



West African Food System Resilience Program – Phase 2 (FSRP2)

Resettlement Policy Framework (RPF)

February 2022

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ACRONYMS

ADB	Agricultural Development Bank	IIE	Independent Impact Evaluation
AfCFTA	Africa Continental Free Trade Area	IFAD	International Fund for Agricultural Development
AFSLD	Africa Food Security Leadership Dialogue	IFC	International Finance Corporation
AGRHYMET	(Regional Training and Application Center in) Agriculture, Hydrology and Meteorology	IRI	Industrial Research Institute
APD	Animal Production Directorate	LVD	Land Valuation Division
ARAP	Abbreviated Resettlement Action Plan	MDAs	Ministries Departments and Agencies
ARI	Animal Research Institute	M&E	Monitoring and Evaluation
AU	African Union	MEP	Monitoring and Evaluation Plan
DOVVSU	Domestic Violence and Victim Support Unit	MET	Monitoring and Evaluation Team
CERC	Contingency Emergency Response Component	MMDAs	Metropolitan, Municipal and District Assemblies
CERSGIS	Centre for Remote Sensing and Geographic Information Services	MoFA	Ministry of Food and Agriculture
CORAF	West and Central Africa Council for Agricultural Research and Development	MoTI	Ministry of Trade and Industry
CRI	Crop Research Institute	MPA	Multi-Phase Programmatic Approach
CSIR	Council for Scientific and Industrial research	MSA	Meteorological Services Authority
DAs	District Assemblies	NAFCO	National Food Buffer Stock Company
DAES	Directorate of Agricultural Extension Services	NDA	Northern Development Authority
DCS	Directorate of Crops Services	NGOs	Non-Governmental Organizations
DFSA	Department of Fisheries Science and Aquaculture (College of Science and Technology)	PAPs	Project Affected Persons
EA	Environmental Assessment	PDO	Program Development Objective
EAR	Environmental Audit Report	PIU	Project Implementing Unit
e-AP	e-Agricultural Programme	PPRSD	Plant Protection and Regulatory Services Division
EEE	Electrical and Electronic Equipment	PS	Performance Standard
EPA	Environmental Protection Agency	RAP	Resettlement Action Plan
ESIA	Environmental and Social Impact Assessment	RCC	Regional Coordinating Council
ESF	Environmental and Social Framework	RPF	Resettlement Action Framework
ESRI	Environmental and Social Risk and Impact	SADA	Savannah Accelerated Development Authority

ESMP	Environmental and Social Management Plan	SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
ESS	Environmental and Social Standards	SEP	Stakeholder Engagement Plan
FAO	Food and Agriculture Organization	SLWM	Sustainable Land and Water Management
ECOWAS	Economic Community of West African States	SRI	Soil Research Institute
GBV	Gender-Based Violence	SSS	Social Safeguards Specialist (of PIU)
GDP	Gross Domestic Product	ToR	Terms of Reference
GE	Gender Equality	VSD	Veterinary Services Directorate
GIDA	Ghana Irrigation Development Authority	FSRP2	Food System Resilience Program
GoG	Government of Ghana	WBG	The World Bank Group
GRC	Grievance Redress Committee	WIAD	Women in Agriculture Development
GM	Grievance Mechanism	WE	Women Empowerment
GMA	Ghana Meteorological Agency	WEEE	Waste Electrical and Electronic Equipment
GSS	Ghana Statistics Service	WHO	World Health Organisation
ICT	Information Communication Technology	WRC	Water Resources Commission
IESS	Institute of Environment and Sanitation Studies		

EXECUTIVE SUMMARY

Background

The Government of Ghana (GoG) through the Ministry of Food and Agriculture (MoFA) in collaboration with ECOWAS and the World Bank is undertaking the West African Food System Resilience Program (FSRP2) under the World Bank Multi-Phase Programmatic Approach (MPA) instrument. Ghana will implement the program for 5 years with a financing envelope of US\$100 Million, among 9 West African countries.

The Program Development Objective (PDO) is to strengthen regional food system risk management, improve the sustainability of the productive base in targeted areas and to develop regional agricultural markets. The five key components of the Program (with regional and national sub-components) are as follows:

- Digital advisory services for agriculture and food crisis prevention and management;
- Sustainability and adaptive capacity of the food system's productive base;
- Market integration and trade;
- Contingent emergency response component; and
- Project management.

The FSRP2 is prepared under the World Bank Environmental and Social Framework (ESF), which requires compliance with the World Bank Environmental and Social Standards (ESSs), as well as with national laws, in particular the national Environmental Assessment Regulations, 1999 (LI 1652). Preliminary assessment shows that eight (8) World Bank ESSs will be relevant to the program including ESS5 that refers to social impacts of projects relating to land acquisition or restrictions on land use. The ESS5 is therefore relevant in guiding the preparation of the required Resettlement Policy Framework (RPF) for this Program.

The RPF for the FSRP2 is to establish the general principles and procedures to guide the preparation of site-specific Resettlement Action Plans (RAPs) under the Program proportionate to potential risks and impacts during implementation. Proposed works under some of the components (subcomponents 1.1 and 1.2; 2.1 and 2.2; and 3.1 and 3.2) are likely to lead to some land take or restriction of access to sources of livelihood. This RPF is required because although there is general knowledge about the types of projects/sub-projects likely to be implemented under the FSRP2, their design specifications and features, specific locations and the type and zone of impacts cannot be determined at this stage of the Program preparation.

Specifically, this RPF document has been prepared with the aim of presenting the procedures to be followed for ARAP/RAP preparation when a project activity will lead to:

- Restrictions on land use and involuntary resettlement; or
- Involuntary land acquisition by the state for public infrastructure.

The objectives of the RPF are to:

- Establish the FSRP2 resettlement and compensation principles and implementation arrangements;
- Describe the legal and institutional framework underlying approaches for resettlement, valuation of assets and compensation in Ghana;
- Define the eligibility criteria for identification of PAPs and entitlements;
- Describe the procedure for public consultation and stakeholder engagements involving PAPs and other key stakeholders particularly in the context of COVID-19 pandemic;
- Provide procedures for setting up grievance mechanism for resolving disputes;

- Provide a format for preparation of ARAP/RAP; and
- Provide measures for information dissemination and disclosure.

Approach and Methodology for the RPF

The approach and methodology for the RPF processes involved project and other documents review and analysis; stakeholder engagement planning and meetings; social impacts identification (related to land-take and resettlement issues); and entitlements, valuation methods, institutional arrangement, grievance mechanism (GM), and monitoring and evaluation (M&E) review for ARAP/RAP preparation. This covered the following 8 main areas, activities, and outputs:

- Inception report preparation;
- Project information study and analysis of components with potential land-take;
- Project target implementation areas preliminary identification;
- Socio-economic baseline characteristics review;
- Regulatory and institutional frameworks analysis;
- Stakeholder engagement program;
- Draft RPF preparation (incorporating eligibility criteria, entitlement and valuation methods, institutional arrangement, GM, E&M for ARAP/RAP preparation and budget estimates and funding for the RPF implementation; and
- Disclosure workshop and final RPF report incorporating an executive summary.

Program/Project Description

The main PDO of the FSRP2 is to strengthen regional food system risk management, improve the sustainability of the productive base in targeted areas and to develop regional agricultural markets. The specific PDOs are:

- To establish risk management architecture to provide early warning support to value chain actors at national and regional level;
- To scale up dissemination, adoption and capacity building programmes focused on regional and national priority commodities;
- To develop, expand and maintain areas under Sustainable Land and Water Management (SLWM);
- To strengthen partnership among actors in priority value chains; and
- To facilitate and promote regional trade in inputs and output of targeted value chains.

There are 5 Program components with national and regional sub-components. The sub-components with the potential for land-take and therefore relevant for the RPF are as follows:

- 1.1: Regional level upgrading food crisis prevention and monitoring systems;
- 1.2: National level strengthening creation and provision of digital advisory services for farmers;
- 2.1: Regional level adapting and adopting innovations and technologies for resilient food systems;
- 2.2: National level strengthen food security through sustainable practices in targeted areas;
- 3.1: Regional level facilitate trade across key corridors and consolidate food reserve system;
 and
- 3.2: National level support to development of strategic, priority staple crops and short cycle livestock value chains.

Regulatory and Institutional Frameworks

The appropriate regulatory and institutional context (both national and international) for addressing issues relating to land acquisition, access restriction and property loss, and involuntary resettlement under the FSRP2, which were identified and reviewed included:

- The Constitution of the Republic of Ghana
- Land Use and Spatial Planning Act, 2016 (Act 925)
- State Lands Act 1962 (Act125) and Amendments
- Survey Act, 1962 (Act 127)
- Land Act, 2020 (Act 1036)
- The Lands (Statutory Wayleaves) Act, 1962 (Act 183)
- Land Title Registration Act, 1986 (P.N.D.C.L 152)
- Administrator of Stool Lands Act 1994 (Act 481);
- National Gender Policy, 2015
- World Bank requirements under the Environmental and Social Framework (ESF) mainly, ESS1, ESS5, and ESS10

The relevant institutions and organizations that would have roles in land acquisition, resettlement and compensation issues for the FSRP2 (including implementation of RAPs), and whose mandates were reviewed to enable definition of their specific roles included:

- Ministry of Food and Agriculture
- Environmental Protection Agency
- Lands Commission
- Ministry of Finance (MoF)
- Ministry for Gender, Children and Social Protection (MGCSP)
- Ministry of Lands and Forestry
- Land Use and Spatial Planning Authority (LUSPA)
- Attorney General's Department and Ministry of Justice
- Regional Coordinating Council (RCC)
- Metropolitan, Municipal and District Assemblies (MMDAs)
- Non-governmental Organizations (NGOs)
- Traditional Authorities (TAs)

A comparison of the requirements of Ghanaian laws and the World Bank ESS5 on resettlement and compensation issues was made, with the view that where differences exist the one that provides the highest or better protection of PAPs would be adopted and implemented.

Socio-Economic Baseline Characteristics

The regional and district distribution of target implementation Project areas helped to focus the socio-economic baseline survey and accordingly covered the following areas:

- General country characteristics
- Surface water resources
- Land use, ownership and degradation
- Agro-ecological zones in the Volta Basin of Ghana
- NDA regions
- Major farming (and cropping) systems in the Volta Basin of Ghana

The methodology for data collection included document review, institutional consultations, focus group discussions with Project expert groups and field survey reports of the target areas. Emphasis was placed on the socio-economic conditions/accounts of the areas covering:

- Land use categories
- Agricultural land use
- Land acquisition and tenure system
- Socio-economic activities
- Ethnic groups, culture, and cultural resources
- Vulnerable groups, children, and women
- Water resources
- Physical environment

Identification of Potential Social Risks and Impacts

The various benefits of the program will include the following:

- 1) Protection for PAPs and other affected parties
- 2) Improved food security
- 3) Sustainable land management
- 4) Improved national and regional economy

The identified potential social risks and impacts likely to be associated with the implementation of projects under the Program include:

- 1) Land take for ground and weather stations construction displacing existing users
- 2) Potential displacements from conversion of other land use areas to priority crop fields
- 3) Adjoining land take for rehabilitation and upgrading of agriculture centres
- 4) Land take for agricultural development activities and watershed restoration
- 5) Potential displacements from creation of large grazing reserves and corridors
- 6) Irrigation development potentially displacing existing users of land
- 7) Potential land take for disposal of unwholesome foods in transit
- 8) Land take for construction of fertilizer, pesticides, etc. industries displacing existing users

The three main components requiring land acquisition to implement relevant projects as well as the significance ranking for the identified risks and impacts are shown in Table 1.

Table 1 Potential Adverse Social Risks and Impacts

Project Component	Project Type/Activity	Identified Social Risk/Impact	Impact Significance Ranking
Component 1	Increased infrastructure for transformational digital advisory services provision for agro-meteorological information, etc. Land take for construction of ground stations and weather stations potentially displacing existing users and/or their access		Moderate
Component 2	Promotion of agricultural inputs production, increase food production, food produce market and guaranteed pricing leading to expansion of agricultural lands. Huge agricultural expansion (in priority staple crops and short cycle livestock sectors) through conversion of other land use types and acquisitions with potential displacements		Moderate
Component 2	Rehabilitation of the Asuansi and Mampong Agriculture Centres and upgrading of the	Potential adjoining land take (permanently of temporarily) for rehabilitation and	Moderate

	Kpeve, Wenchi and Babile Agriculture Stations	upgrading of existing centres and stations potentially displacing existing users	
Component 2	Land development and watershed restoration	Land take for agricultural development and watershed and floodplains restoration potentially denying existing users access and related economic loss.	Moderate
Component 2	Two irrigation projects development	Water mobilization and irrigation High developments potentially displacing existing users of the land.	
Component 2	Rehabilitation of 8 small irrigation dams	Land take for rehabilitation of 8 small irrigation dams potentially displacing adjoining land users	Moderate
Component 2	Reclamation of the Wheta, Tanoso and Techiman Irrigation Schemes	Land take for reclamation of the Wheta, Tanoso and Techiman Irrigation Scheme sites potentially displacing users	Moderate
Component 2	Development of 13,000ha grazing reserve/corridor to support about 11,000 cattle	Conversion of large, contiguous area of land into a huge grazing corridor acquisition and access rights (easements or rights of way) displacing all existing land uses and a large population.	High
Component 3	Expanded distribution of food produce (food trade in West Africa) from production centres to deficit regions	Potential land take for disposal of damaged or unwholesome food produce (food waste) due to transit and transportation problems.	Minor
Component 3	Facilitation and promotion of agricultural inputs production and technology support	Land take for setting up seeds, fertilizers, pesticides, etc. industries potentially displacing or dispossessing existing users of land.	Moderate

Compensation Payment, Eligibility Criteria, Entitlement and Valuation

When land acquisition or restrictions on land use cannot be avoided, affected persons are required to be compensated at replacement cost, and other assistance to help them improve or at least restore their standards of living or livelihoods at pre-project stage.

The RPF apply to sub-project/project activities (or components) whose implementation would physically displace or lead to losing some or all access to resources. This is regardless of the total number of people affected, severity of impact, and legal status (including those with ill-defined or no title to the affected land). Special attention is provided to the needs of vulnerable groups among the PAPs, especially households with income below the national poverty line, the landless, the aged, disabled, ill-persons and people living with HIV/AIDS, women and children, ethnic minorities, and other historically disadvantaged persons.

Once determined that RAP is to be required, all potential PAPs will be identified, consulted on land acquisition and livelihood issues and informed about their rights to compensation at full replacement cost or restore them at <u>pre-displacement levels or to levels prevailing prior to the beginning of project</u> implementation, whichever is higher. A census will be carried out to take inventory of affected assets,

structures, households, etc. Affected plots of land, Structures and Households. The PIU will adopt a consultative and participatory approach in the RAP preparation as follows:

- Socio-economic survey to determine scope and nature of resettlement impacts as well as data collection in the selected sub-project/project sites;
- Cut-off date will be determined and agreed with all parties; and
- Socio-economic assessment on the affected communities, including some demographic data, and establishing baseline information on livelihoods and income, landholding, etc.

The matrix of entitlement for the different categories of impacts likely to be encountered has been prepared for use.

The valuation and compensation for losses is to determine the replacement cost for the affected persons as part of the assessment of resettlement issues under a project, which cover:

- Valuation methodology;
- Land acquisition procedure and compensation;
- Valuing entitlement;
- Procedure for delivering entitlement; and
- Time frame.

Opportunity is provided for negotiation of compensation and resettlement. Compensation could range from cash to other non-cash compensation subject to the approved entitlements, which would be communicated to the beneficiaries. Compensation should be paid before PAPs vacate their properties for commencement of sub-projects.

Stakeholder Engagement and Information Dissemination

The World Bank's Environmental and Social Framework and the Ghana EA Regulations recognize the importance of open and transparent engagement with project stakeholders as an essential element of good practice. The ESS10 advocates effective stakeholder engagement to improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation.

The stakeholder engagement program preparation commenced with the identification of all relevant stakeholders using a Stakeholder Identification Matrix (SIM). The key stakeholders were grouped into the following categories:

- Government ministries (4)
- Research institutions (9)
- Regulatory institutions (4)
- Regional level planning authorities (3)
- Local Communities
- Project Affected Persons (PAPs)
- NGOs/CBOs

The highlights of selected engagement outcomes with stakeholders are presented in Table 2.

Table 2 Major Highlights of Engagement Outcomes

Stakeholder	Key Highlight		
National Food Buffer Stock Company (NAFCO) Water Research	Unwholesome or expired food is crushed and incinerated in collaboration with the Food and Drugs Authority and the Ghana Standards Authority so they cannot be used by anyone. A negative impact of cage aquaculture is conflict with existing fishermen who may		
Institute (WRI)	not have access to any areas where they ones fished and also because feed put in the water for the caged fish attract fish from the wild but local fishermen would not be allowed to venture close to the cages to make a catch.		
Northern Development Authority (NDA)	Within their area of jurisdiction, no intervention would require physical relocation of settlements or farms		
Ghana Irrigation Development Authority (GIDA) The increase of the height of the irrigation dams may affect some near communities and farms due to the increase in the throw back of the root yet known if the height of these proposed dams will be increased			
Animal Production Directorate (APD)	The grazing reserves vary in perimeter: Adaklo – perimeter of 9km, 11km & 47km (15,000ha in total, can house 11000 cattle for 4 months) Fanteakwa – perimeter of 43km (5,000ha, which can house 10,000 cattle for 4 months) Kintampo North – perimeter of 150km (100,00ha, which can provide 1000Mg of feed for 128,000 cattle) Sekyere – perimeter of 89km (32,000ha which can house 150,000 cattle for 4 month)		

Institutional Arrangement for RPF Implementation

MoFA will play the lead role and oversight responsibility for the Program. A National Steering Committee (NSC) set-up by MoFA will be the highest decision-making body and will act to approve the Annual Work Plan and Budget. The NSC will also provide policy guidance and orientation to the national coordination and implementation units of the Program.

The PIU, established by MoFA will be responsible for the implementation of the RPF and subsequent ARAPs/RAPs. The PIU will also coordinate, monitor, evaluate and manage the Program activities in collaboration with the Policy Planning, Monitoring and Evaluation Division and other key implementing MoFA Directorates. This will comprise of the Department of Agriculture at the district level, the National Agriculture Research Institute, and other Ministries, Departments and Agencies, such as the Ministry of Trade and Industries, Ghana Meteorological Agency, EPA, AfCFTA, etc.

Grievance Mechanism

Grievance mechanisms are established as part of the resettlement plan and their design usually involves and considers the views of affected communities and PAPs expressed during the resettlement planning process. Project grievances could range from rates and mode of compensation, eligibility criteria, asset valuation, etc. The objectives of the grievance process are to:

- Provide affected persons avenues for making a complaint or resolving any dispute that may arise during implementation and determination of entitlements of compensation;
- Ensure that appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants by using Alternative Dispute Resolution (ADR) approach; and
- Avoid the need to resort to judicial proceedings at the courts.

The composition of Grievance Redress Committee will involve representatives of PAPs. A number of methods will be available to use to resolve disputes as follows:

- Settlement by negotiation;
- Settlement by mediation;
- Settlement by arbitration;
- Court of Law

Monitoring, Evaluation and Completion Audit

Resettlement planning and implementation processes would be monitored and evaluated at local, regional and national levels to ensure these are carried out in accordance with the relevant requirements of the RPF, and for follow up remedial actions, where necessary. The provisions for monitoring and evaluation (M&E) will ensure the proposed actions are implemented as intended and within the timelines established, and that, the expected results are achieved. Where shortcomings or problems are found, M&E can initiate appropriate corrective actions.

The monitoring of project activities related to land acquisition, compensation and resettlement would fit into the overall project M&E framework. The objective of the monitoring plan will be to ensure that all stakeholders are provided with timely and updated information with regards to the implementation of a RAP/ARAP. The focus of the M&E will include an assessment of the following:

- RAP implementation is in accordance with the schedule;
- Whether RAP implementation has to be adjusted due to changes that have occurred;
- Whether complaints and grievances are being properly and effectively addressed; and
- Inform decisions to resolve problems encountered during RAP implementation.

RPF Implementation Estimated Budget and Funding

The budget estimates for implementation of the RPF will cover costs of the disclosure workshop, training for PIU, MoFA, regional LVD, etc. in order to effectively execute defined roles, including RPF compliance M&E as well as mid-term and completion independent evaluation audits. The budgets also include preparation of ARAPs/RAPs (consultancy costs for individual sub-projects), and implementation of the ARAPs/RAPs (covering resettlement / compensation costs for affected assets, grievances and disputes resolution, and M&E).

The total estimated budget is US\$1,101,075.00, which cover the four broad areas in Table 3. The budget estimates are only indicative, given that the actual number of sub-projects/projects and their proposed locations are not known, the indicated values could only be guestimates.

Table 3 Budget Estimates for RPF Implementation

No.	Budget Area	Amount (US\$)
1	Estimated budget for RPF implementation	48,500.00
2	Estimated budget for ARAPs/RAPs preparation	388,000.00
3	Estimated budget for ARAPs/RAPs implementation and compensation payment to PAPs	664,575.00
4	Total Indicative Budget	1,101,075.00

The Constitution of Ghana requires that people affected by compulsory acquisition of land have to be adequately compensated. This forms the basis for the commitment of GoG towards compensation to PAPs for projects/sub-projects under the FSRP2. The cost for the compensation and resettlement of

the PAPs will therefore be paid by GoG. The MoFA will request for the release of the compensation funds from Ministry of Finance's Capital Account for payment.				

1.0 INTRODUCTION

1.1 Background

The Government of Ghana (GoG) through the Ministry of Food and Agriculture (MoFA) in collaboration with Economic Community of West African States (ECOWAS) and the World Bank is undertaking the West African Food System Resilience Program (FSRP2) under the World Bank Multi-Phase Programmatic Approach (MPA). The Program includes three regional institutions: Economic Commission of West African States (ECOWAS), The Permanent Interstate Committee for Drought Control in the Sahel (CILSS), and the West and Central African Council for Agricultural Research and Development (CORAF). Phase 1 FSRP2 countries include Burkina Faso, Mali, Niger, and Togo. Phase 2 countries are Chad, Ghana, and Sierra Leone. The Program is expected to end December 2030. Ghana will implement the program for 5 years (expected end date December 2026) with a financing envelope of US\$100 Million.

The FSRP2 focuses on building resilience to climate change in Africa's food security adapted in the context of the West African Region's specific set of insecurity drivers. The proposed intervention logic builds on the 2019 Africa Food Security Leadership Dialogue (AFSLD)¹. It hinges on three mutually reinforcing thematic pillars:

- Agriculture and food crisis prevention and management;
- Sustainability and adaptive capacity of the food system's productive base; and
- Market integration and trade.

This program is expected to help solve Africa food security challenges by implementing existing commitment on agriculture and food security with key priorities for food system adaptation to climate change, including leveraging science and digital technology and scaling-up agriculture support through strengthened collaboration among development partners. Implementation of FSRP2 is particularly important for the country's food and nutrition security due to the uncertainty of the nature and severity of COVID-19 impacts across the agricultural value chains.

The Program Development Objective (PDO) is to strengthen regional food system risk management, improve the sustainability of the productive base in targeted areas and to develop regional agricultural markets. The focus will be on investments in resilience creation to enable the food sector to exploit its significant potential as an engine for poverty alleviation, job creation (notably in rural areas) and provider of healthy and nutritious food. The five key components of the Program (with regional and national sub-components) are as follows:

- 1) Digital advisory services for agriculture and food crisis prevention and management;
- 2) Sustainability and adaptive capacity of the food system's productive base;
- 3) Market integration and trade;
- 4) Contingent emergency response component; and
- 5) Project management.

The FSRP2 is prepared under the World Bank Environmental and Social Framework (ESF) which requires the Borrower to comply the applicable Environmental and Social Standards (ESSs). The World Bank safeguard policies require that MoFA assesses and mitigates the potential environmental and

¹ This dialogue was held in Kigali, Rwanda in August 2019 to catalyse collective efforts to deal with hunger and vulnerability to climate change in Africa. It was hosted by the Government of Rwanda and was organized by core partners that included the African Union Commission (AUC), the World Bank, Food and Agriculture Organization (FAO), the International Fund for Agricultural Development (IFAD), and African Development Bank Group (AfDB). The AFSLD process was started to help galvanize actions and financing to address Africa's food security challenges.

social impacts of proposed activities under the Program. This also applies to the national Environmental Assessment (EA) Regulations (LI 1652), which require such undertakings undergo the required assessment. Preliminary assessment shows that eight (8) World Bank ESSs will be relevant to this program comprising; ESS1, ESS2, ESS3, ESS4, ESS5, ESS6, ESS8, and ESS10. The ESS5 refers to social impacts of projects relating to land acquisition or restrictions on land use and involuntary resettlement, and it is of relevance in guiding the preparation of the required Resettlement Policy Framework (RPF) for this Program.

1.2 Purpose and Objective of the RPF

1.2.1 Purpose of the Resettlement Policy Framework

The ESS5 of the World Bank ESF and the EA Regulations of Ghana provide the general framework and procedures for the preparation of RPF when the nature or magnitude of land acquisition or restrictions on land use related to a project with potential to cause physical and/or economic displacement is unknown during project preparation. This is done to establish the general principles and procedures to guide the preparation of site-specific Resettlement Action Plans (RAPs) during implementation.

Proposed works under some of the components (sub-components 1.1, 2.2 and 3.1) are likely to lead some land take or restriction of access to sources of livelihood. This RPF is required because although there is general knowledge about the types of sub-projects likely to be implemented by the FSRP2, their design specifications and features, specific locations and the type and zone of impacts cannot be determined at this stage of Project preparation.

The RPF sets out the guidelines as well as regulatory and institutional arrangements for the preparation of the RAPs and other safeguards instruments that emanate from outcomes of project induced involuntary resettlement when project activities are fully defined, and sites/locations are identified. The RPF will provide required criteria to screen all projects/sub-projects for their potential resettlement impacts and streamline all the necessary procedures to follow in mitigating resettlement impacts/issues. Where less than 200 people are affected by a project/sub-project, an Abbreviated RAP will be required, while a full RAP will be developed where the project affected persons (PAPs) are more than 200.

Thus, this RPF document has been prepared with the aim of presenting the procedures to be followed for RAP/ARAP preparation when a project activity triggers:

- Restrictions on land use and involuntary resettlement; or
- Involuntary land acquisition by the state for public use.

1.2.2 Objectives of the Resettlement Policy Framework

The objectives of the RPF are to:

- Establish the FSRP2 resettlement and compensation principles and implementation arrangements;
- Describe the legal and institutional framework underlying Ghanaian approaches for resettlement, valuation of assets and compensation;
- Define the eligibility criteria for identification of PAPs and entitlements;
- Describe the procedure for public consultation and stakeholder engagements involving PAPs and other key stakeholders;
- Provide procedures for setting up grievance redress mechanism for resolving disputes;
- Provide a format for preparation of ARAP/RAP; and
- Provide measures for information dissemination and disclosure.

1.3 Report Organization

This draft RPF has been organized into 15 sections preceded by an Executive Summary as follows:

• Chapter 1: Introduction

Chapter 2: Approach and methodology for RPF
 Chapter 3: FSRP2 and components description

Chapter 3: FSRP2 and components description
 Chapter 4: Legal and institutional framework

• Chapter 5: Socio-economic baseline characteristics

Chapter 6: Identification of potential social risks and impacts
 Chapter 7: Compensation payment for land and other assets

Chapter 8: Eligibility criteria and entitlement matrix

Chapter 9: Valuation of assets and compensation measures
 Chapter 10: Public consultations and stakeholder engagement
 Chapter 11: Information dissemination and disclosure measures
 Chapter 12: Institutional arrangement for RPF implementation

• Chapter 13: Grievance mechanism

• Chapter 14: Monitoring, evaluation, and completion audit

Chapter 15: RPF implementation estimate/budget and funding

2.0 APPROACH AND METHODOLOGY FOR RPF

The approach and methodology for the RPF processes involved project and other documents review and analysis; stakeholder engagement planning and meetings; social impacts identification (related to land take and resettlement issues); and entitlement and valuation methods, institutional arrangement, grievance mechanism (GM), and monitoring and evaluation (M&E) review for ARAP/RAP preparation. This covered the following 8 main areas and outputs:

- 1) Inception Report preparation
- 2) Project information study and analysis of components with potential land-take
- 3) Project target implementation areas preliminary identification
- 4) Socio-economic baseline characteristics review
- 5) Regulatory and institutional frameworks analysis
- 6) Stakeholder engagement program
- 7) Draft RPF preparation incorporating eligibility criteria, entitlement and valuation methods institutional arrangement, GM, M&E for ARAP/RAP preparation and budget estimates and funding for RPF the implementation
- 8) Disclosure workshop and final RPF report incorporating an executive summary

2.1 Inception Report Preparation

The Inception Report (Annex 1) preparation involved the following process and constituted the first output of the RPF assignment:

- Initial review of the Project information;
- Identification of Project target implementation areas (regions and districts);
- Identification of documents (including legal and institutional frameworks) for review;
- Initial definition of the terms of reference (ToR) for the RPF;
- Identification of experts to support the RPF preparation; and
- Preparation of work plan/schedule and timelines to complete the assignment.

2.2 Project Information and Components Analysis

An in-depth review of Project information was carried out to help prepare the Project (FSRP2) description (Chapter 3) of the RPF report. The review also provided the following outputs:

- Identification of the Project components likely to require land take;
- Potential magnitude of social and land acquisition risks or impacts that could be associated with implementation of the identified sub-projects; and
- Stakeholders that could be linked to the identified risks and impacts.

2.3 Project Target Implementation Areas Identification

The review of Project information facilitated the identification of some of the Project target implementation areas (regions and districts). Over nineteen (19) districts in eight (8) regions were identified as potential beneficiaries (Table 2.1).

Table 2. 1 Potential Target Implementation Regions and Districts

No.	Regions	Districts
1	Ashanti	5
2	Bono East	6
3	Central	Not yet determined
4	Eastern	1
5	Greater Accra	2
6	Upper East	Not yet determined

7	Savannah	Not yet determined
8	Volta	5

2.4 Socio-Economic Baseline Characteristics Review

The regional and district distribution of target implementation areas helped to focus the socioeconomic baseline survey, which was accordingly designed and covered:

- General country characteristics;
- Lower Volta Basin area;
- White Volta Basin area;
- Guinea Savanna zone;
- NDA regions; and
- Major farming (and cropping) systems in the Volta Basin of Ghana.

The methodology for data collection included document review, institutional consultations, focus group discussions with Project expert groups and field survey reports of the target areas. Emphasis was placed on the socio-economic conditions and accounts of the areas, covering:

- Land use categories;
- Agricultural land use;
- Land acquisition and tenure system;
- Socio-economic activities;
- Ethnic groups, culture and cultural resources;
- Vulnerable groups, children and women;
- Water resources; and
- Physical environment.

2.5 Regulatory and Institutional Frameworks

To establish the appropriate regulatory and institutional context (both national and international) for addressing issues relating to land acquisition, access restriction and property loss, and involuntary resettlement under the FSRP2, the following were reviewed.

- The Constitution of the Republic of Ghana;
- Land Use and Spatial Planning Act, 2016 (Act 925);
- State Lands Act 1962 (Act125) and Amendments;
- Survey Act, 1962 (Act 127);
- The Lands (Statutory Wayleaves) Act, 1962 (Act 183);
- Land Title Registration Act, 1986 (PNDCL 152);
- Administrator of Stool Lands Act, 1994 (Act 481); and
- International requirements mainly:
 - o The World Bank ESS1, ESS5, and ESS10.

The relevant institutions and organizations identified to have roles in land acquisition, resettlement and compensation issues (including implementation of RAPs), and whose mandates were reviewed to enable definition of specific roles included:

- Ministry of Food and Agriculture;
- Environmental Protection Agency;
- Lands Commission;
- Ministry of Finance;
- Ministry of Gender, Children and Social Protection;

- Ministry of Lands and Forestry;
- Land Use and Spatial Planning Authority (LUSPA);
- Land Attorney General's Department and Ministry of Justice;
- Metropolitan, Municipal and District Assemblies;
- Non-governmental Organizations (NGOs); and
- Traditional Authorities.

A comparison of the requirements of Ghanaian laws and the World Bank ESS5 on resettlement and compensation issues was made, with the view that where differences exist the one that provides the highest or better protection of PAPs would be adopted and implemented.

2.6 Stakeholder Engagement Program

The stakeholder engagement program preparation commenced with the identification of all relevant stakeholders using a Stakeholder Identification Matrix (SIM). The key stakeholders identified were grouped into categories as follows:

- Government ministries (4);
- Research institutions (9);
- Regulatory institutions (4);
- Regional level planning authorities (3);
- Local Communities; and
- Project Affected Persons.

A formal introduction was made by MoFA via voice calls to the stakeholders introducing the consultant for the RPF and requesting their collaboration in the consultation process. The following other preparatory activities were done to usher in the actual engagement activities:

- Development of stakeholder engagement mapping and plan (jointly with the ESMF Consultant); and
- Development of specific engagement issues prepared for each stakeholder group.

The engagement or consultation meetings were conducted either through voice calls or virtual zoom meeting (between $23^{rd} - 29^{th}$ March 2021). Subsequent communications were held via emails to clarify any issues or to request for supporting documentation. The engagement outcomes for all stakeholders were compiled in the Annex 11.

2.7 Draft RPF Preparation

The draft RPF report spelt out the conditions for the following in the preparation of ARAPs/RAPs for the various sub-projects:

- Information dissemination and disclosure measures;
- Institutional arrangement for implementation;
- Grievance mechanism; and
- Monitoring, evaluation and completion audit.

Other relevant guides developed (for ARAPs/RAPs preparation) are: eligibility criteria, entitlement matrix, valuation and compensation methods, and information dissemination and disclosure. Five (5) relevant Forms to facilitate screening sub-projects and other RAP activities as well as for measuring social performance were also developed and included in the Annexes:

- Social Screening Criteria (Annex 10);
- Grievance Resolution Form (Annex 8);

- Affected Plots/Land Form (Annex 9);
- Affected Building Form (Annex 9); and
- Affected Household Form (Annex 9).

The draft RPF report with indicative estimates for RPF implementation budget and funding were developed. The draft report will be submitted for review as required for any comments, prior to finalization.

2.8 Disclosure Workshop and Final RPF Report Preparation

Comments on the draft report will be addressed in an updated RPF report, which will be a subject of a disclosure workshop. This version of the report will have an executive summary. The purpose will be to further review the RPF for consensus and acceptance, following which the final RPF report will be prepared for submission.

3.0 PROJECT DESCRIPTION

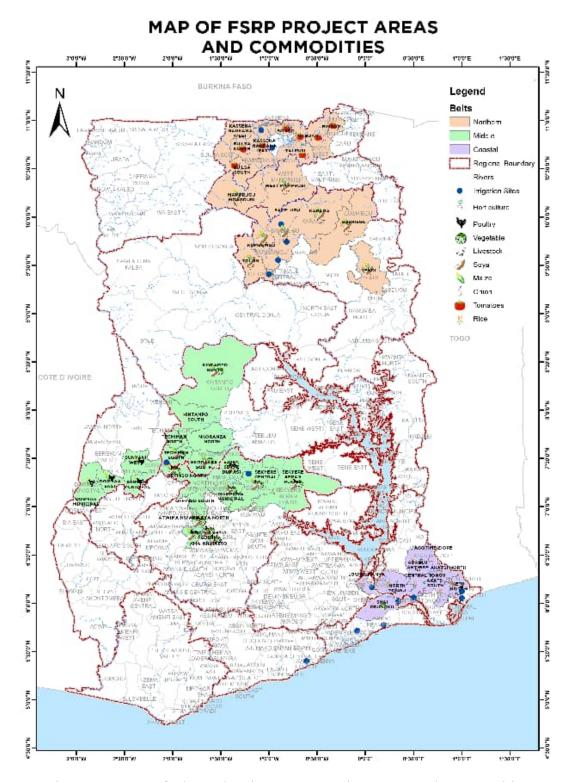


Figure 3.1: Map of Ghana showing FSRP2 Project Areas and Communities

3.1 Background

ECOWAS is home to more than 360 million people of whom about 55% live in rural areas. Most derive their food and livelihood from agriculture, which contributes approximately 29% of gross domestic product (GDP) and constitutes 28% of total exports of ECOWAS by value. More than 30% of the

population remains in poverty (below US\$1.90 PPP per day) and around 60% of the poor derive their livelihoods in part or entirely from agriculture. Climate change, extreme poverty, rapid population growth and insecurity are driving high levels of vulnerability of communities throughout the subregion. West Africa is also a climate change migrant hotspot globally, projected to reach between 17.9 million and 54.4 million people.

As of April 2020, 11.4 million people in West Africa were severely food insecure and the number was projected to rise to 17 million by August 2020, not taking into account likely major disruptions by COVID-19 and a possible spill over of the locust outbreak in Eastern Africa. COVID-19 driven trade restrictions are threatening to trigger price spikes in the largely food import dependent region and mobility restrictions have had immediate effects on food supply and demand, with strong expected impacts on food security and nutrition outcomes. ECOWAS and member states are deploying responses and focusing efforts to preserve and increase domestic production to secure the next harvest of key staples, anticipating further restrictions in international trade should the pandemic worsen.

Agriculture is an engine of growth and poverty alleviation in Africa. Africa has experienced faster agricultural growth (+4.6% over 2000-2017) than the global average over the same period (+2.9%). There is further headroom as African agriculture could be 2-3 times more productive if it intensified further with demand for food being projected to grow by 4.6% per annum. This growth presents significant economic opportunities but also raises pressure on production to deliver sufficient food with shrinking per capita endowments of natural resources.

There is therefore the need to develop food systems that will support nations meet the growing demand for food, while adequately mitigating, diversifying and transferring production risks faced by the already shrinking natural resources in the face of climate change experienced in the region. It is against this background that the FSRP2 was developed. Implementation of FSRP2 is particularly important for Ghana's food and nutrition security due to the uncertainty of the nature and severity of COVID-19 impacts across the agricultural value chains (VCs).

3.2 Overview of FSRP2

The GoG through MoFA in collaboration with ECOWAS and the World Bank is undertaking the FSRP2 under the World Bank MPA Instrument. The Program which will be undertaken in 2 phases will be implemented in 9 West African countries namely Sierra Leone, Mali, Niger, Togo, Chad, Burkina Faso, Gambia, Liberia and Ghana. The life span of the Program is expected to be 9 years (March 2021 to December 2030). However, Ghana will implement the program for 5 years with a financing envelope of US\$100 Million.

The program focuses on building resilience to climate change in Africa's Food security adapted in the context of the West African Region's specific set of insecurity drivers. This program proposed intervention logic builds on the 2019 Africa Food Security Leadership Dialogue (AU-WBG-FAO-ADB-IFAD, Kigali, 2019). The Program hinges on three thematic pillars which are: 1) Agriculture and food crisis prevention and management, 2) sustainability and adaptive capacity of the food system's productive base and 3) market integration and trade.

3.3 Program Development Objectives

The main PDO of the FSRP2 is to strengthen regional food system risk management, improve the sustainability of the productive base in targeted areas and to develop regional agricultural markets. The agricultural priority focus of Ghana in this program aligns with regional priorities outlined in the regional agricultural policy for West Africa with greater integration in markets in the sub-region. The specific PDOs are:

- To establish risk management architecture to provide early warning support to value chain actors at national and regional level;
- To scale up dissemination, adoption and capacity building programmes focused on regional and national priority commodities;
- To develop, expand and maintain areas under Sustainable Land and Water Management (SLWM);
- To strengthen partnership among actors in priority value chains; and
- To facilitate and promote regional trade in inputs and output of targeted value chains.

The primary beneficiaries are the producers, aggregators, traders and all actors of the selected VCs. Other beneficiaries include key participants in establishing, managing and dissemination risk management data and information as well as researchers, public and private extension service and advisory agencies, research institutions, universities, private sector, Non-Governmental Organisations (NGOs), trade associations, financial Institutions and government agencies involved in value chain management.

The following are the proposed PDO level outcome indicators:

- Strengthened regional food crisis prevention and management systems are used for decision making;
- Total number of project beneficiaries;
- Producers adopting supported agricultural technologies and services, including access to agrometeorological information through digital channels (by gender);
- Area under sustainable and integrated land management practices; and
- Countries implementing regional trade policy in targeted input and output VCs.

3.4 Program Components

The Program has 5 components based on current food insecurity crisis towards more medium to long-term investments aimed at building the resilience of the food system and its productive base. The components comprise:

- 1) Strengthening digital advisory services for agriculture and food crisis prevention and management;
- 2) Securing the sustainability and adaptive capacity of the food systems productive base, natural resource base and scaling up Climate Smart Agriculture;
- 3) Developing regional value chains and integration of food trade corridors;
- 4) Contingency Emergency Response Component (CERC); and
- 5) Project management.

3.4.1 Component 1: Digital Advisory Services for Agriculture and Food Crisis Prevention

This component will establish decision support systems to prevent and manage agriculture and food crisis and response by integrating data and leveraging cutting edge science, innovation and technologies. Also, regional capacity will be strengthened and institutional sustainability as well as private sector engagement enhanced to provide demand-driven digital advisory services. The two subcomponents are:

- Regional Sub-component 1.1 Upgrading food crisis prevention and monitoring systems; and
- National Sub-component 1.2 Strengthening creation and provision of digital advisory services for farmers.

Sub-Component 1.1: Upgrading Food Crisis Prevention & Monitoring Systems

This aims to transform the regional food and agriculture risk management architecture (food security relevant data collection, analysis, forecast and management) in order to provide information and

advisory services to support risk management decisions. This would be done by strengthening the capabilities, coordination and organization of agriculture, hydrology and meteorology (AGRHYMET) and other institutions mandated to fulfil these functions at the regional level as well as systematically engaging the private sector. It will also support:

- Regional institutional capacity for monitoring and delivering information services on food security including through the "Cadre Harmonisé";
- Strengthening the existing regional agriculture information system by integrating regional multi-dimensional vulnerability data information systems to support decision making through improved advisory, Hydromet and early warning services;
- Reorganizing existing and developing new pest and disease monitoring and management mechanisms; and
- Regional collaboration through the facilitation of the regionally harmonized approaches in relation to the above including development of a learning platform for national climate information providers (public & private).

Institutions will be supported with improved ground-based data collection systems and high-end digital tools such as satellites, ground stations, weather stations, last-mile radio systems, flowmeters, drones, barometer, computer processors, etc.

Sub-Component 1.2: Strengthening Creation and Provision of Digital Advisory Services

This aims to increase access to and use of location-specific information relevant to food security by decision makers and farmers via national extension systems. This sub-component will include:

- Capacity building and institutional strengthening activities for Hydromet and Agromet service providers (public and private) at the national level;
- Enhancing the national capability to observe Hydromet phenomena to supplement regional and global weather data and infrastructure;
- Development and provision of impact-based forecasting, warning and advisory services to respond to the demands of the agriculture and food security;
- Support the timely delivery of agro-meteorological information to farmers using multi-modal channels including ICT in partnership with the private sector; and
- Support to the development of climate information that can better inform the development of agriculture and risk financing instruments.

3.4.2 Component 2: Sustainability and Adaptive Capacity of Food System's Productive Base

This component targets the resilience of agro-sylvo-pastoral production systems allowing small and medium producers, especially women and youth, to sustainably meet their nutritional needs and raise incomes from the sale of surpluses in local and regional markets. This would be achieved through:

- Adapting and adopting technologies, innovation and knowledge to counter the evolving challenges of the food system; and
- Building resilience in food insecurity priority areas through multisectoral interventions including better access to innovation and technologies.

The two sub-components are:

- Regional Sub-component 2.1 Adapting and adopting innovations and technologies for resilient food systems; and
- National Sub-component 2.2 Strengthen food security through sustainable practices in targeted areas.

Sub-Component 2.1: Adapting and adopting Innovations and Technologies for Resilient Food Systems

This aims to strengthen the regional research and extension systems to deliver, in a sustainable manner, improved technological innovations including climate-smart, nutrition-sensitive, gender- and youth friendly technologies. Specifically, the sub-component would strengthen the capacity of the regional agriculture research system to fine tune existing technologies and accelerate technology transfer at the regional level from national research programs. The project will place emphasis on harnessing disruptive technologies with the objectives of:

- Improving advisory and information service provision for boosting agricultural productivity;
 Enhancing market linkages;
- Improving farmers' financial inclusion; and
- Providing data analytics and agriculture intelligence solutions backed by data infrastructure, remote sensing and mapping technologies, precision agriculture tools, and computing power, etc.

This sub-component will scale up the introduction of digital agriculture (E-extension, electronic markets for agriculture technologies, inputs and products), support the strengthening of the seed system, soil fertility management (development of soil maps, promotion of soil testing, monitoring of soil fertility and introduction of targeted fertilizer blending). These activities may not require land acquisition.

Sub-component 2.2 will sustainably improve rural households' food security and their resilience to climate variability in targeted areas. Proposed interventions like land and watershed restoration, floodplains restoration, water mobilization and irrigation developments and delivery of farm/community level CSA packages of technologies will be coordinated through spatial/participatory planning and management at the watershed level.

3.4.3 Component 3: Market Integration and Trade

This component will seek to expand food trade in West Africa to enable an effective distribution of surplus produce to deficit regions and facilitate production and commercialization of agricultural inputs and technologies within and across national borders. The 2 sub-components are:

- Regional Sub-component 3.1 Facilitate trade across key corridors and consolidate food reserve system; and
- National Sub-component 3.2 Support to Development of Strategic Value Chains.

Sub-component 3.1 will support the implementation of sound regional regulations and policies to strengthen the regional agricultural and food input and output markets.

Sub-component 3.2 will support the development of up to three VCs per participating country, focusing on backward and forward segments of priority staple crops and short cycle livestock VCs, with the potential for tangible positive impacts on regional food security.

3.4.4 Component 4: Contingency Emergency Response Component

This component will allow for a reallocation of credit proceeds from other components to provide immediate emergency recovery support following an eligible crisis or emergency.

3.4.5 Component 5: Project Management

Project management will be coordinated by ECOWAS, which would delegate technical work to the relevant mandated organizations (principally AGRHYMET and CORAF).

3.5 Implementation Target Areas

The target areas for the Project are presented in **Figure 3.1**, which depicts the map of Ghana and the FSRP2 project areas and communities.

The FSRP2 will be implemented in selected district in eight (8) regions of Ghana. The proposed regions are as follows:

- Ashanti;
- Bono East;
- Central;
- Eastern;

- Greater Accra;
- Upper East;
- Savannah; and
- Volta

3.5.1 Ashanti Region

Districts to benefit from the Project in the Ashanti Region include:

- Ejura Sekyedumase,
- Sekyere Central,
- Sekyere Affram Plains,

- Asante Akyem North; and
- Offinso North.

3.5.2 Bono East Region

Districts in the Bono East Region where some Project activities will be implemented include:

- Techiman North,
- Techiman South,
- Atebubu Amantn,

- Nkoranza North,
- Nkoranza South; and
- Sene West.

3.5.3 Central Region

The identified district to benefit from the Project in the Central Region is Efutu District.

3.5.4 Eastern Region

The identified district to benefit from the Project in the Eastern Region is the Lower Manya Krobo District.

3.5.5 Greater Accra Region

The Project will be implemented on the Accra Plains mainly the Shai Osudoku and Kpone Katamanso Districts, specifically the Kpong Irrigation Scheme and the Kpong Left Bank Irrigation Project.

3.5.6 Savannah Region

In the Savannah Region the project will be implemented in the Forest Transition and Guinea Savannah areas covering 27,810km² of land and a population of and 834,787 persons.

3.5.7 Upper East Region

The Project will be implemented within the White Volta Basin area covering 12,000km² with a population of about 1.4 million in the Upper East Region of Ghana.

3.5.8 Volta Region

In the Volta Region the Project will be implemented in the Agotime Ziope, Adaklu Anyingbe, Central Tongu, North Tongu, and Ketu North Districts.

3.6 Program Components Requiring Land Take

A review of the Project components/sub-components was carried out with the view to identifying which ones would potentially require land take or acquisition of any form during implementation. The Table 3.1 shows the components of the Project whose implementation could require land acquisition, hence could raise resettlement issues.

 Table 3. 1
 Identified Project Components Requiring Land for Implementation

Components	Sub-Components	Project Activities Requiring Land
1.0: Digital advisory services for agriculture and	1.1: Regional Level Upgrading food crisis prevention and monitoring systems	Establishment of Weather Stations and Ground Stations, etc. for information delivery services on food security may require acquisition of land
food crisis	1.2: National Level	Establishment of Weather Stations and Ground
prevention and management	Strengthening creation and provision of digital advisory services for farmers	Stations, etc. components for information delivery services on food security may require acquisition of land
2.0:	2.1: Regional Level	Harnessing measures to boost agriculture productivity, gender- and youth friendly technologies, extension systems, the seed system, soil fertility, mechanization services, market linkages, and digital agriculture could lead to huge agricultural expansion through conversion of other land use types and acquisitions.
Sustainability and adaptive capacity of the food system's productive base	Adapting and adopting innovations and technologies for resilient food systems	
	2.2: National Level	Proposed interventions such as watershed and
	Strengthen food security through sustainable practices in targeted areas	floodplains restoration, water mobilization and irrigation developments, and land development including grazing reserve/corridor would require substantial land and acquisition of access rights, like easements or rights of way.
3.0: Market	3.1: Regional Level	Expansion of food trade in West Africa enabling effective distribution of food produce to deficit regions could potentially lead to unwholesome food due to transit challenges, which may require land for disposal of food waste
Integration and Trade	Facilitate trade across key corridors and consolidate food reserve system	
	3.2: National Level	Land would be required for potential expansion in the priority staple crops and short cycle livestock sectors.
	Support to development of strategic, priority staple crops and short cycle livestock value chains	Facilitation of the production and commercialization of agricultural inputs and technologies would require land for setting up seeds, fertilizers, veterinary product industries
4.0:	Reallocation of credit proceeds	Land not required for implementation
Contingency emergency response component	from other components to provide immediate emergency recovery support following an eligible crisis	
5.0: Project management	Coordination of the Project management by ECOWAS	Land not required for implementation

4.0 KEY POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

This section reviews policy, legal and institutional frameworks relevant to land acquisition, property loss, and involuntary resettlement under the FSRP2, which will also apply in the preparation of RAPs in the implementation of future sub-projects. These include:

- 1) The Constitution of the Republic of Ghana;
- 2) Land Use and Spatial Planning Act, 2016 (Act 925);
- 3) State Lands Act 1962 (Act125) and Amendments;
- 4) Survey Act, 1962 (Act 127);
- 5) The Lands (Statutory Wayleaves) Act, 1962 (Act 183);
- 6) Land Act, 2020 (Act, 1036);
- 7) Land Title Registration Act, 1986 (P.N.D.C.L 152);
- 8) Administrator of Stool Lands Act 1994 (Act 481);
- 9) Ghana National Gender Policy, 2015;
- 10) International requirements; and
- 11) Relevant institutional requirements.

4.1 The Constitution of the Republic of Ghana

Article 20 of the 1992 Constitution of Ghana provides that there will be no compulsory acquisition of property unless such acquisition is made in the interest of defence, public safety, public order, public morality, town and country planning, or the development or utilization of property to promote public interest. In such compulsory acquisition by the State, there should be the provision for prompt payment of fair and adequate compensation as well as a right of access to a High Court by any person who has interest in or right over the property for the determination of interest or right and the amount of compensation entitled and any property compulsorily taken possession of or acquired in the public interest or for a public purpose shall be used only in the public interest or for the public purpose for which it was acquired.

4.2 Land Use and Spatial Planning Act

The Land Use and Spatial Planning Act, 2016 (Act 925) establishes the Land Use and Spatial Planning Authority with the functions to:

- Develop the capacities of the District Assemblies (DAs) and other institutions for effective performance of spatial planning and human settlement management functions;
- Ensure the control of physical development in uncontrolled or less controlled but sensitive areas such as forest reserves, nature reserves, wildlife sanctuaries, green belts, coastal wetlands, water bodies and catchment areas, open spaces and public parks; and
- Ensure the exploitative use of natural resources for agriculture, mining, industry and other related activities do not adversely impact on human settlements.

4.3 State Lands Act and Amendments

The State Lands Act 1962, (Act 125) vests in the President of the Republic the authority to acquire land for the public interest through an executive instrument. In addition, the Act details the different elements to be taken into consideration when calculating compensation. These include:

- "Cost of disturbance" (which means the reasonable expenses incidental to any necessary change of residence or place of business by any person having a right or interest in the land);
- "Market value" (which means the sum of money which the land might have been expected to realize if sold in the open market by a willing seller or to a willing buyer);
- "Replacement value" (which means the value of the land where there is no demand or market for the land by reason of the situation or of the purpose for which the land was devoted at

the time of the declaration made under Section 1 of this Act, and shall be the amount required for reasonable re-instatement equivalent to the condition of the land at the date of the said declaration); and

• "Other damage" (which means damage sustained by any person having a right or interest in the land or in adjoining land, by reason of severance from or injurious affection to any adjoining land).

4.4 Survey Act

The Survey Act, 1962 (Act 127) relates to geological, soil and land survey, whereas Part II of the Act deals with demarcation and survey of lands. No person other than the official surveyor or licensed surveyor that shall certify plans for attachments to instruments of conveyance, leases, assignment, charge or transfer. Under the law it is an offence to damage, destroy or alter any boundary mark. The Act 127 gave legal backing to the Director of Surveys to carryout cadastral and other surveys through official surveyor.

4.5 The Lands (Statutory Wayleaves) Act

The Lands (Statutory Wayleaves) Act, 1963 (Act 186) specifics the process involved in occupation of land for the purpose of the construction, installation and maintenance of works of public utility, and for the creation of right of way for such works. The key elements include:

- The owner/occupier of the land must be formally notified at least a week in advance of the intent to enter, and be given at least 24-hour notice before actual entry;
- Any damage due to entry must be compensated in accord with the procedures established by the Minister unless the land is restored or replaced;
- In the case of highways, no compensation shall be paid, unless the land taken is more than one fifth of the total holdings of an affected person; and
- Where a right of way must be established in the public interest, the President may declare the land to be subject to such statutory wayleave.

On publication of a wayleave instrument specifying the area required, and without further assurance, the land shall be deemed to be subject to wayleave. Compensation is then determined and paid, with the right of appeal to a Tribunal established by the President, in parallel with the Lands Act, 1962. Further to this Act, the Statutory Wayleave Regulations, 1964, provide procedural details and address grievance mechanisms.

4.6 Land Act

The Land Act, 2020 (Act 1036) seeks to revise and consolidate the laws on land, with the view to harmonising those laws to ensure sustainable land administration and management and effective land tenure. The Act seeks to consolidate the various legislation on land into one enactment to provide easy access to legislation on land and help remove the overlaps and inconsistencies associated with land legislation. The Act also seeks to complement the Lands Commission Act, 2008 (Act 767), the Administration of Stool Lands Act, 1998 (Act 481) and the Land Use and Spatial Planning Act, 2016 (Act 925), with the view to providing a comprehensive legal regime for the land sector in Ghana and also support decentralized land service delivery to bring about efficiency, cost-effectiveness and enhanced accessibility to land.

4.6.1 Stool and Family Lands

The Act has clarified some of the issues which had been a source of doubt in the interpretation of land legislation, introducing new concepts, such as the Customary Land Secretariat, to provide a mechanism for a more efficient customary land administration. Hitherto, legislation on Customary

Land Administration was confined to only Stool and Skin lands. To create a unitary form of Customary Land Administration, clan and family lands have been included in the provisions that deal with stool and skin lands. This is because family lands are all lands held in trust for various corporate tenure, and heads of these corporate groups are fiduciaries, accountable to the people, as indicated in Clause (9) of Article 36 (t) of the Constitution.

4.6.2 Spousal Acquisition

Pursuant to Article 22 of the Constitution and international best practices, the Land Act provides that property acquired for valuable consideration by spouses during marriage was presumed to be owned by the spouses as tenants in common, unless a contrary intention was expressed. The Act also provides that property acquired in marriage is to be registered in the names of the spouses, unless a contrary intention is expressed. It further provides for the consent of the spouses in the disposition of such property. In matters on compensation of project affected persons, provisions in the land Act regarding spousal rights must be taken into consideration.

4.7 Land Title Registration Act

The Land Title Registration Act, 1986 (PNDCL 152) provides for accurate parcel or cadastral maps which would reduce fraud, multiple registrations and reduce litigation. It also provides for publication and adjudication of conflicts. The certificate of title to the land is indefeasible and can only be cancelled by a court of law. The Land Title Registration Law provides for the registration of all interests held under customary law and also the common law.

The Constitution (Article 18) provides that everyone has the right to own property, either individually or in conjunction with others, and that "no person shall be subjected to interference with the privacy of his home, property, … except in accordance with law and …for public safety or the economic well-being of the country, for the protection of the rights and freedom to others.". There are three types of land ownership in Ghana:

- 1) Customary ownership;
- 2) State ownership; and
- 3) Split ownership.

The Act recognizes four types of customary ownership, whereas the other two categories only contain one form of ownership each.

4.7.1 Customary Ownership:

The four types of customary ownership include:

- Allodial title;
- Freehold title
 - Customary law freehold;
 - Common law freehold;
- Leaseholds;
- Customary tenancy.

Allodial Title

This is the highest interest recognized by customary law. It is normally communally owned and is generally held or vested in stools or skins. In other traditional areas, this interest is held by subgroups like sub-stools, clans, families, or individuals. The owner of the allodial land holds this land under no restrictions or obligations other than those imposed by the law of Ghana.

Freehold Title

a) Customary Law Freehold

Customary law freehold (usufructuary title) refers to an interest held by subgroups or individuals in land that is known to be held in allodium by a larger community. It can be acquired by cultivation or succession. It is perpetual, inheritable, and the holder has the right to sell, lease, or grant agricultural tenancies on the land. The land holder can occupy the land and derive economic benefit from it. The government and/or the allodial landowner may terminate holding rights if the land holder fails to produce successors, through compulsory acquisition, if the holder abandons the land, or in rare circumstance where the holder denies the absolute title of the allodial owner.

b) Common Law Freehold.

This refers to an interest in land that stems from the sale or gift to a person outside the community, by the community that holds the allodial title to the land. The land holder's rights, and any dispute settlement mechanism, are defined by common law. This type of freehold is created by express grant. The grantor may impose terms on the grant, provided those terms are reasonable and not contrary to public policy. Only Ghanaian citizens may acquire freehold title to land.

Leaseholds

This is the right to occupy and develop the land granted for a certain period of time. Ghanaian law specifies 99 years for Ghanaian citizens, and 50 years for non-Ghanaians. A lease may be granted either by the holder of the allodial title or a customary freeholder. It is a creation of the common law. The grantor may impose various terms on the lease, including the payment of rent.

Customary Tenancy

Owners of the allodial title or customary freehold can create various lesser interests (than those described above). These types of tenancies are usually share-cropping arrangements. Under "abusa" tenancy, the tenant farmer is entitled to a third of the produce form the land while under "abunu" tenancy, the farmer is entitled to half of the produce.

4.7.2 State Ownership

State land is the land which the state has compulsorily acquired for public purposes or in the public interest, as specified in the Constitution. Under such ownership, the allodial rights become vested in the government, which thus allows the government to, for example, lease or allocate the land to state institutions, individuals or organizations. Cadastral surveys are used to determine the boundaries of state lands.

4.7.3. Split Ownership (Vested Lands)

Split ownership occurs when the state takes legal ownership of the land, but the customary owner retains the equitable interest in the land. The state, as the legal owner, thus has the right to sell, lease, manage, and collect rent on the land. Although vested lands are generally managed in the same way as State Lands, the boundaries are not determined through cadastral survey (which can lead to confusion with regard to land ownership), and often cover large expanses of land.

4.8 Office of the Administrator of Stool Lands Act

The Office of the Administrator of Stool Lands Act, 1994 (Act 481) provides for the establishment of stool land account for each stool, collection of rents and the disbursement of such revenues. The Administrator is charged with the management of stool lands and in accordance with the provisions in the 1992 Constitution, 10% of the gross revenue goes to the Administrator of Stool Lands for administrative expenses whilst the remainder is disbursed as follows:

- 55% to the District Assembly, within the area of authority of which the stool lands are situated.
- 25% to the stool through the traditional authority for the maintenance of the stool; and

• 20% to the traditional authority.

4.9 National Gender Policy

The overarching goal of the National Gender Policy, 2015 is to mainstream gender equality (GE) concerns into the national development processes by improving the social, legal, civic, political, economic and socio-cultural conditions of the people of Ghana particularly women, girls, children, the vulnerable and people with special needs; persons with disability and the marginalized. The policy focuses on mainstreaming GE, women empowerment (WE) and social protection concerns by strongly concentrating on the implementation of the following five policy commitments (representing policy objectives):

- Women's empowerment and livelihood;
- Women's rights and access to justice;
- Women's leadership and accountable governance;
- Economic opportunities for women; and
- Gender roles and relations.

The government continues to promote equitable access to justice through the Judiciary. In this direction, there are Human Right Courts that support GE and WE issues. In addition, the Judiciary has established two Gender-based and Sexual Offences Courts to expedite the adjudication of cases of violence and abuse. There is also the Legal Aid Scheme which facilitates access to justice for persons who are unable to afford justice.

The Domestic Violence and Victim Support Unit (DOVVSU) of the Ghana Police Service is mandated to respond to and enforce all laws with a focus on sexual and gender-based violence (GBV), child abuse and child protection; and protection of all vulnerable persons from abuse.

4.9.1 Domestic Violence Act

The Domestic Violence Act, 2007 (Act 732) provides protection for domestic violence particularly women and children and related purposes. A Court with original jurisdiction may hear and determine a matter of domestic violence under this Act and may exercise its jurisdiction by issuing a protection order. The Act defines domestic violence as specific acts, threats to commit, or acts likely to result in the following:

- Physical abuse;
- Sexual abuse;
- Economic abuse;
- Emotional verbal or psychological abuse; and
- Harassment including sexual harassment and intimidation by inducing fear in another person

4.10 International Requirements

The relevant international requirements include:

- The World Bank ESF -
 - ESS1;
 - o ESS5;
 - o ESS10.

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4.10.1 World Bank ESS1 – Assessment and Management of ESRI

The World Banks ESS1 on assessment and management of environmental and social risk and impact (ESRI) is designed to manage risk and impacts of a project and improve their environmental and social performance, through a risk and outcomes-based approach. The objectives of the standard include:

- To identify, evaluate and manage the ESRI of the project in a manner consistent with the ESSs;
- To adopt a mitigation hierarchy approach to:
 - Anticipate and avoid risks and impacts;
 - Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels;
 - o Once risks and impacts have been minimized or reduced, mitigate; and
 - Where significant residual impacts remain, compensate for or offset them, where technically and financially feasible
- To adopt differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, and they are not disadvantaged in sharing development benefits and opportunities resulting from the project;
- To utilize national environmental and social institutions, systems, laws, regulations and procedures in the assessment, development and implementation of projects, whenever appropriate; and
- To promote improved environmental and social performance, in ways which recognize and enhance Borrower capacity.

4.10.3 World Bank ESS 5 – Land acquisition, Restrictions on land use and Involuntary Resettlement The World Bank's policy on involuntary resettlement takes the position that if development induced displacements are left unattended, it often gives rise to severe economic, social, and environmental risks as follows:

- Production systems are dismantled;
- People face impoverishment when their productive assets or income sources are lost;
- People are relocated to environment where their productive skills maybe less applicable and the competition for resources greater;
- Community institutions and social networks are weakened;
- Kin groups are dispersed; and
- Cultural identity, traditional authority, and the potential for mutual help are diminished or lost.

The involuntary resettlement safeguards cover physical displacement (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods), due to involuntary acquisition of land, or involuntary restrictions on land use or on access to natural resources in legally designated parks and protected areas. The overall objectives are listed below:

- Involuntary resettlement should be avoided or minimized by considering variations in the design of the project;
- When it is impossible to avoid resettlement, resettlement activities should be designed and implemented as sustainable development programs, by providing adequate resources for people displaced by the project to enjoy the benefits of the project;
- Displaced people must be consulted and should participate in planning and implementing resettlement programs; and
- Displaced people should be assisted in their efforts to improve their living standard, or at least to restore it to its level before the displacement.

The policy is applicable where land acquisition and involuntary resettlement are unavoidable. Resettlement and compensation activities are required to be undertaken as a sustainable development program that provides sufficient opportunity for the PAPs to participate in the planning and implementation of the project. It is a requirement of the Bank to make adequate provision for compensation and other assistance to PAPs, to restore livelihoods, resettlement sites, new homes and related infrastructure, public services and moving allowances in accordance with the provisions of the RPF.

4.10.5 World Bank ESS10 – Stakeholder Engagement and Information Disclosure

The standard on stakeholder engagement and information disclosure recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice. Stakeholder engagement is an inclusive process conducted throughout the project life cycle. Where properly designed and implemented, it supports the development of strong, constructive and responsive relationships that are important for successful management of a project's environmental and social risks. The objectives include:

- To establish a systematic approach to stakeholder engagement that will help Borrowers identify stakeholders and build and maintain a constructive relationship with them, in particular project-affected parties;
- To assess the level of stakeholder interest and support for the project and to enable stakeholders' views to be taken into account in project design and environmental and social performance;
- To promote and provide means for effective and inclusive engagement with project-affected parties throughout the project life cycle on issues that could potentially affect them;
- To ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format; and
- To provide project-affected parties with accessible and inclusive means to raise issues and grievances, and allow Borrowers to respond to and manage such grievances.

4.10.7 Comparison of the World Bank ESS5 with National Requirements

There are significant gaps between the requirements of Ghanaian laws on resettlement and compensation and those laid out in ESS5. These are presented in Table 4.1.

Table 4. 1 Comparison of Ghanaian and World Bank Requirements on Resettlement

Types of Affected	Ghanaian Law	The World Bank ESS5	Comparison/Gaps
Persons/Lost Assets			
Section I: Property and	_	,	
Landowners	Property acquired compulsorily in the public interest shall be used only for the purpose for which it was acquired. Where the property is not used for the purpose for which it was acquired, the owner of the property, immediately before the compulsory acquisition, shall be given the first option for acquiring the property and shall, on such reacquisition, refund the whole or part of the compensation paid as provided for by law or such other amount as is commensurate with the value of the property at the time of the reacquisition. Resettlements in the case of acquisitions can be claimed as of right only by persons with proprietary interests in acquired	Through census and socio-economic surveys of the affected population, identify, assess, and address the potential economic and social impacts of the project that are caused by involuntary taking of land (e.g., relocation or loss of shelter, loss of assets or access to assets, loss of income sources or means of livelihood, whether or not the affected person must move to another location) or involuntary restriction of access to legally designated parks and protected areas Land-for-land exchange is the preferred option; compensation is to be based on replacement cost.	The legal right to resettlement is applicable only to those with proprietary interest in the affected land in the Ghanaian context. The Constitution provides for land-based resettlement. Although its provisions could be interpreted as implying a preference for land-based strategies for displaced persons whose livelihoods are land-based, there is no specific legislative or regulatory provision made for this preference.
	lands.		In this event, the best practices must be applied. The stringent proposition of the prevailing laws is to be adhered to.
Land tenants/squatters	No constitutionally or legally recognized resettlement rights or assistance for those without recognized (formal) legal rights to land. The Land Act criminalizes the occupation of public lands. (Section 236).	Persons who have no formal right or title to the land they occupy are eligible for compensation. Such persons shall receive resettlement assistance in lieu of compensation for the land they occupy, and any other assistance necessary to achieve the objectives of ESS 5, provided that they have occupied the land in the project area before the cut-off date. Such support includes livelihoods' restoration and resettlement assistance.	While in principle no distinction or discrimination is made on the basis of gender, age, or ethnicity, there is no equivalence on the specific requirement of non-discrimination or the requirement that particular attention be paid to the needs of vulnerable groups among the displaced. Those without formal legal rights or claims to such lands are not entitled to be resettled or compensated in the Ghanaian context. However, for the

			FSRP2, the ESS5 guidelines for land tenants and squatters will be applicable. Squatters and land tenants who meet the cut-off date will be provided cash compensation for buildings, structures, installations, and improvements and other resettlement assistance. Advance notice to move not less than a month and Right to salvage materials without deduction from compensation.		
Owners of non- permanent buildings	There are no constitutionally or legally recognized resettlement rights or assistance for those without recognized (formal) legal rights to land	For those without formal legal rights to lands or claims to such land or assets that could be recognized under the laws of the country, Bank policy provides for resettlement assistance in lieu of compensation for land, to help improve or at least restore their livelihoods.	There appears to be a significant		
Owners of permanent buildings	The Land Valuation Division is responsible for the computation of compensation based on market value in the case of land and replacement value for houses and other properties. The State Lands Act defines replacement value as the amount required for "reasonable reinstatement equivalent to the condition of the land at the date of said declaration"	Entitled to in-kind compensation or cash compensation at full replacement cost including labour and relocation expenses, prior to displacement.	Ghanaian law requires the affected persons receive compensation on the basis of replacement value when permanent structures are affected. Although the law can be interpreted to include labour and relocation expenses, these are not explicitly mentioned.		
Section II: Resettlement and Compensation Process					

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Timing of	There are no relevant constitutional or legal	Implement all relevant resettlement plans	There is no equivalence on
compensation	provisions that specify the timing of completion	before project commencement and provide	implementing resettlement plans before
payment	of resettlement and compensation.	resettlement entitlements before	project completion or on providing
	The PAPs will have to be engaged to agree on a	displacement or restriction of access. For	resettlement entitlements before
	date and set as the cut-off date.	projects involving restrictions of access,	displacement or restriction of access.
		impose the restrictions in accordance with	Even if these requirements are met, they
		the timetable in the plan of actions.	would be applicable only to
			communities with proprietary rights or
			interests in affected lands. However, for
			FSRP2, all compensation payments are
			to be made prior to displacement.
Calculation of	The Land Valuation Division is responsible for the	ESS5 requires: (a) prompt compensation at	There are no equivalent provisions on
compensation and	computation of compensation based on market	full replacement cost; (b) if there is	relocation assistance, transitional
valuation	value in the case of land and replacement value	relocation, assistance during relocation; (c)	support, or the provision of civic
	for houses and other properties.	transitional support and development	infrastructure in the Ghanaian laws,
		assistance, such as land preparation, credit	however, in the FSRP2, Replacement
		facilities, training or job opportunities as	Cost Approach (RCA) will be adopted for
		required, in addition to compensation; (d)	the calculation of compensation. This is
		cash compensation for land when the	expanded to cover transition and
		impact of land acquisition on livelihoods is	transportation allowance for PAPs who
		minor; and (e) provision of civic	will move temporarily.
		infrastructure and community services as	
		required.	
Relocation and	In situations where people have to be displaced,	To avoid or minimize involuntary	Ghanaian laws do not provide explicitly
resettlement	the state is to resettle all on "suitable land with	resettlement and, where not feasible, assist	for avoidance or minimizing of
	due regards for their economic well-being and	displaced persons in improving or at least	involuntary resettlement, however in
	social and cultural values"	restoring their livelihoods and standards of	this project, Involuntary Resettlement is
		living in real terms relative to pre-	considered as the last option. Physically
		displacement levels or to levels prevailing	displaced PAPs are to be provided with
		prior to the project, whichever is higher	sites at least equivalent to the old site.
			Preference to be given to land-based
			resettlement for displaced persons
			whose livelihoods are land-based (i.e.
			farmers, etc.)

Those are no volumet assetts the selection	Incompany all malayout acceptions and all a	Thomasia na Chanaian annimalana
	·	There is no Ghanaian equivalence on implementing relevant resettlement
· · · · · · · · · · · · · · · · · · ·	· · ·	plans before project completion or on
·		providing resettlement entitlements
Completed	•	before displacement or restriction of
	, ,	access, however for this project,
	•	resettlement action plans will be
	F F F F F F F F F F	implemented before displacement.
There are no specific laws specifying support for	Livelihoods and living standards are to be	Ghanaian policy and legislation do not
livelihood restoration and transition and moving	restored in real terms to pre-displacement	specifically mention nor guarantee
allowances,	levels or better	livelihood restoration and transition and
		moving allowances, however, in this
		project, PAPs will be offered
		resettlement support to cover the
		transition period.
,		Displaced persons and their
		communities are provided timely and
_		relevant information, consulted on
before actual entry		resettlement options, and offered
		opportunities to participate in planning, implementing, and monitoring
		implementing, and monitoring resettlement.
	9	resettiement.
There are various legislative measures that		Appropriate and accessible grievance
<u> </u>	• • •	mechanisms required to be established,
	grievance meenansms.	as well as the option to resort to the Law
		Courts.
·		
tribunal, or the Law Courts.		
There is no provision that specify preferential	Particular attention to be paid to vulnerable	Particular attention to be paid to
treatment of vulnerable groups.	groups.	vulnerable groups, especially those
		below the poverty line, physically
		challenged, widows, the elderly, women,
		and children
	The owner/occupier of the land must be formally notified at least a week in advance of the intent to enter, and be given at least 24 hours' notice before actual entry There are various legislative measures that govern the rights of persons with formally recognized interests in land. There also procedural redress and complaint mechanisms, including direct recourse to a Minister, appeals tribunal, or the Law Courts. There is no provision that specify preferential	provisions that specifically state that resettlement and compensation need to be completed before project completion and provide resettlement and compensation need to be completed before project completion and provide resettlement entitlements before displacement or restriction of access. For projects involving restrictions of access, impose the restrictions in accordance with the timetable in the plan of actions. There are no specific laws specifying support for livelihood restoration and transition and moving allowances, The owner/occupier of the land must be formally notified at least a week in advance of the intent to enter, and be given at least 24 hours' notice before actual entry There are various legislative measures that govern the rights of persons with formally recognized interests in land. There also procedural redress and complaint mechanisms, including direct recourse to a Minister, appeals tribunal, or the Law Courts. There is no provision that specify preferential before project completion and provide resettlement entitlements before displacement or restrictions of access, impose the restrictions in accordance with the timetable in the plan of actions. Livelihoods and living standards are to be restored in real terms to pre-displacement levels or better Consult project-affected persons, host communities, etc. as appropriate and provide opportunities to participate in the planning, implementation, and monitoring of the resettlement program including determining eligibility for compensation and for establishing appropriate and accessible grievance mechanisms. Establish appropriate and accessible grievance mechanisms.

In the event of differences between the national legal framework and the ESS5, the one that provides the highest and better protection of PAPs would be adopted and implemented. Usually, the provisions of the World Bank are applicable because they meet standards of international practice.

4.11 Relevant Institutions and Organisations

The key institutions that have roles in land acquisition, resettlement and compensation issues include:

- 1) Ministry of Food and Agriculture;
- 2) Environmental Protection Agency;
- 3) Lands Commission;
- 4) Ministry of Finance;
- 5) Ministry of Gender, Children and Social Protection;
- 6) Ministry of Lands and Forestry;
- 7) Attorney General's Department and Ministry of Justice;
- 8) Metropolitan, Municipal and District Assemblies;
- 9) Non-governmental Organizations (NGOs);
- 10) Traditional Authorities; and
- 11) Regional Coordinating Council (RCC).

4.11.1 Ministry of Food and Agriculture

MoFA is the ministry responsible for the development and growth of agriculture. The primary roles of this ministry are the formulation of appropriate agricultural policies, planning and coordination, monitoring and evaluation within the overall economic development. Currently, MoFA has the following technical directorates:

- Directorate of Crops Services (DCS);
- Directorate of Agricultural Extension Services (DAES);
- Plant Protection and Regulatory Services Directorate (PPRSD);
- Veterinary Services Directorate (VSD);
- Animal Production Directorate (APD); and
- Women in Agricultural Development (WIAD).

The FSRP2 will be implemented by the Project Implementation Unit (PIU) will be hosted. The PIU will manage day-to-day implementation of the Program. The staff will include: Project Coordinator, Procurement Specialist and Assistant, Environmental and Social Safeguards Specialist, Financial Management Specialist and Accountants, Monitoring and Evaluation Specialist, Private Sector Specialist, two technical experts (Crops and Livestock) and a Communications Specialist.

4.11.2 Environmental Protection Agency

The Environmental Protection Agency (EPA) established under the EPA Act, 1994 (Act 490) is responsible for the protection of the environment (including the social and economic environment) with the following functions, amongst others:

- Ensuring compliance with the laid down environmental assessment procedures in the planning and execution of development projects, including compliance in respect of existing projects;
- Acting in liaison and co-operation with government agencies, district assemblies and other bodies and institutions to generally protect the environment; and
- To promote effective planning in the management of the environment.

The Environmental Assessment Regulations, 1999 (LI 1652) under the parent Act 490 provide the requirements for Environmental and Social Impact Assessment (ESIA) and related RAPs of relevant projects. The EPA is responsible for the review of ESIAs and RAPs and the issuance of required approvals

for project commencement. This is despite RAP not specifically mentioned nor formal guidelines for RAP preparation provided in the LI 1652.

The Ghana EPA is also responsible for the registration of pesticides as well as their management. This ensures that the pesticides are properly labelled, distributed, stored, transported, used and applied by following the accepted procedures. The registration of pesticides is headed by a Pesticides Registrar who works with a Pesticides Technical Committee (Section 53 of the Act). The PPRSD of MoFA, through the Pesticide and Fertilizer Regulatory Division Act 803 (2010) complements the function of EPA. They supervise and train pesticide inspectors, register and inspect pesticide dealers and provide information materials and training on pesticides, among others, for retailers and farmers.

4.11.3 Lands Commission Act

The Lands Commission Act, 2008 (Act 767) integrates the operations of public service land institutions in order to secure effective and efficient land administration to provide for related matters. The function of the Lands Commission includes:

- Facilitation of land acquisition on behalf of the Government, undertake land and land related valuation services;
- Ensuring socio-economic activities are consistent with sound land use through sustainable land use planning in the long-term national interest;
- Instilling order in the land market through curbing the incidence of land encroachment, unapproved development schemes, multiple or illegal land sales, land speculation and other forms of land racketeering; and
- Promotion of research into all aspects of land ownership, tenure and the operations of the land market and the land development process.

The commission has the following divisions:

- Survey and Mapping Division;
- Land Valuation Division;
- Public and Vested Lands Management Division; and
- Land Registration Division.

Survey and Mapping Division

The Survey and Mapping Division supervises, regulates and controls the survey and demarcation of land for the purposes of land use and land registration; take custody of and preserve records and operations relating to the survey of any parcel of land; direct and supervise the conduct of trigonometric, hydrographic and topographical surveys.

Land Valuation Division

The Land Valuation Division (LVD) is the statutory government institution responsible for assessing and approving compensation amount to PAPs. LVD will receive value and verify documentation on affected properties. This is to ensure that payments are not made to people who are not adversely affected and also compensations offered affected persons are reasonable.

Public and Vested Lands Management Division

The Public and Vested Land Management Division manages public lands effectively so as to ensure easy and secure access for all types of land uses and contribute to socio-economic development. The division

also facilitates the acquisition of land for Government by managing state acquired and vested lands in conformity with approved land use plans.

Land Registration Division

The Land Registration Division registers title to lands and deeds and other interest in land, publishes notices of registration upon receipt of an application for registration and maintains land register that contains records of lands and other interest in land.

4.11.4 Ministry of Finance

The Ministry of Finance manages the central government's budget and is responsible for releasing compensation money for payment by state agencies. The Ministry will authorize and release to MoFA, the funds required to implement the RAPs, pay supplemental assistance and compensations.

4.11.5 Ministry of Gender, Children and Social Protection

The Ministry of Gender, Children and Social Protection (MOGSCP) is responsible for coordinating and ensuring gender equality and equity, promoting the survival, social protection and development of children, vulnerable and excluded and persons with disability and integrating fulfilment of their rights, empowerment and full participation into National development. Currently, MOGSCP has 6 directorates, 3 departments and 6 agencies. Its objectives are to:

- Improve the socio-economic status of the vulnerable and the excluded through targeted interventions:
- Enhance evidence-based decision making on gender equality, the empowerment of the vulnerable and excluded by collecting disaggregated data;
- Protect and promote the development and the rights of children, the vulnerable and the excluded through awareness creation and effective implementation of national and international policy frameworks and legislations;
- Assess progress on implementation of gender related programmes and projects and evaluate policy outcomes and impacts through effective monitoring and evaluation framework to provide inputs for gender, children and social protection policy review and planning; and
- Integrate and coordinate the rights of the vulnerable, the excluded and persons with disabilities into national development through social protection programmes.

4.11.6 Ministry of Lands and Natural Resources

The Ministry is charged primarily with the management of state and vested lands and the policy framework for development of particular areas, as well as ensuring proper coordination. The Lands Commission's role in the compulsory acquisition is that it serves as a member/Secretary to the site selection committee, a technical committee that considers request for compulsory acquisition by state agencies and recommends its acceptance or otherwise. The proprietary plan covering the site to be acquired is plotted by the Commission in the government records. Also, recommendation on the acquisition is processed by the Commission for the approval by the Minister responsible for lands, before an executive instrument would be issued and gazetted.

4.11.7 Attorney General's Department and Ministry of Justice

The Attorney General's Department and the Ministry of Justice has redress mechanisms in place for aggrieved persons. The Attorney General will encourage all individuals who will not be satisfied with compensation offered them to seek redress in a court of law as empowered by the Constitution. Within the grievance mechanism this will be a last resort after exhausting all avenues for grievance resolution.

4.11.8 Metropolitan, Municipal and District Assemblies

The Metropolitan, Municipal and District Assemblies (MMDAs) are the planning authorities who have jurisdiction over the project areas. They grant permits for developments. Land demarcation and general development plans of communities lie with the assemblies as well as the communities in consultations with the traditional authorities who are custodians of lands in most part of the country.

4.11.9 Regional Coordinating Council

They will play coordinating roles for all participating MMDAs in their region on safeguards issues. They can also coordinate and monitor the implementation of sub-project under the FSRP2 at the regional levels by ensuring prudent management of funds.

4.11.10 Non-Governmental Organizations

NGOs are independent bodies who serve as the mouthpiece of the local people. They participate in public consultation in ESIAs and RAPs and play advocacy role in addressing concerns of communities. Where resettlements and compensations are triggered, they can serve as independent bodies to validate compensations, help with sensitization and awareness program regarding safeguards compliance.

4.11.11 Traditional Authorities

Traditional authorities in the various communities are made up of the chiefs, opinion leaders and local council representatives known as the Assembly Members. They are responsible for local policy matters, economic development, resolving local conflicts, and providing orderly leadership and democratic practices at the grassroots level in their respective communities. This mode of governance facilitates mass participation in government affairs and exposes the general populace to their civil rights and obligations, particularly regarding their involvement in development projects in their areas. In addition, chiefs and community elders are custodians of community property including land. They are entrusted with the management of community land and are responsible for releasing land for development projects.

5.0 SOCIO-ECONOMIC BASELINE CONDITIONS

This section presents a description of the existing environment, comprising mainly socio-economic conditions of the proposed project areas and the country generally. The chapter will also present information on socio-demographic characteristics of the agricultural population of Ghana, including issues of land tenure system with respect to gender. The targeted areas are within the Lower Volta Basin, the White Volta Basin (which traverses the NDA regions), the Forest Transition and Guinea Savannah zones, and to a limited extent, areas in the Eastern, Greater Accra and Central regions (Table 5.1).

Table 5. 1 Regional Distribution of Targeted Program Areas

Target Area of Intervention	Region	Districts	
Target Area 1 – Lower Volta Basin (covering 6,950km² with 565,330 population)	Volta Region	Agotime Ziope Adaklu Anyingbe Central Tongu	North Tongu Ketu North
	Eastern Region	Lower Manya Krobo	
	Greater Accra Region	Shai-Osudoku	
Target Area 2 – White Volta Basin (covering 12,000km² with 1.4million population)	Upper East Region North-East Region Savannah Region Northern Region	Not yet identified	
Target Area 3 - Forest Transition and Guinea Savannah areas (covering 27,810km² and 834,787	Bono East Region	Techiman North Techiman South Atebubu Amantin	Nkoranza North Nkoranza South Sene West
population)	Ashanti Region	Ejura Sekyedumase Asante Akyem North Sekyere Affram Plains	Sekyere Central Offinso North

The other intervention regions are Central and Savannah Regions.

5.1 Methodology for Data Collection

The methods used for gathering data included document review, institutional consultations through virtual meetings, e-mails, phone calls and text messages as well as secondary data gathered by some project stakeholders. An account mainly of the existing socio-economic conditions including the following were assembled:

- Land use categories;
- Land acquisition and tenure system;
- Socio-economic activities and farming systems;
- Heritage and cultural resources; and
- Ethnic groups.

The general hydrological, topographic, water resources and eco-climatic conditions of the country and the intervention areas are also described.

5.2 General Country Characteristics

The Republic of Ghana has an area of 239,540km² with a total border of 2,093km (including 548km with Burkina Faso to the north, 688km with Cote d'Ivoire to the west, and 877km with Togo to the east). It has a coastline of 539km on the Gulf of Guinea (the Atlantic Ocean). The country is divided into 16 administrative regions and 170 districts.

The country is characterized by fairly low relief with few areas of moderate elevation in the north and east. The land is generally 600m above sea level. Physiographic regions include the coastal plains, the forest dissected plateau, and high hill tops which are important ecological sub-systems in a generally undulating terrain. At the southern and northern margins of the Volta Basin, there are two prominent areas of highland – the Kwahu Plateau, and the Gambaga Escarpment. On the eastern margins of the Volta Basin is a relatively narrow zone of high mountains running in a south-west to north-east direction with the Akwapim, Buem, Togo Ranges registering the highest point (Mt. Afadjato) in the country.

Average rainfall over the country is about 1,260mm/year, but ranges from 890mm/year in the coastal zone near Accra to 2,030mm/year in the southwestern rainforests. The rainfall is bi-modal in the southwestern forest zone, giving a major and a minor growing season; elsewhere, a unimodal distribution gives a single growing season from May to October. Except for the southwestern zone, the reliability of the rainfall, particularly after crop germination, is a major factor affecting crop growth and agriculture in general.

The poverty trends between 1992 and 2013 Ghana's national level of poverty fell by more than half from 56.5% to 24.2%, thereby achieving the Millennium Development Goal (MDG) 1 target. However, the annual rate of reduction of the poverty level slowed substantially from an average of 1.8% points per year in the 1990s to 1.1% point per year reduction since 2006. Conversely, the rate of reduction of extreme poverty has not slowed since the 1990s and progress in cutting extreme poverty was achieved since 2006 (cut from 16.5% to 8.4%). This means that relatively more progress has been made for the extreme poor in recent years than those living close to the poverty line.

Households in urban areas continue to have a much lower average rate of poverty than those in rural areas (10.6% vs 37.9%). However, urban poverty has dropped in recent years much faster than rural poverty and as a result the gap between urban and rural areas has doubled with rural poverty now almost 4 times as high as urban poverty compared to twice as high in the 1990s.

At the regional level, the Northern, Upper East, and Upper West regions continue to have the highest poverty rates. However, substantial progress has been achieved since 2006 in the Upper East region as poverty has dropped from 72.9% in 2006 to 44.4% in 2013. Northern region is of great concern because of its high level of poverty fall from 55.7% to 50.4%. Since the 1990s overall, the Northern Region has seen the smallest progress in poverty reduction. This is a major issue for the country given that the Northern Region now makes up the largest number of poor people of all the regions in Ghana (1.3 million). Although the proportion of people living in poverty has declined by a quarter since 2006, the number of people living in poverty has only declined by 10% (from 7 million to 6.4 million), meaning that poverty reduction is not keeping pace with population growth.

For child poverty, there are still 3.5 million children living in poverty today which accounts for about 28.3% of all children. It's estimated that a child is almost 40% more likely to live in poverty than an adult.

In Ghana, gender division varies across different ethnic groups. Among the Akan, women assume the basic domestic and childcare roles with both genders assume responsibility for basic agriculture production. Traditional craft production is divided according to gender with men engaging in weaving, carving and metalworks whiles women engage in pottery, food processing and petty trade, which is almost exclusively a woman's occupation. Women independently control any money that they receive from their own works, even though their husbands normally provide the capital funding. Wives, however, assume the main work and financial responsibility for feeding their husbands and children and for other child-care expenses. Akan women also assume important social, political, and ritual roles. Within the lineage and extended family, female elders assume authority, predominantly over other women.

Among the Ga and Adangme, women are similarly responsible for domestic chores. They do not do any farm work and are heavily engaged in petty trade. They are prominent traders as they control a major portion of the domestic fish industry and the general wholesale trade in Greater Accra Region. Northern and Ewe women, on the other hand, have fewer commercial opportunities and assume heavier agricultural responsibilities in addition to their housekeeping activities.

Ghana has a modern medical system funded and administered by the government with some participation by church groups, international agencies and NGOs. Facilities are scarce and are predominantly located in the cities and large towns. Some dispensaries staffed by nurses or pharmacists have been established in rural areas and have been effective in treating common diseases such as malaria.

There is in place a National Health Insurance Scheme (NHIS) which aims to promote equity in access to health care. However, less than one-half of the population are members of the NHIS. Though a Mental Health Law (Act 846) was passed in 2012, psychiatric care and access to mental health services are limited.

Traditional medicine and medical practitioners remain important because of the dearth of public facilities and the tendency for Ghanaians to patronize indigenous and modern systems simultaneously. Customary treatments for disease focus equally on supernatural causes, the psychosociological environment, and medicinal plants. Keepers of fetish shrines focus more heavily on magical charms and herbs, which are cultivated in a garden adjoining the god's enclosure. More secularly oriented herbalists focus primarily on medicinal plants that they grow, gather from the forest or purchase in the marketplace. Some members of this profession specialize in a narrow range of conditions, for example, bonesetters, who make casts and medicines for broken limbs.

The Ghanaian education system is divided in 3 parts namely, basic education, secondary education and tertiary education with lessons being taught primarily in English. The youth literacy rate jumped from 71% in 2000 to 86% in 2010.

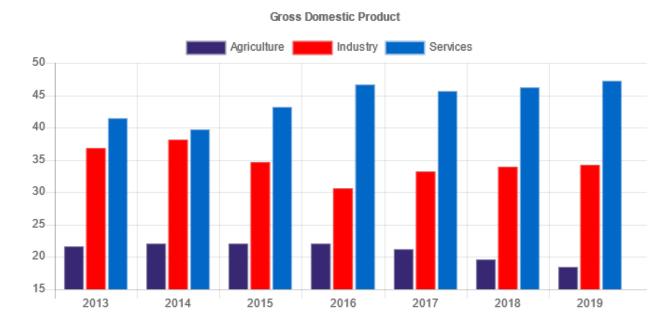
Education indicators in Ghana reflect a gender gap and disparities between rural and urban areas as well as between the southern and northern parts of the country. Those disparities drive public action against illiteracy and inequities in access to education with eliminating illiteracy being a key objective of Ghanaian education policy for the last 40 years. Vocational education and ICT training within the education system have also been emphasized in Ghanaian education policy and has increased over the years.

Nationally, the average household size is 4.5 people per household (Michael Bauer Research, 2019). Northern is the top region by average household size in Ghana with average household size of 7.7 persons that accounts for 15.81% of Ghana's average household size as at 2010. The top 5 regions with others being Upper West, Upper East, Brong Ahafo and Volta account for 58.52% of it (Knoema, 2010). About

28.46% of the employees in Ghana are active in the agricultural sector, 22.19% in industry and 49.36% in the service sector (World Bank, 2020).

Ghana boasts of waterfalls such as Kintampo Waterfalls and the largest waterfall in West Africa, the Tagbo Falls in addition are the palm-lined sandy beaches, caves, mountains, rivers and meteorite impact crater. Other attractions include reservoirs and lakes such as Lake Bosomtwe and the largest man-made lake in the world by surface area, Lake Volta. Ghana also has dozens of castles and forts, UNESCO World Heritage Sites, nature reserves and national parks.

According to statistics from the National Report of the 2017/2018 Ghana Census of Agriculture (GCA), agriculture contributes more than one-fifth (21.2%) of the GDP (GSS, 2020) and is the largest employer of the Ghanaian workforce, 36.1% (GSS, 2016). Yet, given the annual population growth rate of 2.5%, agricultural production does not grow correspondingly to meet the increasing demand for food, feed, fuel and fibres. However, improvement in food and nutrition security are core components of the agricultural development and poverty reduction strategy of the Government of Ghana as reported in the Food and Agriculture Sector Development Policy (MoFA, 2007).



Agricultural activities in the country still remains rural and rudimentary with little innovation and modernisation. Most agricultural holders use traditional tools and equipment for production whereas the use of modern tools and equipment such as tractors, shellers, power tillers, hatchery/incubator, meat processing equipment and milking equipment are negligible. While fertilizer is not used by most holders, the use of pesticides is highly prevalent among holders. Crop cultivation is predominantly dependent on rain and mortality in livestock is high. The sector is characterised by the consumption of own produce. Agriculture production is largely small-scale with the majority of parcels of land used for the cultivation of crops smaller than 2 acres. The level of education among agricultural holders is low with males dominating the sector. In addition to this, the youth, generally, find agribusiness unattractive (GSS, 2020).

There are 2,585,5315 agricultural households with a population of 11,340,947 persons of which 5,663,765 (49.5%) are males. The population of agricultural households in rural areas is 8,527,553 (75.2%). More

than 99% of the population of agricultural households are Ghanaian of which females (5,643,420) are slightly more than males. About 36% of the population are in the first two age groups of 0-14 years (4,044,521) and 15-35 years (4,077,618). A total of 11,218,736, representing 98.9% of agricultural households, are without any form of disability. A population of 6,077,994 (57.2%) of persons in agricultural households who are aged 4 years or older have attained basic education while an additional 1,280,263 (12.1%) have attained secondary level of education. For persons who are 11 years or older, about two-thirds are literate in at least one language. More than half of the population of agricultural households (4,635,640) have ever married (GSS, 2020).

5.2.1 Youth in Agricultural Households

The consideration of the youth is as defined by both the United Nations (15-24 years) and the National Youth Policy of Ghana (15-35 years). The number of youths in agricultural households is 2,270,441 representing 20.0% of the total agricultural household population. A similar pattern is observed for both urban (20.7%) and rural (19.8%) areas. Out of the total youth in agricultural households, 51.3% are males and 48.7% are females. For urban areas, there are almost the same proportions of males and for the rural areas, the proportion of males (51.7%) is 3.4%age points higher than females.

5.2.2 Youth 15-35 Years – Ghana's Definition

The youth population in agricultural households is 4,077,618, representing 36.0% of the total agricultural household population. The youth in urban agricultural households form 37.7% of the total population of agricultural households while the proportion for rural agricultural households is 35.4%. The female youth constitute about 51.0% of the total youth population. There are more female youth than male youth in both urban (51.5% and 48.5% respectively) and rural (50.6% and 49.4% respectively) agricultural households.

5.2.3 Educational Attainment and Literacy

The population aged 4 years or older forms 93.7% of the total agricultural household population (11,340,947). Out of this number, majority have basic education (57.2%), 12.1% have secondary/vocational education, and only 3.1% have tertiary education. However, more than one-quarter (27.2%) of the agricultural household population have never attended school. The proportion of females who have never attended school (31.5%) is higher than that of males (23.0%). The proportion of household members who have never attended school is higher in rural areas (30.2%) than in urban areas (18.4%). Except for basic education, where high proportions are observed for both males and females in rural and urban areas, educational attainment is higher among urban than among rural household members.

With respect to tertiary education, there is a relatively higher proportion of persons in urban areas (6.4%) compared to 2.0% of those in rural areas. Nearly two-thirds (65.8%) of household members, 11 years or older, are literate in at least one language and 34.2% are non-literate in any language. Out of the total household members, 38.4% are literate in both English and a Ghanaian language, 13.6% are literate in a Ghanaian language only, while 12.8% are literate in English language only. The literacy level for males (71.1%) is higher than that for females (60.5%). Similarly, the proportion of male household members (11 years or older) who are literate in English and a Ghanaian language (43.5%) and English only (14.0%) are higher compared to their female counterparts (33.4% and 11.6% respectively). Generally, literacy rates are higher in urban than in rural areas and follow a similar pattern for both males and females.

5.2.4 Relationship to Head of Agricultural Households

Children of the head of agricultural households form more than half (51.9%) of the agricultural household population and spouses form 13.9%. Together, the extended family members of the head and spouse form a little more than one-tenth (11.2%) of the household population. Grandchildren constitute about 5% of the household members. The proportion of male-headed households in urban areas are two and half times that of female-headed household. In rural areas, there are 3 male-headed households to every female-headed household.

5.2.5 Marital Status

Of the agricultural household members who are 16 years or older, more than half (53.1%) are married and 33.4% have never been married. The proportion of married household members in rural areas (53.9%) is higher than those in urban areas (51.1%). A higher proportion of persons residing in urban areas (36.2%) compared to those in rural areas (32.3%) have never been married. In both urban and rural areas, the proportions of males who have never been married are higher than their female counterparts (by more than 9%age points), while widowed females in both urban and rural areas are in higher proportions (about five times higher) than their male counterparts.

Almost all (99.2% of males and 94.6% of females) persons in their early youth (16-19 years) are not married and only about 2% are married while majority of household members aged 25-59 years are married. Females marry at an earlier age compared to males. Among age group 20-24 years, 28.1% of females compared to 7.6% of males are married and at age 25-35 years, 70% of females are married compared to about 50% of males. Also, nearly one-third of persons 60 years or older are widowed (of which females make 53.2% and males 10.8%). A similar pattern is observed for both urban and rural areas and there are no marked differences between the age groups.

Almost all persons in their early youth (16-19 years) have never married (98.2% in urban areas and 96.6% in rural areas) while majority of household members aged 25 years or older are married. Persons in rural areas marry at earlier ages compared to those in urban areas. Among persons in the 20-24 years age group, 20.3% in rural areas are married compared to 11.3% in urban areas and for age group 25-35 years, 62.9% of persons in rural areas are married compared to 54.0% in urban areas.

5.2.6 Nationality of Agricultural Household Members

Almost all the agricultural household population are Ghanaian (99.8%). Similar patterns are observed for males and females, and in both urban and rural areas. Among other nationals (25,338), Togolese and Burkinabes outnumber nationals of other countries and constitute respectively 35.5 and 23.4% of the non-Ghanaian agricultural household population.

5.2.7 Persons with Disability

There are 122,209 persons in agricultural households with some form of disability and this constitutes 1.1% of the agricultural household population. Similar proportions are observed across urban and rural areas and for male as well as female household members. Among the various forms of disabilities, persons who are physically challenged form the highest proportions for both males and females in both urban and rural areas. Among those with some form of disability, close to two-fifths (38.3%) suffer physical disability and about one-fifth have sight disability. The prevalence of all forms of disability is higher in urban areas than rural areas for both males and females.

The proportion of persons engaged in the cultivation of forest trees who have some form of disability is 2.2% while the proportion for all other types of agriculture is less than 2% in both urban and rural areas

with the least being persons engaged in capture fisheries (0.6%). A similar pattern is observed for urban and rural areas for each type of agricultural activities and for males and females. However, for males the proportions are relatively higher among persons engaged in forest tree (2.0%), beekeeping (1.8%) and 1.5% for persons engaged in tree cropping and aquaculture. For females, the proportions are relatively higher for persons engaged in forest tree (3.0%), tree cropping (2.1%) and livestock (1.5%).

5.2.8 Size of Agricultural Households

Agricultural households have an average household size of 6.6 persons. The average household size is slightly higher in rural areas (6.6 persons) than in urban areas (6.4 persons). A little more than one-quarter (25.9%) of households have either four or five members. One-quarter (24.7%) of the households have between six and nine members. One-fifth (20.4%) of the total households are single member households. Households with six or more members constitute 31.4% in rural areas compared to 26.8% in urban areas. The proportions are almost equal in both urban and rural areas for households with 2-3 and 4-5 members.

In contrast, one person households form 23.2% in urban areas and 19.4% in rural areas. Households headed by persons aged 15-19 years have the highest proportion (50.7%) of single member households. More than one-third (36.2%) of households headed by persons aged 36-59 years have six or more members. About one-fifth (20.4%) of heads of households aged 60 years or older live alone. For female heads aged 60 years or older, 26.8% live alone compared to 16.8% recorded for their male counterparts.

5.2.9 Main Activity of Agricultural Holders

The main activity of the majority (65.7%) of all agricultural holders is arable cropping followed by tree cropping (30.9%). Only 3% of agricultural holders are mainly engaged in livestock rearing. Whereas a slightly higher proportion of female holders (68.6%) than male holders (65.7%) are mainly engaged in arable crop farming, the reverse is the case for holders mainly engaged in tree crop farming (of which males account for 32.1% and females 27.9%). There is an overwhelming dominance (more than 90%) of male holders engaged in capture fisheries, aquaculture and bee-keeping. This male dominance is relatively reduced to an average of 70% for poultry, arable and tree crops. A similar pattern is observed for holders in urban and rural areas.

5.3 Surface Water Resources

5.3.1 Lower Volta Basin Area - Surface Water

The Lower Volta Basin is located below the confluence of the Black Volta and the White Volta rivers, excluding the Oti River drainage area. The surface water resources in the basin consist of flows from outside the country and flows from within the country. Discharges of White Volta at Nawuni and Mole River at Lankatere were used to estimate the total basin discharge (Table 5.2).

Table 5. 2 Surface Water Flow of the Lower Volta of Ghana

Station	River	Catchment Area	Annual Discharge (m³/s)	Dry Season Discharge (m³/s)	Wet Season Discharge (m³/s)
Nangodi Yarugu	Red Volta White Volta	10,974 41,619	30.72 80.00	0.34 2.17	61.12 157.00
Total inflow			110.72	2.51	218.12
Nawuni Lankatere	White Volta	96,957	229.98	18.95	440.05 131.33
Nawum Lankatere	Mole Willia	90,957	229.98	15.78	

Station	River	Catchment Area	Annual Discharge (m³/s)	Dry Season Discharge (m³/s)	Wet Season Discharge (m³/s)
			73.31		
Total outflow			303.29	34.73	571.38
Total flow from within the catchment area in Ghana			192.57	32.22	353.26
% Total inflow / Total outflow			36.5	7.2	38.0

The Lower Volta Basin covers a total area of about 68,588km² and most of that (50,432km²) is located in east-central Ghana. The basin includes also portions of the Northern, North East, Savannah, Bono East, Bono, Oti and Volta Regions, and the Ashanti and Eastern Regions and also parts of Togo.

Annual rainfall in the basin varies from about 1,100mm in the northern part of the basin to about 1,500mm in the central and to about 900mm in the southern part. Pan evaporation is about 1,800mm per year and runoff from within the basin is estimated to be 89mm/year. The natural total mean runoff from the Basin is estimated to be 1,160m³/s with the Volta Lake behind Akosombo dam providing extensive regulation. Current river water withdrawals in the basin include about 1.86m³/s domestic water supplies, about 0.71m³/s for irrigation, and about 566m³/s for power.

Water has always been held as sacred in all of the world's religions. Immersion in water and baptism are common within the Christian faith (civiltaqua.org). In most rural and urban communities in Ghana, water bodies represent deities. Most ethnic groups along river bodies give different names to the water bodies and perform customary rituals for the water gods. In most rural communities, surface water also serves as a source of drinking water for both humans and livestock. All projects that require the use of water will require consultation with the respective traditional authorities for the necessary rituals and purification. Projects that depend on water must accommodate the interest of water users in order not to create situations that will lead to restriction of access for the purpose of rituals by traditionalist and other religious persuasions.

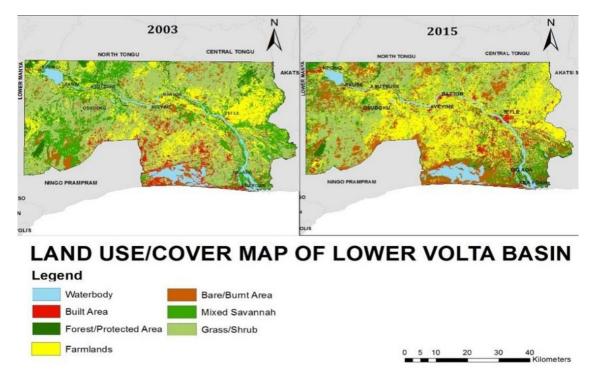


Figure 5. 1 Land Use Map of the Lower Volta Basin (2003, 2005)

5.3.2 White Volta Basin Area - Surface Water

The White Volta sub-basin covers about 49,210km² in Ghana, representing 46% of its total catchment area distributed in Ghana, Burkina and Togo. The White Volta covers mainly the north-central Ghana and some parts of the former Upper and Northern Regions. It is located within the Interior Savanna Ecological Zone and is underlain by the Voltaian and granite geologic formations.

Annual rainfall ranges between 1,000mm in the north and 1,200mm in the south; pan evaporation is about 2,550mm/year and runoff from within the basin averages about 96.5mm/year. The average annual runoff from the White Volta is about 272m³/s and the mean monthly runoff from within the basin varies from a maximum annual flow of 1216m³/s to a minimum of about 0.11m³/s.

Development potentials have been identified in the White Volta Basin which include a total of 63 megawatts of installed hydroelectric generating capacity, 155,809 hectares of irrigation, flood control, domestic water supply, navigation and recreation.

The movement of cattle, sheep, and people across national boundaries is common within the basin. This phenomenon is usually accompanied by reckless destruction of vegetation, watering sources, etc. The situation also creates social tension and disruption of socio- economic activities, sometimes proving fatal.

5.4 Land Use, Ownership and Degradation

About three-quarters (75.2%) of parcels used by holders for the production of crops are owned (52.2%) or inherited (23.0%). Land used for share-cropping constitutes 8.9% whereas parcels held in trust (2.1%) and squatting (1.8%) are not very common types of tenure arrangements.

The total number of parcels used for the production of arable crops, tree crops and forest trees is 3,130,492. More than eight in every ten parcels (84.0%) are used either partially or solely in the cultivation of arable crops, 40.9% for tree crops and 1.0%. This general pattern is reflected in all the land tenure arrangements, except for parcels used for share-cropping. Share-cropping is the most common land tenure arrangement used for the cultivation of tree crops (70.0%) and the least for the cultivation of arable crops even at 75.1%. Cultivators of arable crops use all types of land tenure arrangements systems intensively with renting and squatting being close to 100%. The use of share-cropping system of land tenure arrangement is the dominant choice for the cultivation of tree crops at 70% with the other forms well below 50%. Similar patterns are observed in the land tenure arrangement for the urban and rural areas.

In all the types of land tenure arrangements, the proportion of the parcels used for the cultivation of crops (arable crops, tree crops and forest trees) by female holders constitute less than a quarter (24.2%), except for trusteeship and squatting where the proportion of parcel used by female holders are about one-third (33.8% and 32.7% respectively). Freehold and inheritance are the dominant land tenure arrangements. For all three types of crops, holders who use freehold or inheritance constitute about three-quarters. More than half of the holders engaged in arable crops (50.2%), forest trees (55.8%) and tree crops (57.0%) own their parcels through freehold. The proportion of holders who acquired their parcels through inheritance is the second highest for holders cultivating arable crops (24.0%), forest tree (21.9%) and tree crops (19.7%). The proportion of female holders engaged in tree cropping (59.8%) who own their parcels of land is higher than that of male holders (56.2%)

Generally, majority (82.6%) of the parcels used by holders is not covered by any form of documentation on the tenure arrangement. Only about 13% of the parcels have complete documents, with 3.2% having partial documentations. The proportions of parcels under freehold (16.0%), share-cropping (15.7%) and leasehold (13.4%) land tenure arrangements covered by documents are relatively higher compared to the other categories of tenure arrangements. Three-quarters (74.7%) of the total number of parcels of land (3,130,492) are used by male holders. The proportion of parcels with documents used by males under leasehold (14.7%) and share-cropping (16.3%) is substantially higher than for females (leasehold is 4.5% and share-cropping is 2.9%). The proportion of documented parcels used by male and female holders under freehold and inheritance are almost the same.

Seven in ten of parcels used for tree crop and forest tree farming have no documentation and eight in ten parcels for arable crop farming are also not covered by any documentation. Only about a tenth of parcels used for arable crops have full documentation, while 2.9% of parcels for arable crops have partially complete documentation. For the cultivation of tree crops and forest trees, about one-fifth of parcels have documents. Majority of parcels of land (56.7%) under cultivation are small-scale, one-quarter (25.6%) are medium-scale, while 17.7% are large-scale.

A higher proportion of females (71.4%) than males (51.7%) engage in small-scale farming in both urban and rural areas. Most of the parcels used for all three types of crops (arable crops, 59.4%; tree crops, 49.1%; and forest trees, 53.1%) are small-scale (56.7%) with medium-scale parcels constituting a quarter (25.6%) and large-scale (17.7%) being the remainder of parcels. A similar pattern is observed for both sex of holder and type of locality, with the exception of forest tree cultivation in the urban areas where large-scale farming is second to small-scale.

5.4.1 Lower Volta Basin Area – Land Use

Current land use is short bush fallow cultivation along the immediate banks of the river, and less intensive bush fallow cultivation elsewhere. Animal grazing is common while the lakeshores are extensively settled by fishing families. Charcoal burning involving the cutting of wood has become an extensive economic activity in the southern dry forest and transitional environments such as in parts of the Afram sub-basin.

The Afram Plains and other areas in the south have been the focus of increasing settlement and agricultural development since the 1960s, having been generally thinly populated in the past as part of the empty "middle belt". The forest and transitional areas are intensively farmed with cocoa, coffee, plantain, cocoyam, cassava, oil palm, and maize on small bush fallow plots. A large modern commercial farm at Ejura specializes in maize production. Timber extraction takes place in these areas.

Recent developments, particularly below the Akosombo Dam, include irrigated rice, sugar, and vegetable cultivation in the areas immediately adjoining the Volta River. The areas around the coastal lagoons, such as the Songhor, are used for salt mining. Figure 5.1 illustrates the land use cover changes of the Lower Volta Basin between 2003 and 2015.

The indigene-settler rivalry arising out of the Volta River Authority (VRA) resettlement programme following the creation of the Volta Lake led to the conflicts between the Kwahu (indigenes) and Ewe (settlers). These conflicts revolved around land struggles with ethnic/chieftaincy undertones has influenced the allocation and land use in the area.

5.4.2 White Volta Basin Area - Land Use

The predominant land use is cultivation (NAES, 1993), with widespread grazing of large numbers of cattle and other livestock up to 100 cattle/km² (FAO, 1991), as well as compound cropping around houses (Wills, 1962; Adu, 1967; USAID/ADB, 1979; FAO, 1963; NAES, 1993). Farm sizes are usually less than 3ac. Grazing land including that obtainable under natural condition is generally poor. Annual bush burning further reduces the quality and quantity of fodder.

Extensive valley bottoms in many parts of the basin, particularly in the Guinea Savannah areas, have in recent years been cultivated for rice under rain-fed conditions. A long period of intensive cultivation and grazing (in the upland areas) without proper management practices have led to widespread soil erosion and loss of fertility of the upland soils.

Urban land use is small and most intensive in such centres as Bolgatanga, Bawku, Wa, Navrongo, Tamale, and Tumu. Due to the decentralisation of administration to the district level, urban type land use is becoming important in some of the district capitals, especially those along major trunk roads.

5.5 Agro-Ecological Zones in the Volta Basin of Ghana

There are 6 agro-ecological zones, defined on the basis of climate, reflected by the natural vegetation and influenced by the soil types recognized in Ghana (Figure 5.2). These consist of the Sudan, Guinea and Coastal Savanna Zones, Forest-Savanna Transitional Zone, the Semi-deciduous Forest Zone and the High Rainforest. In all these zones, the natural vegetation has undergone a considerable change because of human activities. Rainfall is generally accompanied by high intensities and energy loads and is therefore erosive, leading to alluvia soils (Fluvisols) and eroded and shallow soils (Leptosols) in all the zones (FAO-RAF, 2000/1).

Except for the Tropical Rainforest Zone, the Volta Basin of Ghana (covering most of the FSRP2 areas) falls in all the agro-ecological zones of the country. The largest portion is in the Sudan Guinea Savanna zones (24.2%) followed by the Forest Savanna Transition zone (11.2%) and the Semi Deciduous Forest zone (5.4%). The Coastal Savanna occupies a small area of about 0.5%.

5.6 The NDA Regions

The erstwhile Savanna Accelerated Development Authority (SADA), now Northern Development Authority (NDA) regions form more than half of the total land surface of Ghana. The project area lies between latitudes 8°N and 11°N and longitudes 1°E and 3°W. The economy of the northern savanna ecological zone is mainly agrarian, which is the basis of livelihood for most of the population. The small-scale family holding is the basic unit of production. Most of the project area falls within the Guinea Savanna zone, although activities may extend into a small area of Sudan Savanna in the extreme northeast corner of the country.

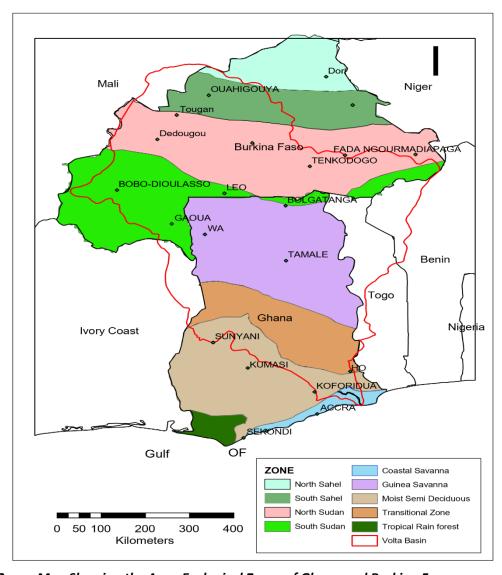


Figure 5. 2 Map Showing the Agro-Ecological Zones of Ghana and Burkina Faso

The FSRP2 has been identified to complement NDA's Agriculture Strategy and Network (Figure 5.3) to ensure the integration of priority agriculture areas, irrigation and flood control projects. This covers the following:

- Over 8-million-hectare land suitable for rain-fed or irrigated agriculture;
- Land highly suitable for 25 studied crops (with possibility of double and triple cropping);
- Suitable land for rice paddy field development;
- Suitable land for large scale livestock production; and
- 23 potential large and medium-sized dam sites for power, irrigation, aquaculture, flood control, tourism, and other uses.

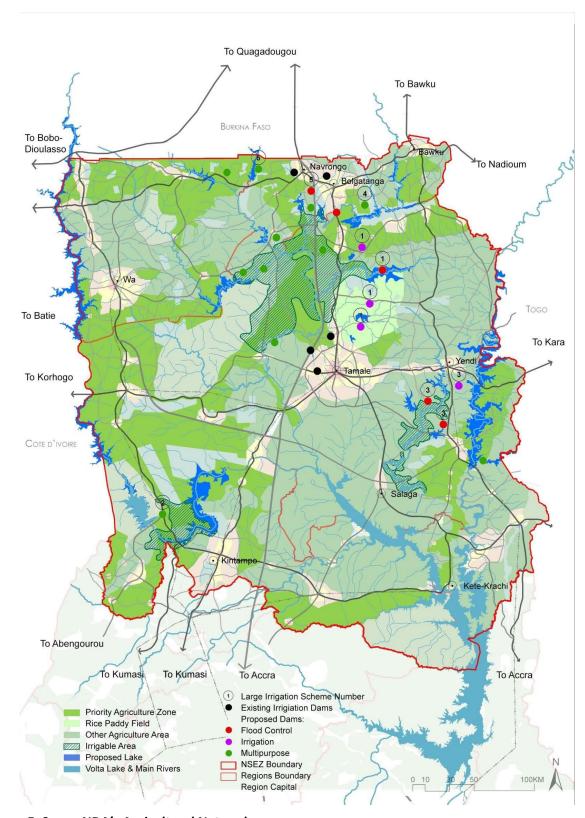


Figure 5. 3 NDA's Agricultural Network

5.6.1 Socio-Cultural Environment

The population of the former three northern regions (Northern, Upper East and Upper West) was 3,346,105 (2000 Population and Housing Census). The then Northern Region carried the highest human population of 1,854,994, followed by Upper East with 917,251 and Upper West with 573,860. However, population densities followed the reverse order of 104 persons/km² for Upper East, 31 persons/km² for Upper West and 26 persons/km² for the Northern Region.

The main ethnic groups include the Dagbani, Mamprusi and Gonja in the Northern Region, Dagaaba, Waala and Sisala in the Upper West, Builsa, Kassena, Nankani, Grunnie, Nabdam and Kussasi in the Upper East Region. Patrilineal inheritance is the norm and traditional authority is vested in the chief, who sits on a skin, an acknowledged symbol of identity of the group and authority.

On-farm Livelihood Activities

Most people in the three northern regions are traditionally crop and livestock farmers (cereals, root and tubers; and goats, cattle and sheep) for subsistence and gain. Outside farming season activities include farm produce processing and marketing, livestock grazing and "pastoralling", bush fire prevention and control and rehabilitation of residential structures.

Grazing is on communal basis and anyone with animals may graze animals on communal lands in the community. Herders from other communities will have to obtain grazing rights from the village chief or head of the land-owning group before putting their animals on communal lands to graze. Communal lands are "common good" and are rather taken for granted as limitless gift of nature available to be used. (Acheampong, 2001).

Culture and Religion

Each region consists of at least 3 ethnic groups and spoken languages are varied accordingly. The major ethnic groups are each represented by a paramount chief. The Northern Region has 4 paramount chiefs who represent four major ethnic groups. Islam is the dominant religion in the Northern Region, whereas Traditional and Christian religions are prominent in the Upper East and Upper West Regions respectively.

Disaster Risk Exposure

Risk sources range from erratic climatic conditions, limited opportunities for off-farm economic activities, poor planning and implementation of development policies to frequent incidence of bushfires, floods and droughts, which are the bane of the area's underdevelopment. Additionally, persistent inter- and intraethnic conflicts result in heavy loss of lives and property, with resources redeployed into conflict resolution. In the Northern Region, there are longstanding often violent inter-ethnic conflicts between the Gonja and the Konkomba and between Dagombas and Konkomba. Intra-ethnic conflict between Bimbagu and Bimbilla. Also, land use conflicts have been a source of violence between Fulani herdsmen and local farmers in the Northern parts of Ghana.

5.6.2 Land Tenure

In the Upper West and Upper East regions, ownership of land is vested in the Tindanas (Landowners), while in the Gonja area of the Northern Region the land-owning authority are the "skins" or chiefs. In most parts of the 3 northern regions undeveloped and unoccupied land may be described as communal lands and subject to common rights. These may be termed as local 'public' lands since they are for the benefit of the whole community. Land that may appear to be unoccupied is in many cases land that is utilized by local communities for a variety of livelihood activities.

The essential principle is that all lands are owned by the community or a group on communal basis. The Tindana determines new areas that are to be put under cultivation every farming season. Once a plot is allocated to an individual the person obtains a user's right and continues to till it. An individual acquires land user's rights by purchase, gift or through inheritance but cannot sell it to anyone outside the group. A person who obtains a user right to land cannot be deprived of the land without his/her consent even by the owner of the allodial title. A person who does not belong to the land-owning group can acquire stool or family land only by some form of grant/license or contract irrespective of whatever use it will be put to (Acheampong, 2001).

5.6.3 Gender and Vulnerable Groups Issues

Role of Women in Ghana's Economy

The concentration of women in skill and knowledge-based industries is low, as against the high concentration of women in the informal private sector employment and informal self-employment (Amu, 2006).

The gender characteristics of the unemployed indicate that the unemployment rate among women is lower than among males. Women's participation in the labour force and economic activity makes up almost half of the economically active population; but are mostly in the lower echelons of economic activity, especially the private informal sector where women are predominantly entrepreneurs of small and medium scale businesses (Amu, 2006). Women are found to be mainly employed in agriculture and allied fields, sales work and to a lesser extent production and transport and professional and technical.

Existing programs to enhance women's participation in economic activities have covered financial assistance in the form of micro credit as well as skills training and retraining through workshops, seminars, etc. However due to various operational constraints, financial assistance from micro-financial institutions has been poor and woefully inadequate.

Women in Agriculture

Within the agriculture sector, the unique relationship that exists between women and nature are predominant in all the sub-sectors namely farming, processing and distribution. As farm owners, farm partners and farm labourers, women are estimated to account for 70% to 80% of food consumed in Ghana. The predominant role of women in agriculture has enabled most women farmers to become increasingly responsible for the educational and other material needs of their wards, especially for female headed households.

The problems women face in carrying out economic activities, include the following:

- Access to and control over land due to traditional/cultural factors;
- Access to credit due to lack of collateral, inadequate savings needed for equity payment required for loans, cumbersome bureaucratic procedures for accessing formal credit facilities;
- Access to training due to ignorance on the awareness of training programs and low educational qualification;
- Access to hired labour on their farms due to rural-urban migration;
- Access to other inputs: fertilizer, extension services, information, technology, etc;
- Time constraints.

On access to and control of land it appears that most of the problems facing women in this area are associated with customary laws that are discriminatory to women as well as inefficiencies in land

administration that tends to impact negatively on women and other on minority groups. Women who are affected by the Project must be monitored so as not to make them more vulnerable.

Women's Rights to Own and Use Land

The traditional heritage that pertains in Ghana to a large extent is disadvantageous to women's access to and control over land. In principle, all stool subjects and lineage members irrespective of sex have inherent rights of access to stool and lineage lands (usufructuary rights). Lineage/stool members seeking land to farm or for any other purpose ask the lineage/stool head to assign them a piece of the land.

Discrimination against women in this allocation is widely reported. For instance, fewer women obtain land as women are often allocated less fertile land or they obtain smaller parcels of land. One important source of access to land for women is through marriage but when the marriage breaks down, they lose this access irrespective of the development they have made on the land because customary law does not recognize marital property or non-monetary contributions to the acquisition of property during marriage (Women's Manifesto, 2004). Women are also discriminated against in the allocation of lineage lands for reasons that are associated with marriage because their control over their rights to land tend to diminish upon marriage for the following reasons:

- Marriage and its attendant domestic obligations reduce women's chances of acquiring land or comparatively larger portions than men. A wife is by tradition under obligation to help her husband on his own farm or business and they tend to respond to this by abandoning their own farms/business or by acquiring smaller portions of land;
- Gender patterns in division of labour place land clearance in the hands of men, which gives them the priority in original acquisition and possession of the usufruct;
- Land is normally given on the basis of ability and means to develop such as ownership of financial resources, which many women tend not to have; and
- The emergence of permanent crops such as cocoa which require longer use of land have given preference to men who were more economically empowered to engage in it (Duncan, 2004).

Another way of acquiring land is to buy or lease from the original owners. However, this requires huge sums of money, which also limits women's access, especially poor women. Apart from this the problem of land administration complicates the purchase of land. This is because some landowners can sell one piece of land to two or more people, which tend to have violent outcomes. The difficulties of acquiring land can scare away women even when they have funds to acquire and will therefore buy through a male member of her family (brother/husband/father etc).

The difficulty in acquiring land by women particularly impacts negatively on women farmers who derive their livelihood from the land. When their access to land is hampered by cultural and economic constraints, their participation in economic activity is impaired and thus reduces their own efforts at improving themselves economically and socially. However, with the passage of the Land Act, 2020 (Act 1036), issues woman's access to land has been largely addressed.

In the Accra Plains, women are involved in farming, harvesting, marketing and all aspects of irrigation farming. They are allowed to own land and usually priority is given to community members including women where they mostly cultivate rice and vegetables.

In many parts of the NDA Regions, women do not have the right to own land. However, they do have a long-established right to borrow land from their husbands or male partners skin to cultivate a crop of their own. If a woman is unable to obtain land from these men, she will negotiate the loan of land from another compound (Abaka-Yankson, 2009). With the introduction of the Water Users Association, women are increasingly getting involved in dry season irrigation farming which to a large extent represents a change in cultural behavior towards women. In Bongo Central for instance, women participation in dry season irrigation increased by 64% in 4 years (Abaka-Yankson, 2009).

Gender Based Violence

In Ghana, traditional values, cultural norms as well as socializing processes have bestowed a low status on the Ghanaian woman and girl child. About 31.9% of Ghanaian women have faced at least one form of domestic violence - physical, economic, psychological, social or sexual (DOVVSU, 2020).

Thousands of children and adolescents live and work on the streets, the majority of these girls become vulnerable to sexual violence and exploitation. The traditional practice of engaging children and adolescents in farming and other related works alongside their parents to teach them necessary skills at times take on exploitive dimensions. Prohibited child marriage, female genital mutilation/cutting and the "troski" system of ritual enslavement still persist in certain parts of the northern regions. These forms of violence, abuse, exploitation and neglect of children and adolescents are often rooted in social, cultural and gender-related beliefs and practices.

Concerns about Participation of Women and other vulnerable groups

The program issues of concern about participation of women arising from public consultation include:

- The need for the program to streamline processes for land acquisition by women;
- Women involvement in the market value chain;
- Involvement of women in decision making;
- Youth involvement and their roles;
- Knowledge and understanding of the out-growers scheme;
- Extension services available to women or just men;
- Women understanding and knowledge of the program;
- Negative impacts of the program on women, youth and children;
- Possible barriers preventing women from accessing aspects of the program;
- Verification that the program will not make women worse off;
- Program support to improve project objectives to the beneficiaries;
- Current food security situation; and
- The need to educate women on the usage of chemicals since some of them are illiterates.

5.7 Major Farming Systems in Ghana

Two farming systems are dominant in Ghana, the bush fallow system (temporary system) and the permanent system. Some variants of both systems are used in some parts of the Volta basins, the HUZA and the mixed farming systems.

5.7.1 The Bush Fallow System

This is a system of land rotation between crops or fields and bush. A plot of land is cultivated for a number of farming seasons and abandoned when necessary, to revert to secondary vegetation. The average size of food farm cultivated under the bush fallow system is 1.10ha. During the dry season, men clear the land

by hand with vegetation burnt after clearing. All trees of economic importance, such as shea butter, dawadawa and the oil palm trees are left standing.

5.7.2 The HUZA Farming System

A co-operative regroups of all the financial resources of the farmers with a sole purpose of collecting land. When the land is acquired, it is divided into strips for each farmer. The width of the strip is proportional to the farmer's financial participation. After two or three seasons of cultivation, when yields decline, the field is left fallow. Due to the pressure of population and the great demand for land, the length of the fallow period is now short (4-6 years).

5.7.3 The Permanent Systems

Contrary to the bush fallow system, these systems are intensive, and a piece of land is cultivated continuously. In Ghana, there are 2 permanent systems of food farming: the compound farming system and the Anloga-Keta system. In the Volta Basin, only the compound farming system is used.

The Compound Farming System

It is used in the densely settled areas of north-eastern and north-western Ghana which centres on the household compound. The land immediately surrounding the compound house is intensively cropped with vegetables and staples using organic soil regeneration techniques, which involve using household refuse and manure from livestock. The average size of a compound farm is less than an acre. These pieces of land are used for cultivating okra, tomato, pepper, maize, cocoyam and plantain.

5.7.4 The Mixed Farming System

It is characterized by a combination of cultivation with keeping of livestock (provides power and manure on the farm). Mixed farming is restricted to areas which are free from tsetse fly. The growing season is based on when rainfall is more than one-half of the potential evapotranspiration and ends when there is less than half the potential evapotranspiration.

5.8 Cropping Systems in the Volta Basin of Ghana

5.8.1 Sudan Savanna Zone

The basis of the cropping system throughout the zone consists mainly of pearl millet. The early millet is inter-planted with late millet or sorghum in fields close to compounds where fertility is highest. There has been a spread of European vegetable cultivation with the gradual decrease of some minor indigenous crops. Carrots, cabbage, lettuce and peas are now available and grown on irrigated plots close to towns.

5.8.2 Guinean Savanna Zone

Maize is the major cereal crop produced in this zone with more than 80% of the small-scale farmers cultivating it. Every farm family cultivates sorghum either as a sole crop or as an inter-crop. Cotton is also found at specific sites throughout the Savanna Zone. Other cash crops cultivated include groundnuts, cowpeas and rice. Marketing of cereals is done mainly by women, who pass on moneys generated to their husbands.

5.8.3 Forest Savanna Transitional Zone

Food crop production dominates the farming system with major commercial food production of maize, cassava, groundnut and yam being existent. Oil palm is also important as it is reserved in fallow land rather than grown plantations. Cotton and tobacco are important cash crops.

5.8.4 Deciduous Forest Zone

Cassava and plantain are the important food crops while cocoa and oil palm are important as cash crops. Vegetable production is increasing in importance in the zone.

5.9 Crop Husbandry Processes and Activities

5.9.1 Sudan Savanna Zone

Compound farms and bush farms are found in this zone. On the bush farm, no manure is applied, and it consists in land rotation. The plots take place 2 to 4 km away from the farm. In the compound system, the land cultivated is directly around the homestead and is fertile because household and farm refuse are used as manure.

Tobacco, gourd, melon, okra, tomatoes, pepper and sweet potatoes are usually cultivated in the compound lands. Further away is another zone planted with early and late millet, guinea corn, bambara beans and cowpea. This second zone is fertilized with farmyard manure though this is often inadequate. The rest of the compound area, usually the largest, has no manure application and is cropped to guinea corn and late millet.

Onion cultivation is popular and represents one of the most important agricultural exports from the zone. Cereals produced are locally consumed and so, are not open to the commercial market. Sheanuts are bought and exported in small scale. Tomatoes and onions are produced for sale as cash crops and are exported to Southern Ghana.

5.9.2 Guinea Savanna Zone

Animal production is more important than it is in the rest of the Savanna Zone. However, food production dominates. Bullock is also used for ploughing although some farmers are not able to afford it. Tractor may be used but at a higher price (between ¢25,000 and ¢30,000 per acre for the bullock, and ¢35,000 for the tractor) In the Sudan Savanna Zone, farming systems practiced are bush fallow and compound farming.

The major cropping system is mono-cropping of early maturing maize within the compound. The following groups of cropping systems may be distinguished in the zone:

- Maize, sorghum, groundnut and cowpea with root crops, namely yam and cassava that occur in the central portion of the zone;
- Sorghum based but mixed with maize or cowpea and yam, occurs in the western part of the zone;
 and
- Yam, maize, sorghum, groundnut-based system, occur in the south-eastern part of the zone.

The choice of soil tillage is influenced by ecological and economic factors such as soil type, land use of the preceding year, crop that is actually to be sown or planted, and the available technological options. Tractor is used for heavier lowland soils whereas hoe and bullocks till sandy upland soils. Soil preparation is done by hoe. Soil nutrient stocks are replenished by fallowing, the use of organic manure, biological processes, rainfall, sedimentation and mineral fertilisation. The application of fertiliser and manure is still not a common practice and it fluctuates from year to year. The majority is applied to crops which show an elastic response to the fertiliser (maize, rice and vegetables).

Men and women have distinct roles with men usually carrying out land clearing and ploughing, while women gather and burn the cleared weeds and later plant all crops. Women do most of the marketing and are responsible for the daily cooking and childcare. Almost every farmer in the zone has some

livestock. About 90% of all women have 5 to 10 chickens, about 29% have 2 to 5 goats, about 89% of all men have sheep, particularly in the Dagbon area and 10% have cattle.

5.9.3 Forest Savanna Transitional Zone

In this zone, permanent mechanized cultivation of food crops is common. Many farmers have adopted technologies based on ploughing, permanent cultivation and use of chemical fertilisers. The transitional character of the ecosystems, the ethnic and cultural diversity resulting from migration led to a considerable diversity in farming systems and crops. The widest variety of crops are grown in the transitional zone. Mixed or sole cropping is used and the major cropping systems in the forest area are sole maize, maize/cassava, maize/cassava/plantain and /maize/pepper. In the Savanna area of the zone the cropping systems are sole yam, sole groundnut, rice/cassava and yam/cassava.

5.9.4 Deciduous Forest Zone

In this zone, the systems all have combination of food crops and at least one tree crop. For example, cocoa or oil palm is combined with food crops like plantain, cassava, cocoyam and some other minor crops. The farming system involves permanent cultivation of tree crops, and rotational bush fallow of food crops. The first crop usually planted is maize, which is planted in almost every part of the farm. Farm sizes vary from 1ac to 15ac with the most recurring farm size being 2ac followed by 1ac.

5.10 Livestock Production

5.10.1 Sudan Savanna and Guinea Savanna Zones

Livestock may be owned individually or by a family. Sheep, goats, fowls and guinea fowls are kept by many households. The animals are free during the dry season and tethered to a post in uncultivated patches of grass near the farm in the rainy season. Grazing lands are poor and are those obtained under natural conditions.

5.10.2 Forest Transitional Savanna Zone

In this zone, poultry, sheep, ducks and goats are kept in extensive and or semi-intensive management systems, whilst pigs are kept under an intensive system. Chickens are kept in coops during the night and left on free-range during the day. The animals are seen to be liquid assets, which can be sold easily on the local markets. Pigs are kept in the relatively urban settlements.

5.10.3 Deciduous Zone

As a result of the susceptibility of livestock to Trypanosomiasis and other diseases, the zone keeps very few livestock. It also results from a difficulty of integrating livestock with arable farming particularly where farmers have to walk long distances to farm. Small livestock are allowed to roam and graze around the village.

6.0 IDENTIFICATION OF POTENTIAL SOCIAL RISKS AND IMPACTS

The program implementation is expected to be overwhelmingly beneficial to the socio-economic conditions and livelihoods of people in the beneficiary communities and districts as well as the entire nation and sub-region. The implementation of some components and their sub-projects could, however, have some significant social risks and impacts due to some land take requirements and land acquisition. These would affect assets and property, access restriction to land use, economic resources and livelihoods of a large number of people. This section highlights the beneficial impacts and also identifies the potential social risks and impacts of the program.

6.1 Beneficial Impacts

The beneficial impacts will include:

- Improvement of the living conditions of PAPs and other affected parties as a result of resettlement.
- Improved food security;
- Sustainable land management; and
- Improved national and regional economy.

6.1.1 Protection for PAPs and other Affected Parties

This RPF provides guidelines and measures to apply to minimize potential risks and impacts such as displacement and socio-economic losses to affected persons in accordance with the World Bank ESS5. It also provides procedures to guide the preparation of RAPs for specific sub-project activities, and for mitigating the actual risks and impacts to PAPs, including different forms of compensation and livelihood restoration measures and other forms of assistance.

Grievance mechanisms procedures have been provided as part of the resettlement plan and their designs would take into account and involve the views of affected communities and PAPs. This provides affected persons avenues for seeking resolution on valuation of affected property and compensation methods, entitlements of compensation, etc. There are also elaborate mechanisms provided to adopt in engaging with stakeholders and PAPs to accommodate their concerns and issues, provision for information dissemination and disclosure, as well as relevant forms to facilitate screening sub-projects and other RAP activities and for measuring social performance relating to resettlements. The provisions through the RPF for the protection of PAPs and other affected entities are comprehensive and would ensure no affected party is rendered worse of following implementation of projects/sub-projects.

6.1.2 Improved Food Security

Ghana is generally described as food secure, though pockets of food insecurity occur across the country, among social groups and in between seasons. The challenge of local farmers producing under unstable weather and other conditions to meet domestic demand at all times is a major contributory factor to seasonal food shortages. The program components that would make agricultural inputs (such as improved seeds, fertilizers, pesticides, etc.) and water available for farming through irrigation, e-extension services, etc. would be expected to improve productivity and output.

With improved productivity and output, unit production cost could reduce leading to stable food prices and a positive impact on affordability, potentially reducing the incidence of malnutrition. This could also lead to increase in food stocks and thereby enhance the country's emergencies preparedness.

The wide scope of intended beneficiaries including vulnerable households, farm families (such as producers, aggregators, traders and all actors within communities) that otherwise are susceptible to uncertainties and risks of shocks such as drought, pest and diseases, and unreliable rainfall pattern, etc. is remarkable. The impact of the program on food security, improved nutrition and emergency preparedness is significant with potential long-term sustainability.

6.1.3 Sustainable Land Management

Land use and land improvement development activities would promote sustainable use of land resources and productivity in the priority crops and value chains. This could encourage investment into farming practices that support land conservation in the long-term. In addition, the introduction of scientific methods of farming through extension services support and e-agriculture (digital agriculture and early warning) would ensure the intensive use of land.

The effect of such improved land use systems could help reduce erosion problems, improved fertility and yields and productivity. The impact of the program on sustainability and adaptive capacity of the food systems productive base and natural resource base would be significant.

6.1.4 Improved National and Regional Economy

The program can be considered as potentially effective mitigation intervention to address the challenges with agriculture both in Ghana and the West African sub-region. It is expected to help solve West Africa food security challenges by implementing existing commitment on agriculture and food security with key priorities for food system adaptation to climate change. This will also include leveraging science and digital technology and scaling-up agriculture support through strengthened collaboration among development partners.

The targeted areas selection criteria were based on zones most in need of critical interventions including food insecurity situation within a catchment area; inadequate resources for agricultural potential for increased production and productivity; and level of fragility in terms of conflict (and for settlements near conflict areas). This led to the selected areas in the three target zones:

- Lower Volta Basin (covering about 6,950km2 with population of 565,330;
- White Volta Basin covering 12,000km2 with a population of about 1.4million; and
- The Forest Transition and Guinea Savannah Areas covering 27,810km2 and a population of 834,787.

The criteria also took into account regional integration and trade for the selected, priority value chains, which would lead increased output of rice, maize, poultry and livestock. The potential direct impact could be a reduction in rice, poultry and other food imports. Couple with the wide scope of program coverage, stable price and markets, and the opportunity to move food from production centres to deficit areas, the potential benefits of program would be significant.

6.2 Assessment of Social Risks and Impacts

The identified potential social risks and impacts that are likely to be associated with the implementation of projects under the Program are described in the Table 6.1. The table also shows the three main components with relevant projects potentially requiring land acquisition, as well as the significance ranking for the identified risks or impacts.

Table 6. 1 Potential Adverse Social Risks and Impacts

Project Component	Project Type/Activity	Identified Social Risk/Impact	Impact Significance Ranking		
Component 1	Component 1 Increased infrastructure for transformational digital advisory services provision for agrometeorological information, etc. Land take for construction of ground stations and weather stations potentially displacing existing users and/or their access				
Component 2	Promotion of agricultural inputs production, increase food production, food produce market and guaranteed pricing leading to expansion of agricultural lands.	Huge agricultural expansion (in priority staple crops and short cycle livestock sectors) through conversion of other land use types and acquisitions with potential displacements	Moderate		
Component 2	Component 2 Rehabilitation of the Asuansi and Mampong Agriculture Centres and upgrading of the Kpeve, Wenchi and Babile Agriculture Stations Rehabilitation of the Asuansi and (permanently of temporarily) for rehabilitation and upgrading of existing centres and stations potentially displacing existing users				
restoration and rest		Land take for agricultural development and watershed and floodplains restoration potentially denying existing users access and related economic loss.	Moderate		
development		Water mobilization and irrigation developments potentially displacing existing users of the land.	High		
Component 2	Rehabilitation of 8 small irrigation dams	Land take for rehabilitation of 8 small irrigation dams potentially displacing adjoining land users	Moderate		
Tanoso and Techiman Irrigation Schemes S		Land take for reclamation of the Wheta, Tanoso and Techiman Irrigation Scheme sites potentially displacing users	Moderate		
Component 2 Development of 13,000ha grazing reserve/corridor to support about 11,000 cattle		Conversion of large, contiguous area of land into a huge grazing corridor acquisition and access rights (easements or rights of way) displacing all existing land uses and a large population.	High		
Component 3	Expanded distribution of food produce (food trade in West Africa) from production centres to deficit regions	Potential land take for disposal of damaged or unwholesome food produce (food waste) due to transit and transportation problems.	Minor		

Component 3	Facilitation and promotion of	Land take for setting up seeds,	Moderate
	agricultural inputs production and	fertilizers, pesticides, etc. industries	
	technology support	potentially displacing or dispossessing	
		existing users of land.	

6.3 Description of Potential Social Risks and Impacts

6.3.1 Potential Land Take for Disposal of Unwholesome Food Produce in Transit

The expanded distribution of food produce from production centres to deficit areas would involve deployment of more haulage vehicles. The associated potential road transportation risks include frequent breakdown of cargo vehicles in transit, speeding and frequent accidents, and inconsiderate driving on bad and pothole riddled roads with associated high vehicular accident rate and road fatalities. Also, potential unilateral and unannounced border closure decisions by governments in the sub-region often lead to stranded traders and cargo in transit.

The cargo of food produce in transit could go bad if delivery is unduly delayed. The disposal of damaged or unwholesome food cargo, whether through accident, vehicle breakdown or standard cargo would require land for waste management, besides associated potential public health risks. The potential land take for the waste disposal could displace existing users of the land and/or deny them access to their economic activities or sources of livelihood.

6.3.2 Land Take for Agricultural Inputs Production Displacing Existing Users

The land required to set up various industries for agricultural inputs (seeds, fertilizer, pesticides, etc.) production could be considerable, and the acquisition could displace or dispossess some existing users of the land, affecting their existing means of livelihood and socio-economic activity.

The potential risk of imitation of the agricultural inputs by sub-standard seeds, fertilizers, pesticides, veterinary products by covert industries could capture the market by cheap products, patronized by smallholder farmers exploited due to low level of education. The production process could have potential health impacts on workers through inhalation and contact with skin and eye from the hazardous active ingredients such as for fertilizers and pesticides.

The users of the products could also be adversely exposed, again given their limited education background or inability to read instruction on the labels. The storage of such products, for instance, pesticides in bedrooms could be inhaled by an entire family continually with dire consequence. The empty containers of chemical could be used for fetch water and drinking purposes.

6.3.3 Conversion of other Land Use Areas to Crop Fields and Potential Displacements

The production and availability of agricultural inputs such as seeds, fertilizers, pesticides, veterinary products, and technology support, increased production and distribution of food produce with guaranteed pricing regime would enhance agriculture productivity and attract more people. Increased expansion in the cultivation of cereals (corn, rice, sorghum/millet, etc.), roots and tubers, vegetables and fruits (e.g., onions and tomatoes), and short cycles livestock value chains (poultry and fisheries) that are promoted could occur at the expense of other land use types.

There is for instance a potential risk of conversion of areas covered by forests and woodlands into agricultural fields, and thus reducing the carbon sequestration function of these areas. The potential

expansion of agriculture through attraction of new investments into the sector would potentially displace other land users with consequent social implications.

6.3.4 Land Take for Ground and Weather Stations Construction Displacing Existing Users

Increased acquisition and use of electrical and electronic equipment (EEE) and infrastructure for agrometeorological information to farmers using multi-modal channels (including ICT in partnership with the private sector, etc.) require construction of ground stations and weather stations. The land take impacts relate to the acquisition of sites for the construction of ground stations and weather stations. This could lead to potential displacement of people and/or disruption of their livelihoods or source of economic activity.

Furthermore, the generation of large quantities of end-of-life EEE or waste electrical and electronic equipment (WEEE) from widespread EEE use would require sound handling and disposal methods to avoid potential public health hazards. Additional land space may be required for temporary storage of WEEE in given areas or districts until they are evacuated for treatment or disposal.

6.3.5 Adjoining Land Take for Rehabilitation and Upgrading of Agriculture Centres

The rehabilitation of the Asuansi and Mampong Agriculture Centres and the upgrading of the National Agriculture Stations at Kpeve, Wenchi and Babile may require additional land for the proposed civil and other related works, storage of construction materials and demolition and disposal of construction and other wastes. The potential permanent or temporary land take could lead to displacement of users of the adjoining land to the existing centres or stations affected by the rehabilitation or upgrading projects. The adjoining land users could also suffer from dust and debris from demolition and construction activities as well as noise impacts during the construction phase. These impacts could be only temporary, without requiring acquisition of land.

6.3.6 Land Take for Development Activities and Watershed Restoration

The main potential social impacts likely to be associated with land development and watershed restoration activities could be the displacement of existing users of the areas. The current use of such areas could include farming or other forms of agriculture, which could adversely be affected leading to livelihood disruption and economic loss of crops and possibly property. Where such affected persons are women or belong to a vulnerable group the severity of impact could be disproportionally high, since they may not have any other alternative livelihood source. They may also have no rights to own and use land like the case of women in the northern parts of the country.

6.3.7 Conversion of Large Area of Land into a Huge Grazing Corridor

The proposed development of some 13,000ha grazing reserve and corridor capable of supporting about 11,000 cattle would have substantial and widespread impacts on a large population of land users. The existing uses that could be affected include agriculture (farmlands and crops and animal rearing), property, socio-economic life, usufructuary rights, deprivation of access, cultural heritage, etc. Given that the area required for the grazing reserve would be contiguous land, makes the potential impacts far reaching and disruptive for a large number of communities and districts. The immediate adjoining lands to the grazing corridor could be exposed to damage by the roaming cattle, thus extending the encumbered grazing area potentially much wider.

6.3.8 Irrigation Development Potentially Displacing Existing Users of Land

The development of land for irrigation purposes usually covers several thousands of hectares of land. Two irrigation projects will be developed, while about 8 small irrigation dams will be rehabilitated. Also, the

Wheta, Tanoso and Techiman Irrigation Schemes will be reclaimed. The irrigation projects will cover large areas and displace existing users of the area, while the rehabilitation of the dams may affect relatively small floodable area, displacing a few farmers and property in the area. For the reclamation of the irrigation schemes, the existing users/dependents on the scheme may be denied further use of the facilities, which could deprive them their sources of livelihood and economic activity.

Also, the following risks could be associated with the development of these projects/sub-projects:

- Influx of migrant worker and associated risk of spread of STDs/STIs and HIV/AIDS; and
- Higher earning migrant workers could attract women in project communities, which could whip
 up jealousy and insecurity in partners or husbands leading to potential violence against spouses
 and partners at the slightest incidents and other forms of sexual exploitation, sexual abuse and
 sexual harassment (SEAH).

7.0 COMPENSATION PAYMENT FOR LAND AND OTHER ASSETS

When land acquisition or restrictions on land use (whether permanent or temporary) cannot be avoided, affected persons are required to be compensated at replacement cost, and other assistance as may be necessary to help them improve or at least restore their standards of living or livelihoods.

The RPF guidelines apply to all eligible sub-projects/projects of the FSRP2, whether or not they are directly funded in whole or in part by the Program. The RPF applies to activities or projects (or components) whose implementation would physically displace or lead to losing some or all access to resources. This is regardless of the total number affected, the severity of impact, and their legal status (including those with ill-defined or no title to the affected land).

The RPF provides special attention to the needs of vulnerable groups among the PAPs, especially households with income below the national poverty line, the landless, elderly and disabled, women and children, ethnic minorities, and other historically disadvantaged persons. The activities in the FSRP2 that are expected to have some land acquisition or restriction of access have been provided in Table 6.1. Although the exact nature and locations of sub-projects/projects are unknown, the following categories of affected parties are identifiable:

- 1) Project affected persons;
- 2) Project affected households; and
- 3) Vulnerable group.

7.1 Project Affected Persons

They are individuals whose assets may be lost, including land, property, crops, other assets, and/or access to natural and/or economic resources as a result of activities related to implementation of sub-projects.

7.2 Project Affected Households

They are groups of PAPs in one household and where one or more of its members are directly affected by sub-projects under the FSRP2 implementation. These include members like the head of household, male, and female members, dependent relatives and tenants.

7.3 Vulnerable Groups

People from these households will separately identify the vulnerable members, such as the aged and ill-persons; children; people living with HIV/AIDS; women; unemployed and youth. Households headed by women that depend on sons, brothers, and others for support are especially vulnerable. Similarly, households with elderly or seriously ill persons are eligible for additional support. During implementation of the FSRP2, consistent with the guidelines, the following will apply when it is determined that a RAP would be required:

- All potential PAPs should be identified (through a scoping exercise) and informed about their options and rights pertaining to compensation for land and assets to be acquired;
- PAPs must be consulted about land acquisition and compensation and offered technical and financial options, including the most economically feasible alternatives; and
- PAPs should receive reasonable compensation at full replacement cost for losses of assets and access attributable to the sub-projects.

7.4 Inventory of Affected Assets for Compensation Payment

In all events, a census will be carried out to inventorise affected persons, group of persons, community, assets and households. The set of forms (Annexes 4 and 5) required to be used for the census during preparation of ARAPs/RAPs would include:

- Questionnaire for PAPs;
- Affected Plot Form;
- Affected Structure Form; and
- Affected Household Form.

Compensation could range from cash to other non-cash compensation for lost of properties, crops or assets subject to the approved entitlements. The agreed amounts would be communicated to the implementing agency or unit for delivery or payment to the beneficiaries. Compensation would be paid before the owners/occupiers are made to vacate their properties for commencement of sub-projects. The PIU would ensure that no sub-project activity begins until PAPs have been satisfactorily resettled or compensated.

8.0 ELIGIBILITY CRITERIA AND ENTITLEMENT MATRIX

8.1 Eligibility Criteria

Individuals whose assets such as land, property and /or access to natural and/or economic resources may be lost as a result of sub-project/projects related activities are referred to as PAPs. Affected persons may be eligible for compensation and resettlement assistance classified in accordance with the ESS5 (eligibility classification) as persons who:

- Have formal legal rights to land or assets;
- Do not have formal legal rights to land or assets, but have a claim to land or assets that is recognized or recognizable under national law; or
- Have no recognizable legal right or claim to the land or assets they occupy or use (affected persons
 in these groups are not eligible for compensation for land but are eligible for resettlement and
 livelihood assistance and compensation for assets).

In instances where PAPs have been identified, and RAPs or ARAPs will be required, in such cases, the PIU will rollout actions which would include:

- Screening; and
- RAP preparation.

8.1.1 Screening

The PIU will be responsible for conducting screening on all projects/sub-projects. This will be done in collaboration with the EPA and the Environmental and Social Team of the World Bank in determining the type of safeguards instruments required for sub-projects.

The screening process will facilitate the determination of whether sub-project will lead to:

- Land acquisition (temporary or permanently);
- Loss of livelihood;
- Relocation or loss of shelter, assets or access; and
- Involuntary restriction to legally protection areas and natural resources.

If sub-projects will not lead to any of the above, then sub-project can commence work and continually manage social performance. If, however, significant social risks and impacts are anticipated, then an Action Plan (ARAP/RAP) will be prepared for the project/sub-project.

8.1.2 RAP Preparation

Following the approval of the list of sub-project/projects, the PIU will prepare the terms of reference for the Action Plans for sub-projects, which will be cleared by the World Bank. A consultative and participatory process for the preparation of a RAP/ARAP would be started as follows:

- A socio-economic survey will be completed to determine scope and nature of resettlement impacts;
- The socio-economic study will be carried out to collect data in the selected sub-project/projects sites (questionnaire for PAPs Data collection Annex 4);
- Cut-off date will be determined and agreed with all parties and officially published; and

• The socio-economic assessment will focus on the potential affected communities, including some demographic data, description of the area, livelihoods, the local participation process, and establishing baseline information on livelihoods and income, landholding, etc.

Annex 3 details the requirements for the RAP which should contain the following information:

- Baseline census;
- Socio-economic survey;
- Specific compensation rates and standards;
- Entitlements related to any additional impacts;
- Site description;
- Programs to improve or restore livelihoods and standards of living; and
- Detailed cost estimates and implementation schedule.

The PIU may prepare the ToR for any RAP/ARAP subject to approval by MoFA (facilitated by the RPF), while the procurement of the consultant to undertake the RAP will also be the responsibility of the PIU. In developing a RAP, the following guidelines will be followed:

- Consultation and participatory approaches;
- Disclosure and notification;
- Documentation and verification of land and other assets;
- Compensation and valuation; and
- Community payments.

Consultation and Participatory Approaches

To initiate the compensation process, a participatory approach is adopted. Consultations must commence during the planning stages when the technical designs are being developed, and at the land selection/screening stage. The process therefore seeks the involvement of PAPs throughout the census for identifying eligible PAPs and throughout the RAP preparation process.

Disclosure and Notification

Eligible PAPs are informed about the RAP process. A cut-off date is established as part of determining PAPs eligibility. In special cases where there are no clearly identifiable owners or users of the land or asset, the RAP team must notify the respective local authorities and leaders. A "triangulation" of information – affected persons; community leaders and representatives; and an independent agent (e.g., local organization or NGO; other government agency; land valuer) – may help to identify eligible PAPs. The RAP process must notify PAPs about the established cut-off date and its significance. The start of the census would establish the cut-off date. PAPs must be notified both in writing and by verbal notification delivered in the presence of all the relevant stakeholders.

Documentation and Verification of Land and Other Assets

The government authorities at both national and local levels; community elders and leaders; representatives from PIU will arrange meetings with PAPs to discuss the compensation and valuation process. For each individual or household affected by the sub-project, the RAP preparation team will complete a Compensation Report (CR) containing necessary personal information on the PAPs and their household members; their total land holdings; inventory of assets affected; and demographic and socioeconomic information for monitoring of impacts. This information will be documented in the CR, and

ideally should be "witnessed" by an independent or locally acceptable body (e.g., Resettlement Committee). The CR will be regularly updated and monitored.

Compensation and Valuation

All types of compensation will be clearly explained to the individual and households involved. These refer especially to the basis for valuing the land and other assets. Once such valuation is established, PIU will produce a Contract or Agreement that lists all property and assets being acquired by the sub-project and the types of compensation selected. Table 8.1 below provides a sample of entitlements that are eligible for compensation. These options include in-kind (e.g., replacement housing) and cash compensation. All compensation should occur in the presence of the affected persons and the community local leaders.

Community Payments

Although most sub-projects may not normally take land and other assets belonging to a community, such as a community centre, school, or sacred site, if this occurs in a sub-project, the community will be compensated. This compensation will be in the form of reconstruction of the facility (in case of damage) or replacement at least the same standard or equivalent or better standard required by local planning regulation. Examples of community compensation are expansion of grazing grounds, rehabilitation of school buildings, public toilets, health facilities, installation of wells or pumps, creation of marketplace, and reconstruction of community roads.

8.2 Entitlement Matrix

The matrix of entitlement for the different categories of impacts likely to be encountered is presented in Table 8.1.

Table 8. 1 Entitlement Matrix

Land and Assets	Types of Impact	Person(s)Affected	Compensation/Entitlement Benefits
	Any part of land holding affected.	Famer/title holder	Cash compensation for affected land equivalent to replacement value.
	 Land remains economically viable. loss of income for temporary or permanent farm workers. 	Tenant/lease holder	Cash compensation for the harvest or produce from the affected land or asset, equivalent to average market value of last 3 years, or market value of the crop for the remaining period of tenancy/lease agreement, whichever is greater.
Agricultural Land	 Any part of land holding lost. Land does not become economically viable 	• Farmer/ Title holder	 Land for land replacement where feasible, or compensation in cash for the entire landholding according to PAPs' choice. Land for land replacement will be in terms of a new parcel of land of equivalent size and productivity with a secure tenure status at an available location which is acceptable to PAPs. Transfer of the land to PAPs shall be free of taxes, registration, and other costs. Relocation assistance (costs of shifting + assistance in re-establishing economic trees + allowance up to a maximum of 12 months while short-term crops mature).
		Tenant/Lease holder	 Cash compensation equivalent to average of last 3 years' market value for the mature and harvested crop, or market value of the crop for the remaining period of tenancy/lease agreement, whichever is greater. Relocation assistance (costs of shifting + assistance in re-establishing economic trees + allowance up to a maximum of 12 months while short-term crops mature. Relocation assistance (costs of shifting + allowance).
Commercial Land	Land used for business partially affected.Limited loss	 Title holder/ business owner Business owner is lease holder 	 Cash compensation for affected land. Opportunity cost compensation equivalent to 5% of net annual income based on tax records for previous year (or tax records from comparable business or estimates where such records do not exist).

		Opportunity cost compensation equivalent to 10% of net annual income based on tax records for previous year (or tax records from comparable business, or estimates where such records do not exist).
 Assets used for business severely affected. If partially affected, the remaining assets become insufficient for business purposes. 	Title holder/ business owner	 Land for land replacement or compensation in cash according to PAP's choice. Land replacement will be provided in terms of a new parcel of land of equivalent size and market potential with a secured tenure status at an available location which is acceptable to the PAP. Transfer of the land to the PAP shall be free of taxes, registration, and other costs. Relocation assistance (costs of shifting + allowance). Opportunity cost compensation equivalent to 2 months net income based on tax records for previous year (or tax records from comparable business, or estimates).
	Business person is lease holder.	 Opportunity cost compensation equivalent to 2 months net income based on tax records for previous year (or tax records from comparable business, or estimates), or the relocation allowance, whichever is higher. Relocation assistance (costs of shifting). Assistance in rental/lease of alternative land/property (for a maximum of 6 months) to re-establish the business.
 Location for temporary structure loss - expenses for moving structure Utility service disconnection 	Owner of temporary structure	 Assistance in rental/lease of alternative location. Refund of any lease/rental fees paid for time/use after date of removal. Supplementary assistance based on – Transportation rates for the transfer of structure Disconnection of utility service lines at old location Reconnection of utility service lines at new location
	Squatter	 Relocation assistance (costs of shifting + assistance to find alternative secure accommodation preferably in the community of residence through involvement of the project).

			Rehabilitation assistance (if required assistance with job placement, skills training).
Residential Land	Land used for residence	Title holder	Cash compensation for affected land
	partially affected, limited loss. • Remaining land viable for present use.	Rental/lease holder	Cash compensation equivalent to 10% of lease/rental fee for the remaining period of rental/lease agreement (written or verbal)
	 Land and assets used for residence severely affected. Remaining area insufficient for continued use or becomes smaller than minimally accepted under zoning laws 	• Title holder	 Land for land replacement or compensation in cash according to PAP's choice. Land for land replacement shall be of minimum plot of acceptable size under the zoning law or a plot of equivalent size, whichever is larger, in either the community or a nearby resettlement area with adequate physical and social infrastructure systems as well as secured tenure status. When the affected holding is larger than the relocation plot, cash compensation to cover the difference in value. Transfer of land to the PAP shall be free of taxes, registration, and other costs. Relocation assistance (costs of shifting + allowance).
		Rental/lease holder	 Refund of any lease/rental fees paid for time/use after date of removal. Cash compensation equivalent to 3 months of lease/rental fee. Assistance in rental/lease of alternative land/property. Relocation assistance (costs of shifting + allowance).
Religious/Cultural/Civic Land	Loss of land/space used for religious/cultural/civic activities	MosquesChurchesShrines/grovesSchoolsMarkets	 Cash compensation for entire structure and other fixed assets without depreciation, or alternative structure of equal or better size and quality in an available location which is acceptable to the religious entity/community/PAPs Supplementary Assistance – Transportation rates for the transfer of movable properties.
Buildings and Structures	Structures are partially affected.	• Owner	 Cash compensation for affected building and other fixed assets. Cash assistance to cover costs of restoration of the remaining structure.

•	 Remaining structures viable for continued use. 	• Rental/lease holder	 Cash compensation for affected assets (verifiable improvements to the property by the tenant). Disturbance compensation equivalent to two months rental costs.
	 Entire structures are affected or partially affected. 	• Owner	Cash compensation for entire structure and other fixed assets without depreciation, or alternative structure of equal or better size and quality in an available location which is acceptable to the PAP.
	 Remaining structures not suitable for continued use 	• Rental/lease holder	 Right to salvage materials without deduction from compensation Relocation assistance (costs of shifting + allowance) Rehabilitation assistance if required (assistance with job placement, skills training)
		• Squatter/informal dweller	 Cash compensation for affected structure without depreciation. Right to salvage materials without deduction from compensation. Relocation assistance (costs of shifting + assistance to find alternative secure accommodation preferably in the community of residence through involvement of the project). Alternatively, assistance to find accommodation in rental housing or in a squatter settlement scheme, if available). Rehabilitation assistance (if required assistance with job placement, skills training).
		• Street vendor (informal without title or lease to the stall or shop)	 Opportunity cost compensation equivalent to 2 months net income based on tax records for previous year (or tax records from comparable business, or estimates), or the relocation allowance, whichever is higher. Relocation assistance (costs of shifting). Assistance to obtain alternative site to re- establish the business.
	Loss of accommodation/ room	• Caretaker	 Supplementary Assistance based on: Comparable open market rent for alternative accommodation based on specific period (in this case 3 months reinstatement period); and Transportation rates for the transfer of movable properties.

Standing crops	Crops affected by land acquisition or temporary acquisition or easement	PAP (whether owner, tenant, or squatter)	Cash compensation equivalent to average of last 3 years market value for the mature and harvested crop.
Trees	Trees lost	Title holder	Cash compensation based on type, age and productive value of affected trees plus 10% premium.
Temporary Acquisition	Temporary acquisition	PAP (whether owner, tenant, or squatter)	Cash compensation for any assets affected (e. g. boundary wall demolished, trees removed).

9.0 VALUATION OF ASSETS AND COMPENSATION MEASURES

The valuation of assets and compensation for losses is to determine the replacement cost for the affected persons as part of the assessment of resettlement issues under the project. These cover:

- 1) Valuation methodology;
- 2) Land acquisition procedure and compensation;
- 3) Valuing entitlement;
- 4) Procedure for delivering entitlement; and
- 5) Time frame.

9.1 Valuation Methodology

In fulfilment of the provisions of ESS5, which requires that the resettlement plan documentation should present information related to valuation of and compensation for losses. Losses due to displacement will be compensated on the basis of replacement costs. With regards to land and structures, replacement cost is defined for the following:

- Agriculture (including fallow) land or pastureland;
- Land in urban areas;
- Houses and other structures (including public structures such as school, clinic, or religious building); and
- Loss of access to natural resources.

9.1.1 Agriculture (including fallow) Land or Pastureland

Land of equal productive use or potential, located in the vicinity of the affected land or the new housing site, plus the cost of preparation to levels similar to or better than those of the affected land, and transaction costs such as registration and transfer taxes or customary fees.

9.1.2 Land in Urban Areas

The market value of land of equivalent area and use, with similar or improved infrastructure and services, preferably located in the vicinity of the affected land, plus transaction costs such as registration and transfer taxes.

9.1.3 Houses and Other Structures

For houses and other structures (including public structures such as school, clinic, and religious building) the cost of purchasing or building a replacement structure, in an area, with quality, and location similar to or better than those of the affected structure; or of repairing a partially affected structure, including labour and contractors' fees; and transaction costs, such as registration, transfer taxes, and moving costs.

9.1.4 Loss of Access to Natural Resources

The market value of the natural resources may include, wild medicinal plants, firewood, and other non-timber forest products, meat, or fish. However, cash compensation is seldom an effective way of compensating for lost access to natural resources. Provision of access to, similar resources elsewhere, taking into account the impacts at the alternative location. Cash compensation can only be provided when it can be demonstrated that no feasible alternative measures are available.

9.2 Land Acquisition Procedure and Compensation

To avoid problems associated with private treaty and compulsory acquisition, as well as multiple ownership issues regarding land acquisition, a hybrid between private treaty arrangement and compulsory acquisition methods should be employed. The acquisition should commence with private consultations similar to that of private treaty arrangement with the aim of achieving the following:

- Identifying the rightful owners;
- Identifying of the boundaries;
- Current occupants;
- Extent of loss to be suffered due to the sub-project activities; and
- Negotiation of compensation and resettlement.

9.3 Valuing Entitlement

Land and properties likely to be affected by the sub-projects during implementation should be inspected/referenced or enumerated. This could be done in conjunction with the Land Valuation Division of the Lands Commission and/or an independent valuer of the PAP's if they so wish.

The valuation of buildings/structures should be based on open market valuation. Replacement cost method of valuation should be used so as to arrive at values which could secure replacement properties for the affected persons. The replacement cost method should be based on the following:

- Physical inspection of each of the properties affected;
- Average replacement costs of different types of buildings and related structures based on collection of information on the quantities and types of materials used to construct different types of structures (e.g., blocks, bricks, wood, steel plates, rafters, doors, etc.);
- Costs of transportation and delivery of these items to acquired/replacement building site; and
- Estimates of construction of new buildings including labour required.

Comparative sales method could also be used based on the market value of comparable recent land transactions for loss of land and truck/transport hiring charges for expenditure incurred for transfer of movable properties and temporary structures.

9.4 Procedure for Delivery of Entitlements

Compensation and resettlement will be funded by GoG. The compensation process should incorporate the following:

- Involvement of relevant public sector agencies (MoFA, LVD, EPA, etc.);
- Negotiation with land resource holders;
- Documentation of holdings and assets;
- Agreement on compensation and preparation of contracts; and
- Compensation payments.

9.4.1 Involvement of Public Sector Agencies

Institutions such as the EPA and the LVD of the Lands Commission must be involved in the process of resettlement and their roles clearly spelt out.

9.4.2 Negotiation of Land Resource Holders

All property owners or users would have to be identified and located through a socio-economic survey. The users or their representative should be informed through both formal notification in writing and by verbal notification delivered in the presence of all stakeholders or their representatives.

9.4.3 Documentation of Holdings and Assets

PIU and LVD will arrange meetings with affected individuals and/or households to discuss the compensation process. For each individual or household affected, PIU and LVD would compile a compensation dossier containing necessary personal information on the affected party and those that s/he claims as household members, total land holdings, inventory of assets affected, and information for monitoring their future situation. This information would be confirmed and witnessed by EPA and

local leaders. Dossiers will be kept current and will include documentation of lands surrendered. This is necessary because it is one way in which an individual can be monitored over time. All claims and assets will be documented in writing.

9.4.4 Agreement on Compensation and Preparation of Contracts

All types of compensation should be clearly explained to the individual or household. A land acquisition team comprising the Landowner(s), Local Leaders, PIU with the support of the Regional Lands Commission and Land Valuation Offices should draw up a contract listing all property and land being surrendered, and the types of compensation (cash and/or in-kind) selected. A person selecting in-kind compensation has an order form, which is signed and witnessed. The compensation contract should be read aloud in the presence of the affected party and other stakeholders prior to signing.

9.4.5 Compensation Payments

The handing over of properties such as land and buildings, and compensation payments will be made by PIU in the presence of the affected party and officials of LVD and EPA also. However, compensation payments will be made either in cash or bank transfer or any other method agreeable with the PAPs.

9.5 Time Frame

Potentially, the scope of resettlement issues could be largely low to medium scale, the processing of compensation application for payment by PIU could therefore be expedited on the average over a period of 1 month (for sub-project). An additional month could be allowed for exceptional cases where there are some complexities or challenges. No construction works will begin until PAPs have been resettled if physical relocation is necessary and/or received their full compensation (according to the World Bank ESS5). Additionally, the property owners must be given adequate notice of not less than one month after payment of compensation to vacate affected assets and relocate depending on the nature of relocation or resettlement.

10.0 PUBLIC CONSULTATIONS AND STAKEHOLDER ENGAGEMENT

10.1 Purpose of Stakeholder Engagement

Stakeholders were engaged as required generally by good EA practice in line with the Ghana Environmental Assessment Regulations, 1999 (LI 1652) and the World Bank ESS10, as well as the IFC PS1 to engender openness in eliciting useful contribution to project design and implementation, improve environmental sustainability and enhance social acceptability of the Project.

With respect to the RPF, however, the engagement with stakeholders was specifically to identify the Project components with potential for land-take and access restrictions, etc. thus, would require resettlement and compensation for relevant sub-projects implementation. The identification and engagement with stakeholders on potential social risks and impacts and other relevant issues such as land tenure and ownership, women's access to land, and socio-economic characteristics of the targeted areas would facilitate ease of preparation of RAPs for the sub-projects, when due.

The relevant stakeholders identified and engaged included government agencies and research institutions, which have regulatory mandate, oversight responsibility or development promotion. The other stakeholders included companies, individuals or associations that have interest in any of the components, or whose mandates fall within the sphere of influence of the Project intervention areas.

10.2 Stakeholder Engagement Methodology

10.2.1 Stakeholder Identification and Mapping

In identifying the stakeholders, an initial prospective list was developed by matching the main components of the project (location features, project environment etc.), as well as potential impacts and baseline areas with the various stakeholder groups in a Stakeholder Identification Matrix (SIM). Table 10.1 gives the SIM used to help elicit inputs from the various stakeholders with respect to their relevance for involvement in the engagement processes. The key stakeholders identified have been listed under the respective category in table 10.2.

Table 10. 1 Stakeholder Identification Matrix

N o.	Stakeholder Categories Project Components and Activities	Sector Oversight	Development Promotion	Research Institutions	Regulatory Authority	Planning Authority	Other Government Ministries	Civil Society Groups	Local Communities	Utility Agencies
1	Land/flood plains restoration			IESS	EPA	NDA LUSPA			PAPs	
2	Watershed restoration			IESS	EPA WRC	NDA LUSPA			PAPs	
3	Irrigation development	MoFA	GIDA DCS WIAD	FRI IESS DFSA	EPA GIDA WRC	NDA GIDA LUSPA		NGOs	PAPs TAs	GRIDCo ECG
4	Agro-sylvo pastoral farming	MoFA	DCS APD WIAD	FRI DCS	EPA PPRSD	NDA		NGOs	PAPs WPDV G	
5	Livestock production	MoFA	DAES APD WIAD		EPA	NDA			PAPs WPDV G	
6	Poultry production	MoFA	DAES		EPA	NDA			PAPs	

			APD						WPDV	
_	Do ato and tuba famaina	N4-5A	WIAD	CDI	ED A	NDA			G	
7	Roots and tube farming	MoFA	DCS DAES WIAD	CRI	EPA PPRSD	NDA			PAPs WPDV G TAs	
8	Aquaculture	MoFA	DAES WIAD	DFSA IESS	FC EPA WRC	NDA	MOGC SP	NGOs		
9	Woodlot development				FoC EPA PPRSD	NDA		NGOs	PAPs	
10	Cattle grazing reserve and corridor	MoFA	DAES APD		EPA	NDA LUPSA	MOGC SP		PAPs WPDV G TAs	GRIDCo NEDCo ECG
11	Ground and weather		e-AP		MSA				PAPs	
12	stations upgrade	N4-FA	MSA	CDI	EPA					
12	Electronic agriculture management system	MoFA	e-AP DCS APD WIAD	CRI CERSGI S	MSA EPA					
13	e-extension services	MoFA	e-AP DAES WIAD	CERSGI S						TELCOs
14	Waste management		DCS APD DAES	DFSA CRI CRI CERSGI S	EPA PPRSD	MMDA s LUPSA NDA			TAs PAPs	
15	Food processing	MoFA	DCS FRI WIAD	CRI FRI	EPA	MMDA s NDA			PAPs TAs	
16	Food storage	MoFA	NAFCO	FRI		NDA			PAPs TAs	
17	Food produce transportation	MoFA	NAFCO WIAD	FRI	EPA	MMDA s				
18	Screening		PIU		EPA				PAPs TAs WPDV G	
19	ToR for ARAPs/RAPs		PIU		EPA					
20	Review of ARAPs/RAPs	WB			EPA					
21	Resettlement/Compen sation	MoFA MoF	PIU		LVD EPA	NDA MMDA s	MOGC SP	NGOs	PAPs TAs WPDV G	
22	Grievance Mechamism		PIU		EPA	MMDA s		NGOs	PAPs TAs WPDV G	

23	Monitoring and	PIU			PAPs	l
	evaluation				TAs	l
					WPDV	l
					G	1

Table 10. 2Categorization of Stakeholders

Government Ministries/Agencies (Sector	Research Institutions
Oversight) Ministry of Food and Agriculture (MoFA): National Food Buffer Stock Company (NAFCO) Women in Agriculture Development (WIAD) Animal Production Directorate (APD) Directorate of Agricultural Extension Services (DAES) Directorate of Crop Services (DCS) Plant Protection & Regulatory Services Directorate (PPRSD) Ministry of Finance (MoF) Ministry of Gender, Children and Social Protection (MOGCSP) Fisheries Commission (FC)	 Institute of Environment and Sanitation Studies (IESS) Centre for Remote Sensing and Geographic Information Services (CERSGIS) Council for Scientific and Industrial Research (CSIR): Food Research Institute (FRI) Crop Research Institute (CRI)
Forestry Commission (FoC) Regulatory Institutions	Regional/District Level Planning Authority
 Environmental Protection Agency (EPA) Ghana Irrigation Development Authority (GIDA) Meteorological Services Authority (MSA) 	 Northern Development Authority (NDA) Metropolitan Municipal and District Assemblies (MMDAs) Local Authorities, Land Use and Spatial Planning Authority (LUSPA)
Local Communities	Utility Agencies
 Project Affected Persons (PAPs) Women, People with Disabilities and other Vulnerable Groups (WPDVG) Traditional Authorities (TAs) 	 Ghana Grind Company Limited Electricity Company of Ghana (ECG) Northern Electricity Department (NEDCo)

10.2.2 Stakeholder Engagement Planning

A formal introduction was made by MoFA via voice calls to all the stakeholders introducing the consultants (for the RPF and ESMF) for the proposed FSRP2, requesting their collaboration in the consultative engagement processes. The consultants followed up by sharing the schedule for the engagement meetings and discussed the methodologies acceptable to the respective stakeholders.

The initial engagements were organized between $23^{rd}-29^{th}$ March and took the form of either voice calls or virtual zoom meetings. Subsequent communication was held via emails as follow-up to clarify information provided at the first engagement or to request for relevant documentation. The engagement schedule is presented in Table 10.3 showing the respective engagement tool used, the key contact persons and contact details.

Table 10. 3 Engagement Schedule, Tool and Respondents

Date	Stakeholder	Engagement Tool	Main Contact Person	Position	Contact Details
23/03	WIAD	Voice call	Paulina Addy	Director	addypolly@yahoo.com

					0244422712
24/03	EPA	Voice call	Joseph Edmond	Director	0501301396
24/03	CERSGIS	Virtual meeting	Mr Foster Mensah	Executive Director	fmensah@ug.edu.gh 0243352468
24/03	NAFCO	Voice call	Emmanuel J.K. Arthur	Senior Manager, Corporate Affairs	emmanuel.arthur@nafco.gov. gh info@nafco.gov.gh 0244669709
24/03	DCS	Voice call	Dr Solomon Gyan Ansah	Head of Seed Unit	<u>crowzee2000@yahoo.com</u> 0208133029
24/03	NDA	Voice call	Dr Emmanuel Abeere-Inga	Director, Infrastructure, Land and Natural Resources	asanamzoya@yahoo.com 0548314461
24/03	CSIR-FRI	Voice call	Prof. Charles Tortoe	Ag. Director	ctortoe@yahoo.co.uk 024 3241801
25/03	IESS	Voice call	Dr Benjamin Ofori	Senior Research Fellow	bdofori@ug.edu.gh bdofori@staff.ug.edu.gh 0208134292
25/03	DFSA	Virtual meeting	Dr Ruby Asmah	Head of Department	rubyasmah@yahoo.com 0205424161
25/03	APD	Virtual meeting	Edwin Bekoe	Director	eddbekoe@yahoo.com 0274747847
25/03	DAES	Virtual meeting	Mr Paul Siameh	Director	paulsiame@yahoo.com 0244641260
25/03	MSA	Virtual meeting	Francisca Martey	Deputy Director, Research and Applied Meteorology	0244130093
25/03	GIDA	Voice call	Ing. Richard Boateng	Director	0244662243
29/03	PPRSD	Voice call	Eric Dzimado	Senior Agricultural Officer	agabusm2@gmail.com 0243413991

10.3 Engagement Issues and Guides

Institution-specific stakeholder issues were developed and delivered through semi-structured questionnaire to elicit initial stakeholder responses. This covered background information on FSRP2 as well as the specific issues of relevance and interest to the respective stakeholders. The engagement issues/guides for the specific stakeholders are presented in Table 10.4.

Table 10. 4 Issues/Guides for Stakeholder Engagement

Respondents (Name, Position, Tel. &/ E-mail):				
Engagement Tool:	Date:	Time:		
A. Engagement Issues – WIAD				

- 1) What is the possibility of gender discrimination from the introduction of new technology and the program?
- 2) What form does gender-based violence and other forms of abuse take, within the value chain?
- 3) What mitigations can be used to address gender-based violence and other forms of abuse?
- 4) Are there any other occupation health issues faced by women in the value chain?
- 5) Are women unfairly treated during land acquisition processes? How?
- 6) Is forced labour an issue in the agriculture sector?

B. Engagement Issues - EPA

- 1) What are the key social issues experience in similar past programs?
- 2) What were the interventions/mitigations recommended in past program?
- 3) What roles did the EPA play in similar programs?
- 4) Can the promotion and supply of agricultural inputs (seeds, fertilizers, pesticides, veterinary products, and technology support) with ready market for food produce and guaranteed pricing regime enhance productivity and agriculture generation to the point where people would convert
 - a. Forest and woodland areas into agricultural fields?
 - b. Tree crop plantations (e.g., Cocoa, Rubber, etc.) into cash/food crop fields?
- 5) How end-of-life EEE (e-waste) is current managed?
- 6) Quantities of end-of-life EEE (e-waste) generated?
- 7) How is the storage provision for the e-waste?
- 8) The Program is likely to increase the quantity (number and types) of the EEE for digital advisory services provision what types of EEE are likely to be needed/supplied?
- 9) The increased EEE quantities (number and types) for the digital advisory services provision, would generation large quantities of end-of-life EEE (e-waste) will land be required for storage of the WEEE?
- 10) What measure could be put in place to handle and manage the WEEE?
- 11) What land use types are likely to be affected by the grazing reserve/corridor development?

C. <u>Engagement Issues – CERSGIS</u>

- 1) Will land have to be acquired for setting up ground stations and weather stations under the digital advisory services provision and infrastructure for agro-meteorological information to farmers (using multi-modal channels...)
- 2) Who (land use type) could be easily affected in the event of acquiring land for any of the stations?
- 3) How end-of-life EEE (e-waste) is current managed?
- 4) Quantities of end-of-life EEE (e-waste) generated?
- 5) How is the storage provision for the e-waste?
- 6) The Program is likely to increase the quantity (number and types) of the EEE for digital advisory services provision what types of EEE are likely to be needed/supplied?
- 7) The increased EEE quantities (number and types) for the digital advisory services provision, would generation large quantities of end-of-life EEE (e-waste) will land be required for storage of the WEEE?
- 8) What measure could be put in place to handle and manage the WEEE?

D. <u>Engagement Issues – DCS</u>

- 1) How much land on the average is required to set up the following industries?
 - Seeds production?

- o Fertilizers production?
- o Pesticides production?
- 2) Can the promotion and supply of agricultural inputs (seeds, fertilizers, pesticides, veterinary products, and technology support) with ready market for food produce and guaranteed pricing regime enhance productivity and agriculture generation to the point where people would convert
 - o Forest and woodland areas into agricultural fields?
 - Tree crop plantations (e.g., Cocoa, Rubber, etc.) into cash/food crop fields?
- 3) Would such a situation have consequences for Climate Change?
- 4) How could the situation be avoided to prevent Climate Change impact (if it is true)?
- 5) What has been the impact of COVID on production?
- 6) What are the activities involved in rehabilitation of stations and what are the associated E&S issues?
- 7) Are there any other key E&S issues?
- 8) What is the current environmental management system used?
- 9) What interventions/ mitigations would you recommend dealing with E&S issues identified?

E. Engagement Issues - MSA

- 1) Will land required for setting up ground station or weather station acquisition?
- 2) Who could be easily affected in the event of acquiring land for any of the stations?
- 3) How end-of-life EEE (e-waste) is current managed?
- 4) Quantities of end-of-life EEE (e-waste) generated?
- 5) How is the storage provision for the e-waste?
- 6) The Program is likely to increase the quantity (number and types) of the EEE for digital advisory services provision what types of EEE are likely to be needed/supplied?
- 7) The increased EEE quantities (number and types) for the digital advisory services provision, would generation large quantities of end-of-life EEE (e-waste) will land be required for storage of the WEEE?
- 8) What measure could be put in place to handle and manage the WEEE?

F. Engagement Issues - NAFCO

- 1) How common are accidents involving cargo trucks in transit?
- 2) How frequent do cargo trucks in transit breakdown?
- 3) How common do food produce cargo trucks get stranded due to vehicle breakdown?
- 4) How common do cargo trucks in transit get involved in accidents causing damage to the food produce cargo?
- 5) How often do food produce cargo trucks get stranded at international borders in the sub-region?
- 6) How is damaged or unwholesome food produce (in transit due to delayed delivery) disposed of?
- 7) Would land be required/acquired for the disposal of such declared unwholesome food produce?
- 8) How could accidents and breakdown be avoided or minimized (during transit)?

G. Engagement Issues - WRI

- 1) What are the E&S issues related to integrated aquaculture and agriculture system?
- 2) What are the negative impacts of cage aquaculture?

- 3) What mitigations/ recommendations would you suggest to tackle conflict between local fishermen and cage aquaculture developers?
- 4) Are there land-take issues in integrated aquaculture and agriculture systems?

H. Engagement Issues - NDA

- 1) How much land on the average is required to set up the following industries?
 - o Seeds production?
 - o Fertilizers production?
 - o Pesticides production?
 - O Veterinary products manufacture?
- 2) Where are such factories/industries likely to be set up for each of them e.g. peri-urban, remote, industrial areas, etc.)?
- 3) How likely is proposed land for development be occupied by some existing users?
- 4) Are women likely to be among the affected land users?
- 5) How are watershed areas proposed for restoration likely to be occupied by some existing users?
- 6) What are the most likely land use forms such watershed areas will be under?
- 7) Are women likely to be among the affected watershed area users?
- 8) What land use types are likely to be affected by the grazing reserve/corridor development?
- 9) What is the estimated proportion of the land use types (e.g. farming 60%, etc.)
- 10) How long and wide will the grazing reserve/corridor be?
- 11) How many districts is the grazing reserve/corridor likely to traverse or cross?
- 12) What happens to the grazing reserve/corridor in the rainy season?

I. Engagement Issues - GIDA

- 1) What is the average land area for each of the irrigation projects?
- 2) What is the likely land use types in these areas?
- 3) Will the rehabilitation of the 8 small irrigation dams likely to displace people?
- 4) How many people could on the average be displaced?
- 5) What is the estimated land area likely to be affected on the average?
- 6) For the reclamation of the 3 irrigation schemes (Wheta, Tanoso and Techiman) are there any existing users/dependents on the scheme?
- 7) How many people (on the average) depend on the scheme currently?
- 8) What is their level of productivity on the irrigation schemes (average income)?
- 9) What role does the Agency play in irrigation projects?

J. <u>Engagement Issues – FRI</u>

- 1) What are the main E&S issues related to the food production, processing and transportation under the program?
- 2) What best practices can be adopted to manage impacts?

K. Engagement Issues – IESS

- 1) What are the current challenges of the Volta Basin Area?
- 2) What are the social issues associated with irrigation, aquaculture and other activities under the program?
- 3) What mitigation/recommendation will be appropriate?

- 4) What is the average land take by irrigations projects?
- 5) What is the typical land use of areas along the Volta for irrigation?

L. <u>Engagement Issues – DAES</u>

- 1) How much land on the average is required to set up the following industries?
 - o Seeds production?
 - o Fertilizers production?
 - o Pesticides production?
- 2) How likely is proposed land for development be occupied by some existing users?
- 3) What are the most likely land use forms such lands will be under?
- 4) Are women likely to be among the affected land users?
- 5) How are watershed areas proposed for restoration likely to be occupied by some existing users?
- 6) What are the most likely land use forms such watershed areas will be under?
- 7) Are women likely to be among the affected watershed area users?
- 8) What land use types are likely to be affected by the grazing reserve/corridor development?
- 9) What is the estimated proportion of the land use types (e.g. farming 60%, etc.)
- 10) How long and wide will the grazing reserve/corridor be?
- 11) How many districts is the grazing reserve/corridor likely to traverse or cross?
- 12) What happens to the grazing reserve/corridor in the rainy season?

M. Engagement Issues – APD

- 1) What land use types are likely to be affected by the grazing reserve/corridor development?
- 2) What is the estimated proportion of the land use types (e.g., farming 60%, etc.)
- 3) How long and wide will the grazing reserve/corridor be?
- 4) How many districts is the grazing reserve/corridor likely to traverse or cross?
- 5) Which districts are these?
- 6) What happens to the grazing reserve/corridor in the rainy season?

N. Engagement Issues – PPRSD

- 1) What are the environmental safeguards activities you have been involved in on previous programs?
- 2) What are the safeguards activities that the PPRSD would undertake under the FSRP2?
- 3) What are some of the treats to food production?
- 4) How would/ has Covid impacted your operations?

10.4 Stakeholder Engagement Highlights

The highlights from the engagement with stakeholders have been provided in the Table 10.5. with the full responses in Annex 11

Table 10. 5 Major Highlights from Engagement

Stakeholder	Key Highlight
WIAD	During the transportation of food, traders are sexually exploited or extorted
	financially by drivers when their vehicles breakdown

	Lack of or abandoning the use of PPE exposes women to adverse conditions like
	extreme heat, smoke and sharp tools during food processing
EPA	 A specialized registration and screening system can be developed in collaboration with the EPA so that all projects under the program can have a speedy initial environmental assessment.
	The assessment of the cumulative impact of several operation under the project within a certain area can be done.
	Disposal challenges for asbestos from the rehabilitation of old training centre was
CERSGIS	 a key issue from a similar program in the past. Under the program, our existing facilities would be used so there would be no
CLNSGIS	need to acquire additional land
	End of life e-waste is stored and either dumped or donated to schools if they are
	still in working condition
DCS	The misuse of pesticides by farmers is a key environmental issue that needs to be addressed because it poses risk to any nearby water body
	The provision of appropriate equipment like weeders which are not too
	sophisticated to use can help prevent the situation of parents using their children
	as labour since a lot more work can be done by fewer people using farming equipment.
MSA	E-waste from all meteorological stations are transported to the head office in
	Accra where they are later auctioned.
	 Quantities of e-waste generated yearly are very small because the equipment are well maintained.
NAFCO	Trucks transporting food are hardly involved in accidents because drivers of such
	trucks are usually very experienced.
	 There have been attacks by armed man on food trucks in transit in the Northern, Savannah and Upper West Regions in recent years
	Unwholesome or expired food is crushed and incinerated in collaboration with the
	Food and Drugs Authority and the Ghana Standards Board so they cannot be used by anyone.
WRI	A negative impact of cage aquaculture is conflict with fishermen who may not
	have access to areas where they ones fished.
	The feed for the caged fish attracts fish from the wild but local fishermen would
110.4	not be allowed to venture close to the cages to make a catch.
NDA	 Within their area of jurisdiction, no intervention would require relocation of settlements or farms
GIDA	The increase of the height of the irrigation dams may affect some nearby
	communities and farms due to the increase in the throw back of the reservoir. It is
CSIR-FRI	not yet known if the height of these proposed dams will be increased or not.
COIN-ENI	 A major waste management issue is the effluent produced from food processing activities especially production of ethanol from cassava.
IESS	A major environmental issue could be the widespread use of agrochemicals by
	farmers.
	With the increase in activities along the Lake, siltation could also become a problem.
	 problem. The predominant land use along the lake at the southern portion of the lake and
	middle belt is farming
DAES	• In cassava process, women and children are exposed to sharp objects like cutlases,
	those who are involved in the frying are exposed to high temperature sometimes
	with their babies on their backs.

	 On the project level assessment, it is necessary for extension officers to be consulted since they deal directly with the farmers. Their capacity will have to be built so they are in the best place possible to deliver adequate guidance to the farmers on all the new interventions as a result of the program. 	
APD	 The grazing reserves vary in perimeter: Adaklo – perimeter of 9km, 11km & 47km (15,000ha in total, can house 11000 cattle for 4 months) Fanteakwa – perimeter of 43km (5,000ha, which can house 10,000 cattle for 4 months) Kintampo North – perimeter of 150km (100,00ha, which can provide 1000Mg of feed for 128,000 cattle) Sekyere – perimeter of 89km (32,000ha which can house 150,000 cattle for 4 month) The grazing reserve has the potential to eliminate clashes between migrating or resident Fulani herdsmen and crop farmers. 	
PPRSD	 Fall army worms and the indiscriminate use of pesticides is a big treat to food production. The management of empty pesticide containers is a key E&S issues that needs to be addressed. 	

11.0 INFORMATION DISSEMINATION AND DISCLOSURE MEASURES

The WBG ESSs and the Ghana EA Regulations recognize the importance of open and transparent engagement with project stakeholders as an essential element of good practice. The ESS10 advocates effective stakeholder engagement as a way to improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation.

Stakeholder engagement is described by the ESS10 as an inclusive process conducted throughout the project life cycle. When properly designed and implemented, it supports the development of strong, constructive and responsive relationships that are important for successful management of a project's environmental and social risks. Stakeholder engagement must be initiated at an early stage of the project development process to be effective as an integral part of project decisions on risks and impacts and planning.

Information dissemination and disclosure actions are required at all stages of projects financed by the World Bank. It is to promote effective engagement of all stakeholders including project implementers, regulatory agencies, bureaucrats, project affected persons and project beneficiaries. Effective consultation and information disclosure promote community ownership and participation and help to:

- Establish a systematic approach to identifying and engaging stakeholders to help build and maintain constructive relationships, particularly with project-affected parties;
- Assess the level of stakeholder interests and support to enable their views taken into account in project design and social performance;
- Promote and provide means for effective and inclusive engagement with project-affected parties throughout the project life cycle;
- Ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely and appropriate manner and format; and
- Provide project-affected parties with accessible and inclusive means to raise issues and grievances, which will be appropriately responded to and grievances managed.

The requirements set out in ESS5, which requires the application of special disclosure and consultation, for projects involving involuntary resettlement must be followed. Consultation is critical in the preparation, implementation, and monitoring of involuntary resettlement process for it to ensure that:

- PAPs provide their inputs and concerns about the project;
- Participate fully in the execution of the project; and
- Promote stakeholders support and sustainability of the project.

The 1992 Constitution and Right to Information Act, 2019 (Act 989) grants citizens right to information held by public institutions, subject to the exemptions that are necessary and consistent with the protection of the public interest. At every stage of the process, full and complete information about the prospective investment, its land requirements, and the implications for community and individuals will be made available to all parties in public meetings and other stakeholder engagements.

Local processes should be employed to ensure that project information is disseminated using the local language(s), ensuring that the community is fully aware of developments. During all consultations, the existence and conditions of access to a register will be widely disseminated within the community. The PIU would make available to the public, the existing GM, its procedures, the levels, and officers responsible for different types of grievances. It is essential that information on the GM should be

disseminated to all relevant persons including the vulnerable and marginalized groups (such as women and persons with disability).

Information should also be disseminated through the project website, EPA website, notices on DA Notice Boards and in communities, posters, and outreach campaigns by PIU staff and facilitators. Relevant posters and video clips should be designed by the Communications Specialist within the first six months of project effectiveness. Messages conveyed to encourage people to use the GM would include:

- No fees for making complaints;
- Grievances help to improve the project's policies, systems and service delivery;
- Grievances lodged will be treated confidentially; and
- Complainants cannot be sanctioned for complaining.

Essential details about the GM for sub-projects will include:

- How to submit a complaint and where to access the Grievance Form;
- The standards and timeframes for complaint resolution;
- The options available to a complainant if the person is not satisfied with the grievance process or outcome; and
- Besides grievances, suggestions, recommendations, compliments and enquiries will also be welcomed.

12.0 INSTITUTIONAL ARRANGEMENT FOR RPF IMPLEMENTATION

12.1 Program Implementation Arrangements

MoFA will be the lead ministry responsible for the oversight of the Program. The National Steering Committee (NSC) set-up by MoFA will be the highest decision-making body and will act to approve the Annual Work Plan and Budget (AWPB), provide policy guidance and orientation to the national coordination and implementation units of the program.

The PIU established by MoFA will be responsible for the implementation of the RPF and subsequent ARAPs/RAPs. The PIU will coordinate, monitor, evaluate and manage the Program activities in collaboration with the Policy Planning, Monitoring and Evaluation Division (PPMED) and other key implementing MoFA Directorates. This will comprise of the Department of Agriculture (DoA) at the district level, the National Agriculture Research Institute (NARS) and other Ministries, Departments and Agencies (MDAs) such as the Ministry of Trade and Industries (MoTI), Ghana Meteorological Agency (GMA), EPA, AfCFTA, etc. Figure 12.1 shows the institutional arrangement hierarchy for the Program implementation.

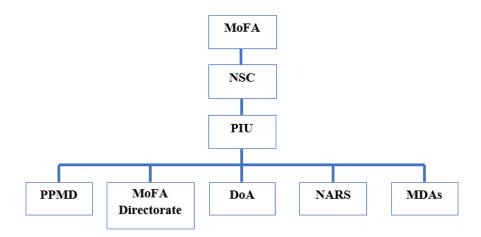


Figure 12. 1 Heirarchy of Instituitonal Arrangement for Program Implementation

The main institutions that will be involved in the resettlement activities during the implementation of sub-projects will include:

- Ministry of Food and Agriculture;
- Project Implementation Unit
- Regional Land Valuation Division;
- Environmental Protection Agency;
- Regional Coordinating Councils (RCCs);
- Non-Governmental Organisations;
- Municipal and District Assemblies;
- Consultant; and
- PAPs' representative.

12.2 Resettlement Management Team

The Resettlement Management Team to be set-up by PIU will consist of 3 teams namely:

- Compensation Disbursement Team;
- Grievance Resolution Team; and

• Monitoring and Evaluation Team.

12.2.1 Compensation Disbursement Team

The team will be responsible for organising and ensuring that compensations payable to PAPs are made in line with the provisions and procedures of this RPF and the respective RAPs.

12.2.2 Grievance Resolution Team

The team will be responsible for receiving and logging complaints and resolving disputes. The team will undertake follow-ups on all measures taken to resolve each grievance or dispute to ensure that grievance resolution actions are implemented by whoever is mandated to undertake such actions. The full description of the Grievance Mechanism is presented in chapter 13.

12.2.3 Monitoring and Evaluation Team

The team will conduct monitoring of the implementation of the RPAs under the Program. This will ensure that stated targets are met and PAPs are duly compensated in line with the specific RAP requirements.

13.0 GRIEVANCE MECHANISM

13.1 Purpose of Grievance Mechanism

Grievance mechanisms are established as part of the resettlement plan and their design takes into account the views of affected communities expressed during the resettlement planning process. Regardless of scale, involuntary resettlement will give rise to grievances among affected households and communities on issues ranging from rates of compensation and eligibility criteria. The project grievance mechanism will be disclosed and explained to affected communities as early as possible and on a regular basis.

Special attention must be paid to accessibility of and inclusiveness of the grievance mechanism to disadvantaged and vulnerable individuals or groups. The scope of the grievance mechanism varies with the magnitude and complexity of the project and displacement involved. The objectives of the grievance process are to:

- Provide affected people with avenues for making a complaint or resolving any dispute that
 may arise during the implementation and determination of entitlements of compensation and
 implementation of a project;
- Ensure that appropriate and mutually acceptable grievance resolution actions are identified
 and implemented to the satisfaction of complainants by using Alternative Dispute Resolution
 (ADR) approach; and
- Avoid the need to resort to judicial proceedings at the courts.

13.2 Grievance Resolution Process

Individuals will bring forward grievances and disputes related to a project either in writing or in person to the Grievance Redress Committee (GRC)/Community Grievance Redress Committee (CGRC) that have been established in the project communities. The general steps of the grievance process comprise:

- Step 1: Assessment of risks, potential grievances and disputes;
- Step 2: Capacity assessment; and
- Step 3: Action plan access point/complaint uptake (have access points as close to the users as possible).

The others include:

- Grievance log assessment;
- Acknowledgment and response;
- Appeals provision (for resolution); and
- Follow-up.

The PIU will sensitize the communities on the need to resort to grievance mechanisms. Complaints received will be sorted into four levels as follows:

- Level 1: Complaints and questions that can be responded to immediately;
- Level 2: Complex complaints, for example disputes between communities and investors, Government and communities, investors, and Government and within the communities;
- Level 3: Complaints related to valuation of land being acquired by GoG; and
- Level 4: Complaints that border on integrity e.g., corruption.

Levels 2, 3, and 4 complaints will be investigated by the PIU/Social Safeguards Specialist within fourteen (14) days. Complaints will be referred to relevant entities and verified. After verification of

complaints, verified ones will be heard by the GRC, which may consist of the following (where applicable);

- 1) Chairperson;
- 2) Representative from the Lands Commission not below the rank of Director;
- 3) Representative from Traditional Leaders;
- 4) Representative of Investors;
- 5) Representative from the District Assembly;
- 6) Representative from Civil Society or NGO;
- 7) Representative of Youth groups;
- 8) Representative from Women's group;
- 9) Representative from Judicial Service;
- 10) Representative of the Ghana Association of Mediators and Arbitrators; and
- 11) One other person to be identified.

The representatives of the traditional leaders, investors, DA, NGO, youth groups, and women's groups will vary depending on the area where the complaint emerges from. Any time there is a complaint, a panel shall be composed to address the specific complaints. At least 5 members of the GRC shall constitute a panel. The nature and type of complaint shall determine the members to be selected. The Social Safeguards Specialist (SSS of PIU) shall be the Chairperson of the GRC.

The GRC shall be governed by the principles of fairness, integrity, transparency, and timeliness. GRC meetings will be a forum for the complainant and other parties to detail grievances and to explore (using mediation, negotiation, and other techniques) the resolution action. The proposed resolution action and the time frame in which it is to be implemented will be discussed within two weeks of receipt of the grievance. The GRC meetings will be recorded by a selected Secretary of a composed panel.

13.3 Settlement of Disputes

Several methods are available to the GRC and PAPs for use in resolving disputes and complaints. These include the following, which is also presented in a hierarchical order in Figure 13.1.

- Settlement by negotiation
- Settlement by mediation
- Settlement by arbitration

Court of Law13.3.1 Settlement by Negotiation

The parties to a dispute under the project may negotiate in good faith with a view to reaching a settlement of the dispute. This may be in accordance with any contract between the parties.

13.3.2 Settlement by Mediation

Where parties to a dispute choose to settle their dispute through mediation, the GRC may mediate the dispute or other mediators may be identified by the parties. Where parties agree to settle the dispute by mediation and there is settlement, the terms of settlement shall be in writing which shall be signed by the mediator and parties to the dispute. The settlement agreement shall be binding on the parties, unless the agreement states otherwise. Where no agreement is reached at the end of the mediation, the mediator shall state so in writing and refer the matter to the GRC for further action.

13.3.3 Settlement by Arbitration

The parties have the right to appoint arbitrators, but where they fail to agree to do so, the GRC may appoint an arbitrator or arbitration panel to resolve the dispute. An arbitration award shall be binding

on all parties. Where an external arbitrator is used, the external arbitrator shall communicate the award in writing to the GRC within 3 days after the award.

The grievance issue should be resolved within 2 weeks of receipt of complaints, unless it requires further investigation which could go up to 4 weeks. Should there be an unexpected delay, the GRC will make sure to inform the concerned parties about the delay and its impacts on the initial schedule. Depending on the nature and type of grievance, PIU staff and partner organizations (Lands Commission and EPA representatives, etc.) may visit the affected property site or get in touch with the complainant to confirm that the resolution action is carried out. Verification should be completed within a time specified by the parties.

13.3.4 Appeal to Court

It is hoped that the courts of law will be a "last resort", in view of the available options above. The Constitution of Ghana allows any aggrieved person the right of access to the Court of Law. If the complainant remains dissatisfied with the alternative mediation efforts, he/she has the freedom to pursue appropriate recourse in a court of competent jurisdiction in Ghana.

13.4 Sexual Exploitation and Abuse and Sexual Harassment

The SEA/SH rating is moderate based on the Bank's SEA/SH risk assessment tool. To mitigate this risk, the Environmental and Social Management Framework will have a SEA/SH Risk Mitigation and Response Action Plan. This will be rigorously implemented, and the client will ensure that GBV risks are adequately reflected in all safeguards' instruments (i.e., Project ESMP and Contractor's C-ESMP). The Stakeholder Engagement Plan of the project, which will be implemented over the life of the project to keep the local communities and other stakeholders informed about the project's activities, to specifically address GBV related issues. The SEA/SH Risk Mitigation and Response Action Plan will also include the availability of an effective grievance mechanism (GM) with multiple channels to initiate a complaint. It should have specific procedures for GBV including confidential reporting with safe and ethical documenting of GBV case consistent with the Ghana National Gender Policy.

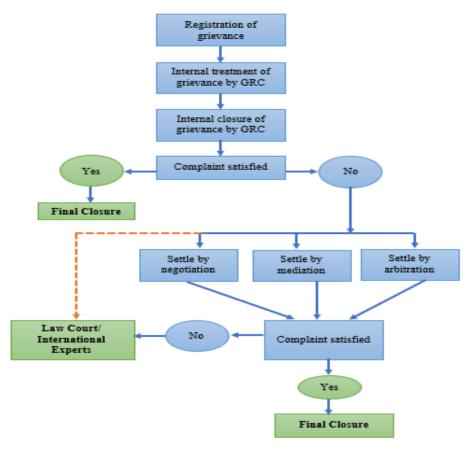


Figure 13. 1 Grievance/Dispute Management Mechanism

13.5 Grievance Form and Monitoring Grievance Resolution

The complainant's name, date and nature of complaint, follow-up actions and their dates will all be logged for referencing and tracing. A template form is included in Annex 8. Once grievances are resolved, the SSS will complete the Grievance Form detailing and confirming the resolution. The form will be signed by the complainant, other parties, and the SSS. A complaint logbook will be opened for all complaints at the project level. All GRC minutes will be recorded and made available for review upon request. A sample grievance log table (for non-SEA/SH complaints) to monitor progress of grievance resolution is included in Annex 12. The PIU will keep an electronic data base (and physical copy) of the logbook which will be reviewed by the World Bank upon request.

14.0 MONITORING, EVALUATION AND COMPLETION AUDIT

14.1 Objective of Monitoring and Evaluation

Resettlement planning and implementation processes must be monitored and evaluated at local, regional and national levels to ensure these are carried out in accordance with the relevant requirements of this RPF, and for follow up remedial actions, where necessary. The provisions for monitoring and evaluation (M&E) will ensure the proposed actions are implemented as intended and within the timelines established, and also that, the expected results are achieved. Where shortcomings or problems are found, M&E can initiate appropriate corrective action.

The monitoring of project activities related to land acquisition, compensation and resettlement must fit into the overall project M&E framework. The objective of the monitoring plan will be to ensure that all stakeholders are provided with timely and updated information with regards to the implementation of a RAP/ARAP. The focus of the M&E will include an assessment of the following:

- RAP implementation is in accordance with the schedule;
- Whether RAP implementation has to be adjusted due to changes that have occurred;
- · Whether complaints and grievances are being properly and effectively addressed; and
- Inform decisions to resolve problems encountered during RAP implementation.

Actions will be monitored and evaluated internally by a Monitoring and Evaluation Team (MET) to be constituted by the PIU Coordination Office of MoFA. An Independent Impact Evaluation (IIE) will be done soon after the completion of the RAP implementation.

14.2 Purpose and Responsibility of Internal M&E

The purpose of the internal M&E will be to verify that:

- Actions and commitments described in this resettlement plan are implemented;
- Eligible people to be affected by the works receive their full compensation; and
- Complaints and grievances lodged by PAPs are followed-up and resolved.

Evaluation and monitoring are key components of the RPF. They have the following general objectives:

- Monitoring of specific situations or difficulties arising from the implementation, and of the compliance of the implementation with objectives and methods as set out in this RPF; and
- Evaluation of the mid- and long-term impacts of any Resettlement and Relocation Action Plan on affected households' livelihood, environment, local capacities, on economic development and settlement.

Monitoring aims to correct implementation methods during the course of a project, as required. Evaluation is intended at checking whether policies have been complied with and providing lessons learnt for amending strategies and implementation in a longer-term perspective. Monitoring will be internal and evaluation external.

14.3 Participatory Monitoring and Evaluation Plan Indicators

The Monitoring and Evaluation Team (MET) will be expected to develop and implement a Monitoring and Evaluation Plan (MEP). The main indicators the MEP will measure include:

- Impacts on affected individuals, households, and communities to be maintained at their preproject standard of living, or better;
- Improvement of communities affected by the project; and
- Management of disputes or conflicts.

The PIU Coordination Office will undertake routine internal M&E of the implementation of the resettlement so as to ensure that all the responsible units follow the schedule and comply with the principles of the resettlement plan. The monitoring program will provide a continuous feedback on the implementation of the resettlement plan. Monitoring teams will be constituted and will report regularly to the coordinating office. The team will include EPA, and appropriate departments under MoFA. Through the M&E, PIU will establish a reporting system for the project RAP that will:

- Provide timely information to the project about all resettlement and compensation issues arising from resettlement related activities;
- Identify any grievance, especially those that have not yet been resolved at the local level and which may require resolution at higher levels;
- Document completion of project resettlement and compensation that are still pending, including for all permanent and temporary losses; and
- Evaluate whether all PAPs have been compensated in accordance with the requirements of the RAP and that PAPs have better living conditions and livelihoods.

Instrument of monitoring will include the following:

- Questionnaires with data stored in a database for comparative analysis (before-after and with-without);
- Documentation and recording of PAPs situation, including subsequent uses of assets and any improvements;
- Relocation/resettlement and compensation reports, including status of land impacts;
- Percentage of individuals selecting cash or a combination of cash and in-kind compensation;
 and
- Proposed use of payments.

14.4 Independent Impact Evaluation

An Independent Impact Evaluation (IIE) will be done after the completion of a RAP implementation. The IIE will determine if:

- Compensation payments have been completed in a satisfactory manner; and
- There are improvements in livelihoods and well-being of PAPs.

Several indicators will be used (as applicable) to measure these impacts, which include, among others:

- A comparison of income levels before-and-after the RAP;
- Access to livelihoods resources and employment;
- Changes in standards of housing and living conditions;
- Number of grievances lodged and their status, time and quality of resolution;
- Number of individuals and families to re-establish their pre-resettlement activities, in terms of other alternative incomes;
- Number of demolitions after giving notice, and
- Number of PAPs paid in a given period in comparison with what was planned.

14.5 Reporting

The monitoring unit will submit periodic (preferably bimonthly) reports to the PIU and copied to MoFA. The report will at least cover status of compensation disbursement, nature of complaints, grievance resolution actions and follow-ups. This report will form part of the PIU's regular and agreed report to the World Bank.

15.0 RPF IMPLEMENTATION ESTIMATED BUDGET AND FUNDING

The budget presented under this section is only indicative.

15.1 Estimated Budget for RPF Disclosure and Implementation

The RPF will be publicly disclosed and disseminated in-country, on MoFA's website and in offices of relevant agencies and in public places within affected communities once it has been cleared by the World Bank. The budget for the disclosure and dissemination workshop and implementation of the RPF will cover costs of the workshop, and training for PIU, MoFA, regional LVD, etc. in order to effectively execute roles as outlined in the RPF, including RPF compliance M&E as well as mid-term and completion independent evaluation audits. The estimated cost is US\$48,500 (Table 15.1).

Table 15. 1 Estimated RPF Implementation Budget

No.	Activity	Description	Rate (US\$)	Estimated Cost (US\$)
1	RPF disclosure workshop	Disclosure workshop for the RPF organized by PIU involving all relevant institutions (including the World Bank Officials)	20 Participants	500.00
2	Training Sessions for PIU MoFA LVD, etc.	Training on RPF implementation including: Resettlement and compensation issues Entitlements/GM/E&M, etc. Procurement of ARAP/RAP consultants Screening and registration of subprojects Facilitating ARAP/RAP preparation, etc.	 1 Training Session @ 2,000 1 Refresher Training Session @ 2,000 	4,000.00
3	RPF implementation M&E by PIU	PIU undertakes implementation M&E of RPF and sub-projects at the district, regional national levels	2 visits in a year for 4 years @ 5,000/year	20,000.00
4	Independent Impact Evaluation at the RPF implementation	Mid-term and Completion Audits of RPF implementation (including assessment of effectiveness of institutional arrangement and supervisory oversight of social safeguards and resettlement performance)	2 Evaluation Audits @ 12,000/Audit	24,000.00
	Total	,	1	48,500.00

15.2 Estimated Budgets for ARAPs/RAPs Preparation and Implementation

The budget estimates for the preparation of ARAPs/RAPs cover the total consultancy costs for individual sub-project ARAPs or RAPs, even though the actual number of sub-projects is not known. The budget for the implementation of ARAPs/RAPs also covers resettlement activities including compensation costs for affected assets, capacity building of institutions, grievance and dispute resolution, M&E and contingency. Tables 15.2 and 15.3 give indicative budget estimates for the preparation and implementation of ARAPs/RAPs respectively. Table 15.4 also gives indicative budget estimates for the compensation payments to PAPs.

 Table 15. 2
 Indicative Budget for Preparation of ARAPs/RAPs

No.	Description (Land-take for Identified Potential Development Activities)	Estimated Number	Rate (US\$)	Estimated Cost (US\$)
1	ARAPs for Ground and Weather Stations construction	4	10,000	40,000
2	ARAPs of disposal sites for damaged food in transit	1	10,000	10,000
3	ARAPs for fertilizers, pesticides, veterinary product, etc. industries	5	10,000	50,000
4	ARAPs for conversion of other land use types to priority crop fields	2	10,000	20,000
5	ARAPs for rehabilitation/upgrading of existing Agricultural Centres	3	10,000	30,000
6	ARAPs for land development and watershed restoration	2	10,000	20,000
7	RAPs for 2 irrigation projects development	2	18,000	36,000
8	ARAPs for rehabilitation of 8 small irrigation dams	8	10,000	80,000
9	ARAPs for reclamation of 3 irrigation schemes	3	10,000	30,000
10	RAPs for the development of grazing reserves/corridors	4	18,000	72,000
	Total			388,000

Table 15. 3 Indicative Budget for the Implementation of ARAPs/RAPs

Activity	Description	Rate (US\$)	Estimated Cost (US\$)
Training Sessions for PIU DoA Regional LVD, etc.	Training on RAP implementation at Regional/District Levels including:	 1 Training Session @ 6,000 1 Refresher Training Session @ 6,000 	12,000

 Table 15. 4
 Indicative Budget for Compensation Payment to PAPs

(0	Description Compensation for Land-take/Acquire for Sub-projects)	Estimated Acreage	Rate (US\$)	Estimated Cost (US\$)
1.	Land acquired for Ground and Weather Stations	4x5ac	300/ac for land up to 20ac	6,000
2.	Land acquired for disposal site for damaged foods	1x5ac	300/ac for land up to 20ac	1,500
3.	Land acquired for seed, fertilizer, pesticides, etc. industries	5x5ac	300/ac for land up to 20ac	7,500
4.	Land converted to priority crop fields	2x100ac	200/ac for land between 51 – 100ac	40,000

15.	Total Cost + Contingency			652,575
14.	Contingency (5% of total cost)			31,075
13.	Addition of subtotals			621,500
12.	Monitoring and evaluation of staff trainings, compensation processes and grievance resolution activities		Lump sum	40,000
11.	Transportation and allowances		Lump sum	15,000
10.	Land acquired for development of grazing reserves/corridors	4x1,000ac	100/ac for land more than 500ac	400,000
9.	Land acquired for the reclamation of 3 irrigation schemes	3x50ac	250/ac for land between 21 – 50ac	37,500
8.	Land acquired for rehabilitation of 8 small irrigation dams	8x50ac	250/ac for land between 21 – 50ac	10,000
7.	Land acquired for 2 irrigation developments	2x100ac	200/ac for land between 51 – 100ac	40,000
6.	Land acquired for development and watershed restoration	2x20ac	300/ac for land up to 20ac	12,000
5.	Land acquired for upgrading/rehabilitation of 3 Agricultural Stations	3х5ас	300/ac for land up to 20ac	4,500

15.3 Sources of Funding

The Constitution of Ghana indicates that people affected by compulsory acquisition of land have to be adequately compensated. This forms the basis for the commitment of the Government towards compensation of PAPs for projects/sub-projects under the FSRP2. The cost for the compensation and resettlement of the PAPs will be paid by GoG. The MoFA being the project implementing Ministry will request for the release of the compensation funds from Ministry of Finance's Capital Account for payment.

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Annex 1 Inception Report

Ministry of Food & Agriculture (MoFA) Ghana Commercial Agriculture Project

West Africa Food System Resilience Program, Phase 2 (FSRP2)

Resettlement Policy Framework

INCEPTION REPORT March 18, 2021

1.0 Introduction

The assignment is to prepare a Program-level RPF that can guide the preparation of site-specific RAPs or ARAPs for the relevant project or sub-project investments that will involve land-take or land acquisition. It will involve undertaking desk review of relevant studies, reports and project paper, the World Bank ESF and other project documents, including review of any relevant secondary data on the target areas as well as analysis and interpretation so derived.

2.0 Key Elements of the RPF

The RPF will specifically involve the sixteen key elements below.

- 1) Preparation of a Stakeholder Engagement Plan (SEP) in consultation with the ESMF consultant with appropriate methodologies to engage stakeholders including women and vulnerable groups and provide a summary of the various categories of stakeholders engaged and their views, needs and priorities, relating to the land acquisition and involuntary resettlement and mitigation measures.
- 2) Preparation of a brief description of the program including description of the program context and information about the components. Also identify the possible resettlement issues that each component and subcomponents are likely to generate, and for which reason this RPF is being developed.
- 3) A clarification of resettlement principles and design criteria to be applied to prepare appropriate resettlement instrument for subprojects or project components that will cause physical and/or economic displacement during project implementation.
- 4) A review of the national laws and/or regulations on expropriation, land valuation and other relevant regulations governing land acquisition and other assets as well as the various land tenure and ownership systems in Ghana (including particular issues related to women's access to land), the different legal instruments regarding government and individual acquisitions and resettlement and compensation policies.
- 5) Spelling out the World Bank Environmental and Social Standard 5 on "Land Acquisition, Restrictions on Land Use and Involuntary Resettlement", which can be found at the World Bank's external website and assess how this applies in the specific case of the FSRP2.
- 6) Description of any discrepancies identified in the different legal instruments noting where the differences are significant, and whichever policy or standard considered to be of a comparatively higher standard shall apply.
- 7) Identification of relevant institutions associated with these legal instruments and their respective roles, paying attention to local-based institutions and structures at the project areas. The institutional arrangements will include implementation and monitoring mechanisms that ensure inclusiveness and participation of all affected people, groups and communities.
- 8) Development of a matrix that details the type of compensation that each identified PAP will be entitled to and a rationale as part of the matrix explaining the reasoning behind the entitlement as will be proposed in the Matrix.

- 9) Description in detail the methods to be used in valuing affected assets eligible for compensation consistent with national regulations on involuntary resettlement and ESS 5, and demonstrating the methods to be used for the exercise using participatory approaches acceptable to all stakeholders.
- 10) Description of the process for organizational arrangements, responsibilities, roles as well as the approval processes for the various stages of the compensation work, including the various actors and their roles and responsibilities. This section will also spell out the actual process for delivering the entitlement including the roles for the different agencies and reporting formats.
- 11) Description of mechanisms for consultations with, and participation of, displaced persons in planning, implementation, and monitoring; and methodology for consultation and participation by the PAPs in the process until they have received their entitlements.
- 12) Maintain a record of consultation and participation for this RPF and attach as an annex to the final RPF report for the client.
- 13) Develop a program for the disclosure of the RPF and RAP to facilitate the work of the client/borrower, complying with all national, WB and WHO COVID-19 prevention and management protocols throughout the RAP preparation and implementation process.
- 14) Describe options available to PAPs for the resolution of grievances about the process, the identification of eligible people for compensation, the valuing and compensation and any other complaints they may have with the entire process, with in-built monitoring mechanism to check on responsiveness to complaints or grievances lodged, as well as adapted to ensure Sexual Exploitation Abuse and Sexual Harassment (SEA/SH) related complaints to resettlement are identified and responded to in a rapid, confidential, ethical, and survivor-centered manner.
- 15) Set out implementation schedule for the resettlement, and also identify potential risks that could militate against the smooth implementation of the resettlement actions and suggest plausible mitigation measures to serve as a guide to the client during implementation.
- 16) Provide a template for the design of a RAP based on the details of the RPF and informed by the World Bank's ESS5 for RAPs, spelling out the main subsections of the RAP and any other relevant annexes.

3.0 Activities potentially requiring Land Acquisition

Some broad activities identified that may require acquisition of sites/land:

- 1) Setting up Ground Stations and Weather Stations (under the Digital Advisory Services for Agriculture and Food Crisis Prevention & Management);
- 2) Creation of nomadic corridors (to avoid conflict between transhuman and the commercial plantain and smallholder farmers within communities, especially at Agogo, Drobonso and Kumawu);
- 3) Setting up of the participatory Integrated Landscape Management system;
- 4) Enhancing the Resilience of Ecosystems and Food Systems in Priority landscapes;
 - a. Land and watershed restoration;
 - b. Floodplain restoration; and
 - c. Water control and development of irrigation in plains and terraces.

4.0 Target Areas of Intervention of the Program

- **4.1 Target Area 1** Lower Volta Basin (covering 6,950km² with 565,330 population):
 - 1) Volta Region
 - a. Agotime Ziope,
- c. Central Tongu,d. North Tongu,
- e. Ketu North

- b. Adaklu Anyingbe,
- 2) Eastern Region
 - a. Lower Manya Krobo
- 3) Greater Accra Region
 - a. Shai Osudoku

- 4.2 Target Area 2 Upper East (White Volta Basin covering 12,000km² with 1.4million population)
- 4.3 Target Area 3 Forest Transition and Guinea Savannah areas (covering 27,810km² and 834,787 population).
 - 1) Bono East Region

2) Ashanti Region

- a. Techiman North,
- c. Atebubu Amantin,

d. Nkoranza North,

e. Nkoranza South,

f. Sene West.

- b. Techiman South,
- a. Ejura Sekyedumase, c. Sekyere Affram Plains,
- e. Offinso North.

- b. Sekyere Central,
- d. Asante Akyem North,

5.0 Experts for the RAP Assignment

- 1) Social Expert (RAP Specialist)
- 2) Environmental Assessment and Management Specialist
- 3) Community Engagement Specialist
- 4) Socio-economic Expert / Valuer

6.0 Key Sections of the RPF Reporting

- 1) Description of Program and Components (and identified sub-projects)
- 2) Description of Project Environment
 - a. Description of eco-climatic, drainage, topography and hydrology of the
 - i. Lower Volta Basin,
 - ii. Upper East (White Volta basin area), and
 - iii. Forest transition and Guinea Savannah areas (of Bono East and Ashanti Regions),
 - b. Socio-economic profile of over 20 districts
 - c. Gender and vulnerable groups related issues, etc.
- 3) Policy, regulatory and institutional framework:
 - a. The Constitution of the Republic of Ghana, 1992,
 - b. Lands Commission Act, 2008 (Act 767),
 - c. State Lands Act, 1962 (Act 125) and Amendments,
 - d. Survey Act, 1962 (Act 127),
 - e. Lands (Statutory Wayleaves) Act, 1963,
 - f. Lands Regulations, 1986 (LI 1341),
 - g. Office of the Administrator of Stool Lands Act, 1994 (Act 481),
 - h. World Bank Safeguard Policies / Environmental and Social Framework
 - i. World Bank Safeguard Policy on Involuntary Resettlement
 - j. Comparison of the Ghanaian Regulations with the World Bank Policies
- 4) Stakeholder engagement/participation
 - a. EPA Regional Offices
 - i. Volta Region
- iii. Greater Accra Region
- v. Upper East

- ii. Eastern Region
- iv. Bono East Region
- vi. Ashanti Region

- b. District/Municipal Assemblies
 - Agotime Ziope,
 - Adaklu Anyingbe,
 - Central Tongu,
 - North Tongu,
 - Ketu North,
 - Shai Osudoku,
- Techiman North,
- Techiman South,
- Atebubu Amantin,
- Nkoranza North,
 - Nkoranza South,
- Sene West

- Ejura Sekyedumase,
- Sekyere Central,
- Sekyere Affram Plains,
- Asante Akyem North,
- Offinso North
- Lower Manya Krobo
- c. Lands Commission (Land Valuation Division, etc.),

- d. Land Use and Spatial Planning Authority, and
- e. Traditional authorities.
- 5) Potential Social Impacts (on Asserts/property and livelihoods) associated with the program:
 - a. Physically displacing people to make way for use of land,
 - b. Physically denying people's rights to use land as a result of planned construction of irrigation canals or other agricultural infrastructure, etc.
- 6) Mitigation Principles
 - a. Administrative and institutional framework for prevention and mitigation)
- 7) Environmental and Social Management Plan
- 8) Eligibility, entitlements and valuation
- 9) Grievance mechanism
- 10) Participatory Monitoring and Evaluation Plan
- 11) Estimated budget for RPF implementation
- 12) Disclosure of RPF
- 13) Preparation of reports (Inception/Scoping, draft and final RPF)

7.0 Work Plan and Schedule for RPF Preparation

Professional Activities	Days	Experts
 Description of Program and Components (including identified sub- projects) 	1	Social Expert
2) Description of Project Environment	3	Social Expert
		Environmental Expert
3) Policy, regulatory and institutional framework	3	Social Expert
4) Stakeholder engagement/participation (shared with ESMF	7	Social Expert
Consultant)		Engagement Specialist
5) Potential Social Impacts (on Assets/property and livelihoods)	2	Social Expert
associated with the program	2	Engagement Specialist
6) Mitigation Principles (Compensation, Assistance, Replacement,		Social Expert
Livelihoods Restoration, etc.)	2	Socio-
7) Environmental and Social Management Plan		Economic/Valuer
8) Eligibility, Entitlements and Valuation		Social Expert
	5	Socio-
		Economic/Valuer
9) Grievance Mechanism/Committee		Casial Forest
10) Participatory Monitoring and Evaluation Plan	ח ַ	Social Expert
11) Estimated budget for RPF implementation	5	Socio-
12) Disclosure of RPF		Economic/Valuer
13) Preparation of engagement tools and other instruments, and		Social Expert
reports (Inception/Scoping Report, draft and final RPF)	12	Environmental Expert
	12	Socio-
		Economic/Valuer

No			٧	Veek	1			1	Week	2				Week	3		Week 4				
	Professional Activities	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Description of Program and																				
	Components (including identified																				
	sub-projects)																				
D1	Inception Report (Preparation																				
	and submision)																				
2	Description of Project																				
	Environment																				
3	Policy, regulatory and institutional																				
	frame work																				
4	Preparation of engagement tools																				
	and other instruments																				
5	Stakeholder engagement/																				
	participation (shared with ESMF					,															
	Consultant)																				
6	Potential Social Impacts (on																				
	Assets/property and livelihoods)																				
	associated with the program																				
7	Mitigation Principles																				
	(Compensation, Assistance,																				
	Replacement, Livelihoods																				
	Restoration, etc.)																				
8	Environmental and Social																				
	Management Plan																				
9	Eligibility, Entitlements and																				
	Valuation																				
10	Grievance Mechanism/Committee																				
11	Participatory Monitoring and																				
	Evaluation Plan										ı	1									
12	Estimated budget for RPF																				
	implementation																				

13	Disclosure of RPF										
D2	Draft RPF Report										
14	Incorporation of review comments into Draft RPF										
D3	Final RPF Report										

Annex 2 World Bank ESS5 on Involuntary Resettlement

The World Bank's policy on Involuntary resettlement takes the position that if development induced displacements are left unattended, it often gives rise to severe economic, social, and environmental risks: production systems are dismantled; people face impoverishment when their productive assets or income sources are lost; people are relocated to environments where their productive skills may be less applicable and the competition for resources greater; community institutions and social networks are weakened; kin groups are dispersed; and cultural identity, traditional authority, and the potential for mutual help are diminished or lost.

This policy includes safeguards to address and mitigate these impoverishments risks to people affected by infrastructure projects. The involuntary resettlement safeguards cover physical displacement (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) because of involuntary acquisition of land, or involuntary restrictions on land use or on access to natural resources in legally designated parks and protected areas. The overall objectives of the Policy are:

- Involuntary resettlement should be avoided where feasible, or minimized, exploring all viable
 alternative project designs. Where it is not feasible to avoid resettlement, resettlement activities
 should be conceived and executed as sustainable development programs. Providing sufficient
 investment resources to enable the persons displaced by the project to share in project benefits;
- Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs; and
- Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

This policy includes safeguards to address and mitigate these impoverishment risks. The ESS5 further requires particular attention to be given to the needs of vulnerable groups, especially those below the poverty line including;

- Landless individuals and households elderly persons;
- Landless women and children;
- Indigenous groups and ethnic minorities and
- Other disadvantageous persons.

The World Bank's Policy requires that where ESS5 is triggered a resettlement action plan shall be prepared and cleared by the Bank prior to the implementation of resettlement activities. It is a requirement of the Bank for adequate provision be made for compensation and other assistance to PAPs, to restore livelihoods when these are affected appreciably and this must be done prior to the displacement of people. In particular, the policy requires that possession of land for project activities may take place only after compensation has been paid. Resettlement sites, new homes and related infrastructure, public services and moving allowances must be provided to the affected persons in accordance with the provisions of the RPF.

Annex 3: Template for Preparing a Resettlement Action Plan

This template is extracted from ESS5. The magnitude and complexity of resettlement or displacement will vary depending on the scope and level of detail of the RAP. The RAP is prepared based on the most recent and accurate information on the:

- Proposed resettlement and its impacts on displaced persons and other adversely affected groups; and
- Legal issues affecting resettlement. The RAP covers elements that are specific to the project context.

A broad outline of the RAP, as applied to sub-projects covered under a RPF includes, but is not limited to, the following:

- Description of the sub-project
- Potential Impacts
- Objective
- Socio-Economic Studies
- Legal Framework
- Eligibility
- Valuation of and compensation for losses
- Resettlement Measures
- Site selection, site preparation, and relocation

- Housing, infrastructure, and social services
- Environmental protection and management
- Community Participation
- Grievance procedures
- RAP implementation responsibilities
- Implementation Schedule
- Costs and budget
- Monitoring and evaluation

Description of the Sub-Project

General description of the sub-project and identification of sub-project area or areas.

Potential Impacts

The potential impacts are identified through:

- the sub-project components or activities that require resettlement or restriction of access;
- the zone of impact of components or activities;
- the scope and scale of land acquisition and impacts on structures and other fixed assets;
- a project-imposed restriction on use of, or access to land or natural resources;
- alternatives considered to avoid or minimize displacement and the reasons for those rejections; and
- Mechanisms established to minimize resettlement, displacement, and restricted access, to the extent possible, during project implementation.

Objective

The main objectives of the resettlement program as they apply to the sub-projects.

Socio-Economic Studies

The findings of socio-economic studies to be conducted in the early stages of project preparation, and with the involvement of potentially affected people will be needed. These generally include the results of a census of the affected people covering:

- Current occupants of the affected area as a basis for design of the RAP and to clearly set a cut-off date, the purpose of which is to exclude subsequent inflows of people from eligibility for compensation and resettlement assistance;
- Standard characteristics of displaced households, including a description of production systems, labor, and household organization; and baseline information on livelihoods (including, as relevant, production levels and income derived from both formal and informal economic activities) and standards of living (including health status) of displaced population;
- Magnitude of the expected loss, total or partial, of assets, and the extent of displacement, physical or economic;
- Information on vulnerable groups or persons, for whom special provisions may have to be made; and

 Provisions to update information on the displaced people's livelihoods and standards of living at regular intervals so that the latest information is available at the time of their displacement, and to measure impacts (or changes) in their livelihood and living conditions.

There may be other studies that the RAP can draw upon, such as those describing the following:

- Land tenure, property, and transfer systems, including an inventory of common property natural resources from which people derive their livelihoods and sustenance, non-title-based usufruct systems (including fishing, grazing, or use of forest areas) governed by local recognized land allocation mechanisms, and any issues raised by different tenure systems in the sub project area;
- Patterns of social interaction in the affected communities, including social support systems, and how they will be affected by the sub-project;
- Public infrastructure and social services that will be affected; and
- Social and cultural characteristics of displaced communities, and their host communities, including a description of formal and informal institutions. These may cover, for example, community organizations; cultural, social or ritual groups; and non-governmental organizations (NGOs) that may be relevant to the consultation strategy and to designing and implementing the resettlement activities.

Legal Framework

The analysis of the legal and institutional framework should cover the following:

- Scope of existing land and property laws governing resources, including state-owned lands under eminent domain and nature of compensation associated with valuation methodologies; land market; mode/timing of payments, etc.;
- Applicable legal and administrative procedures, including a description of the grievance procedures and remedies available to PAPs in the judicial process and the execution of these procedures, including any available alternative dispute resolution mechanisms that may be relevant to implementation of the RAP for the sub-project;
- Relevant laws (including customary and traditional law) governing land tenure, valuation of assets and losses, compensation, and natural resource usage rights, customary personal law; communal laws, etc. related to displacement and resettlement, and environmental laws and social welfare legislation;
- Gaps, if any, between local laws covering resettlement and the Bank's resettlement policy, and the mechanisms for addressing such gaps.

The institutional framework governing RAP implementation generally covers:

- Agencies and offices responsible for resettlement activities and civil society groups like NGOs that may have a role in RAP implementation;
- Institutional capacities of these agencies, offices, and civil society groups in carrying out RAP implementation, monitoring, and evaluation; and
- Activities for enhancing the institutional capacities of agencies, offices, and civil society groups, especially in the consultation and monitoring processes.

Eligibility

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

Valuation of and compensation for losses

The methodology to be used for valuing losses, or damages, for the purpose of determining their replacement costs; and a description of the proposed types and levels of compensation consistent with national and local laws and measures, as necessary, to ensure that these are based on acceptable values (e.g., market rates).

Resettlement Measures

A description of the compensation and other resettlement measures that will assist each category of eligible PAPs. Aside from compensation, these measures should include programs for livelihood restoration, grievance mechanisms, consultations, and disclosure of information.

Site selection, site preparation, and relocation

Alternative relocation sites should be described and cover the following:

- Institutional and technical arrangements for identifying and preparing relocation sites, whether rural or urban, for which a combination of productive potential, location advantages, and other factors is at least comparable to the advantages of the old sites, with an estimate of the time needed to acquire and transfer land and ancillary resources;
- Identification and consideration of opportunities to improve local living standards by supplemental investments in infrastructure, facilities or services;
- Any measures necessary to prevent land speculation or influx of eligible persons at the selected sites;
- Procedures for physical relocation under the project, including timetables for site preparation and transfer;
 and
- Legal arrangements for recognizing (or regularizing) tenure and transferring titles to those being resettled.

Housing, infrastructure, and social services

Plans to provide (or to finance provision of) housing, infrastructure (e.g. water supply, feeder roads), and social services to host populations; and any other necessary site development, engineering, and architectural designs for these facilities should be described.

Environmental protection and management

A description of the boundaries of the relocation area is needed. This description includes an assessment of the environmental impacts of the proposed resettlement and measures to mitigate and manage these impacts,

Community Participation

Consistent with the World Bank's policy on consultation and disclosure, a strategy for consultation with, and participation of, PAPs and host communities, should include:

- Description of the strategy for consultation with and participation of PAPs and hosts in the design and implementation of resettlement activities;
- Summary of the consultations and how PAPs" views were taken into account in preparing the resettlement plan;
- Review of resettlement alternatives presented and choices made by PAPs regarding options available to them; and
- Arrangements on how PAPs can communicate their concerns to project authorities throughout planning and implementation, and measures to ensure that vulnerable groups (including indigenous peoples, ethnic minorities, landless, children and youth, and women) are adequately represented.

The consultations should cover measures to mitigate the impact of resettlement on any host communities, including:

- Consultations with host communities and local governments;
- Arrangements for prompt tendering of any payment due the hosts for land or other assets provided to PAPs;
- · Conflict resolution involving PAPs and host communities; and
- Additional services (e.g., education, water, health, and production services) in host communities to make them at least comparable to services available to PAPs.

Grievance procedures

The RAP should provide mechanisms for ensuring that an affordable and accessible procedure is in place for third-party settlement of disputes arising from resettlement. These mechanisms should take into account the availability of judicial and legal services, as well as community and traditional dispute settlement mechanisms.

RAP implementation responsibilities

The RAP should be clear about the implementation responsibilities of various agencies, offices, and local representatives. These responsibilities should cover:

- delivery of RAP compensation and rehabilitation measures and provision of services;
- appropriate coordination between agencies and jurisdictions involved in RAP implementation; and
- measures (incl. technical assistance) needed to strengthen the implementing agencies" capacities of responsibility for managing facilities and services provided under the project and for transferring to PAPs some responsibilities related to RAP components (e.g. community-based livelihood restoration; participatory monitoring; etc.).

Implementation Schedule

An implementation schedule covering all RAP activities from preparation, implementation, and monitoring and evaluation should be included. These should identify the target dates for delivery of benefits to the resettled population and the hosts, as well as clearly defining a closing date. The schedule should indicate how the RAP activities are linked to the implementation of the overall project.

Costs and budget

The RAP for the specific sub-projects should provide detailed (itemized) cost estimates for all RAP activities, including allowances for inflation, population growth, and other contingencies; timetable for expenditures; sources of funds; and arrangements for timely flow of funds. These should include other fiduciary arrangements consistent with the rest of the project governing financial management and procurement.

Monitoring and evaluation

Arrangements for monitoring of RAP activities by the implementing agency, and the independent monitoring of these activities, should be included in the RAP section on monitoring and evaluation. The final evaluation should be done by an independent monitor or agency to measure RAP outcomes and impacts on PAPs livelihood and living conditions. The World Bank has examples of performance monitoring indicators to measure inputs, outputs, and outcomes for RAP activities; involvement of PAPS in the monitoring process; evaluation of the impact of RAP activities over a reasonable period after resettlement and compensation and using the results of RAP impact monitoring to guide subsequent implementation.

Annex 4 Questionnaire for PAPs

PERSON	NAL INFORMATION																	
1	Name of Respond	dent (if n	ot HH))														
2	Permanent	Residen	itial															
	Address / Phone	no (HH)																
3	Sex			Ma	ale								Female					
4	Age	Under 1	L8 []	18	- 25	[]			26 -	- 40	0[]		41-50	[]		Αł	ove 5	0[]
5	Marital status	Sing	le []			Mar	ried		[Divorce] b]		١	Nid	owed]
]												
6	Number of depen	ndents	1		2)			3			4		5	5		>5	
7	Employment		Fishir	ng & re	elate	d S	Sales		Pro	ofe	essionals		Artisaı	าร	Cası	uals	O	thers
8	Average monthly	income	(GHS)	<10	00			100)-500			5	00-1000)		>1	1000	
9	Next of kin (Name	e/Contac	t)															
10	Highest level	of	Primar	∕y J⊦	HS		SH	IS	Post	t S	ec.	Ter	tiary	Ν	lone		Oth	er
	education																	
11	Ethnic group	Akan	Ga-	Adangl	be	E	Ewe		Mole	e D	agomba		Othe	r, s	pecify	•		
12	Religion	Christia	n	M	1uslir	n				1	Tradition	alist			Othe	r		
13	Status of	Fence	b	Found	datio	n (Comp	olete	ed	Ur	ncomple	ted	Partly				Bare la	and
	property	wall		-									Compl				ı	
14	What are your	waste	dispo	sal W	/aste	colle	ector	·s	Dum	ıp (on dump	site	Burn	ne	ar hou	ıse	Othe	r
	options																	
15	Where do you live currently On																	
16	How was the dump disturbing you Smok								Mos	qu	itoes			1,				
17	Were you part of		est to	end du	mpir	ng					ı				1			
18	View of the proje																	
19	When was the lar	-	ed															
20	Who sold the land	d to you										1						
21	What was the sta		e area v	when t	he													
	land was purchas																	
22	How much was pa														1			
23	How much do you	u spend ((month	nly) on:		Nil	l <2	20	20-4	9	50-99	10		300		600)-999	Other
												29	9 !	599)			
	a. Housing (rent))																
	b. Food						_											
	c. Water	\					_											
	d. Energy (Electr						_											
	e. Education (sch	orm,																
	etc)																	
	f. Health/Medic																	
	g. Clothing h. Social even	222																
	outdooring, fe	age,																
	i. Entertainmen	/ina																
		•	ıking,	smok	virig,													
24	womanizing, etc.) Is any member of this household physically challe								if VEC		ndicate t	ا سما						<u> </u>
25	Has any HH mem								, ii LS	, II	indicate t	ypc)						
23	Tias ally fin illetti	DEI SUITE	ing in	uiii a II	וכוונמ	ai hi c	וושוטי	ı I										

Annex 5 RAPs Implementation Schedule and Costs

Since the specific sites and sub-projects are not determined yet, this RPF only refers to an estimated number of PAPs. As cost of resettlement and compensation are based on technical designs and results of scoping, it is impossible to produce a detailed budget for RAP implementation. Upon finalization of a budget, it will be subjected to the World Bank for approval.

An indicative RAP budget outline is found in the table below:

Ass	et Acquisition	Amount or Number	Total Estimated Cost	Agency Responsible			
Lan	d						
Stru	cture						
	os and economic tress						
Con	nmunity infrastructure						
Lan	d Acquisition and Preparation						
Lan	d						
Stru	cture						
Cro	os areas and others						
Con	nmunity infrastructure						
Relo	ocations						
Trai	nsfer of possessions						
Inst	allation costs						
Eco	nomic Rehabilitation						
Trai	ning						
Cap	ital investments						
Tec	nnical assistance						
Moi	nitoring						
Con	tingency						
	Item	Costs	Assumptions				
1.	Compensation for loss of	Hectare	For land acquisition pur	rposes, based on			
	land		Ghanaian average mark	ket cost, or from similar			
			projects				
2.	Compensation for loss of	hectare of farm lost	Includes costs of labor	invested and average			
	crops		of highest price of stap	le food crops and			
			Ghanaian market price				
3.	Compensation for loss of	If applicable		e provided with shared			
	access to pastoralists		access, or alternate rou	,			
			through consultation a				
4.	Compensation for loss of	If applicable	Data provided from the				
	access to fishing resources.		economic study will de				
			of catch, fish products				
5.	Compensation for buildings	If applicable	This compensation may				
	and structures		Costs for basic housing				
			ventilated pit latrines, o	outside kitchen, and			
			storage.				
6.	Compensation for trees	/year/tree	Includes costs of labor	_			
			of highest price of trees (and tree products)				
			and Ghanaian market prices				
7.	Cost of relocation	/household	This cost reflects the m	~			
	assistance/ expenses		transportation allowan	ce			

8.	Cost of restoration of	Assumed to be higher than the GDP/capita in
	individual income	Ghana
9.	Cost of restoration of	These costs reflect the livelihood restoration
	household income	program of the RAP
10.	Cost of training farmers,	This is a mitigation measure involving capacity
	pastoralists and other PAPs	building and involves PAPs/affected
		communities

Annex 6 Public Consultation and Disclosure Plan for RAPs

Public consultations in relation to the RAP should occur at all stages, starting with inception and planning when the potential lands and alternative sites are being considered. A participatory approach must be adopted as an on-going strategy throughout the entire project cycle. Public participation and consultations should take place through individual, group, or community meetings. Additionally, radio programs and other media forms may be used to further disseminate information. PAPs must be consulted in the survey process which should include:

- Public notices where explanations of the sub-project are made;
- RAP implementation of activities; and
- During the monitoring and evaluation process.

Selection of ways to consult, and expand participation by PAPs and other stakeholders should take into consideration the following:

- Literacy levels prevalent in affected communities;
- Ethnicity and cultural aspects; and
- Practical conditions (like distance).

The role of traditional political and cultural leaders, including the community elders, in the participation strategy will be important. The RAP team should ensure that these leaders and local representatives of PAPs are fully involved in designing the public consultation procedures.

- Data collecting Phase
- Implementation Phase
- Monitoring and Evaluation Phase

Data Collecting Phase

Consultations during preparation, in particular, the collection of background information and the social survey or social assessment, are critical for successful data collection. The levels of consultation should vary from households to community groups, based on the particular context of the sub-project(s). The RAP team will design the questionnaires, but it will be the households, organizations, and institutions that will validate their effectiveness through feedback. Focus group meetings with women, farmers" associations, individuals who own farms, fishing boats, etc., as well as primary and/or secondary schools, health centres, and agricultural cooperative unions are usually good sources for establishing the community baseline situation.

Implementation Phase

During implementation, PAPs should be informed about their rights and options. The grievance mechanism should continue to operate and all grievances should be recorded. The participation of local leaders and PAPs in disseminating information and resolving disputes will be important once RAP implementation starts. A dynamic participatory approach should involve PAPs in decision making about livelihood and community development programs.

Monitoring and Evaluation Phase PAPs representatives should participate in the sub-project workshops at mid-term and at the end of RAP implementation. Prior to closing the RAP, PAPs will participate in a feedback survey as part of the RAP"s independent impact evaluation exercise.

Annex 7 Monitoring and Evaluation of Impacts

The RAP team of the consultant will be expected to develop and implement a Monitoring and Evaluation Plan (MEP) in the RAP. The main indicators that the MEP will measure include:

- Impacts on affected individuals, households, and communities to be maintained at their pre-project standard of living or better;
- Improvement of communities affected by the project; and
- Management of disputes or conflicts.

In order to measure these impacts, the RAP identifies the specific indicators to be monitored; define how they will be measured on a regular basis; and identify key monitoring milestones (e.g., at mid-point of the RAP implementation process). The PIU will establish a reporting system for the sub-project RAP that will:

- Provide timely information to the project about all resettlement and compensation issues arising as a result of RAP related activities;
- Identify any grievances, especially those that have not yet been resolved at the local level and which may require resolution at the higher levels;
- Document completion of project resettlement and compensation that are still pending, including for all permanent and temporary losses;
- Evaluate whether all PAPs have been compensated in accordance with the requirements of this RPF and that, PAPs have better living conditions and livelihoods; and
- Identify mitigation measures, as necessity, when there are significant changes in the indicators that
 may require strategic interventions (e.g., vulnerable groups are not receiving sufficient support from
 the sub-project.

A variety of indicators should be used to measure these impacts. These should include, among others, a comparison of income levels before-and-after; access to livelihoods and employment; changes in standards of housing and living conditions; and improvements in level of participation in sub-project activities. There are measures to verify these basic indicators, such as number of children in-school (compared to pre-RAP levels); changes in health standards; and changes in access to markets or roads, all of which may reflect overall improvements in standards of living. The following methods should be used for measuring impacts:

- Questionnaires with data stored in a database for comparative analysis (before-after and withwithout);
- Documentation and recording of PAPs situation, including subsequent uses of assets/improvements;
- Relocation/resettlement and Compensation Reports, including status of land impacts; percentage of
 individuals selecting cash or a combination of cash and in-kind compensation; proposed use of
 payments;
- Number of grievances and time and quality of resolution; and
- Ability of individuals and families to re-establish their pre-resettlement activities, in terms of improvements in land and crop production, and/or presence of other alternative incomes.

The RAP team together with local officials, should maintain basic information on all physical or economic displacement arising from the sub-project. This should include an update, for example on a quarterly basis, of the following:

- Number of sub-projects requiring preparation of a RAP;
- Number of households and individuals physically or economically displaced by each subproject;
- Length of time from sub-project identification to payment of compensation to PAPs;
- Timing of compensation in relation to commencement of physical works;
- Amount of compensation paid to each PAP household (if in cash), or the nature of compensation (if in kind);

- Number of people raising grievances in relation to each sub-project and;
- Number of unresolved grievances.

The PIU team will review these statistics to determine whether the RAP implementation arrangements, as defined in this RPF, are effective in addressing RAP related issues. Financial records will be maintained by the sub-projects and PIU to determine the final cost of RAP implementation. The following indicators (in Table below) can be used to monitor implementation of the RAP.

Indicators of RAP Impacts

Monitoring (of Issues)	Evaluation (of Impacts)
Number of compensation (and valuation) not	Changes (+/-) PAPs conditions during transition
completed	process
Number of sub-projects unable to settle	Changes (+/-) in PAPs income and livelihood
compensation after two years	conditions
Number of grievances filed	Quality of grievances or disputes resolved
	(qualitative)
Number of livelihood restoration programs	Changes (+/-) in affected households income
completed	levels
Pre project production versus present production	Equal or improved production per affected
levels (crops for crops, land for land)	household/homestead

Socio-Economic Assessment

The purpose of socio-economic assessment, which is part of the evaluation process, is to ensure that PAPs livelihoods and wellbeing have improved, and have not worsened as a result of the sub-project. An assessment should be undertaken on payment of compensation, restoration of income and livelihoods, and provision of sufficient community development activities. Monitoring of living standards will continue after resettlement. In addition, a reasonable period (usually two years) must be established for monitoring post-resettlement impacts. A number of indicators should be used for measuring status of affected people. Most socio-economic assessments use surveys, focus group meetings, and participatory appraisal tools for measuring impacts. A separate assessment must be made for each sub-project. Additionally, since a baseline household survey was completed during RAP preparation, the end-RAP assessment can measure changes from this baseline.

Annex 8: Sample Grievance Resolution Form

Grievance Resolution Form							
No. 15 (5) (Completely							
Name (Filer of Complaint):		/DADs ID num					
ID Number: (PAPs ID number) Contact Information: (Village; mobile phone)							
Nature of Grievance or Complaint:							
Dili	1. 1. 1. 1.						
Date	Individuals		Summary of Discussion				
Signature:		Date:					
Signed (Filer of Complaint):							
Name of Person Filing Complain	 nt:		(if different from Filer)				
Position or Relationship to Filer							
Review/Resolution							
Date of Conciliation Session				_ Was	Filer		
Present? YES	NO VEC		NO				
Was field verification of compla	int conducted? YES		NO				
Findings of field investigation:							
Summary of Conciliation Sessio	n Discussion:						
lssues							
Was agreement reached on the	a Saguaria	No					
If agreement was reached, deta							
If agreement was not reached,			w:				
			-				
Signed (Conciliator):		Signed	l (Filer):				
		5.8.100					
Signed: Independent Observ							
Independent Observ	/er						
Date:							

Annex 9: Framework for the Census of Affected Assets and Affected People

Reference:				
Location:	Region:	District	Village:	
GPS Coordinates:				
				
Surface:				
Description of soil:				
Crops				
Perennial Crop	1		Owner:	
	2		Owner:	
Annual Crops:	1		Owner:	
	2		Owner:	
Trees	1		Owner:	
	2		Owner:	
Structures:	Channels:	Owner:		
Anti-erosive structures:		_ Owner: Buildings:	Owner:	
Users:		_		
User 1: Surface used:				
User 2: Surface used:				
User 3: Surface used:				
User 4: Surface used:	Regim	e of tenure:		
Valuation proposal (det				
Crops:				
Structures:				
	_			
Proposed distribution of				
User 1:				
User 2:				
User 3:				
User 4:				
Date: Prepar	red By:			
	A	AFFECTED BUILDING F	ORM	
Reference:	_			
		District:	Village:	_
Location:	Region:			
Location:	Region:		Village: er:	

AFFECTED PLOT OR LAND FORM

Owner: Address:				
Passwintian.				
Description: Permanent	Non normanant			
	Number		of	rooms:
Walls: Material	Number			1001113.
Roof: Material				
Floor:Material				
Annexes outside: Latrine:				
Others Additional features:			_	
			•	
Permanently Inhabited: By:	Regime of occu	oation:		
Periodically Inhabited: By:				
,	<u> </u>			
Valuation proposal (details of calcula	tion on attached sheet):		
Proposed distribution of compensati	on:			
User 1:				
User 2:				
User 3:				
User 4:				
Date: Prepared By	/:			
Trepared by	·		_	
	AFFECTED HOUSEHO	OLD FORM		
Household Reference:				
Household Reference: Location:Region:	District:	Village: _		
Location:Region:	District:	Village: _		
Location:Region: Reference of Affected Asset:			·	
Location:Region:				
Reference of Affected Asset: Type: Structure				
Reference of Affected Asset: Type: Structure Reference of Affected Asset Sheet:	Plot Crop			
Reference of Affected Asset: Type: Structure	Plot Crop			
Location:Region: Reference of Affected Asset: Type:Structure Reference of Affected Asset Sheet: Location:Zone:	Plot Crop			
Location:Region: Reference of Affected Asset: Type:Structure Reference of Affected Asset Sheet: Location:Zone: Household Information:	Plot Crop Region:			
Location:Region: Reference of Affected Asset: Type:Structure Reference of Affected Asset Sheet: Location:Zone: Household Information: Head of Household: Name:	Plot Crop Region: _ Age: Sex:			
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Number	Name	Relationship Household head	with	Sex	Age
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Assessment	or the impact of	the Loss of the Affected Asset C	л пои	senoiu s	Liveilliood
	•	Resettlement Package			
Household's	Wishes:				
Proposed Pa	ckage:				
Proposed Liv	elihood Restora	tion Package:			
Household's	Wishes:				
Proposed Pa	ckage:				
Number:	Level:				
	Level:				
Date:	Prepared	d By:			

Annex 10 Social Screening Checklist

SOCIAL SCREENING CHECKLIST				
	Type of Projects (Requiring Land)	Land Take Features	Screening Guide	
1)	Construction of Ground Stations	Land area < 10 Acre	ARAP	
2)	Construction of Weather Stations	And with PAPs < 200	AIVAI	
3)	Disposal sites for unwholesome food produce in transit	Land area < 10 Acres And with PAPs < 200	ARAP	
4)	Setting up seeds, fertilizers, pesticides, etc. industries	Land area < 10 Acres And with PAPs < 200	ARAP	
5)	Conversion of other land use types to food crop agriculture	Land area > 100 Acres Or with PAPs > 200	RAP	
6)	Rehabilitation of Asuansi Agriculture Centre			
7)	Rehabilitation of Mampong Agriculture Centre	Land area < 10 Acres		
8)	Upgrading of Kpeve Agriculture Station	And with PAPs < 200	ARAP	
9)	Upgrading of Wenchi Agriculture Station	Alla Will FALS \ 200		
10)	Upgrading of Babile Agriculture Station			
11)	Watershed restoration	Land area < 20 Acres	ARAP	
		And with PAPs < 200		
12)	Kpong Irrigation Scheme	Land area > 100 Acres	RAP	
13)	Kpong Left Bank Irrigation Project	Or with PAPs > 200	IVAF	
14)	Rehabilitation of 8 small irrigation dams			
15)	Reclamation of Wheta Irrigation Scheme	Land area < 20 Acres	ARAP	
16)	Reclamation of Tanoso Irrigation Scheme	And with PAPs < 200	ARAP	
17)	Reclamation of Techiman Irrigation Scheme			
18)	Development of 13,000ha grazing reserve/corridor	Land area > 100 Acres Or with PAPs > 200	RAP	

Annex 11 Evidence of Consultation

Women in Agriculture Development

Engagement Tool: Voice call	Date: 23/03/2021		Time: 7:00pm
Attendance:		Consultant Team:	
Paulina Addy (0244422712), Director		Kojo Amoyaw-Osei	

Engagement Issues

The engagement covered the following 6 key areas:

- 1) Possible gender discrimination from introduction of new technology
- 2) Gender based violence and other forms of abuse within the value chain
- 3) Remedies for gender-based violence and other forms of abuse
- 4) Other occupation health issues faced by women
- 5) Unfair treatment during land acquisition
- 6) Forced Labour

Discussions/Suggestions and Comments

1) Possible gender discrimination from introduction of new technology

Discrimination is unlikely, both women and man are engage in the food processing activities with majority being women. Where the women are illiterates, they can sometimes be cheated by the men they work with who manage their finances or rent out machinery to them.

2) Gender based violence and other forms of abuse within the value chain

Traders experience this from drivers when vehicles breakdown on the road. These women are sometimes exploited sexually or monies are extorted from them.

3) Remedies for gender-based violence and other forms of abuse

- The use of mobile money for financial transactions to prevent theft or financial exploitation and for keeping records
- Use of mobile phones to communicate their location during transits
- Use of tracking system by some trader associations so that in the event of vehicle breakdowns an emergency team can be used to follow-up on women

4) Other occupation health issues faced by women

- Snake bites in the bush when farming
- Cutlas wounds which are usually not treated
- Exposure to heavy smoke from oil extraction process

2) Some interventions/ mitigations recommended

5) Unfair treatment during land acquisition

Women who work on their husband's family land may not receive any compensation during resettlement. Provision is usually not made for the communal benefit of some economic trees that women relay on especially in Northern Ghana

6) Forced labour

This is not an issues. As part of community development projects, the women may willing offer their services for free.

Environmental Protection Agency

Engagement Tool: Voice call	Date: 24/03/2021		Time: 7:00am
Attendance: Cor		Consultant Team:	
Joseph Edmond (0501301396)	loseph Edmond (0501301396), Director Kojo Amoyaw-Osei		
Engagement Issues			
The engagement covered the following 3 key areas:			
Key E&S issues experience in similar past programs			

3) Roles the EPA has played in similar programs

Discussions/Suggestions and Comments

1) Key E&S issues experience in similar past programs

- Mismanaged pesticides by farmers
- Disposal of chemical containers into the environment
- Excessive abstraction of water for irrigation causing a challenge on the ecosystem of an area
- Washing sprayers directly into water bodies
- Disposal challengers for asbestos from rehabilitation of old training centres
- Disposal challengers for hazardous and lab waste from laboratories that were built
- Cumulative impact of several farming operations within an area

2) Some interventions/ mitigations recommended in past programs

- Developing comprehensive waste management plans
- Performing a proper environmental assessment so all possible impacts and risks are known
- Use of an incinerator for Lab waste
- Sensitization of farmers on consequences of their actions on the environment and their health

3) Roles the EPA has played in similar programs

- Building capacity on proper use of pesticides, weedicides etc.
- Sensitization of farmers and other personnel in the value chain on effects of some negative activities on the environment
- Screening farms to determine the level of assessment required
- A specialized registration and screening system can be developed in collaboration with the EPA so that all projects under the program can be fast-tracked, so they don't go through a long process

Centre for Remote Sensing and Geographic Information Services

Engagement Tool: Virtual meeting	Date: 24/03/2021		Time: 10:00am
Attendance:		Consultant Team:	
Mr. Foster Mensah (0243352468), Executive Director		Kojo Amoyaw-O	sei
Engagement Issues			

The engagement covered the following 4 key areas:

- 1) Type of EEE that would be procured
- 2) How end-of-life EEE is currently managed
- 3) Land required for activities under the program
- 4) Quantities of end-of-life EEE generated

Discussions/Suggestions and Comments

1) Type of EEE that would be procured

- 1 Printer for printing maps
- 5 GPS receivers
- 10 Computers (workstations)

2) How end-of-life EEE is currently managed

They are kept in a storeroom and dumped or donated to schools

3) Land required for activities under the program

Our existing facility would be used so there would be no land acquired

4) Quantities of end-of-life EEE generated

Very little e-waste is generated because of how well they are maintained

Directorate of Crops Services

Engagement Tool: Voice call	Date: 24/03/2021		Time: 12:00noon
Attendance:		Consultant	Team:
Dr. Solomon Gyan Ansah (0208133029), Head of Seed Unit		Kojo Amoya	aw-Osei

Engagement Issues

The engagement covered the following 6 key areas:

- 1) Activities involved in rehabilitation of stations and associated E&S issues
- 2) Other Key E&S issues
- 3) Current environmental management system used
- 4) Some interventions/ mitigations recommended
- 5) Impact of COVID on production
- 6) Child labour issues

Discussions/Suggestions and Comments

1) Activities involved in rehabilitation of stations and associated E&S issues

Lands have already been acquired with all the necessary facilities procured. Nonetheless, there will be some refurbishment (painting, woodwork, changing old installations) since the facilities have not been in use for some period of time

2) Other Key E&S issues

Use of pesticides by farmers

Land preparation activities by farmers causing erosion

3) Current environmental management system used

We use only an Integrated Pest Management System (IPM) to manage and control pest since our environmental impact is limited. For the farmers on the on the other hand, pesticides use could pose a risk to nearby water bodies if pesticides are not managed properly. Waste generation is also not an issue during production, but for those involved in the processing it is a major issue.

4) Some interventions/ mitigations recommended

Training and monitoring on the use of pesticides

Training farms in land preparation activities to prevent erosion

Encourage organic farming

Training farmers on how to use tractors by Agricultural Engineering Services Directorate

5) Impact of COVID on production

Covid affecting the implementation of the Planting for Food and Jobs during the lockdown as seeds were not able to get to the farmers on time. Some farmers were also afraid to go to their farms

6) Child labour issues

Child labour is not a major issue except for cocoa growing areas, nonetheless the provision of appropriate equipment like weeders which are not too sophisticated to use can help prevent the situation of parents using their children as labour since a lot more work can be done by fewer people using these farming equipment.

Meteorological Services Authority

Engagement Tool: Virtual meeting Date: 25/03/2021	Time: 3:00 pm
Attendance:	Consultant Team:
Francisca Martey (0244130093), Deputy Director, Research and	Kwabena Kwakye Mamphey
Applied Meteorology	

Engagement Issues

The engagement covered the following 4 key areas:

- 1) Land required for setting up ground station or weather station acquisition
- Likelihood of resettlement when acquiring land for stations
- 3) Current management practice for end-of-life EEE
- 4) Quantities of end-of-life EEE generated

Discussions/Suggestions and Comments

1) Land required for setting up ground station or weather station acquisition

Land for setting up stations are mostly acquired from chiefs.

2) Likelihood of resettlement when acquiring land for stations

These stations usually require a smaller area and will not affect anyone when the land is acquired.

3) Current management practice for end-of-life EEE

E-waste from all meteo stations is transported to the head office in Accra where they are later auctioned.

4) Quantities of end-of-life EEE generated

The equipment used are regularly maintained preventing frequent breakdown. Just a few e-waste is generated yearly.

National Food Buffer Stock Company

Engagement Tool: Voice call	Date: 24/03/2021	Time: 11:30am	
Attendance:			Consultant Team:
Emmanuel J.K. Arthur (0244669709), Senior Manager – Corporate		e	Kojo Amoyaw-Osei
Affairs			

Engagement Issues

The engagement covered the following 7 key areas:

- 1) Land acquisition for expansion of storage facilities
- 2) Challenges faced by the company
- 3) Food haulage truck accidents
- 4) Measures to prevent robbery attacks
- 5) Breakdown of trucks in transit
- 6) Likelihood of food becoming unwholesome in transit
- 7) Disposal of expired food

Discussions/Suggestions and Comments

1) Land acquisition for expansion of storage facilities

The government, under the 1 district 1 warehouse program has promised to handover some of these warehouses so they can be used as storage facilities. We are suppose to take over the assets of Ghana Food Distribution so when that happens, we would have access to their warehouses. Some of these warehouses have been encroached by churches and other businesses so there might be a challenge getting control of all these properties. If all these are not enough then we would have to look for land and purchase especially in Kumasi where we would want to have enough storage in place to cater for the whole region.

2) Challenges faced by the company

Procurement of refrigerators and other equipment so we can store perishable goods

3) Food haulage truck accidents

These rarely happen as these truck drivers are very experienced. But there are other incidences (3 last year) like attacks from armed man. The likely areas are Northern, Savannah and Upper West.

4) Measures to prevent robbery attacks

- The use of drones to deliver food could be explore even though I am assuming food might be a bit heavier compared to medicine.
- Strategic siting of storage facilities to reduce travel time of delivery trucks. Like the STC or commercial buses we could explore the use of armed police officer to accompany the trucks

5) Breakdown of trucks in transit

Trucks break down but this is not often. The delivery services are outsourced to third party. Trucks from other countries like Mali and Burkina Faso don't breakdown when they enter the country to pick up food because

they are in very good shape. It is standard operating procedure for transport companies to arrange for vehicles that go out to pick food in certain quantities to have another vehicle on stand-by in case of a breakdown so it can be dispatched to finish the trip. We have not had a situation where food has gone bad due to a vehicular accident.

6) Likelihood of food becoming unwholesome in transit

The food is transported with the expiry date and shelf life in mind, so this does not happen. We also cover them well especially grains like rice to protect them from the weather elements

7) Disposal of expired food

These are destroyed by crushing and incineration in collaboration with the Food and Drugs Authority and the Ghana Standards Board so they cannot be used by anyone

DFSA

Engagement Tool: Virtual meeting	Date: 25/03/2021		Time: 9:30am
Attendance:		Consultant Tea	im:
Dr. Ruby Asmah (0205424161), Head of Department		Kojo Amoyaw-	Osei

Engagement Issues

The engagement covered the following 4 key areas:

- 1) E&S issues related to integrated aquaculture and agriculture system
- 2) Land-take issues in integrated aquaculture and agriculture system
- 3) Negative impact of cage aquaculture
- 4) Recommendation/mitigations for conflict with local fishermen

Discussions/Suggestions and Comments

1) E&S issues related to integrated aquaculture and agriculture system

E&S issues are significantly reduced for instance, when rice farming and fish cultivation is done together the waste from the fish enrich the water and soil for the rice plant. The fish can also feed on some of the insects that can affect the rice. There is a government policy in place which directs that 5% of all irrigated land or irrigation systems should be dedicated to aquaculture but this has not been enforced. This system also improves water use since water from one system is reused in the other system. Fertilizer use is also reduced because of the nutrient rich water from the aquaculture system feed to crop farms.

2) Land-take issues in integrated aquaculture and agriculture system

Usually, additional land is not required

3) Negative impact of cage aquaculture

Conflict with existing fishermen because these fishermen may not have access to an area where they ones fished. For large commercial cage aquaculture, because of the feed put in the water, it attracts the fish from the wild who gather around the cages but fishermen in the area would not be allowed to catch. This might not apply to the program since this is meant for the community and is not for large commercial purpose

4) Recommendation/mitigations for conflict with local fishermen

The fear of the farmers is that, when fishermen are allowed close to the cages, they will throw their nets into the cages to steal their fish. This situation has been managed with controlled catch, were fishermen are given a particular time to come close to the cage to fish but under supervision.

Northern Development Authority

Engagement Tool: Voice call Date: 24/03/2021 Time: 3:00pm							
Attendance: Consultant Team:							
Dr Emmanuel Abeere-Inga (0548314461), Director, Infrastructure, Land and Kojo Amoyaw-Ose							
Natural Resources							
Engagement Issues							

The engagement covered the following 3 key areas:

- 1) Sensitive areas to consider under the program
- 2) The role the NDA will play in protecting these sites
- 3) Likelihood of relocation of farms or settlements

Discussions/Suggestions and Comments

1) Sensitive areas to consider under the program

We have marked out these areas in a map through a survey and would be happy to share with you

2) The role the NDA will play in protecting these sites

We will be involved in the monitoring of the sites to ensure that no development takes place there

3) Likelihood of relocation of farms or settlements

Within our area of jurisdiction, no intervention would require relocation of settlements or farms

Ghana Irrigation Development Authority

Engagement Tool: Voice Call Date: 25/03/2021			Time: 1:30pm	
Attendance:		Consultant Team:		
Ing. Richard Boateng (0244662	243), Director	Kwabena	a Kwakye Mamphey	

Engagement Issues

The engagement covered the following 10 key areas:

- 1) Role of the Agency in irrigation projects
- 2) Responsibility for selecting the locations for irrigation projects
- 3) Average land area of irrigation projects
- 4) Likely land use for potential irrigation sites
- 5) Population in an area likely to be affected by irrigation project
- 6) Displacement of people from rehabilitation of the 8 small irrigation dams
- 7) Existing users/dependents of the 3 irrigation schemes
- 8) Effects of reclamation of the 3 irrigation schemes (Wheta, Tanoso and Techiman) on existing users/dependents
- 9) Electronic waste management during operation phase
- **10)** Capacity to participate in environmental impact assessment

Discussions/Suggestions and Comments

1) Role of the Agency in irrigation projects

The Agency has a project development department that conducts survey and mapping for the project to design the irrigation system taking into consideration the topography and hydrology. We also model the project and give the cost the project and prepare a BOQ for the project. It also monitors and supervise construction of irrigation projects.

2) Responsibility for selecting the locations for irrigation projects

GIDA is responsible for selecting locations for irrigation projects. The selected areas are located in the Volta, Upper East, Ashanti, Savannah and Brong-Ahafo Regions. Some of these sites have been studied and the drawings for the irrigation system has been done. Some have also been constructed but do no have the irrigable areas in place.

3) Average land area of irrigation projects

The dam area varies per project. For the existing projects, the existing irrigable lands are 100 ha or more. A hectre is allocated to each farm.

4) Likely land use for potential irrigation sites

Some of the lands are being used as farms. Most of the lands in the proposed areas belong to the chiefs and families. Due to the benefits the dam, the lands in Northern Region are going to be given out for free for the

5) Population in an area likely to be affected by irrigation project

Some dams have already been constructed but the irrigable areas have not yet been developed. For such areas, detailed studies will have to be conducted to determine weather the project will affect some farms or individuals when the irrigable areas are constructed.

6) Displacement of people from rehabilitation of the 8 small irrigation dams

Currently, some of the reservoirs have their irrigable systems developed and there has been not been any displacement. The reservoirs with their irrigable systems yet to be developed will require a detailed study to identify if it will cause displacement of properties or persons.

7) Effects of reclamation of the 3 irrigation schemes (Wheta, Tanoso and Techiman) on existing users/dependents

The increase of the height of the dams may affect some nearby communities and farm ways due to the increase in the throw back of the reservoir. It is not yet known if the height of these dams will be increased or

8) Existing users/dependents of the 3 irrigation schemes

Wheta, and Techima irrigation schemes are currently in operation. Tanoso irrigation scheme is not operating fully due to some technical challenges.

9) Electronic waste management during the operation phase

Electronic waste generated will be transported to the head-office storehouse where all electronic waste from all irrigation facilities is kept and later auctioned.

10) Capacity to participate in environmental impact assessment

The institution partakes in environmental impact assessment for irrigation projects. It also has a department that prepare environmental management plans for irrigations projects.

Food Research Institute

Engagement Tool: Voice call	Date: 24/03/2021		Time: 4:20pm	
Attendance:		Consultant Team:		
Prof. Charles Tortoe (024324180	1), Ag. Director	Kojo Amoyaw-Osei		
Engagement Issues				
The engagement covered the fo	llowing 2 kev areas:			

- 1) Main E&S issues related to our activities
- 2) Best practices being utilized to manage waste

Discussions/Suggestions and Comments

1) Main E&S issues related to our activities

- Managing the waste from the processing of maize, rice and cassava
- Effluent from the ethanol production from cassava and other processing activities
- Waste from packaging

2) Best practices being utilized to manage waste

- Milling husk and spreading on the farms as manure
- Using maize husk as packaging for food e.g., kenkey
- Harvest starch out of the effluent from cassava processing and recycling the left over water
- Planning the procurement of packaging material so that there is no waste

Institute of Environment and Sanitation Studies

Engagement Tool: Voice call	Date: 25/03/2021		Time: 8:00am
Attendance:	Consultant Team:		
Dr. Benjamin Ofori (0208134292), Senior	Kojo Amoyaw-O	sei	

Engagement Issues

The engagement covered the following 5 key areas:

- 1) Current challenges of the Volta Basin Area
- 2) E&S issues associated with irrigation, aquaculture and other activities under the program
- 3) Mitigation/recommendation
- 4) Average land take by irrigations projects
- 5) Typical land use of areas along the Volta for irrigation

Discussions/Suggestions and Comments

1) Current challenges of the Volta Basin Area

Monitoring of the buffer zone has been difficult in the past

Emergence of market centres along the lake

Ckimate changing affecting the raining seasons

2) E&S issues associated with irrigation, aquaculture and other activities under the program

Widespread application of agrochemicals

Encroachment into the Volta Lake buffer zone

Siltation is also a potential issue with the increase in development along the lake

3) Mitigation/recommendation

Encourage drawing of water onto farms which will be about 50-100m away from the buffer zone so that farms don't situate their farms at the banks of the lake

4) Average land take by irrigations projects

That will be difficult to say. It will depend largely on the amount of water storage

5) Typical land use of areas along the Volta for irrigation

Southern area – farming (pepper, onion & watermelon)

Middlebelt – farming (yams, maize, beans & groundnut)

Huge portions are unused

Directorate of Agricultural Extension Services

Engagement Tool: Virtual Meeting	nt Tool: Virtual Meeting Date: 25/0		Time: 11:00am
Attendance:	Consultant Team:		
Mr. Paul Siameh (0244641260), Director	Kojo Amoyav	v-Osei	
Shaibu Muniru – M&E Officer			

Engagement Issues

The engagement covered the following 4 key areas:

- 1) E&S issues expansion of farms and other services under the program
- 2) Child labour and issues affecting women
- 3) Role of extension services
- 4) Effects of COVID on the program

Discussions/Suggestions and Comments

1) E&S issues expansion of farms and other services under the program

• For large scale poultry, effective disposal of droppings. If not disposed of properly can end up in water bodies and cause eutrophication.

- For construction of the irrigation dam, earth material or gravel maybe transported from another community and this could change the environment or topography of that area. These dug holes are not refilled, and provision is not made to revegetate those areas
- Siting of irrigation dams without proper consultations with the community
- Protection of the catchment area of an irrigation dam especially for small dams. Legally secure catchment area to prevent farmers from farming there and also to prevent siltation
- Applying agrochemical and other chemicals without using PPE

2) Child labour and issues affecting women

Child labour issues have always been prominent in the agriculture sector e.g., Use of children in animal husbandry, use of children to scare off birds in rice farms. In cassava process, women and children are exposed to sharp objects like cutlases, those who are involved in the frying are exposed to high temperature sometimes with their babies on their backs. Children are also put in dangerous situations in the fishing industry.

3) Role of extension services

On the project level assessment, it is necessary for extension officers to be consulted since they deal directly with the farmers. Their capacity will have to be built so they are in the best place possible to deliver adequate guidance to the farmers on all the new interventions as a result of the program.

4) Effects of COVID on the program

More reliance on ICT, audio and audiovisual means to reach farmers rather than the traditional means of visiting farms so the contact time with farmers can be reduced

Animal Production Directorate

Engagement Tool: Virtual meeting	Date: 25/03/2021		Time: 10:00am		
Attendance:			Consultant Team		
Edwin Bekoe (0274747847), Director, Anim	Kojo Amoyaw-Osei				
Franklin Yeboah, Deputy Director					
Dr. Abdul Razak, Deputy Director					

Engagement Issues

The engagement covered the following 7 key areas:

- 1) Nature of grazing reserves and mobility corridors
- 2) Land acquisition for grazing reserves and mobility corridors
- 3) Current land use of grazing areas
- 4) Potential conflict with Fulani herdsmen
- 5) E&S issues at the grazing area
- 6) E&S issues for poultry production
- 7) Mitigation/recommendation

Discussions/Suggestions and Comments

1) Nature of grazing reserves and mobility corridors

These will be done in the following districts: Fanteakwa (Eastern), Kintampo North (Bono East), Sekyere Afram plains and Sekyere Kumawu (Ashanti) and Adaklo (Volta)

The grazing reserves vary in perimeter:

- Adaklo perimeter of 9km, 11km & 47km (15,000ha in total, can house 11000 cattle for 4 months)
- Fanteakwa perimeter of 43km (5,000ha, which can house 10,000 cattle for 4 months)
- Kintampo North perimeter of 150km (100,00ha, which can provide 1000Mg of feed for 128,000 cattle)
- Sekyere perimeter of 89km (32,000ha which can house 150,000 cattle for 4 months)

Mobility corridors are 100m wide with varying lengths

2) Land acquisition for grazing reserves and mobility corridors

Feasibility studies have been conducted so these lands have been demarcated. The Chief and people have been consulted and have agreed for the project to take place. Compensation will be arranged by government

when the project gets to that stage. As much as possible the corridors will be diverted from settlement so that relocation is prevented

3) Current land use of grazing areas

Some are being used as farms and some have farm settlements

4) Potential conflict with Fulani herdsmen

Because of conflict between crop farmers, migrating Fulani and resident Fulani, the grazing areas are being developed so it can eliminate these clashes

5) E&S issues at the grazing area

- Dropping of cattle and small ruminants can be an issue but they can be used as manure for the soil
- Pile up of dropping at sleeping areas of the animals
- Overgrazing can be an issue if the carrying capacity of the grazing reserve is not adhered to

6) E&S issues for poultry production

- Cleaning of the poultry house will produce some waste water
- Administering drugs to the poultry could result in overdose
- Droppings from poultry
- Feathers and waste from the gut can sometimes be difficult to dispose

7) Mitigation/recommendation

- Have a rendering plant so that guts and other parts can be processed
- Selling of poultry manure to crop farmers
- Capacity building on handling of E&S issues

Plant Protection & Regulatory Services Directorate

Engagement Tool: Voice call Date: 29/03/2021		Time: 3:00pm	
Attendance	Consultant Team		
Eric Dzimado (0243413991), Senior Agricult	Kojo Amoyaw-	Osei	

Engagement Issues

The engagement covered the following 4 key areas:

- 1) Environmental safeguards activities we have been involved in on previous programs
- 2) Safeguards activities under the FSRP2
- 3) Treats to food production
- 4) Impact of Covid

Discussions/Suggestions and Comments

1) Environmental safeguards activities we have been involved in on previous programs

- Management of pest and diseases on the farms
- Providing technical backstopping and training on Integrated Pest Management System (IPMS) and safe use of pesticide Management of empty pesticides containers
- Sensitization of farmers on all these various issues
- Developing manuals on pesticides safe use
- Creating documentaries on the safe use

2) Safeguards activities under the FSRP2

- Strengthen phyto sanitary systems across the country
- Establishing early warning system for Fall Army worm
- Strengthen the seed certification value chain (increased productivity and increased yield)
- Fertilizer quality control (ensure integrity of product/quality)

3) Treats to food production

- Fall army worms is a big treat to food production
- Indiscriminate use of pesticides and storage in inappropriate places

4) Impact of Covid

- Reduction in the labour force of the office at a particular time because of the shift system being implemented. This has impacted our delivery of service to farmers.
- With the new directives from the presidency, we will also not be able to conduct train the way we used to which was gathering everyone at a particular location.

Annex 12 Sample Grievance Log (for non-SEA/SH complaints)

Case no.	Date Claim Received	Name of Person Receiving Complaint	Where/how the complaint was received	Name & contact details of complainant (if known)	Type of Claim Add content of the claim (include all grievances, suggestions, inquiries) *please note if the complaint was related to the project. If not, note it here and refer complainant to PIU for further processing	Was Receipt of Complaint Acknowledged to the Complainant? (Y/N – if yes, include date, method of communication & by whom)	Expected Decision Date	Decision Outcome (include names of participants and date of decision)	Was Decision communicated to complainant? Y/N If yes, state when, by whom and via what method of communication	Was the complainant satisfied with the decision? Y/N State the decision. If no, explain why and if known, will pursue appeals procedure	Any follow up action (and by whom, by what date)?