Company, and the responsibilities of managers and individuals with regards to GBV and VAC.

Grievance Redress Committee (GRC): Committee to be established by the GAFSp to address all complaints pertaining to the Project including to address GBV and VAC issues.

¹⁶ For example, the Vanuatu Criminal Code Act 1995, Division 474 (telecommunications offences, subdivision C).

¹⁷ For example, under Article 97 Criminal consolidation act for age of legal consent in Vanuatu, sexual activity with any child under the age of 15 years for heterosexual conduct and 18 years for same sex conduct is prohibited (<u>http://tinyurl.com/vu-consent</u>). However, the World Bank follows the United Nations for the age of consent (18 years) so this applies on World Bank financed projects.

Grievance Redress Mechanism (GRM): is the established process to for the GAFSp to receive and address complaints.

Manager: is any individual offering labor to the Contractor or Consultant, on or off the work site, under a formal or informal employment contract and in exchange for a salary, with responsibility to control or direct the activities of a Contractor's or Consultant's team, unit, division or similar, and to supervise and manage a pre-defined number of employees.

Perpetrator: the person(s) who commit(s) or threaten(s) to commit an act or acts of GBV or VAC.

Response Protocol: is the mechanism set in place to respond to cases of GBV and VAC (see Response Protocol below).

Survivor/Survivors: the person(s) adversely affected by GBV or VAC. Women, men and children can be survivors of GBV; children can be survivors of VAC.

Work Site: is the area in which infrastructure development works are being conducted, as part of the Project. Consulting assignments are considered to have the areas in which they are active as their work sites.

Work Site Surroundings: is the 'Project Area of Influence' which are any area, urban or rural, directly affected by the project, including all human settlements found on it.

Codes of Conduct

This chapter presents three Codes of Conduct for use:

- i. Company Code of Conduct: Commits the company to addressing GBV and VAC issues;
- ii. **Manager's Code of Conduct:** Commits managers to implementing the Company Code of Conduct, as well as those signed by individuals; and,
- iii. **Individual Code of Conduct:** Code of Conduct for everyone working on the GAFSP, including managers.

Company Code of Conduct

Implementing ESHS and OHS Standards

Preventing Gender Based Violence and Violence Against Children

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

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

General

- 1. The Company-and therefore all employees, associates, representatives, sub-contractors and supplierscommits to complying with all relevant national laws, rules and regulations.
- 2. The Company commits to full implementing its 'Contractors Environmental and Social Management Plan' (CESMP).
- 3. The Company commits to treating women, children (persons under the age of 18), and men with respect regardless of race, color, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status. Acts of GBV and VAC are in violation of this commitment.
- 4. The Company shall ensure that interactions with local community members are done with respect and non-discrimination.
- 5. Demeaning, threatening, harassing, abusive, culturally inappropriate, or sexually provocative language and behavior are prohibited among all company employees, associates, and its representatives, including sub-contractors and suppliers.
- 6. The Company will follow all reasonable work instructions (including regarding environmental and social norms).
- 7. The Company will protect and ensure proper use of property (for example, to prohibit theft, carelessness or waste).

Health and Safety

- 8. The Company will ensure that the GAFSp's occupational health and safety (OHS) Management Plan is effectively implemented by company staff, as well as sub-contractors and suppliers.
- 9. The Company will ensure that all persons on-site wear prescribed and appropriate personal protective equipment, preventing avoidable accidents and reporting conditions or practices that pose a safety hazard or threaten the environment.

- 10. The Company will:
 - i. prohibit the use of alcohol during work activities.
 - ii. prohibit the use of narcotics or other substances which can impair faculties at all times.
- 11. The Company will ensure that adequate sanitation facilities are available on site and at any worker accommodations provided to those working on the project.

Gender Based Violence and Violence Against Children

- 12. Acts of GBV or VAC constitute gross misconduct and are therefore grounds for sanctions, which may include penalties and/or termination of employment, and if appropriate referral to the Police for further action.
- 13. All forms of GBV and VAC, including grooming are unacceptable, regardless of whether they take place on the work site, the work site surroundings, at worker's camps or within the local community.
 - i. Sexual Harassment-for instance, making unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct, of a sexual nature, including subtle acts of such behavior, is prohibited.
 - ii. Sexual favors-for instance, making promises or favorable treatment dependent on sexual actsor other forms of humiliating, degrading or exploitative behavior are prohibited.
- 14. Sexual contact or activity with children under 18-including through digital media-is prohibited. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse.
- 15. Unless there is full consent¹⁸ by all parties involved in the sexual act, sexual interactions between the Company's employees (at any level) and members of the communities surrounding the work place are prohibited. This includes relationships involving the withholding/promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex-such sexual activity is considered "non-consensual" within the scope of this Code.
- 16. In addition to Company sanctions, legal prosecution of those who commit acts of GBV or VAC will be pursued if appropriate.
- 17. All employees, including volunteers and sub-contractors are highly encouraged to report suspected or actual acts of GBV and/or VAC by a fellow worker, whether in the same company or not. Reports must be made in accordance with GAFSp's GBV and VAC Allegation Procedures.
- 18. Managers are required to report and act to address suspected or actual acts of GBV and/or VAC as they have a responsibility to uphold Company commitments and hold their direct reports responsible.

Implementation

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

- 19. All managers sign the project's 'Manager's Code of Conduct' detailing their responsibilities for implementing the Company's commitments and enforcing the responsibilities in the 'Individual Code of Conduct'.
- 20. All employees sign the Project's 'Individual Code of Conduct' confirming their agreement to comply with ESHS and OHS standards, and not to engage in activities resulting in GBV or VAC.

¹⁸ **Consent** is defined as the informed choice underlying an individual's free and voluntary intention, acceptance or agreement to do something. No consent can be found when such acceptance or agreement is obtained using threats, force or other forms of coercion, abduction, fraud, deception, or misrepresentation. In accordance with the United Nations Convention on the Rights of the Child, the World Bank considers that consent cannot be given by children under the age of 18, even if national legislation of the country into which the Code of Conduct is introduced has a lower age. Mistaken belief regarding the age of the child and consent from the child is not a defense.

- 21. Displaying the Company and Individual Codes of Conduct prominently and in clear view at workers' camps, offices, and in in public areas of the work space. Examples of areas include waiting, rest and lobby areas of sites, canteen areas and health clinics.
- 22. Ensure that posted and distributed copies of the Company and Individual Codes of Conduct are translated into the appropriate language of use in the work site areas as well as for any international staff in their native language.
- 23. An appropriate person is nominated as the Company's 'Focal Point' for addressing GBV and VAC issues, including representing the Company on the GAFSP GRC which includes representation on issues related to GBV and VAC complaints, which is comprised of representatives from the Project, Contractor/Component Managers), the Supervision Consultant, and the Women's Bureau as the local Service Provider.
- 24. Ensuring that an effective GBV and VAC Action Plan for the GAFSp is developed (use the template and Content indicated below), in consultation with the GRC. The Action Plan should include, as a minimum:
 - i. **GBV and VAC Allegation Procedure** to report GBV and VAC issues through the Project's Grievance Redress Mechanism explained below;
 - ii. Accountability Measures to protect confidentiality of all involved; and,
 - iii. **Response Protocol** applicable to GBV and VAC survivors and perpetrators.
- 25. That the Company effectively implements the agreed final GBV and VAC Action Plan to be developed under the GAFSp, providing feedback to the GRC for improvements and updates as appropriate.
- 26. All employees attend an induction training course prior to commencing work on site to ensure they are familiar with the Company's commitments to ESHS and OHS standards, and the Project's GBV and VAC Codes of Conduct.
- 27. All employees attend a mandatory training course once a month for the duration of the contract starting from the first induction training prior to commencement of work to reinforce the understanding of the Project's ESHS and OHS standards and the GBV and VAC Code of Conduct.

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

| Company name: | |
|-----------------|--|
| Signature: | |
| Printed Name: | |
| Title: Date: | |

Manager's Code of Conduct

Implementing ESHS and OHS Standards

Preventing Gender Based Violence and Violence Against Children

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

Implementation

- 1. To ensure maximum effectiveness of the Company and Individual Codes of Conduct:
 - i. Prominently displaying the Company and Individual Codes of Conduct in clear view at workers' camps, offices, and in public areas of the work space. Examples of areas include waiting, rest and lobby areas of sites, canteen areas and health clinics.
 - ii. Ensuring all posted and distributed copies of the Company and Individual Codes of Conduct are translated into the appropriate language of use in the work site areas as well as for any international staff in their native language.
- 2. Verbally and in writing explain the Company and Individual Codes of Conduct to all staff.
- 3. Ensure that:
 - i. All direct reports sign the 'Individual Code of Conduct', including acknowledgment that they have read and agree with the Code of Conduct.
 - ii. Staff lists and signed copies of the Individual Code of Conduct are provided to the OHS Manager, the GAFSp's GRC, and the Project.
 - iii. Participate in training and ensure that staff also participate as outlined below.
 - iv. Put in place a mechanism for staff to:
 - (a) report concerns on ESHS or OHS compliance; and,
 - (b) confidentially report GBV or VAC incidents through the Grievance Redress Mechanism (GRM)
 - v. Staff are encouraged to report suspected or actual ESHS, OHS, GBV or VAC issues, emphasizing the staff's responsibility to the Company and the country hosting their employment, and emphasizing the respect for confidentiality.
- 4. In compliance with applicable laws and to the best of your abilities, prevent perpetrators of sexual exploitation and abuse from being hired, re-hired or deployed. Use background and criminal reference checks for all employees.
- 5. Ensure that when engaging in partnership, sub-contractor, supplier or similar agreements, these agreements:
 - i. Incorporate the ESHS, OHS, GBV and VAC Codes of Conduct as an attachment.
 - ii. Include the appropriate language requiring such contracting entities and individuals, and their employees and volunteers, to comply with the Individual Codes of Conduct.

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

Training

- 10. The managers are responsible to:
 - i. Ensure that the OHS Management Plan (to be developed) is implemented, with suitable training required for all staff, including sub-contractors and suppliers; and,
 - ii. Ensure that staff have a suitable understanding of the CESMP and are trained as appropriate to implement the CESMP requirements.
 - 11. All managers are required to attend an induction manager training course prior to commencing work on site to ensure that they are familiar with their roles and responsibilities in upholding the GBV and VAC elements of these Codes of Conduct. This training will be separate from the induction training course required of all employees and will provide managers with the necessary understanding and technical support needed to begin to develop the GBV and VAC Action Plan for addressing GBV and VAC issues.
 - 12. Managers are required to attend and assist with the Project-facilitated monthly training courses for all employees. Managers will be required to introduce the trainings and announce the self-evaluations, including collecting satisfaction surveys to evaluate training experiences and provide advice on improving the effectiveness of training.
 - 13. Ensure that time is provided during work hours and that staff prior to commencing work on site attend the mandatory Project-facilitated induction training on:
 - i. OHS and ESHS; and,
 - ii. GBV and VAC required of all employees.
 - 14. During civil works, ensure that staff attend ongoing OHS and ESHS training, as well as the monthly mandatory refresher training course required of all employees to combat increased risk of GBV and VAC.

Response

- 15. Managers will be required to take appropriate actions to address any ESHS or OHS incidents.
- 16. With regard to GBV and VAC:
 - i. Provide input to the GBV and VAC Allegation Procedures (see Section below), and Response Protocol (see below), to be developed by the GAFSP GRC as part of the final cleared GBV and VAC Action Plan.
 - ii. Once adopted by the Company, managers will uphold the Accountability Measures (see Section below) set forth in the GBV and VAC Action Plan to maintain the confidentiality of all employees who report or (allegedly) perpetrate incidences of GBV and VAC (unless a breach of confidentiality is required to protect persons or property from serious harm or where required by law).

- iii. If a manager develops concerns or suspicions regarding any form of GBV or VAC by one of his/her direct reports, or by an employee working for another contractor on the same work site, s/he is required to report the case using the GRM and GRC.
 - iv. Once a sanction has been determined, the relevant manager(s) is/are expected to be personally responsible for ensuring that the measure is effectively enforced, within a maximum timeframe of <u>14 days</u> from the date on which the decision to sanction was made
 - v. If a Manager has a conflict of interest due to personal or familial relationships with the survivor and/or perpetrator, he/she must notify the respective company and the GRC. The Company will be required to appoint another manager without a conflict of interest to respond to complaints.
 - vi. Ensure that any GBV or VAC issue warranting Police action is reported to the Police, the Project, and the World Bank immediately
- 17. Managers failing to address ESHS or OHS incidents, or failing to report or comply with the GBV and VAC provisions may be subject to disciplinary measures, to be determined and enacted by the company's CEO, Managing Director or equivalent highest-ranking manager. Those measures may include:
 - i. Informal warning.
 - ii. Formal warning.
 - iii. Additional Training.
 - iv. Loss of up to one week's salary.
 - v. Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.
 - vi. Termination of employment.
- 18. Ultimately, failure to effectively respond to ESHS, OHS, GBV and VAC cases on the work site by the Company's managers or CEO may provide grounds for legal actions by authorities.

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

| Signature: | |
|------------|--|
|------------|--|

Printed Name: _____

Title:

Date:

Individual Code of Conduct

Implementing ESHS and OHS Standards

Preventing Gender Based Violence and Violence Against Children

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

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

I agree that while working on the project I will:

- 1. Attend and actively partake in training courses related to ESHS, OHS, HIV/AIDS, GBV and VAC as requested by my employer.
- 2. Will wear my personal protective equipment (PPE) at all times when at the work site or engaged in Project related activities.
- 3. Take all practical steps to implement the Contractor's environmental and social management plan (CESMP).
- 4. Implement the OHS Management Plan (to be developed).
- 5. Adhere to a zero-alcohol policy during work activities, and refrain from the use of narcotics or other substances which can impair faculties at all times.
- 6. Consent to Police background check.
- 7. Treat women, children (persons under the age of 18), and men with respect regardless of race, color, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.
- 8. Not use language or behavior towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
- 9. Not engage in sexual harassment-for instance, making unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct, of a sexual nature, including subtle acts of such behavior (e.g. looking somebody up and down; kissing, howling or smacking sounds; hanging around somebody; whistling and catcalls; giving personal gifts; making comments about somebody's sex life; etc.).
- 10. Not engage in sexual favors-for instance, making promises or favorable treatment dependent on sexual acts—or other forms of humiliating, degrading or exploitative behavior.
- 11. Not participate in sexual contact or activity with children-including grooming, or contact through digital media. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse.
- 12. Unless there is the full consent¹⁹ by all parties involved, I will not have sexual interactions with members of the surrounding communities. This includes relationships involving the withholding or promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex-such sexual activity is considered "non-consensual" within the scope of this Code.
- 13. Consider reporting through the GRM/GRC or to my manager any suspected or actual GBV or VAC by a fellow worker, whether employed by my company or not, or any breaches of this Code of Conduct.

¹⁹ **Consent** is defined as the informed choice underlying an individual's free and voluntary intention, acceptance or agreement to do something. No consent can be found when such acceptance or agreement is obtained using threats, force or other forms of coercion, abduction, fraud, deception, or misrepresentation. In accordance with the United Nations Convention on the Rights of the Child, the World Bank considers that consent cannot be given by children under the age of 18, even if national legislation of the country into which the Code of Conduct is introduced has a lower age. Mistaken belief regarding the age of the child and consent from the child is not a defense.

With regard to children under the age of 18:

- 14. Wherever possible, ensure that another adult is present when working in the proximity of children.
- 15. Not invite unaccompanied children unrelated to my family into my home, unless they are at immediate risk of injury or in physical danger.
- 16. Not use any computers, mobile phones, video and digital cameras or any other medium to exploit or harass children or to access child pornography (see also "Use of children's images for work related purposes" below).
- 17. Refrain from physical punishment or discipline of children.
- 18. Refrain from hiring children for domestic or other labor below the minimum age of 16 unless, or which places them at significant risk of injury.
- 19. Comply with all relevant local legislation, including labor laws in relation to child labor and World Bank's safeguard policies on child labor and minimum age.
- 20. Take appropriate caution when photographing or filming children.

Use of children's images for work related purposes

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

- 21. Before photographing or filming a child, assess and endeavor to comply with local traditions or restrictions for reproducing personal images.
- 22. Before photographing or filming a child, obtain informed consent from the child and a parent or guardian of the child. As part of this I must explain how the photograph or film will be used.
- 23. Ensure photographs, films, videos and DVDs present children in a dignified and respectful manner and not in a vulnerable or submissive manner. Children should be adequately clothed and not in poses that could be seen as sexually suggestive.
- 24. Ensure images are honest representations of the context and the facts.
- 25. Ensure file labels do not reveal identifying information about a child when sending images electronically.

Sanctions

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

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

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

| Signature: | |
|---------------|--|
| Printed Name: | |
| Title: | |
| Date: | |

There is "The Gambia National Plan of Action on Gender Based Violence 2013-2017". However, for the GAFSp, a specific Action Plan should be developed, adopting the template prescribed below.

OUTLINE AND CONTENT OF GBV ACTION PLAN

- 1.0 OBJECTIVES AND RATIONALE OF GBV ACTION PLAN
 1.1 GBV Action Plan background and rationale
 1.2 GBV Action Plans objectives
 1.3 Definitions and types of GBV
- 2.0 GBV PREVENTION AND MANAGEMENT FRAMEWORK OF THE GAMBIA
 2.1 Prevention and management legal framework of GBV
 2.2 Prevention and management political and institutional framework of GBV
- 3.0 RISKS ASSESSMENT OF PROJECT GBV
 - 3.1 Risks assessment criteria
 - 3.2 Risks level

4.0 PREVENTION AND MANAGEMENT FRAMEWORK OF THE PROJECT RELATED VBG

- 4.1 Codes of Conduct t of GBV 4.1.1 Company obligations 4.1.2 Manager's obligations 4.1.3 Employee's obligations
 - 4.2 GBV and VAC Compliance Team
 - 4.2.1 GCCT members'4.2.2 GCCT missions4.2.3 GCCT members' roles and responsibilities
 - 4.3 GBV Grievances Redress Management
 - 4.4 GBV allegation procedures
 - 4.5 Confidentiality and VBG complaints redress procedures
 - 4.6 Survivor support measures
 - 4.7 Sanctions against VBG perpetrators
 - 4.8 VBG awareness raising Strategy
 - 4.9 VBG monitoring and evaluation

ANNEXES: MODELS OF CODES OF CONDUCT

- Company Code of Conduct
- Manager's Code of Conduct
- Employee's Code of Cond

Guidelines and Procedures to address GBV and VAC in GAFSp

Below is a set of guidelines and procedures (can be referred to as an Action Plan, and should be integrated into the GAFSp-specific Action Plan to be developed) to address GBV and VAC.

The GBV and VAC Compliance Team

A special GBV and VAC Compliance Team will be created and integrated into a Grievance Redress Mechanism (GRM) to be established within the GAFSp. The GRM should establish and operate Grievance Redress Committee (GRC) whose membership will include the two Safeguards Specialists (Social and Environmental Safeguards Specialists to be recruited), and at least five representatives ('Focal Points') as follows:

- i. One representative from the different Project Components/Contractors hired by the GAFSp (this is due to its geographical scope, as well as the different technical components). Each Contractor/Project Component Manager shall delegate an occupational health and safety manager, or someone else as his Focal Point, tasked with the responsibility for addressing GBV and VAC with the time and seniority to devote to the position
- ii. The Supervision Consultant
- iii. A representative from a local Service Provider with experience in GBV and VAC (the 'Service Provider'). In The Gambia's case, this will be the Women's Bureau or whoever that implements "The Gambia National Plan of Action on Gender Based Violence 2013-2017"

It will be the duty of the GRC, with support from the various Contractors to inform workers about the activities and responsibilities of the GRC. To effectively serve on the GRC, members must undergo training to be delivered by the Women's Bureau prior to the commencement of their assignment to ensure that they are sensitized on GBV and Child Protection.

The GRC's mandate will include issues related to GBV and VAC, and will therefore be required to:

- i. Approve any changes to the **GBV and VAC Codes of Conduct** contained in this document, with clearances from the AfDB for any such changes.
- ii. Prepare the **GBV and VAC Action Plan** (if there is none, or implement the existing national GBV and VAC Action Plan reflecting the Codes of Conduct which includes:
 - (a) GBV and VAC Allegation Procedures
 - (b) Accountability Measures
 - (c) An Awareness Raising Strategy
 - (d) A Response Protocol
- iii. Obtain approval of the GBV and VAC Action Plan by the respective Contractors
- iv. Obtain GAFSP PMT and AfDB/WFP clearances for the GBV and VAC Action Plan prior to full mobilization
- v. Receive and monitor resolutions and sanctions regarding complaints received related to GBV and VAC associated with the Project
- vi. Ensure that GBV and VAC statistics in the existing GAFSP GRM are up to date and included in the regular Project reports

The GRC shall hold quarterly update meetings to discuss ways to strengthen resources and GBV and VAC support for employees and community members.

Making Complaints: GBV and VAC Allegation Procedures

All staff, volunteers, Consultants and sub-contractors are encouraged to report suspected or actual GBV or VAC cases. Managers are required to report suspected or actual GBV and/or VAC cases as they have responsibilities to uphold company commitments and they hold their direct reports accountable for complying with the Individual Code of Conduct (see Annex 1 below).

The GAFSp Safeguards Specialists will provide information to employees and the communities on how to report cases of GBV and VAC Code of Conduct breaches through the Project GRM. The GRC will follow up on cases of GBV, VAC and Code of Conduct breaches reported through the GRM.

Addressing Complaints about GBV or VAC

The figure below shows the process for addressing complaints based on the example of the Vanuatu Aviation Investment Project (VAIP).



Note: VPMU is the Vanuatu Project Management Unit (VPMU) responsible for the implementation of VAIP.

GRM and GRC

The proposed GRM for GAFSp will consist of a Grievance Redress Committee (GRC), to be hosted within the GAFSp PMT, and chaired by the Project Coordinator. Other members will include the Social and Environmental Safeguards Specialists, who are permanent, and other non-permanent members are coopted as and when necessary. The non-permanent members are ad-hoc representatives of communities where complaints emanate from, and are changed, based on site-specific complaints that are brought to the attention of the Committee. Reports of GBV or VAC, other complaints, or other concerns may be submitted online, via telephone or mail, or in person.

All complaints regarding GBV and VAC must immediately be reported to the AFDB and WFP by the Project Coordinator.

The Project Coordinator will refer complaints related to GBV or VAC to the GRC to resolve them. In accordance with the GBV and VAC Action Plan to be developed for GAFSp and/or Gambia's Action Plan in existence, the GRC through the Service Provider (Women's Bureau) and Focal Point(s) will investigate the

complaint and ultimately provide the GRC with a resolution to the complaint, or the Police if necessary. The victim's confidentiality should also be kept in mind when reporting any incidences to the Police.

The Project Coordinator will, upon resolution, advise the complainant of the outcome, unless it was made anonymously. Complaints made to Contractors/Component Managers or Women's Bureau (Service Provider) will be referred to the GRC for processing.

If the complaint to the GRC is made by a survivor or on behalf of a survivor, the complainant will be directly referred to the Women's Bureau to receive support services while the GRC investigates the complaint in parallel.

The Service Provider

The Service Provider is a local organization which has the experience and ability to support survivors of GBV or VAC. In this Project it will be the Women's Bureau (assuming it holds the national Policy – to be verified). The Project, the Contractors/Component Managers and Consultants must establish a working relationship with the Women's Bureau/Service Provider, so that GBV and VAC cases can safely be referred to them. The Bureau/Service Provider will also provide support and guidance to the GBV and VAC Focal Points as necessary. The Bureau/Service Provider will have a permanent representative on the GRC and be involved in resolving complaints related to GBV or VAC.

GRC GBV and VAC Focal Points

The GRC shall confirm that all complaints related to GBV or VAC have been referred to the Bank/WFP by the GAFSp Project Coordinator.

The GRC shall consider all GBV and VAC complaints and agree on a plan for resolution. The appropriate Focal Point will be tasked with implementing the plan (i.e. issues with Contractors' staff will be for the Contractors to resolve; Consultants' staff the Consultant; and Project staff the GAFSp PMT). The Focal Points will advise the GRC on resolution, including referral to the Police if necessary. They will be assisted by the Service Provider as appropriate.

All the Focal Points on the GRC must be trained and empowered to resolve GBV and VAC issues. It is essential that all staff of the GRC understand the guiding principles and ethical requirement of dealing with survivors of GBV and VAC. All reports should be kept confidential and referred immediately to the Service Provider represented on the GRC²⁰. In GBV and VAC cases warranting Police action, the Focal Points must appropriately refer the complaint to: (i) the authorities; (ii) the Service Provider; and, (iii) PMT for further action. The Project and the World Bank are to be immediately notified.

Accountability Measures

All reports of GBV or VAC shall be handled in a confidential manner to protect the rights of all involved. The Project, Contractors and Consultants must maintain the confidentiality of employees who notify any acts or threats of violence, and of any employees accused of engaging in any acts or threats of violence (unless a breach of confidentiality is required to protect persons or property from serious harm or where required by law). The Contractors and Consultants must prohibit discrimination or adverse action against an employee because of survivor's disclosure, experience or perceived experience of GBV or VAC (see Annex 1 for examples of actions to maintain accountability).

To ensure that survivors feel confident to disclose their experience of GBV or VAC, they can report cases of GBV or VAC through multiple channels: (i) online, (ii) phone, (iii) in-person, (iv) the Women's Bureau, (v) the managers (vi) Village Development Committees (VDCs); or, (vii) the Police. To ensure confidentiality, only the Women's Bureau will be privy to information regarding the survivor. The GRC will be the primary point of

²⁰ Survivors of GBV and VAC may need access to Police, justice, health, psychosocial, safe shelter and livelihood services to begin on a path of healing from their experience of violence.

contact for information and follow up regarding the perpetrator.

Monitoring and Evaluation

The GRC must monitor the follow up of cases that have been reported and maintain all reported cases in a confidential and secure location. Monitoring must collect the number of cases that have been reported and the share of them that are being managed by Police, NGOs etc.

These statistics shall be reported to the GRC and the Supervision Consultant for inclusion in their reporting.

For any GBV and VAC cases warranting Police action, the Project and the Bank/WFP are to be immediately notified.

Awareness-raising Strategy

It is important to develop an Awareness-raising Strategy with activities aimed to sensitize employees on GBV and VAC on the work site and its related risks, provisions of the GBV and VAC Codes of Conduct, GBV and VAC Allegation Procedures, Accountability Measures and Response Protocol. The strategy will be accompanied by a timeline, indicating the various sensitization activities through which the strategy will be implemented and the related (expected) delivery dates. Awareness-raising activities should be linked with trainings provided by the Women's Bureau.

Response Protocol

The GRC will use appropriate methods of recording responses to complaints relevant to GBV and VAC to meet the Project requirements, in accordance to national laws and protocols. The response protocol developed must include mechanisms to notify and respond to perpetrators in the workplace (See Perpetrator Policy and Response below). The response protocol will include the GRM process to ensure competent and confidential response to disclosures of GBV and VAC. An employee who discloses a case of GBV or VAC in the workplace shall be referred to the GRC for reporting.

Survivor Support Measures

It is essential to appropriately respond to the survivor's complaint by respecting the survivor's choices to minimize the potential for re-traumatization and further violence against the survivor. Refer the survivor to the Women's Bureau/Service Provider to obtain appropriate support services in the community-including medical and psychosocial support, emergency accommodation, security including Police protection and livelihood support-by facilitating contact and coordination with these services. The Project, Contractors or Consultants may, where feasible, provide financial and other supports to survivors of GBV or VAC for these services (see Annex 1 below for examples of financial support).

If the survivor is an employee, to ensure the safety of the survivor, and the workplace in general, the Project, Contractors or Consultants, in consultation with the survivor, will assess the risk of ongoing abuse to the survivor and in the workplace. Reasonable adjustments will be made to the survivor's work schedule and work environment as deemed necessary (see Annex 1 for examples of safety measures below). The employer will provide adequate leave to survivors seeking services after experiencing violence (see Annex 1 below for details).

Perpetrator Policy and Response

Encourage and accept notification through the GRC from employees and community members about perpetrators in the workplace. Through the GRC and/or the Women's Bureau, oversee the investigation of these grievances, ensuring procedural fairness for the accused, and within the local laws. If an employee has breached the Code of Conduct, the employer will act which could include:

i. Undertake disciplinary action up in accordance with sanctions in the GBV and VAC Codes of Conduct;

- ii. Report the perpetrator to the Police as per local legal paradigms; and/or
- iii. If feasible, provide or facilitate counselling for the perpetrator.

Sanctions

In accordance with the Code of Conduct, any employee confirmed as a GBV or VAC perpetrator shall be considered for disciplinary measures in line with sanctions and practices as agreed in the Individual Code of Conduct (see Annex 1 for examples of sanctions). It is important to note that, for each case, disciplinary sanctions are intended to be part of a process that is entirely internal to the employer, is placed under the full control and responsibility of its managers, and is conducted in accordance with the applicable national labor legislation.

Such process is expected to be fully independent from any official investigation that competent authorities (e.g. Police) may decide to conduct in relationship to the same case, and in accordance with the applicable national law. Similarly, internal disciplinary measures that the employer's managers may decide to enact are meant to be separate from any charges or sanctions that the official investigation may result into (e.g. monetary fines, detention etc.).

CODES OF CONDUCT ANNEX 1 - POTENTIAL PROCEDURES FOR ADDRESSING GBV AND VAC

Accountability Measures to maintain confidentiality can be achieved through the following actions:

- 1. Inform all employees that confidentiality of GBV/VAC survivors' personal information is of utmost importance.
- 2. Provide the GRC with training on empathetic and non-judgmental listening.
- 3. Take disciplinary action, including and up to dismissal, against those who breach survivor's confidentiality (this is unless a breach of confidentiality is necessary to protect the survivor or another person from serious harm, or where required by law).

GBV and VAC Allegation Procedures should specify:

- 1. Who survivors can seek information and assistance from.
- 2. The process for community members and employees to lodge a complaint through the GRC should there be alleged GBV or VAC.
- 3. The mechanism for how community members and employees can escalate a request for support or notification of violence if the process for reporting is ineffective due to unavailability or non-responsiveness, or if the employee's concern in not resolved.

Financial and Other Supports to survivors can include:

- 1. No/low interest loans.
- 2. Salary advances.
- 3. Direct payment of medical costs.
- 4. Coverage of all medical costs related specifically to the incident.
- 5. Upfront payments for medical costs to later be recouped from the employee's health insurance.
- 6. Providing or facilitating access to childcare.
- 7. Providing security upgrades to the employee's home.
- 8. Providing safe transportation to access support services or to and from accommodation.

Based on the rights, needs and wishes of the survivor, survivor support measures to ensure the safety of the survivor who is an employee can include²¹:

- 1. Changing the perpetrator or survivor's span of hours or pattern of hours and/or shift patterns.
- 2. Redesigning or changing the perpetrator or survivor's duties.
- 3. Changing the survivor's telephone number or email address to avoid harassing contact.
- 4. Relocating the survivor or perpetrator to another work site/ alternative premises.
- 5. Providing safe transportation to and from work for a specified period.
- 6. Supporting the survivor to apply for an Interim Protection Order or referring them to appropriate support.
- 7. Taking any other appropriate measures including those available under existing provisions for family friendly and flexible work arrangements.

Leave options for survivors that are employees can include:

1. An employee experiencing GBV should be able to request paid special leave to attend medical or psychosocial appointments, legal proceedings, relocation to safe accommodation and other activities related to GBV.

²¹ It is critical that a survivor centered approach be adopted. The survivor should be fully involved in the decision making. Except for exceptional circumstances the perpetrator should be required to take appropriate actions to accommodate the survivor (e.g. move, change hours, etc.), rather than the survivor changing.

- 2. An employee who supports a person experiencing GBV or VAC may take care givers leave, including but not limited to accompanying them to court or hospital, or to take care of children.
- 3. Employees who are employed in a casual capacity may request unpaid special leave or unpaid care givers leave to undertake the activities described above.
- 4. The amount of leave provided will be determine by the individual's situation through consultations with the employee, the management and the GRC where appropriate.

Potential Sanctions to employees who are perpetrators of GBV and VAC include:

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

Referral to the Police or other authorities as warranted.

Appendix 3.2: Chance Find Procedures

This Chance Find Procedure shall be applied in case previously unknown culturally valuable materials are unexpectedly discovered during the implementation of GAFSP:

- In the case of chance find of any material with possible archaeological, historical, paleontological, religious, or other cultural value, all work at and around the find, feature or site must be stopped immediately.
- The discovery will be clearly demarcated and secured from unauthorized access, and all found remains will be left where they were found. Protect artefacts and implement measures to stabilize the area, if necessary.
- Notify the Project Manager/ of the findings who in turn immediately notifies the National Council for Arts and Culture for the necessary, assessment, recording and next course of action to take.
- Restart construction works only upon authorization of the relevant authorities (the National Council for Arts and Culture under the Ministry of Tourism and Culture).

Appendix 5.1: Stakeholder Engagement Plan for the GAFSp

| Activity | Identified Stakeholders | Reason/Justification for Consultation | Period/Frequency | Communication Method | Responsibility | Estimated Cost (US \$) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------|
| Disclose ESMF | GAFSP; AfDB; WFP; Schools; affected communities; Traditional leaders; NGOs- NACOFAG; ActionAid; CFAN | Financing GAFSp In compliance with Bank requirements Ensures compliance with sub-project ESMPs to mitigate negative impacts of GAFSp Communities to determine if their concerns and views are integrated into ESMF | Upon approval of ESMF report | Bank's website; WFP website; national dailies; distribution of ESMF documents | AfDB; WFP; GAFSP | 5,000 |
| Sub-project ESIA/ESMP preparation | GAFSP; AfDB; Schools; WFP; affected communities; local and national agencies; traditional leaders; NGOs-NACUFAG; ActionAid; CFERN; Private sector actors | In compliance with Bank requirements Ensure that community concerns and views are taken into account and integrated into ESIA/ESMP Ensure that impact mitigation measures are implemented and monitored for compliance Health and safety issues are integrated into ESMPs | During ESIA/ESMP preparation | During site visits; consultation and public participation; interviews; e-mail; telephone; literature review | Consultants | Included in Consultants ' fees |
| Consultation before start of construction works (e.g. bulking and storage facilities; school kitchens; boreholes for gardens; rural feeder roads, processing facilities etc.) | Community members; Schools; Traditional leaders; GAFSP ; NGOs | Information sharing on planning of works Create awareness on potential impacts of works and method of mitigating impacts Inform and build capacity on grievance redress mechanism (GRM) Build capacity of stakeholders including GASFP on implementation of ESMPs | One week before commencement of works | Radio announcement; newspaper announcement; local and traditional means of communication | GAFSP (Env. and Social Safeguards Specialists), Consultants | 2,000 |
| Start of construction works as noted above | Affected communities; Schools; Traditional leaders; NGOs- NACOFAG; ActionAid; CFAN; Private sector actors | Information on schedule of works and progress Awareness creation on potential impacts and mitigation measures Review ESMPs and mitigation measures Training on implementation of ESMPs; training on Codes of Conduct and Action Plan for Implementing ESHS and OHS Standards, and | During the implementation of the works | Community meetings; Stakeholder meetings; periodic progress reports | GAFSp ESS Contractors | 2,000 |

| | | Preventing Gender Based Violence and Violence Against Children Training on GRM | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------|--------|
| End of construction works and decommissioning of construction equipment | Affected communities; Schools; Traditional leaders; NGOs- NACOFAG; ActionAid; CFAN | Information on schedule of works and progress Awareness creation on potential impacts and mitigation measures Review ESMPs and mitigation measures Training on implementation of ESMPs; training on Codes of Conduct and Action Plan for Implementing ESHS and OHS Standards, and Preventing Gender Based Violence and Violence Against Children Training on GRM | Decommissioning period | Community meetings; Stakeholder meetings; periodic progress reports | GAFSp; Contractors, Consultants | 2,000 |
| Commissioning and handing over of sub- projects (roads, school kitchens, boreholes/gardens, processing facilities, etc.) | Affected communities; Schools; Traditional leaders; NGOs- NACOFAG; ActionAid; CFAN; Private sector actors; Contractors | Information sharing Identification of roles and responsibilities Awareness creation on expectations Training of operators/farmers/cooks | Before commissioning of facilities and infrastructure | Radio announcement; newspaper announcement; local and traditional means of communication Training workshops | WFP, GAFSp , Consultants, | 2,000 |
| Operation and Maintenance (O&M) of sub-projects | Affected communities; Schools | O&M requirements Roles and responsibilities Review GRM | During period of O&M | Stakeholder meetings; training | GAFSp , Consultants | 2,000 |
| Total Estimated cost | | | • | • | • | 15,000 |

Appendix 5.2: Summary of Comments and Views Expressed at the Consultations

| Venues | Dates | Introduction and objectives of GAFSp | |
|---------------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | funded Project dedicated to fighting hunger, mali | rief background of the GAFSp; that it is GAFSP- nutrition and poverty in developing countries. The riculture that benefits and empowers poor and n and youth. |
| WFP CO | 27.4. /27.5. 20 | · · · · · · · · · · · · · · · · · · · | |
| CFAN | 12.5.20 | | emented in the WCR, LRR, and CRR-N and S and |
| National Environment Agency | 12.5.20 | | feeding program of the national HGSF program to |
| ActionAid | 19.5.20 | | children, creating a ready market for small holder ured demand", and assured market outlet for the |
| Ministry of Basic and Secondary Education (MOBSE) | 27.5.20 | | ables, and poultry products) from the smallholder |
| Consultant's Opening Remarks | | women farmers which will be sold to the schools ta | rgeted by the Project in these Regions. The Project eder roads to provide quick access to markets for |
| | | of the Project areas will potentially be impacted, al the impacts as much as possible. He informed th assessment shall be carried out to ensure | ject the physical, biological and social environment though all efforts will be made to avoid or minimize e meetings that where impacts are inevitable, the that the appropriate mitigation measures are is required, the affected persons and families shall is done. |
| | | and employment and job creation for the small | e Project will contribute to providing a ready market holder farmers especially women and the youth; II, improve the living standards of the small holder |
| | | Rationale of the Public Consultations | |
| | | The Consultant informed the meetings that the rationale for the public consultations is for information sharing with stakeholders (including the implementation partners) to seek their opinion, learn from their experiences of similar past projects, hear their concerns to help in better planning of the GAFSp activities. That from the consultations an ESMF report will be developed which will be used by future consultants to develop sub-project ESIA/ESMPs to address the potential negative environmental and | |
| | Domarka Com | social impacts that may be caused by the Project. | |
| Location | Remarks, Con | ments Received at the Meetings Comments/Concerns | Proposed Approach to address Concern |
| WFP | | The Project is highly appreciated because: | |
| | | It will help preserve and store the foodstuff designed for the schools | ✓ Post-harvest technologies will be included in Project to include cold storage |

| | ~ | Ensuring the children's nutritional well- being is a high priority of WPF | |
|---------------------------------------------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | ~ | As much as possible, project implementation must avoid impacts that will result to persons losing any asset or mean of livelihood that will require a RAP | ✓ Project design will ensure this does not happen ✓ Project will provide resources to train |
| | × | The proposed GRM of the GAFSp will be mainstreamed into the existing WFP GRM to avoid duplication; the experience acquired in the WFP GRM will help in the impending one | the new participants in the GRM |
| ActionAid | √ | Environmental issues need to be addressed in the Project | |
| | ~ | Prototype solar PV cold storage facility has been constructed in the village of Kumbaniye, in CRR-S that GAFSp could replicate; this will reduce the Project' Carbon foot print | This possibility will be explored in the design of GAFSp |
| NEA | ~ | Even though NEA will not sit on the Project's PSC, it will be required to screen and classify the sub-projects | Project design will look into plausible options to address these concerns |
| | × | NEA is also legally required to monitor compliance with ESMP implementation | |
| | ✓ | In spite of the above, we will be amenable to delegate the monitoring responsibility to a private entity to monitor and provide report to NEA and relevant Partners | |
| CFAN | ~ | We have expertise and capacity to provide services and inputs that will be required by the Project | |
| | ~ | CFAN members will need capacity development in environmental issues and management | Training and sensitization on ESIA/ESMP, sustainable use of agro- chemicals, etc. will integrated into training and awareness creation exercises |
| Ministry of Basic and Secondary Education (MOBSE) | ~ | MOBSE operates a school feeding program in the Regions proposed by GAFSp | |

| ~ | An EU/EIB-funded project is planning to provide electricty to many of the schools in the Project's area of influence through off-grid solar PV. Thus, CO ₂ free. | |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| ~ | Is there possibility for synergy between GAFSp and the School Solarization project? | |

Appendix 5.3: List of Persons Consulted

| Name | Designation | Institution | Telephone |
|-----------------------|------------------------------------------|-------------|-----------|
| Ms. Wanja KAARIA | Country Representative | WFP | 4494782 |
| Mr. Duncan NDHLOVU | Head of Program | WFP | 3495856 |
| Ms. Mam Yassin CEESAY | Head of Vulnerability Assessment and M&E | WFP | +971 |
| | | | 501163419 |
| Mr. Kebba JARJU | Project Coordinator | FASDEP | 9964392 |
| Dr. Omar TOURAY | Chairman | CFAN | 3920616 |
| Ms. Saffie JOBE | Member | CFAN | 3766311 |
| Mr. Abdoulie TOURAY | Member | CFAN | 9978829 |
| Mr. Dodou TRAWALLY | Executive Director | NEA | 9961049 |
| Mr. Malick BAH | Director, Technical Services Network | NEA | 7919822 |
| Mr. Omar BDJIE | Executive Director | ActionAid | 9869721 |
| Mr. Fafa O. CHAM | LRPs Manager | ActionAid | 3729062 |
| Ms. Amie M. JOBE | Head of HR&D | ActionAid | 3636331 |
| Mr. Foday KANYI | PA 3 Lead Resilience, Livelihood | ActionAid | 3513281 |
| Ms. Fanta Jatta-SOWE | Acting Head of Program | ActionAid | 3780959 |
| Mr. Katim TOURAY | Internal Audit Manager | ActionAid | 7505403 |
| Ms. Mam Kumba TOURAY | Head of Finance | ActionAid | 7886411 |
| Mr. Alpha BAH | Systems Analyst, Planning Unit | MOBSE | 9234663 |
| Mr. Lamin CONTEH | Technical Adviser | MOBSE | 3705390 |
| Mr. Ansumana Demba | Deputy Project Manager | MOBSE | 9945933 |
| Mr. Adison Gomez | Procurement Officer | MOBSE | 9964525 |





NATIONAL ENVIRONMENT AGENCY 5 Fitzgerald Street, PMB 48, BANJUL, The Gambia Tel: (220) 4228056 - Fax: (220) 4229701 E-mail: <u>nea@gamtel.gm</u> Website: www.nea.gm

Appendix 6.1: List of Pesticides and Other Chemicals Banned or Severely Restricted in the Gambia

- 1. 2, 4, 5-T
- 2. ALDICARB
- 3. ALDRIN
- 4. APHOX
- 5. BENZENE HEXACHLORIDE (BHC/HCH)
- 6. CAMPHECHLOR
- 7. CAPTAFOL (Believed to be carcinogenic. Present in "Granox WP" from Senegal)
- 8. CHLORBENZILATE
- 9. CHLORDANE
- 10. CHLORDIMEFORM
- 11. CROCIDOLITE
- 12. CYHEXATIN
- 13. DDT (Persistent Organic Pollutant (POP). Found in Cock Brand coil from PRC)
- 14. DIBRIMOCHLORD PROPANE
- 15. DIELDRIN
- 16. DINOSEB + SALTS
- 17. ENDRIN
- 18. ETHYLENE DIBROMIDE
- 19. FLUOROACETAMIDE
- 20. HEPTACHLOR
- 21. HEXACHLOROBENZENE
- 22. LINDANE (Present in "Thiodal" from Senegal)
- 23. MERCURY COMPOUNDS
- 24. PARAQUAT
- 25. PARATHIOM-METHYL (Toxic Organo-phosphorus pesticide. Present in 'Spiridur')
- 26. PBBs (POLYBROMINATED BIPHENYLS)
- 27. PCBs (POLYCHLORINATED BIPHENYLS)
- 28. PCTs
- 29. PENTACHLOROPHENOL (Mostly used as a wood preservative)
- 30. TRIS (2,3-DIBROMOPROPYL)



Appendix 7.1: Flowchart illustrating the EIA Process (Source: EIA Procedures, 1999)

Appendix 7.2: EIA Screening Form





NATIONAL ENVIRONMENT AGENCY 5 Fitzgerald Street, PMB 48,BANJUL, The Gambia Tel: (220) 228056 - Fax: (220) 229701 email-nea@gamtel.gm Serial No._____

ENVIRONMENTAL IMPACT ASSESSMENT SCREENING FORM

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

| SECTION 1: INFOR | MATION ON THE CONTACT PERSON | | | | |
|-------------------------------------------------------------------|--------------------------------------------------|--|--|--|--|
| Name | | | | | |
| Institutional Affiliation | | | | | |
| Business Title/position | | | | | |
| Business Address | | | | | |
| Telephone | | | | | |
| SECTION 2: DESCR | RIPTION OF THE PROPOSED PROJECT | | | | |
| Name of Proposed Proje | ct | | | | |
| Date expected to start co | onstruction | | | | |
| Proposed location of project | | | | | |
| Land Area | (Approximate land area and of proposed location) | | | | |
| Current Land Use (Describe how the land is being used at present) | | | | | |
| Describe any Possible Alternative Site(s) | | | | | |
| Serial No | | | | | |

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

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

.....

.....

SECTION 3: EMPLOYEES AND LABOURERS

Number of people to be employed:

| Employees Labourers | and | During Construction | During Operation | Routine |
|------------------------|-----|---------------------|---------------------|---------|
| | | | | |
| | | | | |

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

SECTION 4: DESCRIPTION OF INDUSTRIAL PROCESS

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

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

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

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

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

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

| Туре | Quantity | Source |
|------|----------|--------|
| | | |
| | | |
| | | |
| | | |

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

| Name/Type | Description | Quantity | |
|-----------|-------------|----------|--|
| | | | |
| | | | |
| | | | |
| | | | |

SECTION 6: PRODUCTS

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

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

SECTION 7: BY-PRODUCTS, WASTE MANAGEMENT AND DISPOSAL

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

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

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

| Type of Waste | Method of Disposal/Management | |
|---------------|-------------------------------|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

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

| Source of Noise | Type of Noise |
|-----------------|---------------|
| | |
| | |
| | |
| | |

SECTION 8: ENVIRONMENTAL IMPACTS

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

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

SECTION 9: PROPOSED MITIGATION MEASURES

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

| Air Pollution | |
|-----------------------------------|--|
| Water Pollution | |
| Noise Pollution | |
| Removal of vegetation | |
| Wastes | |
| Displacement of human populations | |
| Destruction of fish habitat | |
| Destruction of special habitats | |
| Soil Erosion | |
| Others | |

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

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

Serial No._____

SECTION 10: TESTIMONY

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

| Signed: Developer | Date |
|---------------------------------|----------|
| For Official Use Only | |
| Reviewed by: | Date: |
| Classified A B C | |
| Reasons for the Classification: | |
| | |
| | |
| | |
| | |
| | |
| | |
| Endorsed by: | Date: |
| Approved by Executive Directo | r: Date: |
| | |

Appendix 7.3: Schedule: Projects to Be Considered for Environmental Impact Assessment

ENVIRONMENTAL IMPACT ASSESSMENT

PART A

PROJECTS TO BE CONSIDERED FOR ENVIRONMENTAL IMPACT ASSESSMENT

1. General

- (a) Any activity out of character with its surroundings.
- (b) Any structure of a scale not in keeping with its surroundings.
- (c) Major changes in land use.

2. Urban Development, including,

- (a) Designation of new townships, villages and residential areas.
- (b) Establishment of industrial estates.
- (c) Establishment of industrial estates.
- (d) Establishment or expansion of recreational townships in hilly areas, national parks and game reserves.
- (e) Shopping centres and complexes.
- (f) Hotels and other tourist facilities.

3. Transportation, including,

- (a) All major roads.
- (b) All roads in scenic, wooded or hilly areas.
- (c) Bridges.
- (d) Railways lines.
- (e) Airports and airfields.
- (f) Pipelines.
- (g) Water transport.
- (h) Ports and landing sites.

4. Dams, rivers and water resources, including,

- (a) Storage dams, barrages and weirs.
- (b) River diversions and water transfers between catchments.

5. Aerial Spraying

6. Fisheries especially large-scale commercial projects.

7. Mining, including quarrying and open-cast extraction of:

- (a) Precious metals.
- (b) Diamonds.
- (c) Metalliferous ores.

- (d) Coal.
- (e) Phosphates.
- (f) Limestone and dolomite.
- (g) Stone and slate.
- (h) Aggregates, sand, gravel and laterite.
- (i) Clay.
- (j) Exploration for the production of petroleum in any form.
- (k) Off-shore activities.

8. Forestry related activities, including,

- (a) Timber harvesting.
- (b) Clearance of forest areas.
- (c) Reafforestation and afforestation.
- (d) Establishment of wood plantation.

9. Agriculture, including,

- (a) Large scale agriculture.
- (b) Use of new pesticide.
- (c) Introduction of new crops and animals.
- (d) Use of fertilizers.

10. Processing and manufacturing industries, including,

- (a) Mineral processing, reduction of ores and minerals.
- (b) Smelting and refining of ores and minerals.
- (c) Foundries.
- (d) Brick and earthenware manufacture.
- (e) Cement works and lime processing.
- (f) Glass works.
- (g) Fertilizer manufacture or processing.
- (h) Explosives plants.
- (I) Oil refineries and petro-chemical works.
- (j) Tanning and dressing of hides and skins.
- (k) Abattoirs and meat-processing plants.
- (I) Chemical works and process plants.
- (m) Brewing and malting.
- (n) Bulk grain-processing plants.
- (o) Fish processing plants.

- (q) Pulp and paper mills.
- (r) Food processing plants.
- (s) Plants for the manufacture or assembly of motor vehicle.
- (t) Plants for the construction or repair of aircraft of railway equipment.
- (u) Plants for the manufacturing or processing of rubber.
- (v) Plants for the manufacture of tanks, reservoirs and sheet-metal containers.
- (w) Plants for the manufacture of groundnut briquettes or other briquette
- (x) Mechanical workshops.
- (y) Cottage industries.

11. Electrical infrastructure, including,

- (a) Electricity generation stations.
- (b) Electrical transmission lines (high voltages).
- (c) Electrical substations.
- (d) Pumped-storage schemes.

12. Management of hydrocarbons, including.

The storage of natural gas and combustible or explosive fuels.

13. Waste disposal, including,

- (a) Sites for solid waste disposal.
- (b) Sites for hazardous waste disposal.
- (c) Sewage disposal works.
- (d) Major atmospheric emissions.
- (e) Offensive odours.

14. Natural conservation areas, including,

- (a) Creation of national parks, game reserves, and buffer zones.
- (b) Establishment of wilderness areas.
- (c) Formulation or modification of forest management policies.
- (d) Formulation or modification of water catchment management policies.
- (e) Policies for management of ecosystems, especially by use of fire.
- (f) Commercial exploitation of natural fauna and flora.
- (g) Introduction of alien species of fauna and flora into ecosystems.
- (h) Establishment of natural heritage areas.

Appendix 7.4 Generic EA Terms of Reference

I. Introduction and context

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

II. Objectives of the study

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

III. Terms of Reference

The consultant will perform the following tasks:

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

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

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

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

(e) Assess the need for liquid and solid waste collection, disposal and management in the facility, and make recommendations accordingly;

(f) Discuss alternative project designs and make recommendations;

(g) Assess alternative project designs and make recommendations;

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

(i) Review the Conventions and Protocols to which the country is a signatory;

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

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

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

IV. Report Plan

Cover page - Table of Contents - List of acronyms - Executive summary (as necessary, in English and French) - Introduction - Description of the proposed activity - Description of the environment of the area where the activity will take place - Description of the policy, institutional and regulatory framework. - Methods and techniques used during evaluation and impact analysis of the proposed activity. - Description of potential alternatives to the proposed project design. - Description of environmental and social impacts of the proposed activity. - Discussion of consultations with relevant stakeholders, including potentially affected persons. - Environmental Management Plan for the proposed activity. - Monitoring indicators for the proposed activity. - Recommendations - References. - List of individuals/ institutions contacted. - Summary table of the Environmental Management Plan (EMP).

Appendix 7.5: Guidelines for the preparation of ESMP

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

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

1. Summary of Impacts: Anticipated adverse environmental and social impacts should be identified and summarized and the appropriate mitigation measures.

2. Description of Mitigation measures: The mitigation measures proposed for the various impacts should be described in relation to the corresponding impacts while stating the conditions under which they are required.

3. Consultations: Adequate description of the public participation and consultations should be done and justified.

4. Description of monitoring program: A detailed monitoring program should be described in the ESMP, listing environmental performance indicators and their link with impacts and mitigation measures. The ESMP should also describe the parameters to be measured, methods to be used, sampling location and frequency of measurements, detection limits and a clear definition of thresholds that indicate the need for corrective measures.

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

5. Legal requirements and bidding/contract documents: The ESMP should be incorporated in all legal documents to enforce compliance by all Contractors participating in the GAFSp. The ESMP should be summarized and incorporated in the bidding and contract documents.

6. Institutional arrangements: The ESMP should clearly state who is responsible for monitoring, execution of remedial action and the reporting order and format to allow for a defined channel of information flow. It should also recommend institutional strengthening for relevant agencies and the funding authorities for the various activities.

7. Capacity Development and Training: To support timely and effective implementation of environmental project components and mitigation measures, the ESMP draws on the assessment of the existing capacities and role of the various actors, on site. If necessary, the ESMP recommends the establishment or expansion of such units, and the training of staff, to allow implementation of recommendations. Specifically, the ESMP provides a specific description of institutional arrangements i.e. who is responsible for carrying out the mitigation and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training). To strengthen environmental management capability in the agencies responsible for implementation, most ESMPs cover one or more of the following additional topics: (a) technical assistance programs, (b) procurement of equipment and supplies, and (c) organizational changes.

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

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

Appendix 7.6: Contract clauses that may be included in Contractor agreements

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

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

- Cutting of trees for any reason outside the approved construction area
- Hunting, fishing, wildlife capture, or plant collection
- Use of unapproved toxic materials, including lead-based paints, asbestos, etc.
- Disturbance to anything with architectural or historical value
- Setting of fires
- Use of firearms (except authorized security guards)
- Use of alcohol by workers.

Construction Management Measures:

Waste Management:

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

Maintenance:

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

Labor health and safety

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

Community Safety during Construction

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

- Carefully and clearly mark pedestrian-safe access routes.
- If school children are in the vicinity, include traffic safety personnel to direct traffic.
- Keep the public away from construction sites

Nuisance and dust control should include:

- Maintain all construction-related traffic at minimum
- Maintain equipment and machinery to reduce noise
- In sensitive areas (including residential neighbourhoods, health centres, schools) stricter measures may need to be implemented to prevent undesirable noise levels, including controlled working times
- Minimize production of dust and particulate materials at all times, to avoid impacts on surrounding families and businesses
- Spray water as needed on dirt roads, cut areas and soil stockpiles or fill material.
- Apply proper measures to minimize disruptions from vibration or noise coming from construction activities.

Community Relations

To enhance adequate community relations, the Contractor should:

- Inform the population about construction and work schedules, interruption of services, traffic detour routes as appropriate.
- Avoid construction activities at night.

Chance Find Procedures for Culturally Significant Artefacts

In case culturally valuable materials are uncovered during excavation:

- Stop work immediately following the discovery of any materials with possible archaeological, historical, paleontological, or other cultural value, announce findings to project manager and notify the Project Coordinator, who in turn notifies the National Council for Arts and Culture
- Protect artefacts as well as possible, using plastic covers, and implement measures to stabilize the area, if necessary
- Prevent unauthorized access to the artefacts
- Restart construction works only upon the authorization of the relevant authorities.

Environmental Supervision during Construction

The bidding documents should indicate how compliance with environmental rules and design specifications would be supervised, along with the penalties for noncompliance by contractors or workers. Construction supervision requires oversight of compliance with the ESMP by the contractor or his designated environmental supervisor.