



Republic of Ghana

MINISTRY OF LANDS AND NATURAL RESOURCES

**FOREST INVESTMENT PROGRAMME
(FIP)- ENHANCING NATURAL
FORESTS AND AGROFOREST
LANDSCAPES**

ADDITIONAL FINANCING

**Updated Environmental and
Social Management Framework
(ESMF)**

January 2019



LIST OF ABBREVIATIONS

AfDB	African Development Bank
ASGM	Association of Small Scale Gold Miners
CFC	Collaborative Forest Committee
CIF	Climate Investment Funds
COCOBOD	Ghana Cocoa Board
COCOSHE	Cocoa Coffee and Shea-nut Farmers Association
CREMA	Community Resource Management Area
CRIG	Cocoa Research Institute of Ghana
CSIR	Council for Scientific and Industrial Research
CSOs	Civil Society Organisation(s)
DAs	District Assemblies
DGM	Dedicated Grant Mechanism for Indigenous People and Local Communities
EHS	Environmental Health and Safety
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency, Ghana
ESIA	Environmental and Social Impact Assessment
ELCIR+	Engaging Local Communities in REDD+
ESMP	Environmental and Social Management Plan
ESMF	Environmental and Social Management Framework
EU	European Union
FAO	Food and Agriculture Organisation
FAWAG	Furniture and Wood Workers Association of Ghana
FASDEP	Food and Agricultural Sector Development Policy
FC	Forestry Commission
FCPF	Forest Carbon Partnership Facility
FDMP	Forest Development Master Plan
FIP	Forest Investment Programme
FLEGT	Forest Law Enforcement, Governance and Trade
FORIG	Forestry Research Institute of Ghana
FP	Focal Point
FSD	Forest Services Division
FWP	Forest and Wildlife Policy
GFIP	Ghana Forest Investment Programme
GFTN	Global Forest and Trade Network (WB/WWF)
GHG	Green House Gas
GIS	Global Information System
GoG	Government of Ghana
GNFS	Ghana National Fire Service
GPRS I	Ghana Poverty Reduction Strategy
GPRS II	Growth and Poverty Reduction Strategy
GSBA	Globally Significant Biodiversity Areas
GTA	Ghana Timber Association
GTMO	Ghana Timber Millers Organisation

HFZ	High Forest Zone
IFC	International Finance Corporation
IUCN	International Union for Conservation of Nature
LI	Legislative Instrument
LVD	Land Valuation Division
LULUCF	Land use, Land Use Change and Forestry
MC	Minerals Commission
M&E	Monitoring and Evaluation
MESTI	Ministry of Environment Science Technology and Innovation
METASIP	Medium-Term Agriculture Sector Investment Plan
MLGRD	Ministry of Local Government and Rural Development
MLNR	Ministry of Lands and Natural Resources
MMIP	Multilateral Mining Integrated Programme
MMDA	Metropolitan, Municipal and District Assemblies
MoFEP	Ministry of Finance and Economic Planning
MoFA	Ministry of Food and Agriculture
MRV	Monitoring Reporting and Verification
NCRC	Nature Conservation Research Center
NGOs	Non-Governmental Organisations
NREG	Natural Resources and Environmental Governance
NFF	National Forest Forum
NRCD	National Redemption Council Decree
NTFPs	Non-Timber Forest Products
NTSC	National Tree Seed Centre
OASL	Office of the Administrator of Stool Lands
PF	Process Framework
QCD	Quality Control Division
REDD	Reducing Emissions from Deforestation and forest Degradation
REDD+	REDD plus sustainable management of forest, forest conservation, enhancement of carbon stocks
RMSC	Resource Management Support Centre
R-PP	Readiness Preparation Proposal
RSPO	Roundtable on Sustainable Palm Oil
SEA	Strategic Environmental Assessment
SESA	Strategic Environmental and Social Assessment
SNR	Strict Nature Reserve
SPGS	Sawlog Production Grant Scheme
SRI	Soil Resource Institute of Ghana
SRA	Social Responsibility Agreement
TAs	Traditional Authorities
TIDD	Timber Industry Development Division
ToR	Terms of Reference
UNFCCC	United Nations Framework Convention on Climate Change
UTZ	Universal Trade Zone
VCS	Voluntary Carbon Sequestration
VPA	Voluntary Partnership Agreement

WB	World Bank
WD	Wildlife Division
WRC	Water Resources Commission

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EXECUTIVE SUMMARY

Objectives, Components and Major Activities

The objective of Ghana's FIP Program is to 'reduce GHG emissions from deforestation and forest degradation while reducing poverty and conserving biodiversity', with a range of interventions in the High Forest Zone toward reducing deforestation through more sustainable management practices for forests, agro-forests and cocoa landscapes.

Project components

The project development objective of the Additional Financing is: to improve forest and tree management practices by cocoa farmers, CREMA communities and forest reserve managers to reduce forest loss and degradation and demonstrate rehabilitation of mined-out sites in selected landscapes in Ghana's High Forest Zone (HFZ). The Ghana FIP has four components: 1) Policy Reforms and Institutional Strengthening; 2) Pilot Investments for Improved Forest and Landscape Management with Communities; 3) Innovation, Capacity Building; and Communications; and 4) Project Management, Monitoring and Coordination. The proposed Additional Financing (AF) will follow the same structure. Component 2 (Pilot Investments for Improved Forest and Landscape Management with Communities), has two main program areas consisting of: (1) reclamation of degraded, mined-out areas through community engagement, reforestation and development of economically productive activities, and (2) Plantation development, with focus on providing incentive for private plantation enterprise development.

The preparation of the Additional Financing ESMF has benefitted immensely from the lessons learnt from the implementation of the on- going Ghana FIP ESMF and the Strategic Environmental and Social Assessment (SESA) developed for the REDD+ mechanism. This ESMF has also benefited from earlier safeguards instruments, activities and implementation including the preparation of an Environmental and Social Management Plan (ESMP) for the African Development Bank (AfDB) component of the FIP. Key stakeholders including community members and district assemblies in the project regions, namely Western and Eastern Regions, were also actively engaged to prepare this report.

Major activities

The proposed program areas under the additional financing are summarized in the listing below:

Reclamation of forest lands degraded through mining:

- Mapping and Prioritization of Affected Areas;
- Mapping and Characterizing Mining Degradation in Cocoa Landscapes;
- Testing of Rehabilitation Approaches and Sequencing of Interventions;
- Productive Species for Rehabilitation;
- Engage with Local Land Use Planning Processes;
- Leveraging Communication Platforms and Community Engagement;

Plantation development:

- Support to private plantation developers;
 - Incentivize private plantation developers to expand planted areas
 - Support may include: Low cost tree seedlings of economic species; transport and delivery of the seedlings; training, tools and equipment for site/ soil preparation, planting / spacing, and care / nurture
 - Low cost loans will be considered for financially viable firms (based on financial assessment / due diligence and track record)
 - Incentive payments are conditional: on compliance with seed quality and stand maintenance/ weeding standards
 - TA for skills development in tree planting and nurturing, business planning, species selection, mapping and land titling/clearing services
 - Professional monitoring, TA to keep investments on track
- Alternate community livelihood support
 - TA and support for cash crops and local food crops grown within plantation systems
 - Intercropping assistance with plantation maintenance and weeding
 - Provides early income in advance of the first thinning and timber harvest

The significant potential environmental, social and health stakes and risks may become important from the implementation stage. Specifically, the assessment would include such issues as the following: biodiversity, water resources, soils, air quality, pesticides, land tenure and ownership, maintaining livelihoods, farmer rights, forest management, safety and security, occupational health and safety, cultural heritage.

Policies, legal and regulatory frameworks

The document identified national policies as well as laws/regulations/bills and institutions of relevance to the forestry and mining sectors and activities. The following have been discussed in the report as relevant policies, regulatory, legal, and institutional frameworks that the program will comply with.

- Land Policies
- Forest Policies and Regulations (2012 Forest and Wildlife Policy, Forest Development Master Plan (FDMP), Forestry Commission Act of 1999 (Act 571), Trees and Timber Decree 1974 (NRCD 273), Trees and Timber (Amendment) Act 1994 (Act 493), Forest Protection Decree of 1974 (NRCD 243), Concessions Act of 1962 (Act 124), Timber Resources Management (Amendment) Act 2002, Act 617, Timber Resources Management Regulations of 1998 (LI 1649) and its amendment (LI 1721, Regulation 2003), Tree Crop Policy)
- Mining and Mineral Policies (National Mining Policy –June 2007 draft, Mining and Minerals Act of 2006 (Act 703), Mining in Forest Reserves)
- Environmental Protection & Assessment Policies and Regulations (The Environmental Protection Agency (EPA) Act, 1994 (Act 490), The Environmental Assessment Regulations of 1999, LI 1652, National Environmental Policy (NEP), 2013, National Climate Change Policy (NCCP), 2013).

Institutional Framework:

- Public: Ministry of Lands and Natural Resources, Forestry Commission, Lands Commission, Office of the Administrator of Stool Lands (OASL), Minerals Commission, Ministry of Environment, Science, Technology and Innovation, Environmental Protection Agency, Forest Research Institute of Ghana (FORIG), Ghana Cocoa Board (COCOBOD) and Cocoa Research Institute of Ghana (CRIG), Ministry of Food and Agriculture, Water Resources Commission (WRC), Local Government Authorities, Traditional Authorities/ National House of Chiefs)
- Private Sector: Timber Industry, Cocoa Industry.
- NGOs/ Civil Society

Risks and generic potential impacts of each type of eligible subproject;

In summary, the **Table** below lists some significant potential social and environmental impact issues to be expected from the implementation of the various sub-project activities.

AF FIP sub-project activities and potential environmental and social issues/ concerns

Sub- Project activities/interventions	Potential Impact Issues/ concerns
<u>Reclamation of sites</u> <ul style="list-style-type: none"> • Earthworks which will involve spreading of stockpile of sandy/lateritic waste into pits; • Cutting and haulage of fill materials to top up to the required ground elevations; • Spreading of topsoil • Construction of crest for river/stream course • Raising of cover crops • Tree planting 	<p><u>ENVIRONMENTAL</u></p> <p><u>Biodiversity</u></p> <ul style="list-style-type: none"> ✓ Mono specific exotic tree plantings may alter natural vegetation; ✓ Plantation tree seedlings may invade adjacent forest ✓ Biodiversity conservation (changes in flora and fauna) ✓ Uniform age as clear felling may prevent succession processes <p><u>Water Resources</u></p> <ul style="list-style-type: none"> ✓ Alterations in local natural water cycles/ hydrology ✓ Sediment transport to local water bodies <p><u>Soils</u></p> <ul style="list-style-type: none"> ✓ Changes in soil nutrient cycles (fertility and carbon storage capacity) ✓ Increased soil erosion due to repeated disturbance ✓ Poor plantation management leading to physical impacts to soil structure and surface layers <p><u>Air quality</u></p> <ul style="list-style-type: none"> ✓ deterioration from burning of biomass from clearing ✓ reverse gains from carbon sequestration – adding carbon into atmosphere ✓ dust emissions from cutting and filling operations <p><u>Pesticides</u></p> <ul style="list-style-type: none"> ✓ improper application of pesticide amounts ✓ application in rainy season resulting in ineffective targeting and increased runoff and uptake by soils and water bodies ✓ use of highly toxic chemicals to plants, animals and humans ✓ improper use, contamination by high exposure, no precautionary measures leading to health impacts

Sub- Project activities/interventions	Potential Impact Issues/ concerns
<p>(Phytoremediation)</p> <ul style="list-style-type: none"> Field maintenance Monitoring and evaluation <p><u>Plantation development</u></p> <ul style="list-style-type: none"> Establishment of tree plantations and enrichment planting Model forest nurseries for native species Migrate sacred groves to community dedicated forest reserves Shade Trees integrated into Cocoa Farms and agricultural farming systems Landscape Planning for corridors Cocoa Marketing Incentives and Sustainability Production 	<p><u>SOCIAL</u></p> <p><u>Land tenure and ownership</u></p> <ul style="list-style-type: none"> ✓ lack of adequate documentation ✓ clear understanding of land use and occupancy ✓ Conflicts in land claims ✓ increased values in land prices leading to economic displacement of poor land tenants ✓ Transparent rules for benefit sharing of carbon payments between land owner and farmer tenants ✓ Rules and agreements in place for traditional chiefs' revenue sharing with locals and other stakeholders ✓ Land acquisition and compensation issues ✓ Discrimination, lack of grievance mechanisms for all land users and tenants <p><u>Maintaining Livelihoods</u></p> <ul style="list-style-type: none"> ✓ Enhance food security through improved agriculture production on farmed lands to reduce forest pressures ✓ Potential expansion of negative activities by admitted settlements and farms that result in biodiversity loss, ecosystem changes, depletion of natural resources ✓ Increasing demand for forest lands for farming/ settlements by fringe communities because productive lands not available; ✓ Adequate, documented and transparent compensation for admitted farmers in order to vacate unauthorised sections of forest ✓ Lost opportunity to earn income through illegal gold mining to maintain families <p><u>Farmer Rights</u></p> <ul style="list-style-type: none"> ✓ Farmers have little say in the harvesting of matured shade trees ✓ Little or no compensation for farmers for destroyed cocoa trees during harvesting of shade trees; ✓ Higher income from improved yields; ✓ No financial benefit to farmers for planting and nurturing shade trees; ✓ Difficulties in registering shade trees ✓ Unreliable supply of seedlings ✓ Long gestation period of native species. <p><u>Forest Management</u></p> <ul style="list-style-type: none"> ✓ Fire prevention and control and plantation security ✓ Community inclusion in management decisions ✓ Community participation in surveillance and enforcement ✓ Protection of rights to use forest resources ✓ Alternative uses for forest waste – charcoal and biogas <p><u>Security and Safety</u></p> <ul style="list-style-type: none"> ✓ Safety and security of community informants/ whistle blowers ✓ Safety and security of FSD field staff ✓ Delayed court processes and low fines which do not create proper structures to punish/deter violations ✓ Low motivation of FSD field staff – not proper incentive structure ✓ Unavailability and poor use of personal protective equipment and limited/ no enforcement process

Sub- Project activities/interventions	Potential Impact Issues/ concerns
<ul style="list-style-type: none"> Plantation Field Trials/ Models/ Innovations On Reserve Timber and Non-Timber Innovation, Community Based Enterprise Trials 	<p><u>Occupational health and Safety</u></p> <ul style="list-style-type: none"> ✓ Lack of awareness creation programs on health and safety including chemical handling. ✓ Unavailability and poor use of personal protective equipment and limited/ no enforcement process <p><u>Cultural Heritage</u></p> <ul style="list-style-type: none"> ✓ Limited access to shrines ✓ Preservation of local cultural identity and heritage ✓ Compensation issues ✓ Community pride and support ✓ Community relinquishing/ sharing heritage for greater good <p><u>Resource Access and Possible Restriction</u></p> <ul style="list-style-type: none"> ✓ Rights to question and have individual considerations addressed ✓ Possible alternative options ✓ Established grievance redress options

Public consultation during the preparation of the ESMF

The AF ESMF preparation included stakeholder consultations. Key project stakeholders were identified for consultations and these included Government Ministries, State Agencies/ Organisations/ and Departments, Project offices, Non-governmental organization and local communities in Eastern and Western Regions.

Meetings were held with key officials and opinion leaders to gauge level of awareness and involvement with the project, concerns of project implementation, and to obtain relevant documents or baseline information. The consultations also served to gather information on the mandates and permitting requirements to inform the development of the projects.

The list of stakeholders and potentially affected communities contacted as well as summaries of issues discussed in both the Eastern and Western Regions are provided in Annex 7.

Framework Environmental and Social Management Plan (Framework ESMP)

The environmental and social management of eligible subprojects

The screening process and procedure are to: (i) determine whether projects are likely to have negative environmental and social impacts; (ii) decide if form EA1 needs to be submitted to EPA; (iii) identify appropriate mitigation measures for activities with adverse impacts; (iv) incorporate mitigation measures into the project design; (v) review and approve projects proposals and (vi) monitor environmental and social impacts and concerns during implementation. The formal environmental approval and permitting processes will be guided by the World Bank safeguard policy OP4.01 and the Ghana EIA procedures (EPA, 1994) which established a process to screen and

evaluate all developments, undertakings, projects and programs which have the potential to give rise to significant environmental impacts.

Environmental and Social Management Plan

An Environmental and Social Management Plan (ESMP) is presented to provide guidance to the MLNR and the Forestry Commission on procedures to be followed and standards to be met in implementing the projects which should agree with national and World Bank safeguard provisions. Roles and responsibilities of the FC/FSD and other collaborating agencies are clearly defined as well as monitoring protocols to be followed to ensure that the required provisions are adhered to. Budgetary estimates are provided to support the implementation of the environmental and social management plan.

The main responsibility for implementing the ESMF rests with the MLNR and it is proposed to continue to use the Focal Point at the Ministry to oversee all environmental and social safeguard activities in collaboration with his counterpart at the REDD+ Unit of the FC. The FSD regional managers will oversee the implementation of all actions to mitigate adverse environmental and social impacts within their respective operational regions and supervise their district managers to ensure sound management practices at the community level.

The competence of the MLNR/FC to carry out their respective design, planning, approval, permitting, monitoring and implementation roles will, to a large extent, determine the success and sustainability or otherwise of the programme. Some limited progress has been achieved so far under the main GFIP, but the capacity building efforts will be enhanced under the AF requirements, and will mostly be in the form of training workshops and a budget of US\$560,000 has been presented in the report to support the operationalization of this ESMF for the project period.

Monitoring plans have been developed for implementation at different levels, namely at the: FIP and national Policy level; environmental and social safeguards framework level; and project level. The plan is accompanied by verifiable indicators and the required lines of institutional responsibility.

Identification of Capacity Needs

As part of the implementation of the GFIP ESMF, some training programmes have been carried out from 2014 to ensure that regional and district safeguard persons are suitably equipped to manage the sub- projects. However, further capacity improvement needs exist especially since many trained focal persons have been re- assigned to other regions and districts, and new persons brought to the project regional/ district offices. Moreover, the Eastern Region is now being introduced to the project. The Minerals Commission has seven District Offices, which concern themselves mainly with small-scale gold mining. These were established purposely to register, monitor and extend technical assistance to small-scale gold miners. However, the mineral licensing and permitting processes are, to a large extent, carried out centrally at the Minerals Commission Head Office in Accra. The Minerals Commission staff will also be involved for the first time in training programmes.

The capacity building will include training workshops and production of guidance reports and tools. A training programmes has been recommended, especially for the newly assigned officers. It may also serve as a refresher programme for the other focal persons. The private sector including plantation managers and reclamation companies will participate in the programme.

Grievance Redress Mechanism

The Forestry Commission engaged a consultant to specifically develop a Dispute Resolution Mechanism (DRM) for the REDD+ Mechanism in Ghana and the processes and procedures outlined for the FIP must be consistent with the REDD+ DRM document in addressing disputes and conflicts arising from resettlement/compensation related issues. The DRM for REDD+ also proposes amicable settlement/mediation as a first option, which is in line with the stated above objectives under this ESMF.

In compensation and resettlement operations, it often appears that many grievances derive from misunderstandings of project policy and procedures, land/asset valuations, property demarcations and boundaries among others as mention above, which can usually be solved through adequate mediation using customary rules and some mediation. This is why a first instance of dispute handling will be set up with the aim of settling disputes amicably.

Institutional arrangements (roles and responsibilities)

Institutional arrangement for the implementation of the Framework ESP

The key institutions to compose the implementation team will consist of the following:

- Steering Committee
- Project Coordinating Unit
- Forestry Commission
- Environmental Protection Agency
- Minerals Commission
- Water Resources Commission

Roles and responsibilities for the implementation of the Framework ESMP

The key specialists to implement the project include the following:

- Project coordinator
- Environmental safeguards specialist
- Social safeguards specialist
- Procurement specialist
- Technical specialist
- Financial management specialist
- Monitoring and Evaluation specialist
- FSD Regional and District safeguard persons

Roles and responsibilities

No	Steps/Activities	Responsible	Collaboration	Service Provider
1.	Identification and/or siting of the sub-project	MLNR/ FC	<ul style="list-style-type: none"> District Assembly EPA 	Consultant
2.	Screening, categorization and identification of the required instrument	Environmental safeguards specialist at the PCU	<ul style="list-style-type: none"> Beneficiary Community District Assembly Social Safeguards Specialist at PCU FC regional/ district safeguards focal person 	-
3.	Approval of the classification and the selected instrument by the EPA	PCU	<ul style="list-style-type: none"> Environmental safeguards specialist Social Safeguards Specialist FC regional/ district safeguards focal person 	<ul style="list-style-type: none"> EPA The World Bank
4.	Preparation of the safeguard document/instrument (ESIA, Env. Audit, simple ESMP, etc.) in accordance with the national legislation/procedure (considering the Bank policies' requirements)			
	Preparation and approval of the ToRs	Environmental safeguards specialist		<ul style="list-style-type: none"> The World Bank
	Preparation of the report		<ul style="list-style-type: none"> Procurement specialist Social Safeguards Specialist District Assembly FC regional/ district safeguards focal person 	<ul style="list-style-type: none"> Consultant
	Report validation and issuance of the permit (when required)		<ul style="list-style-type: none"> Procurement specialist Social Safeguards Specialist District Assembly FC regional/ district safeguards focal person 	<ul style="list-style-type: none"> EPA The World Bank
	Disclosure of the document		Project Coordinator	<ul style="list-style-type: none"> Media; The World Bank
5.	(i) Integrating the construction phase mitigation measures and E&S clauses in the bidding document prior to advertisement; (ii) ensuring that the contractor prepares his ESMP (C-ESMP), gets it approved and integrates the relevant measures in the works breakdown structure (WBS) or execution plan.	FC regional/ district safeguards focal person	<ul style="list-style-type: none"> Environmental safeguards specialist Social Safeguards Specialist 	<ul style="list-style-type: none"> EPA
6.	Implementation of the other safeguards measures, including environmental monitoring (when relevant)	FC regional/ district safeguards focal person	<ul style="list-style-type: none"> Environmental safeguards specialist Social Safeguards Specialist District Assembly 	<ul style="list-style-type: none"> Consultant CSIR- WRI NGOs

No	Steps/Activities	Responsible	Collaboration	Service Provider
	and sensitization activities			
7.	Oversight of safeguards implementation (internal)	<ul style="list-style-type: none"> Environmental safeguards specialist Social Safeguards Specialist 	<ul style="list-style-type: none"> Monitoring and Evaluation specialist (M&E-PIE) EPA 	• Consultant
	Reporting on project safeguards performance and disclosure	Coordinator	<ul style="list-style-type: none"> M&E specialist Environmental safeguards specialist Social Safeguards Specialist 	-
	External oversight of the project safeguards compliance/performance	PEA	<ul style="list-style-type: none"> M&E specialist Environmental safeguards specialist Social Safeguards Specialist 	-
8.	Building stakeholders' capacity in safeguards management	• Environmental safeguards specialist	• Social Safeguards Specialist	• Consultant
9.	Independent evaluation of the safeguards performance (Audit)	Environmental safeguards specialist	• Social Safeguards Specialist	• Consultant

The Project Coordination Unit at the MLNR, and the FC, will not issue a Request for Proposal (RFP) of any activity subject to Environmental and Social Impact Assessment (ESIA), without the construction phase's Environmental and Social Management Plan (ESMP) inserted in, and will not authorize the works to commence before the contractor's ESMP (C-ESMP) has been approved and integrated into the overall planning of the works. This abovementioned section, on the roles and responsibilities for the implementation of the Framework ESMP, are inserted in the E&S safeguards management section the project implementation manual (PIM).

Budget

#	Item	Unit	Unit Cost		Total		Source of financing
			Local	US\$	Local	US\$	
1	Preparation of specific ESIA	ESIA	-	15,000	-	150,000	Project funds
2	Capacity Building (Training, provision of guidance documents, tools etc, transport)	-	-	-	-	112,000	Project funds
3	Implementation of specific ESMP including communication (adverts etc)	ESMP	-	25,000	-	250,000	Project funds
4	Mid-term audit of ES performance	-	-	-	-	23,000	Project funds
5	Completion audit of ES performance	-	-	-	-	25,000	Project funds
	Total					560,000	-

1.0 INTRODUCTION

This introductory section provides the background to the project and describes project components and the purpose of this ESMF document.

1.1 Background of Ghana FIP and Additional Financing

The objective of Ghana's FIP Program is to 'reduce GHG emissions from deforestation and forest degradation while reducing poverty and conserving biodiversity'. The Program supports a range of interventions in the High Forest Zone toward reducing deforestation through more sustainable management practices for forests, agro-forests and cocoa landscapes. Ghana's Forest Investment Programme (GFIP) aims to enhance and increase social benefits and community empowerment by focusing on groups that depend on natural resources. The GFIP was designed in 2012 to work together in a programmatic, landscape level approach, managed by the Ministry of Lands and Natural Resources (MLNR) and has three components implemented by World Bank (WB), African Development Bank (AfDB) and International Finance Corporation (IFC). The GFIP is part of an integrated financing package that aims to reduce deforestation and forest degradation, while also achieving livelihood and biodiversity co-benefits.

The development objective of this Additional Financing requested by the Government of Ghana is to improve forest, land and tree management practices by cocoa farmers, Community Resource Management Areas (CREMA) communities and forest reserve managers to reduce forest loss and degradation in selected landscapes in Ghana's High Forest Zone and parts of the transitional zone. It has two main program areas consisting of: (1) reclamation of degraded, mined-out areas through community engagement, reforestation and development of economically productive activities; and (2) plantation development. The plantation development component seeks to establish an investment fund and Technical Assistance (TA) program to incentive SMEs; support community-based tree planting & alternate livelihood programs; focus on degraded areas of the HFZ; focus where MLNR and FC already have comparative advantage (advising on how to establish and manage plantations); and learn from experience of Uganda Sawlog Production Grant Scheme (SPGS)

The revised ESMF is based on a review of the FIP safeguard instruments prepared in 2014 which also included a Process Framework (PF) and a Pest Management Plan (PMP). The revised documents have specifically considered the key focus areas of the new program which includes activities to reclaim degraded mined-out areas in forests, and also, supporting the establishment of community and sector led tree plantations development in the Eastern and Western Regions of Ghana.

1.2 Project components design and description

There is evidence of success for many activities including the safeguards being implemented under the original FIP ENFAL, and at mid-term, progress towards the achievement of project development objective (PDO) has been rated as Moderately Satisfactory (MS). However, drivers of deforestation and

degradation continue to degrade Ghana's rural landscape. The pace of expansion of illegal ASM in recent years has accelerated forest and agroforest loss in affected areas and the challenges associated with private plantation development persist. The FIP AF is designed to support demonstration pilots that can inform and influence the important steps that can help support to combat deforestation in the cocoa sector and commitments to address illegal mining through scaled up action. The proposed activities are designed to fit into the existing FIP ENFAL implementation structures, demonstration pilot approaches, community engagement efforts, land use planning and management processes, and outreach and communication tools. The proposed activities are focused on supporting the efforts to address the impacts of illegal ASM on forests, community agroforestry areas and natural landscapes. The support will be through improved coordination and implementation of policies, testing of mine site clean-up and reclamation approaches, including tree planting and plantation establishment, with community and media engagement, and communication, outreach and training activities. It will also support the government's overall efforts to control illegal ASM for gold, known also as *galamsey*. Specifically, additional financing is supporting two new interventions: (i) supporting the rehabilitation of mined out areas towards reduction of degradation and deforestation due to illegal artisanal small-scale mining (ASM) in forest landscapes, and (ii) the enhancement of private investment in forest plantation development, with community job creation, in forest and cocoa landscapes in Ghana's High Forest Zone (HFZ), which includes areas of Brong-Ahafo, Western, Ashanti and Eastern Regions. The Government's renewed attention to these issues creates new opportunities for FIP to support action needed to accelerate implementation, replicate good practices, and roll out reformed policies on a larger scale.

Project Components

The Ghana FIP has four components: 1) Policy Reforms and Institutional Strengthening; 2) Pilot Investments for Improved Forest and Landscape Management with Communities; 3) Innovation, Capacity Building; and Communications; and 4) Project Management, Monitoring and Coordination. The proposed Additional Financing (AF) will follow the same structure.

Component 1: Policy reforms and institutional strengthening (US\$2 million grant). Following the structure of FIP ENFAL, this Additional Financing (AF) will expand support for strengthening institutional coordination across a wider array of central, regional and local government agencies. This will particularly include the Minerals Commission (MC) of MLNR and the Ministry of Environment, Science, Technology and Innovation (MESTI), which has a leadership role in the effort to control *galamsey*, as well as the EPA, which has an important role in setting standards for reclamation activities, controlling water pollution and toxic materials associated with all types of mining. The Ministry of Chieftaincy and Traditional Affairs, local chiefs and traditional authorities, and District Assemblies will need to be more proactively engaged in addressing *galamsey* issues. The AF will support additional analytical and policy studies that aim to assess the magnitude and geographical spread of ASM impacts on forest and draw lessons from previous and existing activities/strategies-including those of legally operating firms- with regards to rehabilitation and restoration of mined-out sites. Based on this, guidance for practitioners on the ground will be developed, taking a multi-stakeholder approach. Specific policy work is under discussion and could include analysis of existing policies and institutional arrangements to address the environmental footprint of *galamsey*. Legal analysis and policy development will specifically look at

putting in place a policy on mined-out lands; standards and guidance for mine site rehabilitation (based on international good practices); and systems and capacity at national, regional and local level to sustainably protect rehabilitated sites.

Component 2 is made up of two sub- components as described below.

Component 2a. Pilot demonstration of clean up and reclamation practices with alternative livelihood support after forest and land degradation and loss due to ASM (US\$6 million grant). This pilot activity aims to reclaim and rehabilitate mined out areas in selected sites as a demonstration of appropriate technical approaches, analysis and testing technologies and policies, and clean up/ reclamation practices. Implementation will be combined with effective engagement of landowners, traditional authorities, mine managers and workers, and community members. Specific activities may include:

- site selection and characterization for clean- up. Mapping, prioritization and characterization of mining degradation in forest reserves and cocoa landscapes in the Western and Eastern Region. This may include site sampling and analysis and assessment of potential clean up approaches and techniques. The AF will support assessments and stakeholder consultations for site selection, for community engagement, and for organizing collective action;
- community engagement in planning, collaboration and training. Engagement with local and traditional authorities and land use planning processes to improve district government collaboration with communities on forest and land protection; Provision of training for communities, including miners, and local governments on responsible management and protection of reclaimed areas;
- community engagement in implementation. Engagement with community and CREMA members in reclamation of selected sites, using appropriate land contouring and replanting approaches. Replanting efforts will consider appropriate crops and materials after analysis of site decontamination requirements and the need to avoid uptake in potential food crops. Use of climate-smart agriculture or restoration of cocoa plantations may not be appropriate in some cases;
- alternative livelihood support. Engagement with communities, particularly miners, to identify suitable and beneficial alternative livelihood activities that can complement reclamation efforts, such as nursery stocks for timber and bamboo planting, value added processing and sale of more beneficial natural resource products, equipment rental and operation for land contouring, monitoring and patrols to prevent re-entry into reclaimed sites (see Component 2b);
- private sector engagement for lessons. Engagement with legally operating small- and large-scale mining operations for support, understanding of incentives, lessons on good practices from existing sites, technical assistance and potential visits to demonstration sites;
- guidance on improved practices. Development and roll out of guidance materials on site assessment, clean up / reclamation approaches and success stories and preparation and studies needed in advance of reclamation efforts;
- these efforts will be supplemented with communication and awareness raising activities financed under Component 3. The project design will be further informed by the results of case studies of selected mining sites, development of criteria for the selection of pilot sites [e.g., strength of local institutions including both traditional and District Assembly; ownership and control of the land;

representative land use issues; balance of on- and off- reserve sites; proximity of potential partner institutions (training, service delivery)] including lessons from existing mining reclamation experiences, particularly from private sector operations.

The transformative nature of this activity is to provide positive demonstrations of the potential for local community action to clean up and reclaim locally affected sites and waterways following the destructive impacts of ASGM/galamsey. The effort aims to raise awareness among landowners and land users of the beneficial alternative uses of land, the power of collective action, and the ability to control the negative effects of galamsey. These positive demonstrations, if successful, can lead to further GoG support in the follow on to MMIP, as well as potential support from other development partners.

Component 2b. Pilot for incentivizing investment and local level job creation in timber plantations (US\$7 million concessional loan). This pilot activity will provide financing incentives and technical assistance to support tree planting by small- and medium-scale plantation enterprises, including community-based efforts located, to the extent feasible in or nearby to mined-out degraded forest areas in existing FIP and REDD+ target areas, as in Component 2a above. Locating Pilot 2a and 2b nearby to each other in the landscape will help to provide livelihoods support, increase engagement with communities and traditional landowners, and support productive enterprises for the medium term. It is envisaged that plantation developers who access the loan funds will provide employment benefits to nearby community members who will engage in site preparation, tree planting, plantation maintenance and other activities. This could reach up to 3,000 community beneficiaries. Specific activities may include:

- Financial assistance for (small and medium) private plantation developers (including nurseries) to expand planted areas, focusing on trees in high demand for specific markets. Firms will be selected based on interest, willingness, business model, to promote local employment opportunities (targeting vulnerable groups and forest fringe communities) and to promote quality wood products for domestic markets. Support may include: low cost tree seedlings of economic species; transport and delivery of the seedlings; training, tools and equipment for site preparation, planting/spacing, and care. Low cost loans will also be considered for financially viable firms (based on financial assessment/due diligence and track record). The low cost loan funds will be held at the Bank of Ghana and will be managed by the Ministry of Lands and Natural Resources and the Forestry Commission. Following the learning of the Uganda Sawlog Production Grant Scheme (SPGS), this activity will provide both technical assistance and financial assistance for small-scale timber plantations companies. Incentive payments will be conditioned on compliance with seed quality and stand maintenance standards. The transformative nature of this activity is to stimulate private sector investment in tree planting which creates employment and supplies local markets. This will reduce pressure on natural forests, create alternative livelihoods at local level, and sequester carbon.
- Mobilization of community members (in targeted, degraded, mined out areas) to engage in planting of economic trees and plants (possibly including indigenous bamboo) that can contribute

to short term livelihoods, longer term economic options, landscape restoration, and soil/stream bank stabilization. Support may also include local livelihood opportunities, including (carefully selected) crops that can be grown within plantation systems at the early planting stage before the canopy closes. Agricultural production assistance with plantation maintenance and weeding, and provides an early income source in advance of the first thinning and timber harvest. As above, care must be taken to ensure that crops chosen are safe for human handling or processing when grown in degraded sites. This work will proceed in parallel with reclamation activities mentioned in Component 1, based on assessment, criteria development, and consultations with communities and decentralized government authorities. For communities organized into CREMAs, support may include technical assistance in business planning so that the tree/timber output is eventually used efficiently to contribute to local economic development (processing of timber into sawn wood, poles, building components and other value added/downstream markets). The transformative nature of this activity is to empower communities to engage in local timber production and processing, which will reduce pressure on natural forests, create alternative livelihood options, and at the same time rehabilitate degraded landscapes and sequester carbon.

Component 2c. Field Activity Monitoring and Technical Assistance (US\$2.285 million grant). This sub-component will also finance professional monitoring, technical assistance and follow up to ensure that investments and plantation maintenance remain on track during the loan period. This activity is noted separately to indicate the different forms of financing available in this tranche of FIP financing, which includes both grants and concessional finance. Technical assistance activities will focus on advising on tree planting and nurturing techniques, business planning, species selection, mapping and land titling services. In providing the technical assistance, the activity may build on the work of organizations that are currently working in this field, such as the Solidaridad, International Institute for Environment and Development (IIED), Nature Conservation Research Centre (NCRC), the Sustainable Trade Initiative (IDH); certification standards such as UTZ Quality Foods, Forest Stewardship Council (FSC), Rainforest Alliance and Roundtable on Sustainable Palm Oil (RSPO); research institutions and certification bodies.

Design of the plantation investment incentive scheme will be based on a review of best practices and lessons learned from prior efforts (e.g., Plantation Fund Board loan scheme and relevant approaches from agriculture). The design will lay out the types of support for tree planting to be offered (loan or grant); institution(s) involved in financial management of the funds; criteria and rules for program eligibility; modalities for fund disbursement and repayment; and technical assistance to be provided by the Government. As above, safeguard issues will be assessed and existing GoG safeguard instruments will be updated and revised as needed to address new issues introduced with the AF activities.

Component 3: Innovation, capacity building, and communications (US\$1 million grant). Following the structure of FIP ENFAL, this AF will expand support for communication, outreach and regular reporting on trends and results of the activity by MLNR to coordination bodies and higher authorities engaged in the MMIP implementation and follow on planning, including MESTI, EPA, MC and others. It will support scaled up communication and outreach activities to engage communities and miners (both legal and illegal) with awareness campaigns about the government's plans and programs. Outreach activities will be designed to engage miners on good environmental practices in artisanal gold mining and mine site

rehabilitation, including use of established, legal small-scale mining operations as learning sites and mentors (to the extent possible). Where useful, training programs will be conducted with communities, mine owners and workers, local and traditional authorities and others to introduce improved practices, raise awareness of health impacts, and raise awareness of environmental degradation costs and impacts.

Component 4: Project management, monitoring, and coordination (US\$1 million grant). Additional support for management, monitoring and coordination recognizes the need to expand the G-FIP Steering Committee to include key agencies, such as MESTI, EPA, MC, Ministry of Chieftaincy and Traditional Affairs and others as needed. Project management and reporting functions will expand to ensure regular reporting on and integration of the FIP ENFAL- and AF-funded activities are aligned and integrated with larger scale Government programs to address and control the negative effects of illegal ASM in Ghana.

1.3 Project stakeholders and benefits

The ultimate project beneficiaries are the rural communities (current and future generations) in the target regions who are currently being affected by the environmental damage and pollution associated with illegal artisanal and small-scale mining (ASM) practices. Community members engaged in ASM, including women, will gain access to greater awareness of risks, as well as new skills and economic opportunities through engagement in rehabilitation activities at inactive mining sites, including opportunities created by tree planting and plantation establishment. Plantation establishment will further help to create jobs for community members, contribute to knowledge sharing and uptake, increase awareness of sustainable forestry management practices, and increase opportunities for promoting positive private sector contributions to the overall REDD+ effort. In the HFZ, the proposed activities will contribute to reducing pressure on high biodiversity areas. Communities, landowners, farmers and cocoa growers will gain through the reduced impact of mining activities on their production systems, as well as improvement of their local environment. MLNR, FC, EPA, and MC, charged with forest, landscape and mining management, will also benefit from clarified policies and guidance, capacity development programs, and outreach and communication programs. Other stakeholders, including the private sector and civil society, will benefit through improved stewardship of land, plus communication and outreach activities.

1.4 Summary of Additional Financing Program Activities

The proposed program areas under the additional financing are summarized in the listing below:

Reclamation of forest lands degraded through mining

- Mapping and Prioritization of Affected Areas
- Mapping and Characterizing Mining Degradation in Cocoa Landscapes
- Testing of Rehabilitation Approaches and Sequencing of Interventions
- Productive Species for Rehabilitation

- Engagement with Local Land Use Planning Processes
- Leveraging Communication Platforms and Community Engagement

Plantation development

- Support to private plantation developers
 - Incentivize private plantation developers to expand planted areas
 - Support may include: Low cost tree seedlings of economic species; transport and delivery of the seedlings; training, tools and equipment for site/ soil preparation, planting / spacing, and care / nurture
 - Low cost loans will be considered for financially viable firms (based on financial assessment / due diligence and track record)
 - Incentive payments are conditional: on compliance with seed quality and stand maintenance/ weeding standards
 - TA for skills development in tree planting and nurturing, business planning, species selection, mapping and land titling/clearing services
 - Professional monitoring, TA to keep investments on track
- Alternate community livelihood support
 - TA and support for cash crops and local food crops grown within plantation systems
 - Intercropping assistance with plantation maintenance and weeding
 - Provides early income in advance of the first thinning and timber harvest

1.5 The Purpose of the ESMF

The purpose of the ESMF is to:

- establish clear procedures and methodologies for the environmental and social assessment, review, approval and implementation of interventions to be financed under this Additional Financing World Bank FIP;
- specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to project interventions;
- determine the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF; and
- provide practical information on resources for implementing the ESMF.

1.6 Approach to the ESMF Study

The Additional Financing ESMF study has benefitted immensely from the on- going GFIP ESMF implementation activities and the Strategic Environmental and Social Assessment (SESA) study for the REDD+ mechanism and also from earlier activities which led to the preparation of an Environmental and Social Management Plan (ESMP) for the African Development Bank (AfDB) component of the FIP. Key stakeholders including community members and district assemblies in the Western and Eastern Regions were also actively engaged to prepare this report.

The following range of stakeholders are important to the project and some of them were sampled for consultation during the preparation of this document.

Project proponents

- Ministry of Lands and Natural Resources (MLNR)
- Ministry of Local Government and Rural Development (MLGRD)
- Ministry of Environment, Science, Technology and Innovation (MESTI)
- Ministry of Chieftaincy and Cultural Affairs

Regulatory institutions

- Forestry Commission
- Environmental Protection Agency (EPA);
- Minerals Commission; and
- Water Resources Commission.

Political Authorities

- Western Regional Coordinating Council;
- Eastern Regional Coordinating Council;
- MMDAs (relevant Assemblies)

Other Agencies

- Town and Country Planning Department;
- Department of Urban Roads;
- Ghana Highway Authority;
- Ghana Water Company Limited

Private sector

- Mining companies;
- Plantation development companies

Local Authorities and Communities

- Traditional Councils;
- Assembly persons
- Local Chiefs and elders.
- Youth and Women Groups
- Local NGOs/ CSOs (A Rocha Ghana)

2.0 RELEVANT POLICIES, LEGAL AND INSTITUTIONAL FRAMEWORK

The section identifies national policies/plans as well as laws/regulations/bills and institutions of relevance to the forestry and mining sectors/activities.

2.1 National Policies and Legal Framework

The following national policies, laws and regulations provided in **Table 1** were identified during the preparation of the ESMF.

Constitution of Ghana (1992)

Safeguarding the national environment for posterity:

Article 36 (9) states that *The State shall take appropriate measures needed to protect and safeguard the national environment for posterity; and shall seek co-operation with other states and bodies for purposes of protecting the wider international environment for mankind.*

Lands and Natural Resources

- Article 258 establishes a Lands Commission and prescribes the functions of the Commission.
- De-vesting of the Northern, Upper East and Upper West Regions lands: Article 257 Section (3) de-vest all lands in the Northern, Upper East and Upper West Regions of Ghana which immediately before the coming into force of this Constitution were vested in the Government of Ghana. These lands are not public lands but have been reversed to the original owners.
- Rights and Interest in land for non-citizen of Ghana: Article 266 Imposes restrictions on the rights and interest in land that could be granted to a non-citizen of Ghana.
- Stool/Skin Lands: Article 267(1) - All stool lands in Ghana shall vest in the appropriate stool on behalf of, and in trust for the subjects of the stool in accordance with customary law and usage.
- OASL: Article 267(2): Establishes the Office of Administrator of Stool Lands and prescribes its functions.
- Stool land revenue disbursement: Article 267(6) Provides for the disbursement formula for stool land revenue.
- Protecting natural resources: Articles 268 and 269 make provision for the protection of natural resources of the country. It gives power to Parliament under Article 269 ((1) to provide for the establishment of a Minerals Commission, a Forestry Commission, Fisheries Commission and such other Commissions as Parliament may determine, which shall be responsible for the regulation and management of the utilization of the natural resources concerned and the co-ordination of the policies in relation to them.

Table 1: Summary of key Policies and Legal Framework

The 1992 Constitution of Ghana
Ghana Shared Growth and Development Agenda
Land Policies
Administration of Lands Act of 1962 (Act 123)
Office of the Administrator of Stool Lands Act 1994, Act 481
National Land Policy, 1999
Lands Commission (LC) Act 2008, Act 767
<i>Land Use and Spatial Planning Bill, draft October 2011</i>
Forest Policies and Regulations
Forest Ordinance of 1927 (Cap 157)
Concessions Act of 1962 (Act 124)
Forest Protection Decree of 1974 (NRCD 243)
Trees and Timber Decree of 1974 (NRCD 273)
Economic Plant Protection Act of 1979
Trees and Timber (Amendment) Law of 1983 (PNDCL 70)
1994 Forest and Wildlife Policy
Trees and Timber Amendment Act of 1994 (Act 493)
Interim Measures for Controlling Illegal Harvesting Outside Forest Reserves of 1995
Forestry Commission Act of 1999 (Act 571)
Forest Protection Amendment Act of 2002 (Act 624)
Timber Resources Management Amended Act of 2002 (Act 617) LI1998 (amended 2003)
2012 Forest and Wildlife Policy
Mining and Mineral Policies
National Mining Policy
Minerals Commission Act 1993, Act 450
Mining and Minerals Act of 2006 (Act 703)
Environmental Protection & Assessment Policies and Regulations
Environmental Protection Agency Act, 1994 Act 490
Environmental Assessment Regulations 1999, LI 1652
National Environment Policy, 2013
National Climate Change Policy, 2013
Energy Policies
Strategic National Energy Plan

Energy Commission Act 1997, Act 541
National Energy Policy, 2010
Renewable Energy Act, 2011, Act 832
Water Policy
Water Resources Commission Act, 1996 Act 522
National Water Policy, 2007
Buffer Zone Policy, 2014
Agricultural Policy
Food and Agriculture Sector Development Policy (FASDEP)
Ghana Irrigation Policy, June 2010
Tree Crops Policy, 2012
Intestate Succession Law, PNDC Law 111 (1985)
Investment, Employment, Labour, Gender, Local government, Chieftaincy, Safety and others
National Employment Policy
National Gender and Children Policy
Factories Offices and Shop Act, 1970, Act 328
Control of Bush Fires Law of 1983 (PNDCL 46)
Workmen's Compensation Law 1987
Control and Prevention of Bush Fires Act 1990
Ghana Investment Promotion Centre Act 1994, Act 478
Ghana National Fire Service Act 1997,
The Children's Act 1998, act 560
The Labour Act 2003, Act 651
Ghana Meteorological Agency Act, 2004, Act 682
Chieftaincy Act 759 of 2008
National Pensions Act, 2008, Act 766
Alternative Dispute Resolution Act 2010, Act 798
Local Governance Act 2016, Act 936

2.1.1 Forest Policies and Regulations

The 1994 Forest and Wildlife Policy (FWP), revised in 2011, and the 1996 Forestry Development Master Plan (FDMP) serve as guiding policies for the sector.

Forest Ordinance of 1927 (Cap 157) is the principal statute governing the constitution and management of forest reserves in Ghana. The ordinance vests in the central government the power to create forest and protected area reserves. Forest Ordinance (Cap 157) – This Act provided guidelines for constitution of forest reserves and the protection of forests and other related matters.

Forest and Wildlife Policy, 1994

The Forest and Wildlife Policy of 1994 aims at conservation and sustainable development of the nation's forest and wildlife resources for maintenance of environmental quality and perpetual flow of optimum benefits to all segments of society. Specifically, the policy will, among others, ensure that the country's permanent estate of forest and wildlife resources are managed and enhanced for preservation of vital soil and water resources, conservation of biological diversity and the environment and sustainable production of domestic and commercial produce.

Forest Development Master Plan (FDMP)

In 1996, the Government of Ghana launched a Forestry Development Master Plan (FDMP) to guide the execution of the FWP to 2020. Four key elements of the Master Plan are: (1) ensure the legality of timber; (2) ensuring sustainable financing for the sector; (3) improving the quality of forest management and; (4) ensuring transparency in distribution of resources to forest communities.

2012 Forest and Wildlife Policy

The 1994 Forest and Wildlife Policy was revised in 2011 and subsequently approved in 2012. The policy aims at the conservation and sustainable development of forest and wildlife resources for the maintenance of environmental stability and continuous flow of optimum benefits from the socio-cultural and economic goods and services that the forest environment provides to the present and future generations, whilst fulfilling Ghana's commitments under international agreements and conventions.

Ghana's Forest and Plantation Strategy 2015 -2040, Draft October 2013

The goal of this strategy is to achieve sustainable supply of planted forest goods and services to deliver a range of economic, social and environmental benefits. The purpose of the strategy is to optimize the productivity of planted forests by identifying suitable tree species and improving their propagation, management, utilization and marketing.

Forestry Commission Act of 1999 (Act 571) Forestry Commission Act, 1999 (Act, 571) – This Act repealed Act 453 and re-establish the Forestry Commission as a semi-autonomous corporate body and also brought under the Commission, the forestry sector agencies implementing the functions of protection, development, management and regulation of forest and wildlife resources. Section 2 (1) states: *“The Commission shall be responsible for the regulation of the utilization of forest and wildlife resources, the conservation and management of those resources and the co-ordination of policies related to them.*

Concessions Act of 1962 (Act 124) vests the right to grant timber concessions and the management of all timber resources both on and off reserve in the central government. Section 16 provides for all timber rights to be vested in the President except for preexisting (customary or otherwise) rights in forest reserves or preexisting concessions in off-reserve areas (section 16 (1) – (4)). The Act was repealed by the Timber Resource Management Act of 1997, with the exception of sections 1 and 16

exempting stool lands from most provisions of the act, and 16, regarding forest reserves and timber concessions.

Forest Protection Decree of 1974 (NRCD 243) attempts to protect the integrity of forest reserves by prohibiting virtually all activities therein if done without the written authorization of the Forestry Department. Forest Protection Decree, 1974 (NRCD 243) – This Act defined forest offences and prescribed sanctions and or penalties for such offences.

Trees and Timber Decree 1974 (NRCD 273) – This law prescribed guidelines for participation in the logging/ timber industry and provided for the payment of fees as well as sanctions for non- compliance with the guidelines for participation and also export of unprocessed timber and makes it a criminal offence to fell timber for export without a valid property mark.

Economic Plant Protection Act of 1979 abolishes the grant of timber felling rights in farms having trees, such as cocoa, with economic value. This Act provides for the prohibition of the destruction of specified plants of economic value and for related matters.

Trees and Timber (Amendment) Law of 1983 (PNDCL 70) imposes harsher penalties for violation of the Trees and Timber Decree than as provided in the 1974 NRCD 273 Decree.

Trees and Timber (Amendment) Act 1994 (Act 493) – This Act reviewed the fees and fines for the renewal of property marks upwards and also introduced export levy for air-dried lumber and logs.

Interim Measures for Controlling Illegal Harvesting Outside Forest Reserves of 1995 introduces a new system for harvesting off-reserve timber that includes the farmer's rights to veto proposed harvesting and to receive compensation for crop damage.

Timber Resources Management Act 1997 (Act 547) – This repealed the Concessions Act, 1962 (Act 124) other than Sections 1 and 16 of Act 124 and provided for the grant of timber rights in a manner that secures the sustainable management and utilization of timber resources. The Act introduces Timber Utilization Contracts (TUCs) for timber harvesting and enhanced benefits for landowners and farmers for harvesting of trees on their land and provides for payment of royalties in respect of timber operations.

Timber Resources Management Regulations of 1998 (LI 1649) and its amendment (LI 1721, Regulation 2003) establishes regulations for the management of timber pursuant to the Timber Resources Management Act of 1997.

Forest Plantation Development Fund Act of 2000 (Act 583) provides for the grant of financial assistance for the development of private forest plantations on lands suitable for commercial timber production.

Timber Resources Management (Amendment) Act 2002, Act 617 This Act amends the Timber Resources Management Act 1997 (Act 547) to exclude from its application land with private forest plantation; to provide for the maximum duration, and maximum limit of area, of timber rights; to provide for incentives and benefits applicable to investors in forestry and wildlife and to provide for matters related to these.

The Forest Protection (Amendment) Act 2002 (Act 624) – This Act repealed the Forest Protection (Amendment) Law, 1986 (PNDCL 142) and amends the Forest Protection Decree 1974 (NRCD 243) to provide for higher penalties for offences. It reviewed forest offences fines upwards and introduced joint liability in the commitment and prosecution of forest offences.

The Forest Plantation Development Fund (Amendment) Act 2002 (Act 623) –This Act amended ACT 583 to enable plantation growers, both in the public and private sectors to participate in forest plantation development.

2.1.2 Agricultural Policies and Regulations

Food and Agriculture Sector Development Policy (FASDEP)

The first Food and Agriculture Sector Development Policy (FASDEP) was developed in 2002 as a framework for the implementation of strategies to modernize of the agricultural sector. In 2006, after nearly four years of its implementation, the FASDEP was revised to reflect lessons learned and to respond to the changing needs of the sector. The revised policy of 2006 (FASDEP II) encourages the formation of inter-ministerial teams to ensure environmental sustainability in agricultural production systems. FASDEP II emphasizes the sustainable utilization of all resources and commercialization of activities in the sector with market-driven growth in mind and with emphasis on environmental sustainability.

Medium Term Agriculture Sector Investment Plan (METASIP)

The Government of Ghana developed the Medium-Term Agriculture Sector Investment Plan (METASIP) to implement the Food and Agriculture Sector Development Policy (FASDEP II) over the medium term 2011-2015. The METASIP comprises of six key programmes:

- (i) food security and emergency preparedness;
- (ii) improve growth in incomes;
- (iii) increased competitiveness and enhanced integration into domestic and international markets;
- (iv) sustainable management of land and environment;
- (v) science and technology applied in food and agriculture development;
- (vi) enhanced institutional coordination.

Tree Crop Policy

GPRS I and GPRS II emphasized the need for the country to make tree crops a pivot of the country's development agenda. GPRS II stated that tree crop development should be used as a strategy to reduce poverty. The tree crops listed include cashew, citrus, cocoa, coconut, coffee, dawadawa, kola,

mangoes, oil palm, rubber tree, and shea. Others include acacia (Gum Arabic), avocado, baobab, and tamarind.

The Ghana Irrigation Policy

The objective of irrigation policy is to expand and improve the efficiency of irrigation to support agricultural development and growth. It will be pursued with principles of sustainability in operation and maintenance, and use of natural resources, equitable access by women to benefits of irrigation, and the rights to participate in irrigation management.

2.1.3 Mining and Mineral Policies and Regulations

National Mining Policy –June 2007 draft

The mining policy has a section on environmental regulation of mining and the objective stated under this section is to achieve a socially acceptable balance, between mining and the physical and human environment and to ensure that internationally accepted standards of health, mining safety and environmental protection are observed by all participants in the mining sector.

It mentions also that procedures for the assessment of applications will take into consideration inter-agency consultation. It will establish arrangements under which the Minerals Commission will consult with the EPA, the Forestry Commission, District Assemblies and other relevant departments and agencies during the evaluation of applications for mineral rights.

The policy mentions under land use that *“In the case of forest reserves the Forestry Commission must explicitly waive any restrictions to entry before any mining activity can take place”*.

Mining and Minerals Act of 2006 (Act 703) (*repeals and replaces Minerals and Mining Law 1986, Minerals and Mining (Amendment) Act of 1994 among others*). It vests the ownership of all minerals in its natural state in, under or upon land in Ghana, rivers, streams, water-courses throughout the country, the exclusive economic zone in the President in trust for the people of Ghana.

The Minerals and Mining Act represent the central pieces of legislation for the exploitation of minerals. The Act establishes detailed rules regarding the ownership of minerals, mineral rights, various licenses required, royalties/rentals/fees, surface rights and compensation issues among others.

Mining in Forest Reserves

In 1997, a policy decision was taken that mineral exploration activities would be allowed within at least 2% of Production Forest Reserves. Guidelines for mining in forest Reserves were developed and implemented. The Liaison Group overseeing the review of the guidelines for mining in production forest reserves (EPA, FSD, WRC, Chamber of Mines, Minerals Commission) has since 2013 initiated the procurement process to engage a consultant to review the existing guidelines for mining in production forest reserves.

2.1.4 Environmental Protection and Assessment Policies and Regulations

The Environmental Protection Agency (EPA) Act, 1994 (Act 490)

This Act establishes and mandates the EPA to seek and request information on any undertaking that in the opinion of the Agency can have adverse environmental effects and to instruct the proponent to take necessary measures to prevent the adverse impacts. The EPA Act, 1994 (Act 490) gave mandate to the Agency to ensure compliance of all investments and undertakings with laid down Environmental Assessment (EA) procedures in the planning and execution of development projects, including compliance in respect of existing ones.

Part II of the Act 490 deals with pesticides control and management and this was formally an Act on its own (Pesticides Control and Management Act of 1996, Act 528). This section of Act 490 provides the rules for registration, pesticides classification, approval, clearance, using, disposing of and non-disclosure of confidential information, the granting of license, labeling and pesticides inspections.

The Environmental Assessment Regulations of 1999, LI 1652

The Environmental Assessment Regulations of 1999, LI 1652 enjoins any proponent or person to register an undertaking with the Agency and obtain an Environmental Permit prior to commencement of the project. It indicates the EIA process and provides list of environmentally sensitive areas as well as possible undertakings requiring EIA.

National Environmental Policy (NEP), 2013

The NEP presents a road map to address major environmental threats jeopardizing the natural and common resource base of the country and has integrated the most urgent environmental concerns of present time, to provide clear strategies for overcoming existing hurdles. It validates the Strategic Environmental Assessment (SEA) process as a tool for mainstreaming environment into all government policies, programmes and projects.

National Climate Change Policy (NCCP), 2013

The Policy is built on five systematic pillars: Governance and Co-ordination; Science, Technology and Innovation; Finance; International Cooperation, Information Communication and Education; and Monitoring and Reporting. The objective of the policy is to mitigate and ensure an effective adaptation in key sectors of the economy, such as agriculture and food security, natural resources management, energy, industry and infrastructure among others. The National Climate Change Policy Framework has three objectives: low carbon growth; effective adaptation to climate change, and social development.

2.2 Institutional Framework

The major institutions with significant influence or involvement with the GFIP activities are described below.

2.2.1 Ministry of Lands and Natural Resources

The Ministry has the oversight responsibility for the land and natural resources sector and its functions include: policy formulation, co-ordination, monitoring and evaluation , validation of policies, programmes and project, supervision of sector departments and agencies; and negotiations with development partners.

The Ministry's aims and objectives are:

- develop and manage sustainable lands, forest, wildlife and mineral resources;
- to facilitate equitable access, benefit sharing from and security to land, forest and mineral resources;
- promote public awareness and local communities' participation in sustainable forest, wildlife and land use management and utilization;
- to review, update, harmonise and consolidate existing legislation and policies affecting land, forest and mineral resources;
- to promote and facilitate effective private sector participation in land service delivery, forest, wildlife and mineral resource management and utilization;
- develop and maintain effective institutional capacity and capability at the national, regional, district and community levels for land, forest, wildlife and mineral service delivery; and
- develop and research into problems of forest, wildlife, mineral resources and land use.

MLNR is the sector Ministry to which the Forestry Commission reports. It is also responsible for Ghana's Forest Investment Program (FIP). MLNR will serve as the Program's Coordination and Management Committee to ensure integration with FIP projects and related activities.

2.2.2 Forestry Commission

The Forestry Commission of Ghana is responsible for the regulation of utilization of forest and wildlife resources, the conservation and management of those resources and the coordination of policies related to them. The Commission embodies the various public bodies and agencies that were individually implementing the functions of protection, management, the regulation of forest and wildlife resources. These agencies currently form the divisions of the Commission namely:

- Forest Services Division (FSD);
- Wildlife Division;
- Timber Industry Development Division (TIDD);
- Wood Industries Training Centre (Forestry Commission Training School);
- Resource Management Support Centre (RMSC) ;

The Climate Change Unit, established in 2007 as a unit of the Commission has a mandate to manage forestry-sector initiatives related to climate change mitigation, including REDD+. It hosts the National REDD+ Secretariat and serves as the National REDD+ focal point.

It is the aim of the Commission to be a corporate body of excellence in the sustainable development management and utilization of Ghana's forest and wildlife resources meeting both national and global standards for forest and wildlife resource conservation and development.

2.2.3 Lands Commission

The Lands Commission manages public lands and any other lands vested in the President by the Constitution or by any other enactment or the lands vested in the Commission. The Commission advises the Government, local authorities and traditional authorities on the policy framework for the development of particular areas to ensure that the development of individual pieces of land is coordinated with the relevant development plan for the area concerned.

The Commission formulates and submits to Government recommendations on national policy with respect to land use and capability; advice on, and assist in the execution of, a comprehensive programme for the registration of title to land throughout the Republic. Currently, the Commission has the following divisions:

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

2.2.4 Office of the Administrator of Stool Lands (OASL)

The functions of the Office of the Administrator of Stool Lands as provided for under Article 267(2) of the 1992 Constitution and Sections 2, 9 and 10 of Act 481 of 1994 are:

- establishment of a Stool Lands account for each stool into which shall be paid all rents, dues, royalties, revenue or other payments whether in the nature of income or capital from stool lands;
- collection of stool lands revenue and accounting for same to the beneficiaries;
- disbursement of stool land revenue to beneficiaries in the proportion of 25% to the Stool through the traditional authority, 20% percent to the traditional authority and 55% to the district assembly within the area of authority of which the stool land is situated;
- consultation with stools and other traditional authorities on matters relating to the administration and development of stool lands;
- co-ordination with Lands Commission and other relevant Public Agencies and other stakeholders in preparing policy framework for the rational and productive development of stool lands;
- facilitation of the establishment of Land Secretariats for traditional authorities;
- research into stool land issues and collection and storage of relevant information and data on stool lands and making same available.

2.2.5 Minerals Commission

In broad terms, the responsibility vested with the Mineral Commission is to oversee regulation and management of the utilization of the mineral resources of Ghana, and to co-ordinate the policies in relation to them. The main functions of the MC include the following:

- formulate recommendations of national mining policies and monitor their implementation;

- monitor the operations of all bodies or establishments with responsibility for minerals and report to the Minister;
- receive and assess development agreements relating to minerals and report to Parliament;
- secure comprehensive data collection on national mineral resources; and
- perform such other functions as the Minister may assign to it.

A foremost responsibility of the MC is the administration of minerals rights. For this purpose, the MC maintains a cadastral system and a register of mineral rights. The various mining and mineral permits include reconnaissance license, prospecting license, and mining lease. Actual decisions in matters of mineral rights are taken by the Minister of Mining, but only after recommendation of the MC.

For the promotion and administration of Small Scale Mining, the MC maintains District Offices. The control of illegal small-scale mining activities popularly known as *galamsey* is a national security issue. The nation has been overwhelmed by these *galamsey* activities and successive governments have not been able to bring it under control or get rid of it. The recent Presidential Task Force has however, brought some success to the control of *galamsey* activities since 2012 but only time will tell with regard to its sustainability. The effective control of *galamsey* activities will require the involvement and collaboration of all stakeholders especially the traditional authorities and district assemblies.

2.2.6 Ministry of Environment, Science, Technology and Innovation

The overall objective of the ministry is to ensure accelerated socio-economic development of the nation through the formulation of sound policies and a regulatory frame work to promote the use of appropriate environmentally friendly, scientific and technological practices and techniques.

2.2.7 Environmental Protection Agency

As the law stipulates, the EPA is statutorily mandated to ensure that the implementation of all undertakings do not harm the environment. The Agency has eleven (11) regional offices, which are accessible and staffed and equipped to perform its functions. It is expected that sub-projects that will require the preparation of EIA will abide by statutory requirements and the implementing institutions will liaise sufficiently with the Agency to ensure compliance. The EPA is the National Focal Point for Climate Change and is responsible for all national communications to the UNFCCC.

2.2.8 Forestry Research Institute of Ghana (FORIG)

Forestry Research Institute of Ghana (FORIG) is one of the 13 institutes of the Council for Scientific and Industrial Research (CSIR). By Act of Parliament (Act 405) the Institute was transferred from the CSIR to the Forestry Commission in 1980. In 1993, by another Act of Parliament (Act 453) the Institute was reverted to the CSIR. The goals of the Institute include to:

1. conduct high quality user-focused forestry research that generates scientific knowledge and appropriate technologies;

2. disseminate forestry related information for the improvement of the social, economic and environmental well-being of the Ghanaian people;
3. to enhance the sustainable development, conservation and efficient utilisation of Ghana's forest resources;
4. to foster stronger linkages through collaborative research across disciplines among its scientists, stakeholders and external Institutions.

The Institute has research centres in 5 research stations strategically located in one or more ecological zones of the country – Benso in the wet/moist evergreen zone in the Western Region, Kubease, Amantia and Abofour respectively in the moist semi-deciduous-N/E, moist semi-deciduous-S/E and dry semi-deciduous in the Ashanti Region; and Bolgatanga in the northern savanna.

2.2.9 Ghana Cocoa Board (COCOBOD) and Cocoa Research Institute of Ghana (CRIG)

Ghana Cocoa Board (COCOBOD) is directly under the Ministry of Finance and the functions of COCOBOD centre on the production, research, extension, internal and external marketing and quality control. The functions are classified into two main sectors; Pre-harvest and Post-harvest. The Pre-harvest Sector functions are performed by the Cocoa Research Institute of Ghana (CRIG), the Seed Production Unit (SPU) and the Cocoa Swollen Shoot Virus Disease Control Unit (CSSVDCU) deal with fundamental issues on actual cocoa production at the farm gate level.

The Post-Harvest Sector functions are undertaken by the Quality Control Division (QCD) and the Cocoa Marketing Company (CMC) Limited. The post-harvest activities of COCOBOD start with quality control measures of QCD which farmers must observe to facilitate the acceptance of their produce at the buying centers by the licensed buying companies engaged in internal marketing of cocoa at the time.

CRIG is the research wing and a division of COCOBOD. CRIG's research policy and directions are underpinned by the following outcomes:

- increase productivity;
- facilitation of environmental sustainability;
- adaptation of farming practices to climate change;
- farmer's find CRIG'S mandated crops attractive.

2.2.10 Ministry of Food and Agriculture

The Ministry of Food and Agriculture is the ministry responsible for the development and growth of agriculture in the country. The primary roles of this ministry are the formulation of appropriate agricultural policies, planning and coordination, monitoring and evaluation within the overall economic development. The Ghana Irrigation Authority (GIDA) falls under this ministry. MoFA's mandate in relation to forestry includes provision of extension services on agro-forestry and tree crops.

2.2.11 Water Resources Commission (WRC)

The Water Resources Commission (WRC) was established by an Act of Parliament (Act 522 of 1996) with the mandate to regulate and manage Ghana's Water Resources and co-ordinate government policies in relation to them. The Act stipulates that ownership and control of all water resources are vested in the President on behalf of the people. The functions of the WRC as established under Act 522 among other things are to:

- formulate and enforce policies in water resources conservation, development and management in the country;
- coordinate the activities of the various agencies (public and private) in the development and conservation of water resources;
- enforce, in collaboration with relevant agencies, measures to control water pollution; and
- be responsible for appraising water resources development project proposals, both public and private, before implementation.

2.2.12 Local Government Authorities

The Regional Coordinating Council (RCC) and the District Assembly (DA) are responsible for the overall development of the region and district respectively and their functions include: to prepare and submit development plans and budgets to superior institutions for approval and implementation. These institutions were set up by an Act of Parliament, to serve as the planning authority for the region and district respectively.

The current local government structure or the district assembly system is established by Act 936. The Act designates the District/Municipal/Metropolitan Assembly as the planning authority, charged with the overall development of the district. Both Acts provide that local people (communities) must participate in the formulation of the District Development Plan.

A key feature of this Assembly System is the involvement of communities or zones or whole villages who elect their representatives (Assemblymen) to the Assembly. The structure of the Assembly comprises Unit Committees which are usually formed at the community levels, and the Urban/Town/Area Councils.

With regard to environmental management at the district level, the District Environmental Management Committees (DEMC) has been set up by law (Act 462) to among other things:

- promote and provide guidelines for the establishment of community level environmental committees to put into effect the environmental programmes of the Assembly in the community;
- plan and recommend to the DA, strategies and activities for the improvement and protection of the environment with emphasis on fragile and sensitive areas, river courses etc.

2.2.13 Traditional Authorities/ National House of Chiefs

Traditional authorities encompass chiefs or traditional rulers, and traditional councils. In Ghana, the traditional authority system comprises:

- Chiefs;

- Queen Mothers;
- Linguists;
- Family/lineage/clan heads;
- Head of 'asafo' companies; and
- Priests and priestesses.

In pre-colonial times, traditional authorities constituted the axis for the exercise of executive, legislative and judicial powers. Traditional authorities are now largely the custodians of the traditions and customs of their subjects. Chiefs (or other traditional rulers) have important role as custodians of communal land and exercise traditional authority over people living within their areas.

Forestry has had diverse impacts on traditional authority systems, especially as they relate to authority over land. The regulation, allocation and management of land have been a responsibility and right of traditional authority and structures. Chiefs are recipients of part of royalties from the forestry sector and land rent payable in private tree plantation operations. Traditional councils, who assist the chiefs, also receive a share of royalties. Traditional authorities are key players in decision-making. Traditional authorities sit on important boards such as the Forestry Commission board and the National REDD Working Group.

The 1992 constitution under Article 270(1) and the Chieftaincy Act 2008 guarantees the institution of chieftaincy together with its traditional councils as established by customary law and usage. The Constitution also makes provision for an elaborate system of House of Chiefs. This includes several traditional and divisional councils, each of which elects members to one of ten Regional Houses of Chiefs (RHCs), and then five members from each RHCs to the National House of Chiefs.

2.2.14 Private Sector

Timber Industry

Two major groups in the forestry sector include the Ghana Timber Association (GTA), which is made up of loggers and the Ghana Timber Millers Organization (GTMO), which comprises of the milling and export companies. Other players in the industry include the Furniture and Wood Workers Association of Ghana (FAWAG) comprising of a wide range of members from small wood workers to large furniture companies. There are also the retailers of lumber in the domestic market forming the Domestic Lumber Traders Association (DOLTA).

Cocoa Industry

The major groups of interest may include farmers associations such as the Ghana Cocoa Coffee and Shea-nut Farmers Association (COCOSHE); Cocoa Abrabopa Association (CAA); Kuapa Kokoo; the Ghana Cocoa Platform; and Private License Buying Companies

2.2.15 NGOs/ Civil Society

There are quite a number of NGOs/Civil society groups both national and international in Ghana and can be found operating in all the ten regions of the country in one way or the other. Their activities cut across exploitation of natural resources (forestry, mining), agriculture especially the cocoa subsector, protection of water bodies to climate change issues. These NGOs or civil society groups have advocated for good governance in the natural resource sector, transparency, respect for human rights, fairness, accountability etc.

Within the NGO group alone, there are over seventy (70) registered NGOs (TBI, 2008). Some relevant international NGOs operating within the forestry sector and or on climate change related issues include IUCN, TBI, SNV, Solidaridad, Conservation Alliance, Oxfam, and Nature Conservation Research Center (NCRC). At the community level, one can identify such civil society groups as local forest users, traditional authorities (chiefs/landowners), women's groups, hunters and minor forest products' collectors such as herbalists whose livelihoods depend on forests.

Several civil society coalitions and platforms are also emerging. A key example is the Forest Watch Ghana, which claims a representation of civil society interests in ensuring good governance in the forestry sector. For example, under the FLEGT VPA process, the Forest Watch Ghana represents the civil society stakeholders in the VPA Steering committee and is consulted regularly on developments with respect to implementation of the VPA (Marfo, E., E. Danso and S.K. Nketiah. 2013).

Other groups that can be classified under CSOs include research and academic institutions such as KNUST, FORIG, UENR; professional bodies such Ghana Institute of Foresters; Religious associations, trade unions among others.

2.2.16 Development Partners

Development partners play a key role in the general development of the country by providing funding required to support the implementation of policies/plans/programmes/projects across almost all the sectors including forestry, which has been greatly influenced by donor support. These bilateral and multilateral donors –e.g. World Bank, AfDB etc do not only provide funding but also ensure that the implementation of the interventions satisfy their prescribed environmental and social safeguards or requirements or standards.

2.3 Ramsar Convention

Six (6) Ramsar sites with a total estimated area of 1784km² are listed as wetland sites of international importance. Under the Convention there is a general obligation for Ghana to include wetland conservation considerations in national land-use planning.

2.4 World Bank Safeguard Policies

The proposed project is anticipated to have positive social and environmental impacts. Component 2 may result in changes in land use which may impact livelihoods. However, these will be voluntary and derived from community-based decision making. Some important and relevant safeguard policies are briefly described as follows:

- Environmental Assessment OP/ BP 4.01. The project will engage in a number of activities that use forest resources in selected sites and potentially impact other environmental areas. These activities may have environmental impacts on a limited scale. This ESMF is being prepared to provide guidance on how to address any possible negative impacts during project implementation. .
- Natural Habitats OP/BP 4.04. Some of the forest and woodlands to be targeted will contain critical ecosystems; the project will enhance the quality of the management of these critical ecosystems and reduce risks associated with potential economic development. The ESMF will provide guidance on avoiding or mitigating impacts on natural habitats.
- Forests OP/BP 4.36. Forest policy and management are a primary focus of this project, in addition to trees in the agroforestry landscape. The project will explore integrated and participatory forest management as part of a strategy of increasing carbon sequestration through sustainable forest management. The ESMF will include guidance on managing forestry issues.
- Physical Cultural Resources OP/ BP 4.11. This policy could be triggered if project activities promote actions in areas containing sites deemed physical cultural resources by the local communities (e.g. holy/secret sites such as sacred groves, sacred forests, etc.). Though it is not anticipated that the project will have negative impacts on any such sites, the existence of any such sites and the corresponding need to trigger this policy will be determined once the targeted zones are confirmed.
- Pest Management OP 4.09. Support integrated approaches to pest management, identify pesticides that may be financed under the project and develop appropriate pest management plan to address the risks.
- Involuntary Resettlement OP/BP 4.12. No involuntary resettlement is anticipated. However, there may be cases where use and access to resources may be restricted due to changes in forest management and resource management plans. Therefore a Process Framework has been prepared.

Process framework

A Process Framework document has been prepared under separate cover for the project. The document is to be implemented in accordance with the World Bank policy on involuntary resettlement. It covers restrictions of access to legally designated and protected areas which might result in adverse impacts on livelihoods of the affected persons. The objectives of the policy are better achieved through a participatory process. To determine the appropriate coverage of the Process Framework, a review is undertaken of the component designs to confirm if any involuntary restrictions of resource access are anticipated, as well as to evaluate the potential impacts on peoples' livelihoods of any restriction of access is likely to be imposed as a result of the component.

3.0 GHANA BASELINE DESCRIPTION

This section provides a general description of the forestry, mining and agricultural sectors of Ghana and the specific characteristics of the project regions particularly, the Western and Eastern regions.

3.1 Environmentally sensitive and protected areas

The environmentally sensitive and protected areas in the country are described in the following table. Ghana has 3,725 species of plants, 729 birds. The Ghana EPA has also classified 'no go' areas for development projects which are given in the annex of this report.

Table 2: Description of Protected Areas in Ghana

Typology	Area	Comments
Off-Reserve areas	201,000 km ²	Off-reserve areas are lands which are currently (or were) forests but where the policy presumption is that these lands would be converted to other use – in particular, agriculture. This includes 5,000 km ² of unreserved forests, 60,000 km ² of bush fallow, 71,000 km ² of savanna woodland, 36,000 km ² of unimproved pasture, and 29,000 km ² of tree and annual crop land
Forest Reserves	26,000 km ²	Areas which have been designated as forest reserves where no farming is allowed (except for in "admitted" farms, that were usually present at the time of reservation of the forest).
Dedicated Forests	4 km ²	Dedicated forests are designed to enable communities to manage their own forest 'reserves' based on approved management plans. These are in the form of patches of forests, sacred groves and secondary forests in off-reserve areas. Under a pilot scheme, a forest management scheme was initiated in 1994 for two communities in the Fosu district with declared Dedicated Forests (215 ha & 190 ha. The results led to draft legislation and a programme to promote dedicated forests was formulated in 1997.
Sacred Groves	Unknown	There are numerous sacred groves throughout Ghana. These are managed wholly by communities, but they have no legal status and are extremely small in most instances
Protected Areas (National Parks)	10,500 km ²	Generally, a large and relatively undisturbed area of outstanding natural value containing representative samples of major natural regions, features or scenery and containing one or several entire ecosystems and not materially altered by man (or reflecting longstanding cultural land management practices). The areas should be accessible to the public, have high recreational, educational, inspirational and cultural potential of clear benefit to the local people, the region and the nation.

Typology	Area	Comments
Resource Reserves (Game Production Reserve)	1,664 km ²	Areas of variable size in which habitats are managed to guarantee conditions essential to the well-being of selected species for the sustained production of wildlife products (meat, timber, pasture, fruits, honey and other Non-Timber Forest Products (NTFPs) for cultural practices, tourism and trophy hunting. These areas may be managed by a central authority, or through agreement, by other levels of government, special trusts or local community institutions as appropriate under the overall supervision of Ghana Wildlife Department.
Wildlife Sanctuaries	66km ²	Wildlife sanctuaries can be created on state land or local land. There is a revenue sharing mechanism at Agumatsa Wildlife Sanctuary in place. (Community 57%, FC 23% and Hohoe Municipal Assembly 20%)
CREMA-Community Resource Management Area	30km ²	The Community Resources Management Area is a legally recognized unit of management that is capable of managing the wildlife resources within the defined area. Devolution of authority to the CREMA to the Executive Committee is conditional and confers the right to restrict access to the common property and extra-farm resources. This provides the incentives for sustainable management of wildlife resources. So far 19 CREMAs have received the authority to manage their resources.
Globally Significant Biodiversity Areas- GSBAs	2,302 km ²	Legally established globally significant biodiversity areas identified within the existing forest reserve system, forming a potential network of thirty forest reserves which are proposed for either full (11 reserves) or partial (19 re-serves) protection to provide global security for floristic diversity, these include GSBAs and Southern Dry Forests the Provenance Protection Areas.
Strict Nature Reserve (SNR)	385 km ²	Only 1 Strict Nature reserve, Kogyae, has been created. Originally created from a Forest Reserve it was taken over by the WD in 1971 and established as an IUCN Category I strict nature reserve. However, the WD has been unable to evict a number of farms and settlements that have occurred within the reserve.
Ramsar Sites	1,784 km ²	6 Ramsar sites are listed as wetland sites of international importance. Under the Convention there is a general obligation for the Contracting Parties to include wetland conservation considerations in their national land-use planning. They have undertaken to formulate and implement this planning so as to promote, as far as possible, "the wise use of wetlands in their territory"

3.2 Forestry and agricultural (cocoa) sectors

According to the Forestry Development Master Plan (FDMP) in 1996 the annual sustainable harvest is 1 million m³, of which 0.5 million m³ from the FRs based on inventory and yield data, and 0.5 million m³ from off-reserve forests based on estimates. The latter was later revised to 1.5 million m³ around 2002, based mainly on economic considerations, and hence the current annual allowable cut (AAC) is set at 2 million m³.

The informal forestry sector, mainly chain saw milling (CSM), is almost equal in size to the formal sector in terms of employment and production. CSM, though illegal since 1998, provides the bulk of the

supply (84%) for the domestic market, with estimated volume of around 0.5 million m³ and market value of around 280 million GHC. It is also the main source of (illegal) overland export lumber to neighbouring countries with an estimated volume of around 260,000 m³. It provides employment for around 130,000 people and livelihood for 650,000 people, and is the source of considerable revenue, to the mostly urban financiers of the operations (Marfo, 2010). The disconnect between a growing domestic demand and sustainable wood harvest creates huge pressure on forests, particularly in off reserve areas.

In addition to timber, forests provide the main source of domestic energy in the form of fuelwood and charcoal. The average annual per capita wood energy consumption estimate is 1.3 m³. This would give a total estimated wood removal of more than 30 million m³ for fuelwood and charcoal, or about 85% of the total wood removal in Ghana.

Non-timber forest products (NTFPs) are also very important, especially for women, but much of their value is not formally recorded and remains inadequately represented in policy analysis.

Plant NTFPs extracted from FRs include pestles, canes used for roofing, drying mats and fish traps, herbs, spices, chewing sticks and wrapping leaves. Animal-based NTFPs, such as grasscutters, snails, antelope and rats are also common. NTFPs are vital in daily use and consumption, whether as tools, construction materials or food. Their importance for trade appears to be less, mainly because communities may rely on crops they plant in their admitted farms or on their Modified Taungya plots.

NTFPs are an important non-cash component for especially women in communities which are close to FRs. In terms of cash income, NTFPs play a modest role in women's livelihoods, as communities rely predominantly on farming for their cash sources of income. NTFPs contribute mainly to people's daily consumption. Many of the NTFPs have been gradually disappearing.

For commercial NTFP extraction from forest reserves, the permit system is the main policy that regulates NTFP use and trade. Communities within a forest reserve have an admitted right to collect NTFPs without a permit when it is for domestic use; otherwise people have to visit the forest district office for a permit. There is no formal policy that controls NTFP use and trade in off-reserve areas, but there are some community conservation mechanisms in place, such as restricted hunting seasons for certain types of bush meat. The permit system does not really hinder people to access NTFPs for their livelihoods because it does not function properly. In the long run, however, the dysfunctional system will hinder people's ability to access NTFPs since over-exploitation and a lack of local management will continue to lead to dwindling resources and lost species.

It may be important to review the current permit system and determine its effectiveness amongst forest-based communities. The feasibility of a registration system for certain NTFPs (such as for leaf gatherers elsewhere in Ghana) may be worth exploring. A registration system requires people to go through the process of getting permission to extract NTFPs far less often than they do under the permit system.

In order to reduce pressure on forest reserves, alternative livelihood strategies such as snail rearing, pestles planting and grass cutter farming, need to be introduced in the communities.

Agricultural crops, both subsistence (e.g. maize, cassava, millet), and cash crops, (e.g. as cocoa, cashew, oil palm and coffee) make up 64% of the natural capital of Ghana. Agricultural land use accounts for more than 50% of all land use, and though decreasing, still provides employment for an estimated 60% of the population, particularly women (53% of whom are employed in agriculture). It is primarily small holder farming though it is important to note that certain crops such as cocoa have been intensively commercialized already for at least a century.

The cocoa sector in Ghana provides the primary livelihood to an estimated 800,000 farm households. Cocoa farming is one of the dominant land use activity in Ghana with an estimated cultivation area of over 1.6 million ha (World Bank 2012a). Cocoa farm sizes are relatively small with over 84% of the cocoa farms and 44% of the area falling in the size range of below 4 ha (Rice & Greenberg 2000).

Ghana is the second largest producer of cocoa in the world. In 2011, Ghana earned over US\$2.87 billion from cocoa export. The importance of the sector is reflected by the fact that the sector, including the Cocoa Board (COCOBOD), operate directly under the Ministry of Finance and Economic Planning (MoFEP) rather than under the Ministry of Food and Agriculture (MoFA). Overall production continues to grow rapidly, 15% per year 2001 – 2005, and accounted for 28% of the overall growth of the agricultural GDP.

To clearly understand cocoa's role in driving degradation and deforestation, and the potential to reduce emissions associated with land use change driven by cocoa farming, a multi-stakeholder working group consisting of government, private sector and civil society came together in 2011 to conduct a more detailed analysis of the cocoa sector and its role as a principal driver of deforestation in the high forest zone.

The results of this analysis determined that despite major gains in national production (cocoa production had increased from a base of 300,000 tons in the late 1980s to an all-time high of 1 million tons in 2011/2012, extensive (or expansive) cultivation of cocoa in Ghana is still the most widely practiced and ubiquitous land use across the program area. What this means on the ground is that in order to maintain or increase yields (and income) farmers establish new farms, at the expense of forests, instead of investing in improved management of existing farms or replanting/rehabilitation of old farms.

In addition, there has also been a rapid transition from shaded cocoa cultivation to progressively low/no shade cocoa cultivation, driven mainly by short-term profits, increasing competition for land, and a rising demand for domestic timber in combination with an absence of information about recommended practices and tree tenure/benefit sharing arrangements that give farmers no economic incentives to maintain trees on-farm.

Overall, the gap between farmers' average yields (approximately 400 kg/ha) and their potential yield (>800 kg/ha) remains unacceptably large, and the pressure on forests reserves from smallholder cocoa farmers' expansion and loss of shaded cocoa forests from reductions in shade continues.

The private sector and civil society are investing substantial resources into cocoa projects and programs. The most common institutional arrangement has been the use of public-private partnership (PPP) models. The introduction of social and environmental standards through certification, and efforts to improve access to education and other social amenities has also been the focus of these projects and social corporate responsibility initiatives. Despite the number of projects and programs in operation, there is no evidence that there has been a positive sector level impact on yields, nor a reduction in deforestation and degradation at the landscape scale.

As a result, the gap between farmers' yields and their potential yield remains unacceptably large and the pressure on forests reserves from smallholder cocoa farmers seeking to profit from the "forest rent" continues. Ghana's Cocoa Forest REDD+ Program aims to enable and facilitate a transition to a climate-smart cocoa production system, while concurrently reducing emissions in the landscape.

It is estimated that 25% of the cocoa tree stock exceed their 30-year maximum production life. A tree planting and rehabilitation program was launched in 2010 to replace old and infected trees. Focus in the first phase is on the Eastern, Brong Ahafo, Central and Volta regions. Unsecured land tenure and insufficient access to affordable credit are some of the major constraints in the cocoa sector.

Tree crops such as oil palm, rubber trees, cashew etc. are envisaged to play an important role in agricultural development in Ghana (GoG 2011c). Especially the plans for and establishment of palm oil plantations has huge economic potential but are also the cause of major controversies in relation to clearing forests in West Africa (e.g. Liberia, Sierra Leone). The palm oil sector is largely small holder driven but could become an area for large-scale investment and development in Ghana with current economic drivers persist, which potentially could impact on the HFZ. The oil palm has indeed assumed increasing importance as a non-traditional export commodity. In the hierarchy of economic importance, it is next to cocoa in the agricultural tree crop sector of the economy. An estimated total land area of 305, 758 hectares is under oil palm cultivation in Ghana. Commercial production is restricted predominantly to the forest zones whose climates are ecologically suitable for oil palm cultivation, (Danyo, 2013).

3.3 Mining sector

The Mining industry accounts for 5% of the country's GDP and minerals make up 37% of total exports, of which gold contributes over 90% of the total mineral exports. Thus, the main focus of Ghana's mining and minerals development industry remains focused on gold, see Figure 1 for the mining concession map of the country. In spite of the variation in terms of geography, socio-economic conditions in which small scale and artisanal mining take place, and of the minerals mined, the fundamental characteristics are remarkably similar, and may be summarized as follows:

- (i) the sector provides livelihoods for a large number of people, and is usually seen as having the potential to be a driver for the development of indigenous entrepreneurship;
- (ii) small scale and artisanal operations are often informal (and often illegal) operations that are difficult for the authorities to control; and
- (iii) such operations are often associated with negative environmental impacts, and with poor social conditions.

Small scale and artisanal mining has become the subject of numerous international initiatives and projects (funded by governments, the World Bank, the EDF and by bilateral organizations such as SDC and DFID). These initiatives are aimed at mitigating the negative effects, and maximizing the potential for creating jobs and overall socio-economic development. Measures undertaken typically include: (i) the improvement of environmental and social awareness among miners; (ii) encouraging small scale operators to form larger entities (companies or cooperatives) in order that they be able to pool their resources, become legal and thereby improve their environmental performance; (iii) the improvement of the supervision and control of such operations by the authorities. The results of such initiatives have been mixed and there are, in fact, no examples of unequivocal success, leading to an overall conclusion that the sector is fundamentally problematic.

In Ghana, it is estimated that there are some 200-500,000 small scale and artisanal miners, and these make a significant contribution to mineral production and exports. The vast majority of small scale and artisanal miners in Ghana are involved in gold mining, with smaller groups being involved in diamond mining and the extraction of aggregates, kaolin and salt. Although the operations of any one individual and/or firm or group of individuals may be deemed as “small”, their concentration in certain areas ensures that the overall importance and impact is large.

Although there are a number of small scale operations in Ghana that have obtained permits to operate, to date there is no single small scale operation which performs adequately in terms of accounting, health and safety, care for the environment, payment of royalties, taxes and fees, etc. Instead, the vast majority of Ghanaian-owned small scale mining ventures remain informal, and associated with considerable adverse environmental and socio-economic issues. Hazards to miners’ health are numerous and at times serious, including unventilated shafts and galleries, and risks of cave-ins in makeshift shafts and tunnels, the unregulated use of mercury for amalgamation of gold, and exposure to dust and associated risk for silicosis. Some small-scale mines also use explosives without written permission from the Minister of Lands and Natural Resources (upon recommendation from the Minerals Commission), which is required by the Minerals and Mining Law. Moreover, community and general health programmes related to small-scale and artisanal operations do not exist.

Some large-scale gold (and diamond) mining companies have reserved areas for artisanal miners on their concessions, and have thereby established fairly good relations. However, major conflicts exist on most large-scale concessions. These often relate to encroachments on areas which have been legally registered and licensed for mining. Some of these issues have led to situations which have required police or even military intervention. It is noted that the level of hostilities and open confrontations tend to be more pronounced in areas where the small scale miners are “outsiders” (either foreign

nationals and/or from other regions in Ghana) compared to sites where the small scale activities are conducted by local people.

The current focus of policies on mining adopted by the Government is to ensure that the activity contributes its quota to the development of the country. In recent times policy objectives have been in respect of:

- ensuring that Ghana's mineral endowment is managed on an economically, socially and environmentally sustainable basis and that there is an equitable sharing of the financial and developmental benefits of mining between investors and relevant Ghanaian stakeholders.
- encouraging private sector participation - local and foreign - in the exploration for and commercial exploitation of mineral resources, in consonance with the Government's commitment to a free-market enterprise economy. The Government recognizes that private sector investors need to be able to operate profitably, be internationally competitive and satisfy their shareholder and employee expectations. To this end, the Government has been working at establishing and maintaining:
 - a conducive macro-economic environment for mining investment;
 - a stable regulatory environment that provides for the transparent and even, handed treatment of investors;
 - a stable, competitive and fair fiscal regime.
- achieving a socially acceptable balance between mining and the physical and human environment and, ensuring that internationally accepted standards of health, safety and environmental protection are observed by all participants in the mining sector.
- encouraging and facilitating orderly and efficient development of small-scale mining in recognition of the fact that the considerable potential for small scale minerals exploitation can provide additional or alternative livelihoods in rural areas and foster the development of Ghanaian mining skills, entrepreneurship and capital.
- empowering Ghanaians to become professional miners, mine managers and owners by maximizing opportunities for minerals-related education, training, career development and other support
- promoting and enforcing respect for employee, gender and human rights in mining.
- encouraging mining companies to develop a participatory and collaborative approach to mine planning, development and decommissioning, taking into account the needs of local communities and thereby fulfill their role as socially responsible corporate citizens.
- developing streamlined and effective institutional arrangements for the mining sector, together with adequate capacity to promote, monitor and regulate mining operations
- ensuring the application of modern principles of transparency and accountability in the administration of mining operations and facilitation of community participation in such processes. To this end, the Government recognizes the need for and will see to the proper coordination between government departments and agencies, and dissemination of information to the public on all aspects of mining as a basis for informed participation.
- facilitating the capacity building of Ghanaian mining authorities to gather, analyse and disseminate geo-data necessary for the promotion of minerals sector investment.

- cooperating with regional and international partners, notably by endorsing and implementing principles that are established in regional and international conventions and other instruments and undertakings that are relevant to mining and to which Ghana is a party or signatory.
- fostering the development of a mining sector that is integrated with other sectors of the national economy and which will contribute to the economic empowerment of Ghanaians by generating opportunities for local entrepreneurship, increased demand for local goods and services, and creating employment for Ghanaians.

3.3.1 General Impact of mining in Ghana

Based on recent studies as well as the outcome of the EU funded Mining Sector Support Programme (Minerals Commission, 2008), these key observations are presented on the impact of mining on the Ghanaian environment.

- The occupation of large tracts of land, alteration of land forms, and the effects on flora and fauna are, generally speaking, the foremost impacts of mining operations on the Ghanaian environment. The impact is particularly extensive at the large-scale mining operations, but is also substantial within other sub-sectors like small-scale/artisanal, diamond, gravel/sand and salt workings.
- Being the sub-sector with the most extensive impact on land, the large-scale mines are also those operations with acceptable, or sometimes excellent, rehabilitation of the land that has been disturbed. The standard of reclamation work does also seem to have improved considerably during recent years. Other sub-sectors, like small-scale/artisanal, diamond, and gravel/sand, hardly rehabilitate their areas of excavation at all.
- Arsenic occurs as arsenopyrite in high concentrations in gold ores at certain major mines (Obuasi, Prestea and Bibiani, being the most important), from where it is spread extensively to natural surface waters. Similarly, arsenic is spread from sites where small-scale/artisanal miners are working ores or waste from old mines of this same composition (e.g. Konongo). Due to the strong toxicity of arsenic, and the risk for human exposure, contamination by arsenic from mines will have to be regarded as a serious environmental issue. This conclusion has been supported by the elevated concentration of arsenic in hair encountered among people from mining areas, as revealed in a special Screening Study within the MSSP (2008) Project.
- Mercury is used by small-scale/artisanal miners in their amalgamation of gold from concentrates. Procedures vary, but the result is that mercury is spread out over extensive areas. Sampling and analysis within the MSSP Project have indicated the contamination of water and sediments in a large number of places, all within areas of small-scale/artisanal mining. However, the concentrations are consistently low, close to the sensitivity of the analytical method being used. The screening did not reveal high values (except in one case) in human hair; with this exception, the examined subjects at all studied sites showed hair mercury levels well below what is regarded as a safe levels for children and women, and there was no difference between mining and non-mining areas. All in all, results point in the direction that the immediate danger from mercury poisoning to the population is less alarming than what has previously been thought. This does not mean that individuals who are in daily contact with mercury, like some galamsey workers, are not exposed to a significant risk.

- The spread of suspended solids to natural streams and rivers is substantial, particularly from small-scale/artisanal operations (gold as well as diamond). It is also an issue of concern at a smaller number of large-scale mines.
- High dams and dumps for the deposition of tailings and waste rock, as well as deep open pits, are common at large-scale mines in Ghana. Such structures are generally well designed, but in a number of cases it is deemed that certain risks for failures, and thereby accidents, exist. Pits and galleries worked by small-scale/artisanal miners are often in a precarious state and regularly produce accidents, which usually cause harm, sometimes fatalities, to the galamsey workers themselves.
- While the handling of non-mining waste is excellent, or at least good, at the large-scale mines, such management within other sub-sectors is mediocre or inferior.
- Large-scale companies comply well with legal requirements. In contrast, other operations are generally poor in this respect.
- Occupational health and safety is dealt with in an adequate manner at large-scale mines. In most of other sub-sectors, such management is deficient or, in the case of small-scale/artisanal mining, virtually absent.
- Community relations at large-scale mines are generally good, in spite of occasional conflicts. Other sub-sectors, however, are mediocre or poor in this regard.

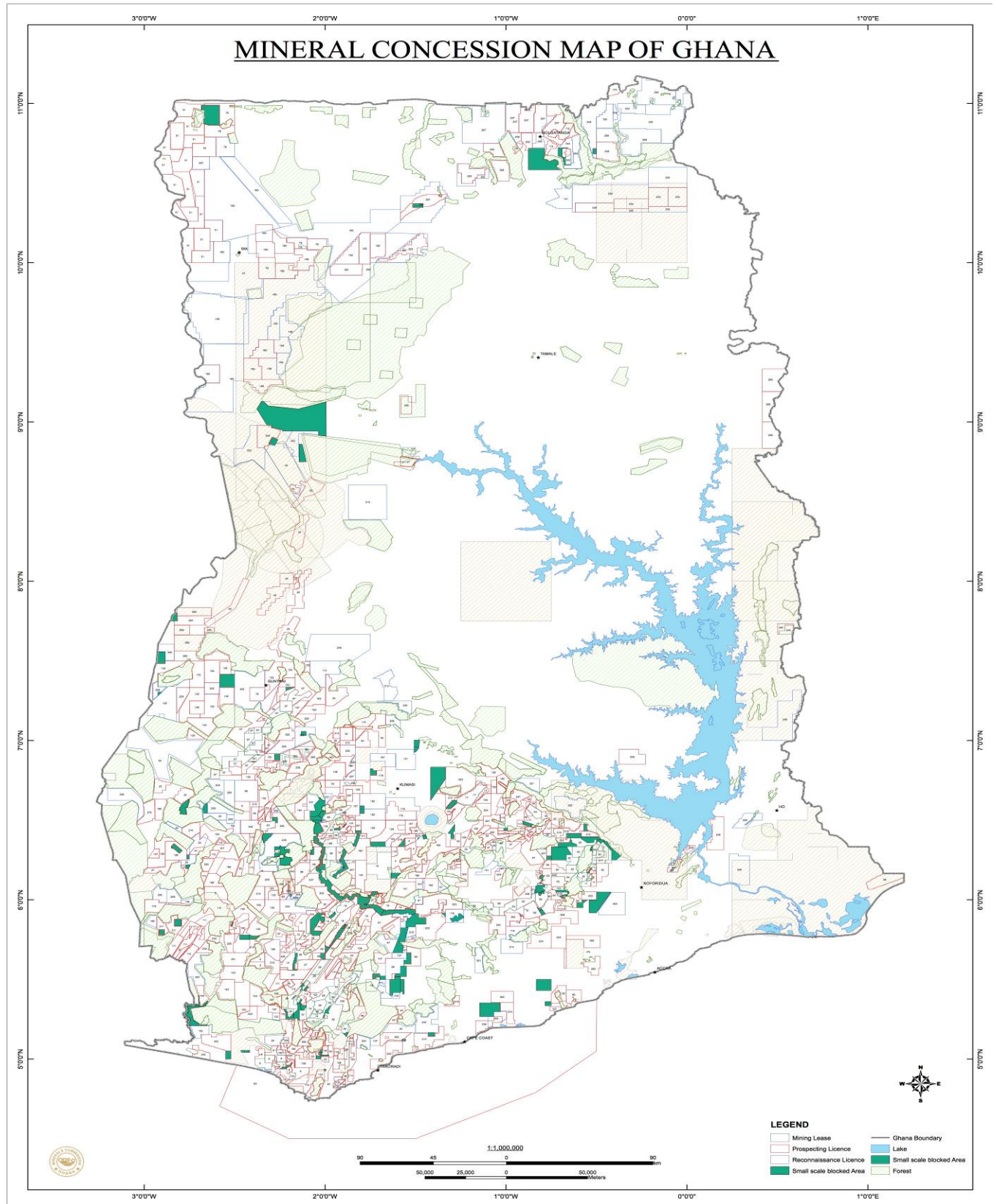


Figure 1: Mineral Concession map (source: Minerals Commission of Ghana,2017)

3.4 Brief presentation of the Project Regions

The two project regions, Eastern and Western are part of the ten (10) regions of Ghana and together occupy 18% of the national landmass (Western- 10% and Eastern- 8%) and host about 20% of the total population of Ghana. The Figures 2 to 7 below present the proposed beneficiary forest districts comprising Bibiani and Tarkwa in the Western Region and Kade and Begoro in the Eastern Region.

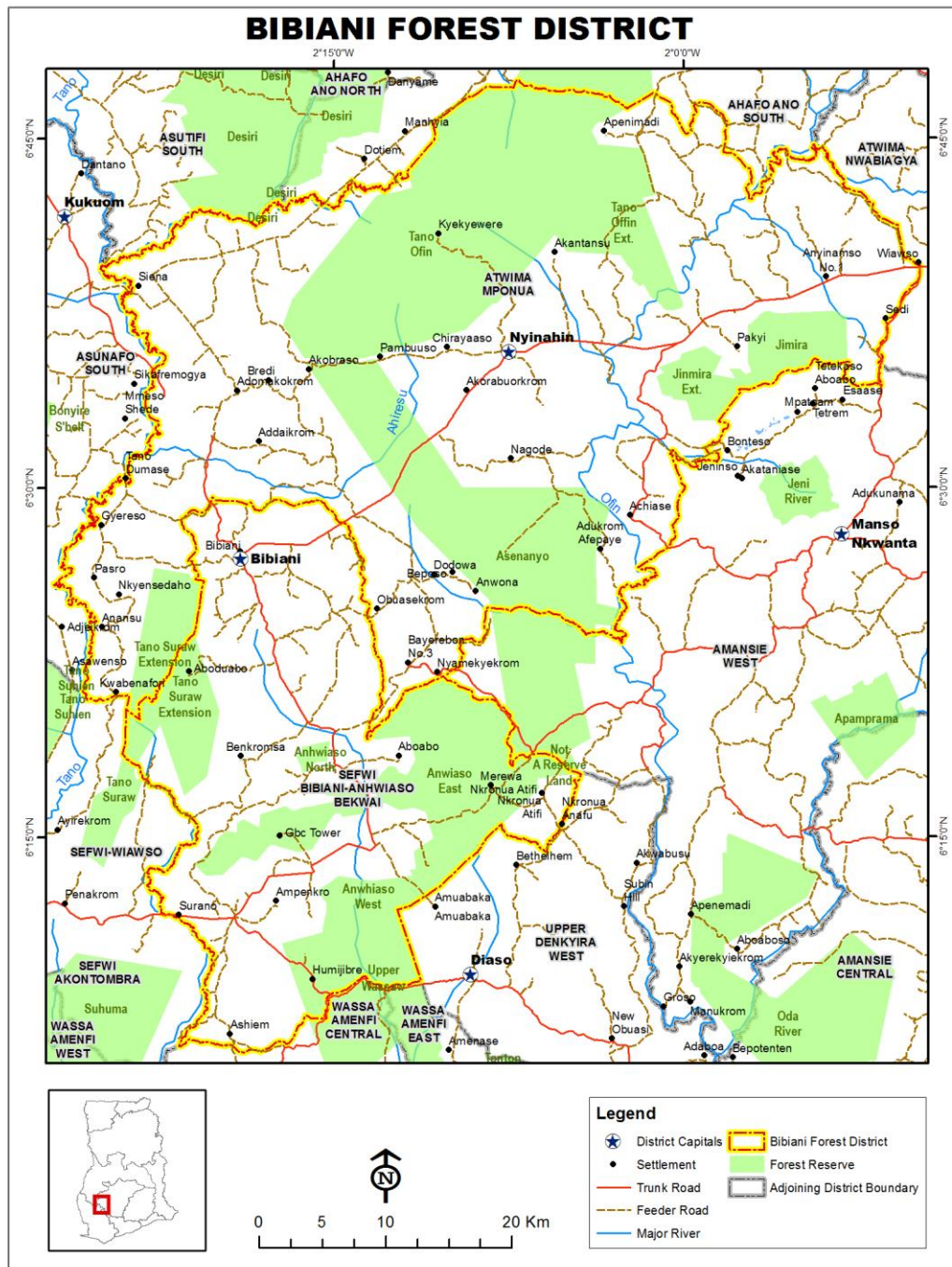


Figure 2: Bibiani Forest District in the Western region showing forest reserve cover (Source: CERGIS, 2018)



Figure 3: Tarkwa Forest District in the Western region showing forest reserve cover. (Source: CERGIS, 2018)

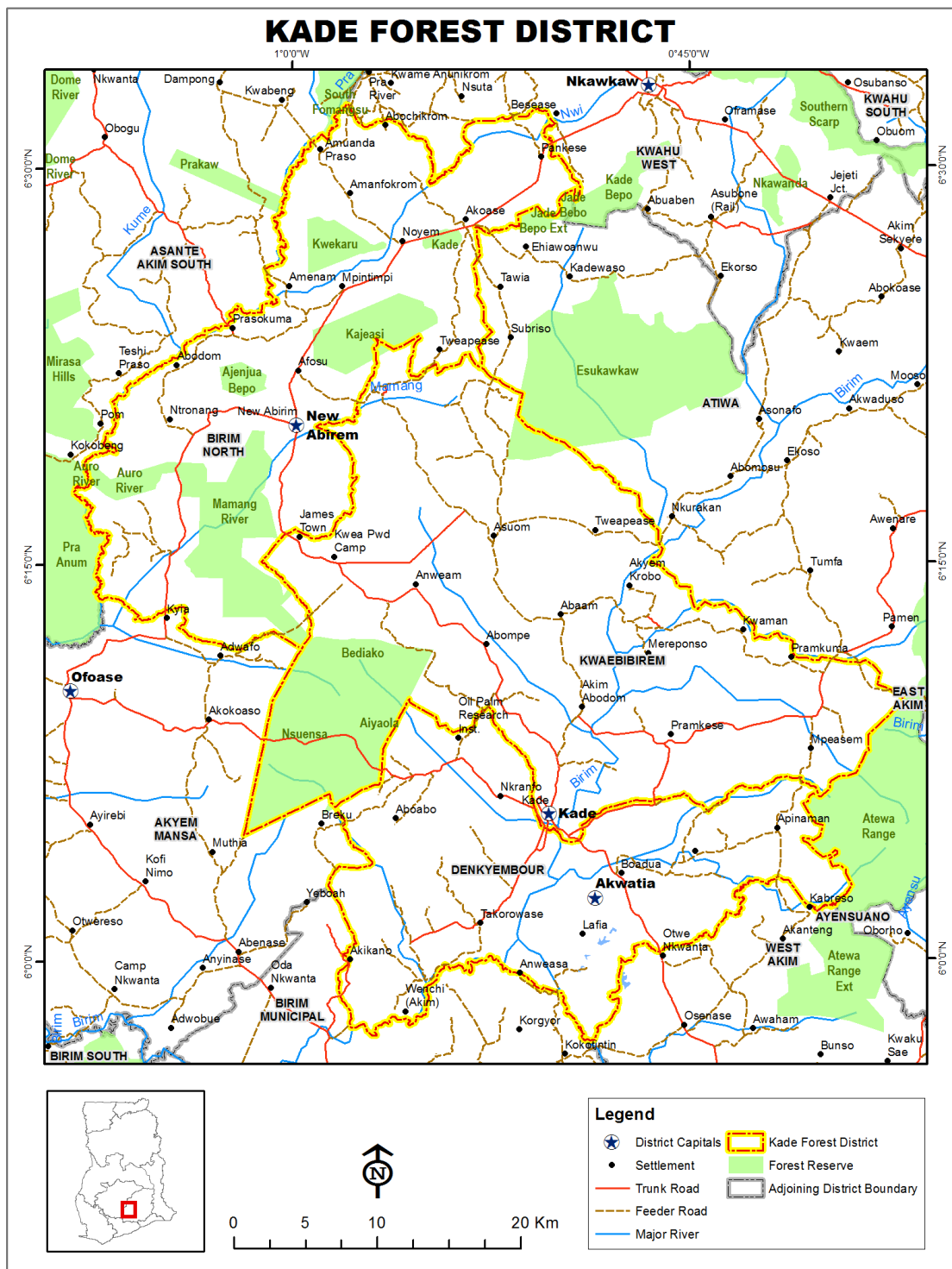


Figure 4: Kade Forest District in the Eastern region showing forest reserve cover (Source: CERGIS, 2018)



Figure 5: Begoro Forest District in the Eastern region showing forest reserve cover (Source: CERGIS, 2018)

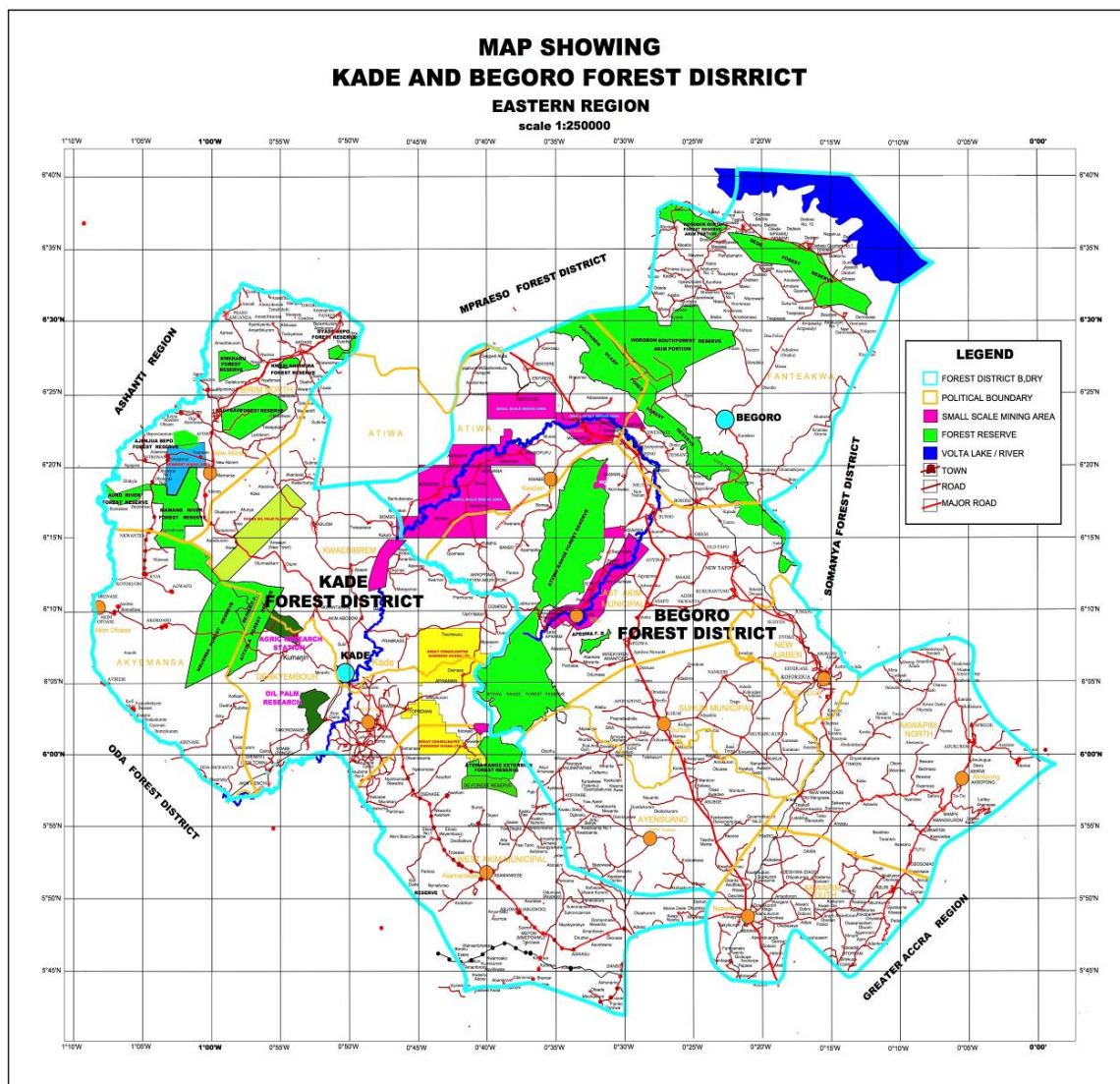


Figure 6: Small scale mining concession areas in the Begoro and Kade Forest Districts (Source: Forestry Commission, Eastern Region, 2017)

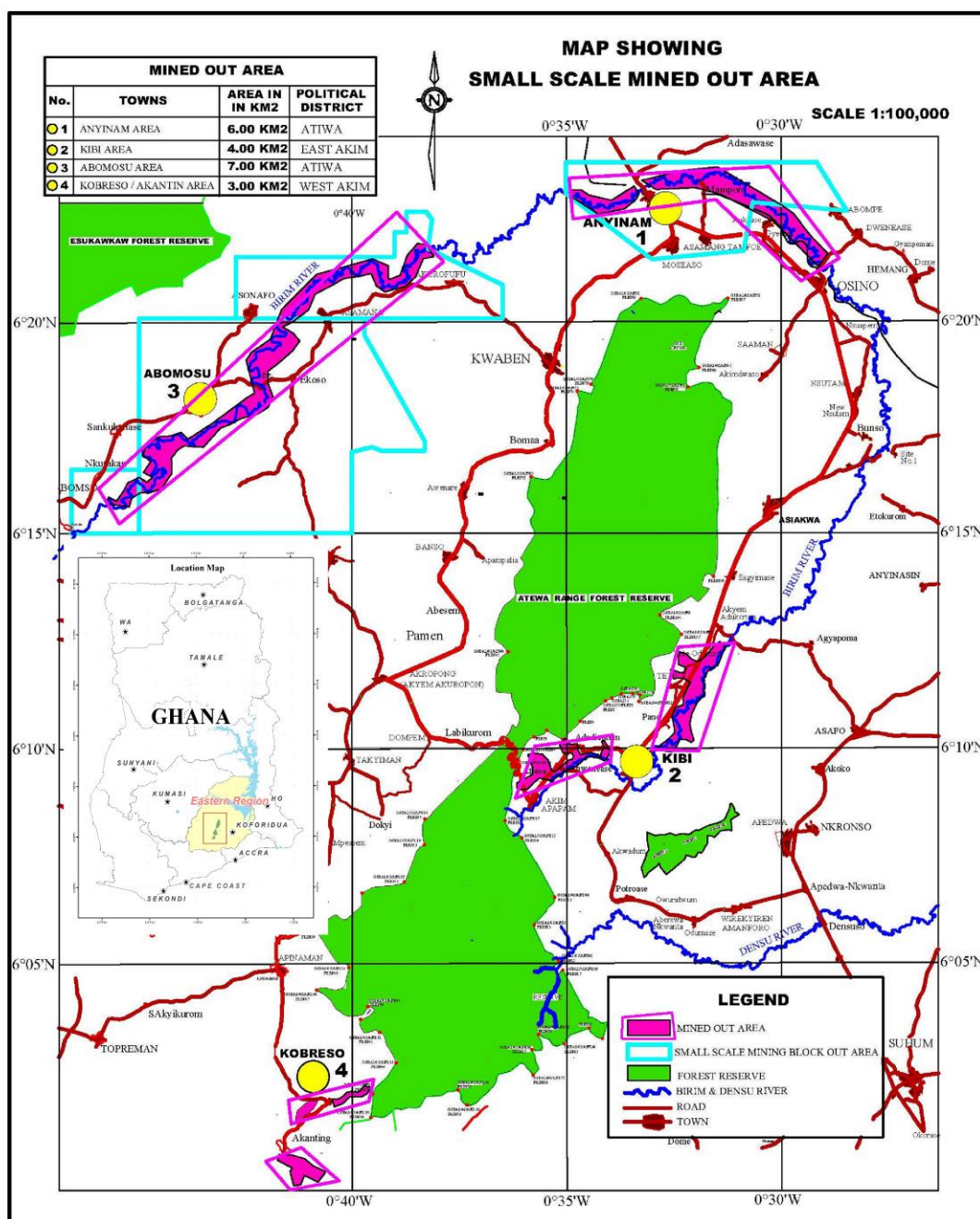


Figure 7: Possible mined out areas in the Begoro Forest District (Kibi area) (Source: Forestry Commission, Eastern Region, 2017)

4.0 FIP ACTIVITIES AND POTENTIAL IMPACT ISSUES AND CONCERNS

The potential environmental and social issues and concerns, both positive and negative, associated with the project are presented in this section. This part of the study has been greatly facilitated by a good understanding of the project scope, as well as from the stakeholder engagement carried out.

4.1 List of key FIP project activities/ interventions under the additional financing

The key FIP sub- projects which required the design and implementation of mitigation actions as per the earlier safeguard documents comprise the following activities listed below:

- Tree Plantation On-Reserve
- Enrichment Planting On-Reserve
- Tree Plantation- Off Reserve
- Model Forest Nurseries for Native Species
- Migrate Sacred Groves to Community Dedicated Forest Reserves
- Shade Tree Planting in Cocoa Farms
- Shade Trees in Agricultural Farming Systems
- Capacity Building- Extension and Communications
- Landscape Planning for corridors
- Cocoa Marketing Incentives and Sustainability Production
- Plantation Field Trials/ Models/ Innovations On-Reserve
- Timber and Non-Timber Innovation, Community Based Enterprise Trials

The proposed sub- project areas under the additional financing are listed below:

Reclamation of forest lands degraded through mining

- Mapping and Prioritization of Affected Areas
- Mapping and Characterizing Mining Degradation in Cocoa Landscapes
- Testing of Rehabilitation Approaches and Sequencing of Interventions
- Productive Species for Rehabilitation
- Engage with Local Land Use Planning Processes
- Leveraging Communication Platforms and Community Engagement

Plantation development

- Support to private plantation developers
 - Incentivize private plantation developers to expand planted areas
 - Support may include: Low cost tree seedlings of economic species; transport and delivery of the seedlings; training, tools and equipment for site/ soil preparation, planting / spacing, and care / nurture
 - Low cost loans will be considered for financially viable firms (based on financial assessment / due diligence and track record)

- Incentive payments are conditional: on compliance with seed quality and stand maintenance/weeding standards
- TA for skills development in tree planting and nurturing, business planning, species selection, mapping and land titling/clearing services
- Professional monitoring, TA to keep investments on track
- Alternate community livelihood support
 - TA and support for cash crops and local food crops grown within plantation systems
 - Intercropping assistance with plantation maintenance and weeding
 - Provides early income in advance of the first thinning and timber harvest

The major reclamation activities will include the following:

- earthworks which will involve spreading of stockpile of sandy/lateritic waste into pits;
- cutting and haulage of fill materials to top up to the required ground elevations;
- spreading of topsoil;
- construction of crest for river/stream course;
- raising of cover crops;
- tree planting (Phytoremediation);
- field maintenance;
- monitoring and evaluation.

4.2 Description of some potential impact issues

This section provides some discussion regarding the potential environmental and social risks and impacts associated with the specific project component activities listed above. These impacts and risks are then linked to each project type in Table 3. The discussion that follows addresses these concerns from a thematic context, such as biodiversity, soils and social issues and concerns.

4.2.1 Impacts on Biodiversity

The establishment of plantation schemes in on-reserve or in off-reserve areas may have both negative as well as positive impacts to the associated environment and ecosystem. These impacts can be a result of converting diverse mixed forest tree species to monoculture stands or creating plantation growth in existing degraded lands.

On the negative side, use of herbicides to eliminate natural vegetative cover which could reduce plantation growth can cause impacts to soil health, associated wildlife and runoff into nearby streams and water bodies. Once established, tree plantations may block the light and as leaf litter and plantation pruning accumulate, cause impacts to surviving plants from increased acidification and dehydration.

The conversion of natural habitats to tree plantations may reduce the abundance and diversity of mammals, birds, reptiles, amphibians, insects and other forms of life.

Aquatic organisms downstream of plantations may be impacted by chemical usage and erosion. Water-bodies may be polluted with organic plantation waste which absorb oxygen, creating anaerobic conditions not conducive to natural species in the aquatic environment. Together with nutrients from fertilizers this can cause outbreaks of algae and invasive water plants. Increased turbidity from suspended particles affects aquatic fauna. Further harm to biodiversity can result from increased sedimentation in wetlands.

On the other hand, most African Acacias are nitrogen-fixing species which actually enrich the soil with organic nitrogen and improve soil fertility. It is therefore expected that the native tree species will be used for recovering degraded or clear-felled native forests as well as in agroforestry. When planning tree plantations, use of diverse agroforestry systems can provide positive benefits in terms of productive outputs (timber, fruits, leaves, resins etc.) as well as other beneficial ecosystem services (nutrient recycling, shelter for various symbiotic species and shade etc.). Selection of tree species that will fulfill both functions is therefore, key to the success of the agroforestry component. The selection of native species and the determination of how to increase biodiversity with spatial planting will also guarantee minimum impact on biodiversity, including wildlife and birds.

4.2.2 Impacts on water resources

Plantation trees grow rapidly, taking up nutrients and water from the soil. Through transpiration they may contribute to locally increased air moisture levels. This may in turn result in more precipitation, but not necessarily at the plantation site.

As tree plantations age, hydrological conditions can be altered in a number of ways:

- reduced soil moisture in the immediate vicinity (root-zone);
- progressively incremental uptake of ground water via the tap-root;
- increased local temperatures due to decomposing grassland plants.

All of these factors can contribute to increased evapotranspiration and the loss of soil moisture. As trees get older, other factors such as rainfall interception come into play. Plantation trees with greater leaf surface areas can hold rainwater caught by their foliage long enough for it to evaporate before it can reach the soil. When water does reach the litter layer, it can be held in sponge-like fashion and also not reach the soil, thereby reducing aquifer recharge. Under these conditions the surface soil layer can develop a condition known as hydrophobicity, which results from a combination of factors including the emergence of certain soil fungi that can deposit water resistant residues on soil particles.

Established plantation trees are able to tap directly into groundwater so that even during dry seasons or droughts they can grow continuously by consuming water that would otherwise be retained in the soil or flow into streams and rivers. This is especially significant during the dry season, as it prevents water from reaching downstream ecosystems and human communities.

4.2.3 Impacts on soil

Tree plantations may impact substantially on soil fertility, and carbon storage capacity as follows:

- decomposing leaf litter may reduce soil pH;
- an acidic environment increases nutrient solubility but increases potential for leaching;
- this also destroys soil organisms that cannot tolerate abnormal acidity;
- after the plantation canopy closes, grassland dies, and groundcover is lost;
- detritus dries/oxidises or decays/decomposes releasing CO₂ and methane;
- altered soil pH creates conditions where alien invasive plants may thrive – often spreading out of plantations.

All of the above contribute to loss of soil carbon through biomass decomposition or soil erosion resulting from soil chemical changes as well as sheet erosion and scouring.

The worst impacts on soils are caused by mechanical disturbance when plantations are clear-cut. The impacts of clear-cutting and log extraction may be worsened by bad plantation design and road construction methods.

Other plantation-related causes of soil erosion are:

- using herbicides to destroy vegetation that ‘competes’ with plantation trees;
- burned or chemically established fire belts (especially on steep slopes);
- displacement of community cropping and livestock grazing onto marginal areas;
- shading induced vegetation loss in grassland or forest areas next to plantations;
- increase silt load in water courses from storm run-off after clear cuts.

4.2.4 Other Impacts

Where there are limited plantation management abilities there may be the probability of alien invasive trees, once they start producing seed, and spreading into the landscape. Also, there may be shading out of natural vegetation. As plantations grow taller, the shade cast along their edges may extend further and for longer. When this happens, it may cause sun-loving species to die out locally and increase opportunities for invasive plant species to become established.

A number of impacts are possible if there are poor plantation practices. These can include:

- poor species selection and poor-quality plants;
- poor management of plantings with a high failure rate;
- inadequate training of plantation workers;
- inadequate fire protection measures;
- inadequate management and supervision.

4.2.5 Social Issues with Plantation Development

The objective is to support local communities to restore and protect their forest lands in a way that meets their needs. It should be taken into account in this respect that many poor local communities cannot wait for so many years until they benefit from a land rehabilitation project. These community forests need to produce a variety of products and services from the early years on. Meanwhile, commercial tree plantations often deny local communities from having access. In certain situations, women sometimes have to walk for miles to gather fuel wood as they cannot enter the tree plantations which have occupied the lands where they used to get their fuel wood from.

It should be taken into account in this respect that many rural households may not have the budget to buy their fuel. There is a clear need to support such communities in their efforts to develop small-scale, biologically diverse agroforestry systems, forest gardens and tree plantations which provide a diversity of goods and services to the community, including fuelwood, medicinal plants, soil fertility, wildlife, and construction materials. These communities also need market access for the sustainable products they produce.

4.2.6 Social Issues with Small scale and Artisanal Mining

There is no clear difference in the execution of work between small-scale and artisanal mining. In most cases, such operations are closely related to larger scale operations by being workings on old abandoned mine sites or by representing intrusions on the land of on-going exploitation of larger mines. The material being treated is often ores from hard rock that have been made accessible by the larger mines, tailings from old or recent mines, and alluvials. The main impacts include the effects on the landscape and drainage pattern; spread of heavy metals and suspended solids in surface waters; and the spread of mercury from gold winning by amalgamation.

Artisanal mine management is typically improvised and performed without any regard to environmental rehabilitation. Moreover, it is not uncommon that artisanal miners in their activities tear down the wall structures of tailings dams or reopen areas that have previously been rehabilitated.

The standard of occupational safety and health is extremely low, and fatal accidents are common.

In many areas of artisanal mining, criminality is widespread, the targets being the “host” company, the local population or other gamamsey miners. At times, action by the police or military has been necessary. Nevertheless, in places, workings may be peaceful and sometimes even involve complete family units, including women and children.

4.2.7 Issues with Remediation/ Reclamation of mined out areas

The positive impacts which may be associated with phyto-remediation include the following:

- it does not require expensive equipment or highly-specialized personnel;
- phytoremediation can be less invasive and less destructive than other technologies;

- phytoremediation may provide habitat to animals, promote biodiversity, and help speed the restoration of ecosystems that were previously disrupted by the activities of the gold mining operators at the site;
- phytoremediation installations can improve the aesthetics of brownfields or other contaminated sites;
- vegetation may help reduce erosion by wind or water;
- the plants can be easily monitored;
- it is potentially the least harmful method because it uses naturally occurring organisms and preserves the environment in a more natural state.

Phytoremediation is not universally appropriate or successful; some important limitations must be noted:

- Extremely high contaminant concentrations may not allow plants to grow or survive; phytoremediation is likely to be more effective or reasonable for lower concentrations of contaminants.
- For remediation to be successful, contamination must generally be shallow enough that plant roots can reach the contaminants, or contamination must be brought to the plant
- Phytoextraction techniques can cause contaminants to accumulate in plant tissues, which could cause ecological exposure issues and thus form part of the food chain
- Phytovolatilization may remove contaminants from the subsurface, but might then cause increased airborne exposure
- If non-native species are selected for phytoremediation, the consequences of introducing them to the ecosystem may be unknown or unexpected
- The time required to achieve the remedial goals may be longer with phytoremediation than with other treatment technologies (e.g., Bioremediation). Phytoremediation can require several growing seasons for a tree stand to be established and for contaminant concentrations to be reduced
- With plant-based systems of remediation, it is not possible to completely prevent the leaching of contaminants into the groundwater (without the complete removal of the contaminated ground, which in itself does not resolve the problem of contamination).

The positive impacts which may be associated with reclamation of degraded lands include:

- creation of opportunities for marginalized groups to access land;
- restoration of authority to chiefs and elders or the original landowners;
- revenue generation through the harvest and sale of economic trees;
- reduction in environmental health hazards posed by the pits;
- creation of available lands for social activities;
- creation of employment;
- increasing the skills and capacity of youths to find employment;
- preventing conflict and enhancing peace and stability;
- protection of traditional activities such as indigenous medicines;
- improvement of the aesthetic beauty of the land;
- free flow of local streams and rivers as their courses will be restored.

The following potential negative impacts are worth noting:

- reclaimed lands which require remediation cannot be used for farming or cultivation of edible crops;
- destruction of the re-colonising pioneer vegetation;
- destruction of habitat of the few hardy animals;
- destruction of animals living in burrows as well as those on the surface of the earth;
- noise pollution emanating from vehicular movement likely to scare away animals
- dusty environs as a result of deployment of heavy vehicles

In summary, **Table 3** below lists some significant potential social and environmental impact issues to be expected from the implementation of the various sub-project activities.

Table 3: AF FIP sub-project activities and potential environmental and social issues/ concerns

Sub- Project activities/interventions	Potential Impact Issues/ concerns
<u>Reclamation of sites</u> <ul style="list-style-type: none"> Earthworks which will involve spreading of stockpile of sandy/lateritic waste into pits; Cutting and haulage of fill materials to top up to the required ground elevations; Spreading of topsoil Construction of crest for river/stream course Raising of cover crops Tree planting (Phytoremediation) Field maintenance Monitoring and evaluation 	<p>ENVIRONMENTAL</p> <p><u>Biodiversity</u></p> <ul style="list-style-type: none"> ✓ Mono specific exotic tree plantings may alter natural vegetation; ✓ Plantation tree seedlings may invade adjacent forest ✓ Biodiversity conservation (changes in flora and fauna) ✓ Uniform age as clear felling may prevent succession processes <p><u>Water Resources</u></p> <ul style="list-style-type: none"> ✓ Alterations in local natural water cycles/ hydrology ✓ Sediment transport to local water bodies <p><u>Soils</u></p> <ul style="list-style-type: none"> ✓ Changes in soil nutrient cycles (fertility and carbon storage capacity) ✓ Increased soil erosion due to repeated disturbance ✓ Poor plantation management leading to physical impacts to soil structure and surface layers <p><u>Air quality</u></p> <ul style="list-style-type: none"> ✓ deterioration from burning of biomass from clearing ✓ reverse gains from carbon sequestration – adding carbon into atmosphere ✓ dust emissions from cutting and filling operations <p><u>Pesticides</u></p> <ul style="list-style-type: none"> ✓ improper application of pesticide amounts ✓ application in rainy season resulting in ineffective targeting and increased runoff and uptake by soils and water bodies ✓ use of highly toxic chemicals to plants, animals and humans ✓ improper use, contamination by high exposure, no precautionary measures leading to health impacts <p>SOCIAL</p> <p><u>Land tenure and ownership</u></p> <ul style="list-style-type: none"> ✓ lack of adequate documentation ✓ clear understanding of land use and occupancy ✓ Conflicts in land claims ✓ increased values in land prices leading to economic displacement of poor land tenants ✓ Transparent rules for benefit sharing of carbon payments between land owner and farmer tenants ✓ Rules and agreements in place for traditional chiefs' revenue sharing with locals and other stakeholders ✓ Land acquisition and compensation issues ✓ Discrimination, lack of grievance mechanisms for all land users and tenants <p><u>Maintaining Livelihoods</u></p> <ul style="list-style-type: none"> ✓ Enhance food security through improved agriculture production on farmed lands to reduce forest pressures
<u>Plantation development</u> <ul style="list-style-type: none"> Establishment of tree plantations 	<p><u>Maintaining Livelihoods</u></p> <ul style="list-style-type: none"> ✓ Enhance food security through improved agriculture production on farmed lands to reduce forest pressures

Sub- Project activities/interventions	Potential Impact Issues/ concerns
<ul style="list-style-type: none"> and enrichment planting • Model forest nurseries for native species • Migrate sacred groves to community dedicated forest reserves • Shade Trees integrated into Cocoa Farms and agricultural farming systems • Landscape Planning for corridors • Cocoa Marketing Incentives and Sustainability Production • Plantation Field Trials/ Models/ Innovations On Reserve • Timber and Non-Timber Innovation, Community Based Enterprise Trials 	<ul style="list-style-type: none"> ✓ Potential expansion of negative activities by admitted settlements and farms that result in biodiversity loss, ecosystem changes, depletion of natural resources ✓ Increasing demand for forest lands for farming/ settlements by fringe communities because productive lands not available; ✓ Adequate, documented and transparent compensation for admitted farmers in order to vacate unauthorised sections of forest ✓ Lost opportunity to earn income through illegal gold mining to maintain families <p><u>Farmer Rights</u></p> <ul style="list-style-type: none"> ✓ Farmers have little say in the harvesting of matured shade trees ✓ Little or no compensation for farmers for destroyed cocoa trees during harvesting of shade trees; ✓ Higher income from improved yields; ✓ No financial benefit to farmers for planting and nurturing shade trees; ✓ Difficulties in registering shade trees ✓ Unreliable supply of seedlings ✓ Long gestation period of native species. <p><u>Forest Management</u></p> <ul style="list-style-type: none"> ✓ Fire prevention and control and plantation security ✓ Community inclusion in management decisions ✓ Community participation in surveillance and enforcement ✓ Protection of rights to use forest resources ✓ Alternative uses for forest waste – charcoal and biogas <p><u>Security and Safety</u></p> <ul style="list-style-type: none"> ✓ Safety and security of community informants/ whistle blowers ✓ Safety and security of FSD field staff ✓ Delayed court processes and low fines which do not create proper structures to punish/deter violations ✓ Low motivation of FSD field staff – not proper incentive structure ✓ Unavailability and poor use of personal protective equipment and limited/ no enforcement process <p><u>Occupational health and Safety</u></p> <ul style="list-style-type: none"> ✓ Lack of awareness creation programs on health and safety including chemical handling. ✓ Unavailability and poor use of personal protective equipment and limited/ no enforcement process <p><u>Cultural Heritage</u></p> <ul style="list-style-type: none"> ✓ Limited access to shrines ✓ Preservation of local cultural identity and heritage ✓ Compensation issues ✓ Community pride and support ✓ Community relinquishing/ sharing heritage for greater good <p><u>Resource Access and Possible Restriction</u></p> <ul style="list-style-type: none"> ✓ Rights to question and have individual considerations addressed ✓ Possible alternative options

Sub- Project activities/interventions	Potential Impact Issues/ concerns
	✓ Established grievance redress options

5.0 FRAMEWORK FOR ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

The Environmental and Social Management Plan (ESMP) provides guidance to the MLNR and the Forestry Commission on procedures to be followed and standards to be met in implementing the projects which are in agreement with national and World Bank safeguard provisions. Roles and responsibilities of the FC/FSD and other collaborating agencies are clearly defined as well as monitoring protocols to be followed to ensure that the required provisions are adhered to. Finally, budgetary estimates are provided to support the implementation of the environmental and social management plan.

The ESMP will be included in the project's Manual of Operations. The ESMP outlines mechanisms for:

- screening of proposed project interventions, identifying potential environmental and social impacts and management of safeguard policies implications;
- arrangements by the MLNR/ FC and other relevant institutions for implementation and their capacity building;
- monitoring ESMP measures implementation;
- community consultations;
- the estimated costs related to the ESMP.

5.1 The Environmental and Social Screening Process

The purpose of the preliminary screening is to: (i) determine whether projects are likely to have potential negative environmental and social impacts; (ii) decide if form EA1 needs to be submitted to EPA; (iii) identify appropriate mitigation measures for activities with adverse impacts; (iv) incorporate mitigation measures into the project design; (v) review and approve projects proposals and (vi) monitor environmental and social impacts and concerns during implementation. The early screening process will also consider the provisions of the Process Framework for possible livelihood impacts.

Project managers must foremost carry out the preliminary environmental and social screening of proposed projects by using the checklist suggested in Annex 1. If significant impacts are anticipated, then the EPA must be consulted and the Ghana Environmental Assessment (EA) procedures duly followed.

When there are minimal or no impacts (as determined using the checklist), project managers must consult internally with the MLNR Environmental and Social Safeguard Focal Person for confirmation. Once an agreement is reached, the manager may proceed with the minimum regular reporting requirements which will be discussed and agreed with the MLNR E&S Safeguard Focal point.

When there may be doubt concerning project risks and impacts, the local and/or MLNR E&S Focal Point should consult the EPA for guidance as provided by the Ghana EA procedures.

5.2 Environmental and Social Assessment Procedure to be followed for Sub- Projects

The formal environmental approval and permitting processes will be guided by the World Bank safeguard policy OP4.01 which provides guidance on the environmental assessment procedures for WB funded projects. The Ghana EIA procedures (EPA, 1994) have also established a process to screen and evaluate all developments, undertakings, projects and programmes which have the potential to give rise to significant environmental impacts. The two processes are largely similar and the Ghanaian procedures are therefore given in the following sections and will mostly be statutorily followed by all projects to obtain environmental permits.

Those projects requiring EPA clearance will only commence when an environmental permit has been procured from the EPA. The Agency has provided the list of environmentally sensitive and critical areas to be avoided in the selection of project sites (Annex 2) as well as projects for which ESIA is mandatory. These have also been given in the Annex 3 and are consistent with the World Bank categorization of projects.

The following steps will be followed by the MLNR/ FC to ensure environmental and social compliance of the Project.

Step 1: Environmental Registration of the Project

The appointed/ designated regional and district safeguard officers will be directly responsible for screening all projects and submitting EPA documentation when required. The FIP Environmental and social review form will be completed and when necessary the Environmental Assessment Registration Forms will also be completed.

A sample copy for the screening form is given as Annex 1 and the EA1 Form is provided in the Annex 4 and the mitigation measures suggested in this ESMF as well as the checklist used in the screening exercise should assist to complete this Form. For projects for which EIA are mandatory, the Officer should register with Form EA1 otherwise Form EA2 should be used.

Step 2: Screening

This activity in accordance with the EAR 1999 LI1652 is the responsibility of the EPA. The Agency, within 25 days of receiving the Registration Form will take a decision by placing the project at the appropriate level of environmental assessment. The results will be communicated to the implementing agency with reasons, which could be any of the following:

- objection to the project;
- no objection to the project (equivalent to World Bank Category C Project);
- preliminary Environmental Assessment (PEA) will be required (equivalent to World Bank Category B Project);
- environmental and Social Impact Assessment (ESIA) required (equivalent to World Bank Category B or A Project).

For projects receiving the 'no objection' from the EPA (WB Category C project) and therefore have only minor environmental and social risks, the regional/ district forestry office may move to implementation in accordance with pre-approved standards or codes of practices or the pre-approved guidelines for environmental and social management.

Step 3: Conduct environmental and social assessment studies

For projects for which the decision is the conduct of a PEA (equivalent WB category B project) or an ESIA (WB Category B and A Projects), stand-alone reports will be prepared. The Ghana EPA statutorily requires an EIA for plantation projects in excess of 40ha.

The Regional Safeguard Officer in consultation with the district office, will prepare the Terms of Reference (ToR) for the ESIA, and follow procurement rules for the recruitment of consultants for the ESIA. The ToR may be prepared using issues identified during the screening exercise and also the registration of the project with the EPA, and in possible consultation if required, the GFIP Safeguards person at the MLNR. Also, the impact mitigation measures provided in this ESMF may provide some basis for the design of the ToR. To facilitate the formulation of the ToR, a template has been prepared and provided in the Annex 5 of this report.

The ESIA will identify and evaluate potential environmental impacts for the proposed activities, evaluate alternatives, and design mitigation measures. The preparation of the ESIA will be done in consultation with stakeholders, including people who may be affected. Community consultations are critical in preparing a proposal for the activities likely to have impacts on the environment and communities. The community consultations should identify key issues and determine how the concerns of all parties will be addressed in the ESIA. When an ESIA is necessary, the administrative process enacted by the EPA will be followed and executed.

Procedures for projects requiring an ESIA

First stage: Preparation of Terms of Reference

The results of identification, and extent of the ESIA (scoping), the terms of reference will be prepared by the Regional Safeguards Officer.

Second stage: Selection of consultant

Third stage: Preparation of the ESIA with community consultation

The report will follow the following format:

- Description of the study area
- Description of the subproject
- Discussion and evaluation of alternatives
- Environment description
- Legal and regulatory
- Identifying potential impacts of proposed sub-projects
- Process of public consultations
- Development of mitigation measures and a monitoring plan, including estimates of costs and responsibility for implementation, of surveillance and monitoring

Step 4: Review and approval of the ESIA for the project; Publication / Dissemination of ESIA

The regional FSD will submit the draft ESIA through the FIP Safeguards Person to the EPA. The report will be reviewed by a cross-sectoral National Environmental and Social Impact Assessment Technical Review Committee (ESIA/TRC) made up of representatives of relevant Ministries, Departments and Agencies as determined by the EPA after preliminary review of the pertinent environmental and social issues associated with the project.

The review committee is expected to:

- assist the Agency in screening/reviewing all Environmental Assessment Applications and Reports (Environmental Impact Statements, Annual Environmental Reports, Environmental Management Plans and other related reports);
- make recommendations to the Executive Director of the EPA for final decision-making;
- provide technical advice on conduct of assessments and related studies on undertakings and the reports submitted on them;
- make recommendations on the adequacy of the assessment and any observed gap;
- advise on the seriousness of such gaps and the risks or otherwise to decisions required to be made recommend whether the undertakings as proposed must be accepted and under what conditions, or not to be accepted and the reasons, as well provide guidance on how any outstanding issue/areas may be satisfactorily addressed.

Copies of ESIA will be placed at vantage points including the EPA Library, relevant District Assembly, relevant District and Regional FSD offices, EPA Regional Offices and the sector Ministry. EPA serves a 21-day public notice in the national and local newspapers about the ESIA publication and its availability for public comments.

Step 5: Public Hearing and Environmental Permitting Decision (EPD)

Regulation 17 of the LI 1652 specifies three conditions that must trigger the holding of a public hearing on a project by the Agency. These are:

- where notice issued under regulation 16 results in great public reaction to the commencement of the proposed undertaking;
- where the undertaking will involve the dislocation, relocation or resettlement of communities; and
- where the Agency considers that the undertaking could have extensive and far-reaching effects on the environment.

Where a public hearing is held, the processing of an application may extend beyond the prescribed timelines required for EPA's actions and decision-making.

Environmental Permitting Decision (EPD)

Where the draft ESIA is found acceptable, the FSD will be notified to finalise the reports and submit eight hard copies and an electronic copy. Following submission to EPA, the FSD shall be issued an Environmental Permit within 15 working days and issue gazette notices.

Where the undertaking is approved, the MLNR/FC shall pay processing and permitting fees prior to collection of the permit. The fees are determined based on the Environmental Assessment Fees Regulations, 2002, LI 1703.

The following distinctions are important and are provided:

1. for activities within forest reserves, the interventions will most likely be owned by the FC and all permitting issues will be spearheaded by the FSD;
2. for activities on off reserve areas which may belong to for example, farmers or plantation owners, they will be supervised/ assisted by the FSD to acquire the required permits.

Table 4: Summary of Environmental Screening Process and Responsibilities

No.	Stage	Institutional responsibility	Implementation responsibility
1.	<ul style="list-style-type: none"> Environmental and Social screening of proposed project interventions to assist in project formulation using checklist 	✓ FC/ MLNR	✓ Secretariat (MLNR)/ FC/ National Safeguard consultant
	<ul style="list-style-type: none"> Statutory Environmental Registration of Project 	✓ FSD/ Private sector	✓ Regional Environmental and Social Safeguard Officer/ Plantation owner
2.	<ul style="list-style-type: none"> Determination of appropriate environmental assessment level/ category 	✓ EPA	✓ -
3.	<ul style="list-style-type: none"> Implementation of environmental assessment 	✓ FSD/ Private sector	✓ Regional/ District Environmental and Social Safeguard Officer/ Plantation owner
3.1	<ul style="list-style-type: none"> If ESIA is necessary 	✓	✓
3.1a	<ul style="list-style-type: none"> Preparation of terms of reference 	✓ FSD/ Private sector	✓ Regional Environmental and Social Safeguard Officer/ Plantation owner
3.1b	<ul style="list-style-type: none"> Validation of ESIA/EMP ToR (Scoping) 	✓ EPA	✓ National Safeguard consultant
3.1c	<ul style="list-style-type: none"> Selection of Consultant 	✓ FSD/ Procurement Office/ Private sector	✓ Secretariat/ Procurement Office
3.1d	<ul style="list-style-type: none"> Realization of the EIA, Public Consultation Integration of environmental and social management plan issues in the tendering and project implementation, 	✓ FSD/ Procurement Office/ Consultancy firm/ Private sector	✓ National Safeguard Consultant/ Regional Environmental and Social Safeguard Officer / Procurement

No.	Stage	Institutional responsibility	Implementation responsibility
			Officer
4	<ul style="list-style-type: none"> Review and Approval 	✓ EPA	-
4.1	<ul style="list-style-type: none"> EIA Approval (B1) 	✓ EPA	-
4.2	<ul style="list-style-type: none"> Approval simple measures (B2&c) 	✓ FSD	✓ Regional Environmental and Social Safeguard Officer/ Plantation manager
5.	<ul style="list-style-type: none"> Public Consultation and disclosure 	✓ FSD/EPA	✓ Regional Environmental and Social Safeguard Officer /Plantation manager/Consultant
6.	<ul style="list-style-type: none"> Surveillance and monitoring 	✓ FSD/EPA/ MLNR	✓ Secretariat/ Regional Environmental and Social Safeguard Officer / Safeguard specialist
7	<ul style="list-style-type: none"> Development of monitoring indicators 	✓ FSD	✓ Regional Environmental and Social Safeguard Officer/ Safeguard Consultant

5.3 Technical Specifications and Standards

5.3.1 Technical specifications

The MLNR/ FC will be responsible for the development and presentation of clear guidelines for the design and provision of technical specifications and standards to assist both the FSD and the private sector to plan for plantation development projects. These will ensure the streamlining of approaches and activities for sound environmental and social implementation of projects. These will include adequate reference to sector schedules and prescribed environmental codes of practice. The private sector will be well aware of applicable technical provisions and fit their projects into these accordingly.

5.3.2 Environmental standards

The EPA is responsible for setting environmental standards and has in place both general and sector specific guideline values. The Water Resources Commission also has standards regarding activities which will impact on water resources. These standards and in some cases, guidelines are required for the management of pollutant emissions and protection of resources. In situations where standards which therefore have legal backing are available then these must be followed. Otherwise, national guidelines or the World Bank guidelines could be used. In most cases, these are practically similar.

Implementation schedules for proposed mitigation measures have been developed and these are described in **Table 5**.

Table 5: Implementation schedule for proposed mitigation measures

Environment, Social and Health Impact Issue/ Concern	Proposed Mitigation Action/ Measures	Implementation by	Verifiable Indicators	Project Phase
<u>Biodiversity</u>	<ul style="list-style-type: none"> ✓ Design planting to include both exotic and indigenous plants in the right proportions and positions; ✓ Avoid environmentally sensitive sites and unnecessary exposure or access to sensitive habitat; Consult EPA in the selection and use of such sites; ✓ Ensure biodiversity plots are maintained within tree plantations and also along waterways and streams within the plantations; ✓ Clearance of plantation plots will be sufficiently phased to reduce the impacts of vegetation removal on terrestrial flora and fauna. 	<ul style="list-style-type: none"> ✓ Regional/ district FSD, Communities, Plantation managers ✓ Regional/ district FSD, Communities, Plantation managers, EPA ✓ Regional/ district FSD, Communities, Plantation managers ✓ Regional/ district FSD, Communities, Plantation managers 	<ul style="list-style-type: none"> ✓ Design reports ✓ Design reports/ Minutes of meetings ✓ Design reports ✓ Design reports 	<ul style="list-style-type: none"> ✓ Preparatory stage ✓ Preparatory stage ✓ Preparatory stage ✓ Preparatory stage
<u>Water Resources</u>	<ul style="list-style-type: none"> ✓ Promote buffer zones along the local streams to ensure their integrity and protection of other aquatic life forms. The buffer reserves will serve as natural filters for surface runoff from the plantation areas. The reserves will also play a major role in protecting the banks of the waterways from channel erosion. In addition, the reserves will create aesthetic scenes along the watercourse. 	<ul style="list-style-type: none"> ✓ Regional/ district FSD, Plantation managers, Communities 	<ul style="list-style-type: none"> ✓ Project design reports and monitoring reports 	<ul style="list-style-type: none"> ✓ Preparatory and implementation stages

Environment, Social and Health Impact Issue/ Concern	Proposed Mitigation Action/ Measures	Implementation by	Verifiable Indicators	Project Phase
<u>Soils</u>	<ul style="list-style-type: none"> ✓ The application of inorganic fertilizer will be restricted to the period just after transplanting. The fertilizers will be applied around each tree in shallow rings. This is to ensure that the fertilizer is available to the young transplanted trees. ✓ No broadcasting of fertilizers will be undertaken. ✓ If possible, use Bio char in selected plots ✓ Sensitive sites with high erosion risk will be identified. Such areas shall not be cultivated and will include hill-tops and very steep slopes having gradient of 25% or more. Vegetation of such areas shall be maintained to help control erosion as well as ensuring soil stability. ✓ Enrichment planting will be done in patches of degraded areas along these slopes 	<ul style="list-style-type: none"> ✓ Communities, Plantation managers, District FSD ✓ Communities, Plantation managers, District FSD ✓ Communities, Plantation managers, District FSD ✓ Communities, Plantation managers, District FSD ✓ Communities, Plantation managers, District FSD 	<ul style="list-style-type: none"> ✓ Monitoring reports ✓ Monitoring reports ✓ Monitoring reports ✓ Design reports, monitoring reports ✓ Design reports, monitoring reports 	<ul style="list-style-type: none"> ✓ Implementation stage ✓ Implementation stage ✓ Implementation stage ✓ Preparatory stage, Implementation stage ✓ Preparatory stage, Implementation stage
<u>Air quality</u>	<ul style="list-style-type: none"> ✓ Burning of biomass will be avoided as much as possible. ✓ Fire will be used only in situations where this is effective and least environmental damaging. ✓ Most biomass generated will be available as fire wood and also as pegs. 	<ul style="list-style-type: none"> ✓ Communities, Plantation managers ✓ Communities, Plantation managers, District FSD ✓ Communities, Plantation managers 	<ul style="list-style-type: none"> ✓ Monitoring reports ✓ Monitoring reports ✓ Monitoring reports 	<ul style="list-style-type: none"> ✓ Implementation stage ✓ Implementation stage ✓ Implementation stage
<u>Pesticides</u>	<ul style="list-style-type: none"> ✓ The use of pesticides on plantations will be minimal. ✓ The main control methods for pests and 	<ul style="list-style-type: none"> ✓ Communities, Plantation managers, District FSD, District Agric Extension Officers ✓ District FSD, District 	<ul style="list-style-type: none"> ✓ Monitoring reports ✓ Monitoring 	<ul style="list-style-type: none"> ✓ Implementation stage ✓ Implementation

Environment, Social and Health Impact Issue/ Concern	Proposed Mitigation Action/ Measures	Implementation by	Verifiable Indicators	Project Phase
	<p>diseases will involve the use of resistant hybrids, trapping/scaring of animals, protecting young plants with collar wire and destroying nestling/breeding areas of pests.</p> <ul style="list-style-type: none"> ✓ A constant phyto-sanitary observation will be maintained to help prevent the outbreak and spread of any potential disease/pest into the whole plantation. ✓ Uncontrolled mass spraying of fungicides will be avoided. ✓ The use of herbicides will not be encouraged on plantations. ✓ Control of weeds will be done manually. ✓ Labour-intensive approach using simple farm tools like hoes and cutlasses will be employed. ✓ Encourage use of organic farming practices when possible 	<p>Agric Extension Officers, Communities, Plantation managers</p> <ul style="list-style-type: none"> ✓ District Agric Extension Officers, District/ Regional FSD ✓ Communities, Plantation managers ✓ District FSD ✓ Communities, Plantation managers ✓ Communities, Plantation managers ✓ District FSD, Agric Officers 	<p>reports</p> <ul style="list-style-type: none"> ✓ Monitoring reports ✓ Monitoring reports ✓ Design reports ✓ Monitoring reports ✓ Design, Monitoring reports ✓ Design reports 	<p>stage</p> <ul style="list-style-type: none"> ✓ Implementation stage ✓ Implementation stage ✓ Design reports ✓ Implementation stage ✓ Design, implementation stage ✓ Preparatory stage
<u>Land tenure and ownership</u>	<ul style="list-style-type: none"> ✓ The project will liaise with the Land Administration Project (LAP) initiatives to assist farmers to map their plots and the information documented for future reference; ✓ Proper arrangements to be made on land tenure systems to be adopted; ✓ Research and stakeholder consultations to identify best practices and guide implementation in partnership with traditional authorities. The benefit sharing agreement (BSA) for off reserve plantations and carbon stocks will have to 	<ul style="list-style-type: none"> ✓ Regional/ District FSD, Project secretariat (MLNR) ✓ Project secretariat (MLNR) ✓ Project secretariat (MLNR) 	<ul style="list-style-type: none"> ✓ Preparatory/ Design report ✓ Preparatory/ Design report ✓ Preparatory/ design reports 	<ul style="list-style-type: none"> ✓ Preparatory stage ✓ Preparatory stage ✓ Preparatory stage

Environment, Social and Health Impact Issue/ Concern	Proposed Mitigation Action/ Measures	Implementation by	Verifiable Indicators	Project Phase
	<p>be approved by government after studies are done and stakeholders validate the findings.</p> <ul style="list-style-type: none"> ✓ Due recognition given to communities who have successfully managed sacred groves to date in the form of suitable compensation which must be discussed and agreed with communities; ✓ Management plans to be prepared for all sites to also reflect community expectations ✓ District Assembly byelaws to be used to support the conservation of dedicated forests and to control/ reduce encroachment 	<ul style="list-style-type: none"> ✓ District/ regional FSD ✓ District/ regional FSD ✓ District/ regional FSD 	<ul style="list-style-type: none"> ✓ Monitoring reports ✓ Monitoring reports ✓ Preparatory reports 	<ul style="list-style-type: none"> ✓ Implementation stage ✓ Implementation stage ✓ Preparatory stage
<u>Maintaining Livelihoods</u>	<ul style="list-style-type: none"> ✓ Determine if compensation is justified for any investments/ developments outside of the permitted areas for admitted farms and settlements that have expanded beyond allowed limits and will have to return to permitted areas ✓ Ensure appropriate compensations are paid to PAPs as defined in the Process Framework; ✓ Employment and other opportunities be given to local communities as much as possible. 	<ul style="list-style-type: none"> ✓ Regional/ district FSD, Secretariat (MLNR) ✓ Regional/ district FSD, Secretariat (MLNR) ✓ Plantation managers, District FSD 	<ul style="list-style-type: none"> ✓ Preparatory, design reports ✓ Preparatory/ design reports ✓ Monitoring reports 	<ul style="list-style-type: none"> ✓ Preparatory stage ✓ Preparatory stage ✓ Implementation stage
<u>Farmer rights</u>	<ul style="list-style-type: none"> ✓ FSD to reconsider current policy and procedures for the allocation and harvesting of trees on farms; ✓ Farmers to participate in discussions to allocate and harvest matured shade trees 	<ul style="list-style-type: none"> ✓ FSD, Project secretariat (MLNR) ✓ Communities, Plantation managers 	<ul style="list-style-type: none"> ✓ Design reports ✓ Monitoring reports 	<ul style="list-style-type: none"> ✓ Preparatory stage ✓ Implementation stage

Environment, Social and Health Impact Issue/ Concern	Proposed Mitigation Action/ Measures	Implementation by	Verifiable Indicators	Project Phase
	<p>on their farms and possible benefits/ compensation arrangements for affected cocoa trees;</p> <p>✓ FSD to streamline procedures for registering shade trees to make it more-friendly to farmers.</p>	<p>✓ FSD, Secretariat (MLNR)</p>	<p>✓ Preparatory/ design reports</p>	<p>✓ Preparatory stage</p>
<u>Forest Management</u>	<p>✓ Educate and train community fire fighting volunteers on fire hazards, prevention and use of equipment and implement regular drills</p> <p>✓ Create fire rides around plantation</p> <p>✓ Ensure regular patrols to identify and remove fire threats early</p> <p>✓ Apply appropriate sanctions on offenders including fines and jail sentences</p> <p>✓ The plantation development will be phased in order to generate biomass which could be manageable at a given time.</p> <p>✓ Salvaging of useable biomass can significantly reduce the volumes of waste that has to be disposed of.</p> <p>✓ Felled trees and cleared under- brushes will be chipped and formed into windrows and allowed to decompose and/or used as pegs for planting.</p> <p>✓ Proper collection of unused and damaged polythene bags for seedlings will be placed at the nursery site</p>	<p>✓ District FSD, District Agric Extension officers</p> <p>✓ Communities/ Plantation managers</p> <p>✓ Communities/ Plantation managers</p> <p>✓ District FSD</p> <p>✓ Communities/ Plantation managers</p> <p>✓ Communities/ Plantation managers</p> <p>✓ Communities/ Plantation managers</p> <p>✓ Plantation managers</p>	<p>✓ Monitoring reports</p> <p>✓ Monitoring reports</p> <p>✓ Monitoring reports</p> <p>✓ Monitoring reports</p> <p>✓ Monitoring reports</p> <p>✓ Monitoring reports</p> <p>✓ Monitoring reports</p>	<p>✓ Implementation stage</p> <p>✓ Implementation stage</p> <p>✓ Implementation stage</p> <p>✓ Implementation stage</p> <p>✓ Implementation stage</p> <p>✓ Implementation stage</p> <p>✓ Implementation stage</p>
<u>Safety and security</u>	<p>✓ FSD to devise policies and procedures to protect field staff</p>	<p>✓ FSD, Project secretariat</p>	<p>✓ Preparatory reports</p>	<p>✓ Preparatory stage</p>

Environment, Social and Health Impact Issue/ Concern	Proposed Mitigation Action/ Measures	Implementation by	Verifiable Indicators	Project Phase
	✓ FSD forestry prosecutors to be adequately trained to efficiently handle court cases for swift determination.	✓ FSD	✓ Preparatory reports	✓ Preparatory stage
<u>Occupational health and safety</u>	✓ The project will design and implement awareness creation programs to educate persons on protecting workers' health and safety including paying attention to chemical handling. The Project will require preparation and implementation of an Environmental, Health and Safety (EHS) plan which will outline procedures for avoiding health and safety incidents and for emergency medical treatment.	✓ Regional/ district FSD, Plantation managers	✓ Design reports, Monitoring reports	✓ Implementation stage
	✓ Workers will be required to wear suitable Personal Protective Equipment (PPE) as appropriate.	✓ Plantation managers, communities	✓ Monitoring reports	✓ Implementation stage
	✓ Workers will be sufficiently trained in the safe methods pertaining to their area of work to avoid injuries. The use of PPEs to be encouraged and with incentives	✓ Plantation managers, communities	✓ Monitoring reports	✓ Implementation stage
	✓ The project will encourage the use of personal protective equipment/apparels such as Wellington boots/safety boots, gloves, overalls and raincoats for field workers.	✓ District FSD, Plantation managers, communities	✓ Monitoring reports	✓ Implementation stage
	✓ The project will conduct safety training for pesticide handlers and all agricultural workers. The training programme will include handling of agro-chemicals, use of PPE and what to do in the case of pesticide exposure.	✓ District FSD, District Agric Extension Officers	✓ Monitoring reports	✓ Implementation stage
<u>Cultural Heritage</u>	✓ Any cultural site including sacred groves	✓ District/ regional FSD,	✓ Monitoring	✓ Implementation

Environment, Social and Health Impact Issue/ Concern	Proposed Mitigation Action/ Measures	Implementation by	Verifiable Indicators	Project Phase
	<p>on proposed plantations will, with the agreement of the community be well demarcated and the area not cleared for development.</p> <p>✓ Necessary cultural rites agreed with community and performed prior to access to groves</p>	<p>Plantation managers, communities</p> <p>✓ District FSD, Plantation managers</p>	<p>reports</p> <p>✓ Monitoring reports</p>	<p>stage</p> <p>✓ Implementation stage</p>

5.4 Institutional roles and responsibility for the ESMF Implementation

The project will be executed by the Ministry of Lands and Natural Resources in collaboration with the Forestry Commission and supported by other partners such as Minerals Commission, COCOBOD, MESTI and MOFA. The National FIP Secretariat at the MLNR will coordinate activities of the Project.

It is anticipated that the FC will also participate in environmental and social due diligence for FIP projects across all donor lending arrangements (eg. WB, AfDB, IFC). The MLNR Environmental and Social Safeguards officer will collaborate intensely with the REDD+ Safeguards person at the FC.

Therefore, the main institutions implementing the additional financing under the FIP and which have interest in environmental and social management include:

- Ministry of Lands and Natural Resources;
- Ministry of Food and Agriculture;
- Ministry of Environment, Science, Technology and Innovation;
- Ministry of Chieftaincy and Cultural Affairs;
- Forestry Commission- Forestry Services Division, Resource Management Support Centre, Climate Change Unit;
- Minerals Commission;
- Cocoa Board- Cocoa Research Institute;
- Municipal and District Assemblies (MDAs);
- Environmental Protection Agency (EPA).

Ministry of Lands and Natural Resources (MLNR) is the sector Ministry entrusted with the management of Ghana's land, forest, wildlife and mineral resources in the country. The Forest Investment Programme (FIP) Management Unit at the ministry is directly responsible for the implementation of the project and will coordinate activities among all the main stakeholders. The Technical Coordinating Committee within the Unit will require environmental and social management specialist support services to ensure that the ESMF is fully implemented.

Ministry of Food and Agriculture (MoFA) has a formal set up within the ministry focusing on environmental and social issues (Lands and Water Management Department). This Department usually collaborates with the EPA to implement environmental and social issues in the ministry's programmes and projects. Their expertise may therefore be available in assisting to implement the ESMF.

Forestry Commission of Ghana is responsible for the regulation of utilization of forest and wildlife resources, the conservation and management of those resources and the coordination of policies related to them. The Commission embodies the various public bodies and agencies that were individually implementing the functions of protection, management, the regulation of forest and wildlife resources. These agencies currently form the divisions of the Commission which includes the

Forest Services Division. The Division has regional and district offices throughout the country. Ability to implement the ESMF from these offices may be limited. The **Resource Management Support Centre (RMSC)** is the technical wing of the Forestry Commission (FC) and is responsible for the exploration, development, facilitation, institutionalization and implementation and monitoring of effective and affordable forest management systems in Ghana. The Centre further ensures that these systems are in accordance with the national Forest and Wildlife Policy. The Centre has its operational base in Kumasi. Its mission is therefore to develop integrated forest and wildlife management systems and facilitate and monitor their implementation through active cooperation with stakeholders for the benefit of all segments of society.

Regulatory Agencies

Environmental Protection Agency (EPA) is responsible for ensuring compliance with laid down ESIA procedures in Ghana in accordance with the EPA Act 1994 (Act 490) and its amendment and agency is expected to give environmental approval for projects. The ESIA is being applied in Ghana to development projects as well as other undertakings as an environmental permitting pre-requisite and a major environmental management tool. The EPA is represented in all the ten (10) regions of the country and will support the project by exercising its permitting and monitoring powers. Though the Agency's technical capacity may be adequate there is some concern with regard to logistics especially transport and personnel which may therefore limit its effectiveness.

The Ghana EA procedures are largely in agreement with the World Bank policies and procedures and the former is now well entrenched in the country to assure satisfactory environmental and social performance of the FIP.

Minerals Commission: The Minerals Commission is under the Ministry of Lands and Natural Resources. The Minerals Commission (MC) is established under Article 269 of the 1992 Constitution and the Minerals Commission Act 1993, Act 450 as the main promotional and regulatory body for the minerals sector in Ghana and is responsible for "the regulation and management of the utilization of the mineral resources of Ghana and the coordination and implementation of policies relating to mining. It also ensures compliance with Ghana's mining and mineral laws and regulation through effective monitoring

Water Resources Commission (WRC): The WRC is responsible for granting licenses for any water use activity and the procedures as laid down in the WRC Act 1998 (Act 526) will be followed. All project activities requiring such license will receive assistance from the WRC and the Commission will therefore provide adequate guidance to ensure that the proper procedures are used.

Lands Commission: The Land Valuation Division (LVD) is the statutory body ensuring that land required for projects are properly acquired and also transparent procedures are followed, and fair and adequate compensation is paid. Though private firms may be invited to participate in the process, in case of disputes, the LVD would assist to ensure prompt settlement.

5.4.1 Implementing Plans

The Forestry Commission (FC) in the Ministry of Lands and Natural Resources (MLNR) will serve as the lead government agency for this project. The MLNR is responsible for forestry activities for both on and off reserves and it is also the designated focal point ministry for the Forest Investment Programme. A project coordination unit (secretariat) has been established to manage the project which includes a dedicated safeguards person.

The focal point ministry will be working with the Ministry of Food and Agriculture (MOFA), the Cocoa Board, the Ministry of Environment Science and Technology, Ministry of Chieftaincy and Cultural Affairs as well as other relevant agencies to ensure smooth implementation and the documentation sharing of the lessons learnt.

The main responsibility for implementing the ESMF and the PF rests with the MLNR Environmental and Social Safeguards Focal Point and will be supported, as needed, by the REDD+ Safeguards person and environmental and social experts who may be recruited by the project. The FSD regional managers will oversee the implementation of all actions to mitigate adverse environmental and social impacts within their respective operational regions, and also supervise their district managers to ensure sound management practices at the community level.

5.4.2 MLNR Environmental and Social Safeguard Focal Point

The MLNR ESS focal point is responsible for:

- coordination of environmental and social safeguards in collaboration with the REDD+ safeguards focal person;
- leadership across the national regional and district levels for the implementation of safeguards;
- providing guidance and project level info and tools on safeguards for all stakeholders;
- managing the environmental and social safeguard experts (consultants);
- responsible for coordinating all safeguard activities with donors, implementing agencies and other potential investors;
- oversee all environmental and social safeguard training and capacity building.

5.4.3 Environmental and social consultants

The Consultants who is conversant with the WB safeguard policies and their instruments and application as well as other REDD safeguard principles, has been hired to support the implementation of the environmental and social safeguards including the preparation of manuals and checklists. The consultants are conversant with the World Bank safeguards policies, the instruments and their application. Particular attention will be on the safeguards policies triggered by the project. The consultants' level of understanding is adequate to facilitate training and other capacity building related activities on safeguards. The template for the preparation of ToRs to recruit consultants is provided in Annex 5.

5.4.4 Regional Environmental and Social Focal Points

The Regional Environmental and Social Focal Points will:

- work with the FC ESS Focal Point to ensure that all environmental and social safeguards issues are incorporated into Bid and specifications documents for all sub project types;
- ensure that safeguards issues are included as part of the training at District level and contractors invited to participate;
- draft safeguards report based on collated documents and reports from district activities as part of usual regional reporting on the project;
- be the first point of contact for the district in case of any challenging issues on project-related safeguards - land, environmental, safety and health and draw the FC ESS Focal Point's attention in case of lack of resolution;
- perform any other related activities that may be assigned by the FC ESS Focal Point to whom he/she will report.

5.4.5 District Environmental and Social Focal Points

The District Environmental and Social Focal Points will:

- work with the Regional ESS Focal Point to ensure that all environmental and social safeguards issues are incorporated into Bid and specifications documents for all sub project types;
- ensure that safeguards issues are included as part of the training at community level;
- draft district safeguards report is prepared and forwarded to the regional office;
- be the first point of contact for the community members in case of any challenging issues on project-related safeguards - land, environmental, safety and health and draw the Regional ESS Focal Point's attention in case of lack of resolution;
- collaborate with relevant authorities (chiefs and elders) and other community members and facilitate the implementation of subprojects and implementation of any other safeguards related activity;
- perform any other related activities that may be assigned by the Regional ESS Focal Point to whom he/she will report.

Table 6: Summary of Roles and Responsibilities

No	Steps/Activities	Responsible	Collaboration	Service Provider
1.	Identification and/or siting of the sub-project	MLNR/ FC	<ul style="list-style-type: none"> • District Assembly • EPA • Minerals Commission 	Consultant
2.	Screening, categorization and identification of the required instrument	Environmental safeguards specialist at the Secretariat	<ul style="list-style-type: none"> • Beneficiary Community • District Assembly • Social Safeguards Specialist at PCU • FC regional/ district safeguards focal person 	-
3.	Approval of the classification	Secretariat	<ul style="list-style-type: none"> • Environmental safeguards 	<ul style="list-style-type: none"> • EPA

No	Steps/Activities	Responsible	Collaboration	Service Provider
	and the selected instrument by the EPA		<ul style="list-style-type: none"> specialist Social Safeguards Specialist FC regional/ district safeguards focal person 	<ul style="list-style-type: none"> The World Bank
4.	Preparation of the safeguard document/instrument (ESIA, Env. Audit, simple ESMP, etc.) in accordance with the national legislation/procedure (considering the Bank policies' requirements)			
	Preparation and approval of the ToRs	Environmental safeguards specialist		<ul style="list-style-type: none"> The World Bank
	Preparation of the report		<ul style="list-style-type: none"> Procurement specialist Social Safeguards Specialist District Assembly Minerals Commission FC regional/ district safeguards focal person 	<ul style="list-style-type: none"> Consultant
	Report validation and issuance of the permit (when required)		<ul style="list-style-type: none"> Procurement specialist Social Safeguards Specialist District Assembly FC regional/ district safeguards focal person 	<ul style="list-style-type: none"> EPA The World Bank
	Disclosure of the document		Project Coordinator	<ul style="list-style-type: none"> Media; The World Bank
5.	(i) Integrating the construction phase mitigation measures and E&S clauses in the bidding document prior to advertisement; (ii) ensuring that the contractor prepares his ESMP (C-ESMP), gets it approved and integrates the relevant measures in the works breakdown structure (WBS) or execution plan.	FC regional/ district safeguards focal person	<ul style="list-style-type: none"> Environmental safeguards specialist Social Safeguards Specialist 	<ul style="list-style-type: none"> EPA
6.	Implementation of the other safeguards measures, including environmental monitoring (when relevant) and sensitization activities	FC regional/ district safeguards focal person	<ul style="list-style-type: none"> Environmental safeguards specialist Social Safeguards Specialist District Assembly 	<ul style="list-style-type: none"> Consultant CSIR- WRI NGOs
7.	Oversight of safeguards implementation (internal)	<ul style="list-style-type: none"> Environmental safeguards specialist Social Safeguards Specialist 	<ul style="list-style-type: none"> Monitoring and Evaluation specialist (M&E-PIE) EPA Minerals Commission 	<ul style="list-style-type: none"> Consultant
	Reporting on project safeguards performance and disclosure	Coordinator	<ul style="list-style-type: none"> M&E specialist Environmental safeguards specialist Social Safeguards Specialist 	-

No	Steps/Activities	Responsible	Collaboration	Service Provider
	External oversight of the project safeguards compliance/performance	PEA	<ul style="list-style-type: none"> • M&E specialist <ul style="list-style-type: none"> • Environmental safeguards specialist • Social Safeguards Specialist 	-
8.	Building stakeholders' capacity in safeguards management	<ul style="list-style-type: none"> • Environmental safeguards specialist 	<ul style="list-style-type: none"> • Social Safeguards Specialist 	<ul style="list-style-type: none"> • Consultant
9.	Independent evaluation of the safeguards performance (Audit)	Environmental safeguards specialist	<ul style="list-style-type: none"> • Social Safeguards Specialist 	<ul style="list-style-type: none"> • Consultant

5.5 Institutional Strengthening and Capacity Building

The competence of the MLNR/FC to carry out their respective design, planning, approval, permitting, monitoring and implementation roles will, to a large extent, determine the success and sustainability or otherwise of the programme. Table 6 describes the environmental and social due diligence on the capacity of project institutions and recommended actions to improve capacity.

Identification of Capacity Needs

As part of the implementation of the GFIP ESMF, some training programmes have been carried out from 2014 to ensure that regional and district safeguard persons are suitably equipped to manage the sub- projects. However, further capacity improvement needs exist especially since many trained focal persons have been re- assigned to other regions and districts, and new persons brought to the project regional/ district offices. Moreover, the Eastern Region is now being introduced to the project. The Minerals Commission has seven District Offices, which concern themselves mainly with small-scale gold mining. These were established purposely to register, monitor and extend technical assistance to small-scale gold miners. However, the mineral licensing and permitting processes are, to a large extent, carried out centrally at the Minerals Commission Head Office in Accra. The Minerals Commission staff will also be involved for the first time in training programmes.

Capacity building should be viewed as more than training. It is human resource development and includes the process of equipping individuals with the understanding, skills and access to information, knowledge and training that enables them to perform effectively. It also involves organizational development, the elaboration of relevant management structures, processes and procedures, not only within organizations but also the management of relationships between the different organizations and sectors (public, private and community).

The capacity building will include training workshops and production of guidance reports and tools. The following training programmes are recommended, especially for the newly assigned officers. It may also serve as a refresher programme for the other focal persons. The private sector including plantation managers and reclamation companies will participate in the programme.

Training programme 1:

Content: World Bank Safeguard policies of OP 4.12, OP4.04, OP4.11, OP4.36 and OP 4.01 and Ghana EPA Environmental Assessment Regulations, ESMF/ PF

Participants: MLNR (Secretariat); FC/ FSD; MC officers; COCOBOD; MMDAs; Private sector plantation managers and reclamation companies).

Training programme 2

Content: Screening Checklist, ToR for regional and district safeguard officers and completion of EA Registration Forms

Participants: MLNR/ Regional and District FSD/ Minerals Commission District staff/plantation managers and reclamation companies (private sector)

Training programme 3

Content: Preparation of Terms of Reference for ESIA

Participants: MLNR (Secretariat)/ Regional Environmental Officers

Training programme 4

Content: Environmental and Social provisions in Reclamation and Plantation development manual (ESMP).

Participants: District/ Regional Forestry Officers/ Minerals Commission staff/ Plantation managers and Reclamation companies (private sector)

Table 7: Summary of environmental and social due diligence capacity and training programmes

No	Institution	Environmental and social due diligence capability	Brief Description of situation	Recommendations
1.0	Sector ministry and agency			
1.1	MLNR	Moderate	<ul style="list-style-type: none"> A full-time safeguards officer has been appointed. He has been involved in training at the regional and district levels together with a recruited safeguards consultant. 	<ul style="list-style-type: none"> Training to be intensified along the chain down to community level.
1.2	Forestry Commission	Moderate	<ul style="list-style-type: none"> REDD+ officer appointed to be responsible for safeguards including gender. Has developed roadmap for training for regional and district officers but implementation has been slow. Safeguards Information System (SIS) almost ready for implementation. 	<ul style="list-style-type: none"> Must collaborate with MLNR safeguards person to ensure consistency in message and achieve most impact.
1.3	Minerals Commission	Limited	<ul style="list-style-type: none"> Limited competence at the head office. Usually participates in all mining and forestry related discussions with sector agencies. 	<ul style="list-style-type: none"> Must be invited to participate in all training programmes especially to involve their district level officers.
1.4	MOFA	Established	<ul style="list-style-type: none"> Environmental Unit established at Ministry and also some competence at the Regional level. No capacity at districts. 	<ul style="list-style-type: none"> Environmental unit to establish coordination with the FC.
1.5	MESTI	Established	<ul style="list-style-type: none"> Parent ministry of the EPA. 	<ul style="list-style-type: none"> Improve coordination with the project ministry, MLNR.
2.0	Relevant regulatory agencies			
2.1	Environmental Protection Agency (EPA)	Functional at head office and regional level.	<ul style="list-style-type: none"> Capacity at the national and regional level. 	<ul style="list-style-type: none"> Improve coordination and support for the permitting process.
2.3	Water Resources Commission (WRC)	Functional	MoU with EPA on areas of mutual interest/overlap.	<ul style="list-style-type: none"> Enhanced collaboration.
3.0	Local Government Service			
3.1	Regional Coordinating	Limited	<ul style="list-style-type: none"> Planning Officers trained by EPA on SEA 	<ul style="list-style-type: none"> Basic training in ESIA for identified

No	Institution	Environmental and social due diligence capability	Brief Description of situation	Recommendations
	Councils		activities.	staff and also for checklist.
3.2	Metropolitan, Municipal and District Assemblies (MMDAs)	Limited	<ul style="list-style-type: none"> Role performed by Planning officers. Coordination, implementation and oversight at district projects. They have been trained by the EPA to assess district plans for environmental sustainability and social acceptability. 	<ul style="list-style-type: none"> Basic training in environmental and social due diligence for forestry interventions and programmes.
4.0	Private sector			
	Plantation and Reclamation companies	Limited	<ul style="list-style-type: none"> Most companies lack managers with the requisite background to design and implement safeguards. 	<ul style="list-style-type: none"> Recruited companies will be required to have persons designated for safeguard matters. Their required qualification and job descriptions will be provided in bidding documents.

The main recipients of the training will be the FSD regional and district managers as well as fringe communities and farmers' groups. Their present capabilities to successfully prepare and implement environmental and social mitigation actions have been greatly enhanced from recent hands-on training exercises carried out by the MLNR safeguard officer and the recruited safeguards consultant. Further training will be organized in collaboration with the regional EPAs and will be in the form of seminars and workshops, especially for the newly assigned staff to the project regions and districts. The training will include the dissemination of the ESMF report, Ghana EPA procedures and the World Bank policies on environment and social assessment. The FSD is still exploring the possibility of having community environmental and social safeguard facilitators and training them. So far, some NGOs working with the communities have been very helpful in identifying safeguard issues for FSD's attention.

The FSD regional offices will then be expected to organise training workshops for selected plantation managers/ farmers and recruited reclamation contractors. It is proposed to collaborate with the MOFA and COCOBOD extension officers as well as the MC for this exercise. The Environmental Unit of the MOFA based in Accra has some competence but none at the regional or district levels.

The training and awareness creation will include annual events and the primary targets will be the FSD district managers, plantation managers and recruited reclamation contractors who will be active in the mined-out areas. It is proposed to have 2- day training programmes within a year at a central location and the content of the training will include a review of key environmental and social management activities and further discussions on the ESMF. It is expected that participants would at the end of the training be in a position to deal more effectively with difficult environmental and social challenges that they may come across.

The workshops with the plantation farmers may also be annual and will be coordinated by the FSD district managers and supervised by the regional managers. The reclamation contractors may further be trained and guided to implement environmental and social management plans to ensure safe and sound activities.

Production of guidelines and tools

The ESMF provides guidelines to mitigate adverse environmental and social impacts arising at project implementation. Training manuals and checklists are required to assist safeguard focal points to carry out their functions. Such checklist and manuals will include those designed for environmental and social screening of projects, see Annex 1. Consultants may be hired to produce additional manuals and checklists as and when required by the project.

5.6 Budgetary provisions

The awareness creation, capacity improvement and training workshops as well as some logistic support expenses for key stakeholders involved in the implementation of proposed interventions is estimated at US\$560,000 over the project life as explained in the Table 8 below.

Table 8: Estimated budget to implement ESMF

No	Item	Unit	Unit cost		Total		Source of financing
			Local	US\$	Local	US\$	
1	Preparation of specific ESIA	ESIA	-	150,000	-	150,000	Project funds
2	Capacity Building (Training, provision of guidance documents, tools etc, transport)	-	-	-	-	112,000	Project funds
	2a. Awareness creation and Capacity building for MLNR (Secretariat), FSD regional project staff	Training workshop/ seminars on Programmes 1,3 and 4 10 staff trained @ \$5,000/ year for 5 years = \$25,000					-
	2b. Capacity building for district FSDs (safeguard officers)	Training workshop/ seminars on Programmes 1, 2 and 4 20 staff @ \$4,000/ year for 5 years = \$20,000					-
	2c. Capacity building for FSD, MC, MMDAs and RCC	Regional training workshops on Prog 1,4 (per diems, travel, workshop venue, materials, meals) 10 staff @ \$5,000/ year for 5 years = \$25,000					-
	2d. Awareness creation and capacity building for selected members of community	Community meetings and training 30 members @ \$6,000/year for 5 years = \$30,000					-
	2e. Capacity building for Plantation managers and Reclamation contractors	Training on preparation and implementation of ESMPs 25 persons @ \$4,000 per year for 3 years = \$12,000					-
3	Implementation of specific ESMP including communication (Radio, TV discussions, Newspaper adverts on issues relating to PPP/ ESMF/ RPF adverts etc)	ESMP	-	25,000	-	250,000	Project funds
4	Mid-term audit of ES performance	-	-	-	-	23,000	Project funds
5	Completion audit of ES performance	-	-	-	-	25,000	Project funds
	Total					560,000	-

5.7 Monitoring and Evaluation

The monitoring plans developed to track safeguard provisions at both the environmental and social safeguards framework level and sub-project activity level for the GFIP have until recently, not been very effective especially in respect of safeguards reporting. These plans are enhanced and presented in the Table 8 for the additional financing. The table confirms the verifiable indicators as well as responsibilities for the various monitoring actions. The recent confirmation of a full time safeguard focal person at the MLNR has improved the situation considerably. Furthermore, the technical support currently provided by the recruited safeguards consulting firm also appears to be making the desired impact on the project.

The monitoring issues at the ESMF level include the dissemination of both ESMF and PF documents as well as capacity building and training activities. At the sub- project activity level, this will encompass instituting monitoring actions to, for example, confirm the screening of projects, preparation of the ESIA reports, acquisition of environmental permits etc.

Table 9: ESMF and PF monitoring indicators and responsibilities

No	Monitoring level	Monitoring Issue	Verifiable indicators	Responsibility
1.	• ESMF level	✓ Adequate dissemination of ESMF and PF to stakeholders.	✓ Record of consultations and meetings.	MLNR, Consultants.
			✓ Workshop reports.	
		✓ Capacity building and training programmes.	✓ Training reports.	MLNR, FC/ FSD/ MMDAs, Private sector, Consultants.
2.	• Sub-project activity level	✓ Screening of sub project.	✓ Checklist completed.	FSD regional/ district FP/ FC E&S FP.
		✓ Completion of EA1 form.	✓ Completed EA1 Form submitted to the EPA.	FSD regional FP/ EPA/ FC E&S FP.
		✓ Adequate mitigation measures provided to manage adverse impacts.	✓ ESMPs prepared, (see Table 11).	FSD regional and district FPs/ FC E&S FP.
		✓ Project satisfies statutory provisions EPA Act 1994 (Act 490) LI 1652.	✓ EPA Permit for project.	FSD regional FP/ EPA/ FC E&S FP.
		✓ Post project monitoring and evaluation.	✓ Monitoring reports, annual environmental reports, (see Annex 6).	FSD regional FP/ EPA/ FC E&S FP.

6.0 CONSULTATIONS, ESMF DISCLOSURE AND GRIEVANCE MECHANISM

The AF ESMF preparation included stakeholder consultations. Key project stakeholders were identified for consultations and these included Government Ministries, State Agencies/ Organisations/ and Departments, Project offices, Non-governmental organization and local communities in Eastern and Western Regions.

6.1 Stakeholder consultations

Meetings were held with key officials and opinion leaders to gauge level of awareness and involvement with the project, concerns of project implementation, and to obtain relevant documents or baseline information. The consultations also served to gather information on the mandates and permitting requirements to inform the development of the projects.

Stakeholder institutions and communities have been consulted in two project regions to discuss the upcoming sub project activities as well as to learn lessons from current activities in the Western Region.

In the Eastern Region, key project stakeholders consulted include Mining communities, Municipal/District Assemblies, Forest District Officers and Non-governmental organizations. These comprise the following:

- Begoro Forest District;
- East Akyem Municipal Assembly;
- Adadientem mining community in the East Akyem Assembly;
- Mampon mining community in the – District;
- Women’s Group at Adadientem;
- Youth Group at Adadientem;
- Presby JHS Headmistress and school prefects in Mampon community; and
- A Rocha Ghana (NGO).

Some other local community members were consulted during FIP activities in the Asankrangwa and Tarkwa Forest Districts in the Western Region. The consultations were aimed at identifying and assessing the benefits of GFIP to the local communities and other stakeholders including plantation workers.

The design and format for the meetings were gender and youth sensitive and discussions were centred on the following questions:

- general socio-economic profile of the municipalities and mining communities;
- general menace of the ‘galamsey’ activities in terms of food security, health, education, water resources, and social vices;

- Successes and challenges faced with the current national operation ‘Vanguard’ to stop illegal mining;
- any intervention/Planned measures to reclaim mined out areas;
- knowledge /Ideas on World Bank’s safeguard issues;
- capacity of MA/Forest District Officers to implement safeguard issues.

6.1.1 Stakeholders consultation, issues discussed and comments

Summary of issues discussed including comments and inputs from various stakeholders are presented below:

The illegal mining /galamsey challenge

- The menace created by the galamsey activities in the communities and in the landscape include *destruction of farmlands/forest reserves, dug pits filled with contaminated water serving as death traps for the students, polluted water resources, truancy in students, increased social vices, teenage pregnancy in some girls who are lured by the ‘galamsey’ workers, school dropout, frequent malaria.*
- According to stakeholders students are involved in the galamsey activities after school, and use their income to cater for their schooling needs and also support their families;
- stakeholders agreed that illegal mining should not be tolerated and therefore pledged their support to help stop illegal mining, and also sign an undertaking to report encroachers on potential reclaimed lands to the Chief and Elders for appropriate sanctions.

Ban on illegal mining

- illegal mining operators have abandoned the ‘galamsey’ work due to the ban and are currently unemployed; they therefore welcome alternative jobs in areas of poultry, transport business and artisan training when supported financially.
- community income from livelihood support programs is not comparable to that of galamsey work hence communities would invariably revert to mining unless strict disincentives backed by law are enforced;
- livelihood support options proposed by the community in the absence of ‘galamsey’ include *financial support for trading by the women, support for poultry and other livestock rearing, support for transport businesses, apprenticeship for dressmaking and hair dressing, artisan training for the youth.*

Addressing the illegal mining challenge and sustaining the reclaimed lands

- the fight against illegal mining can be won if the authorities will maintain the pressure on galamsey miners and communities.
- Some stakeholders are currently benefiting from a training programme for small scale miners on responsible mining in anticipation of the lifting of the ban on their activities soon;
- the NGO has provided alternative livelihood support programs for some community members in such as *grasscutter rearing, snail keeping, mushroom cultivation and rabbit rearing.* These has been met with mixed success as some reclaimed lands were later encroached upon while some animal rearing programmes were also not very successful;
- Previous work in the sector include recent field studies by FORM International (an NGO) on appropriate reclamation strategies which would be published soon;
- the involvement of traditional authority including the paramount chiefs and their sub chiefs is crucial to help sustain reclamation activities;
- there is a recent directive from the office of the Traditional authority instructing that all mined out lands are to be reclaimed by the respective landowners OTHERWISE if the Traditional

authority reclaims it those lands become the property of the Traditional authority and the individual then forfeits ownership to the authority;

- the chief and elders pledged to protect the reclaimed lands and will ensure that any encroachers/trespassers are arrested and duly prosecuted.
- It is expected that Stakeholder consultation process will continue through various stages of the project implementation.

It is expected that Stakeholder consultation process will continue through various stages of the project implementation.

The stakeholders contacted and issues discussed in both the Eastern and Western Regions are summarized in Annex 7.

6.2 ESMF Disclosure

The World Bank policies require that environmental reports for projects are made available to project affected groups, local NGOs, and the public at large. Public disclosure of ESIA documents or environmental reports is also a requirement of the Ghana ESIA procedures. MLNR/ FC and EPA will make copies of the ESMF available in selected public places as required by law for information and comments. Public notice in the media will serve that purpose.

The notification will be done through newspaper advertisements and provide:

- a brief description of the Project;
- a list of venues where the ESMF report is on display and available for viewing;
- duration of the display period; and
- contact information for comments.

The EPA will assist to select display venues upon consultation with MLNR/ FC.

6.3 Grievance Mechanism

The World Bank is committed to enhancing opportunities for grievance redress, collaborative problem solving, and alternative dispute resolution on the projects it supports. Effectively addressing grievances from people impacted by World Bank projects is a core component of managing operational risk. Grievance Redress Mechanisms (GRMs) can be an effective tool for early identification, assessment, and resolution of complaints on projects. Understanding when and how a GRM may improve project outcomes can help both project teams and beneficiaries improve results.

The Bank is supporting more effective approaches to problem solving to help strengthen its performance and development outcomes. This strengthened corporate approach focuses on a preventive approach to identify, track and resolve grievances early; and offering lower-cost, rapid

citizen redress at the project and country level through mediation, facilitation or other problem-solving processes where it is most needed.

The approach proposes three interlinked steps: (i) a risk-based assessment of potential grievances, disputes or conflicts that may arise during project preparation and implementation; (ii) identification of the client's existing capacity for grievance redress; and (iii) an action plan that identifies priority areas for strengthening grievance capacity, or if necessary, establishing new mechanisms at the project level. Where applicable, dedicated resources should be allocated for realization of the action plan.

General grievance/ disputes

Grievances and disputes may arise due to one or more of the following situations:

- disagreement on land or property boundaries;
- disagreement on plot/property valuation and valuation rates applied;
- mistakes in inventorying or valuing properties;
- disputed ownership of a given asset (two or more people claiming ownership of an affected property);
- successions, divorces, and other family issues resulting in disputed ownership or disputed shares between inheritors or family members;
- disagreement on resettlement package (e.g. location of resettlement site not being suitable to them, proposed housing or resettlement plot characteristics/agricultural potential not adequate or suitable);
- disputed ownership of businesses and business-related assets (e.g. owner and operator of a business may be distinct individuals, which gives rise to disputes in the event of compensation).

Objective

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 course of the implementation of FIP actions or projects;
- ensure that appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants; and
- avoid the need to resort to judicial proceedings.

Court cases are known to be cumbersome and take a long time before settlements are reached and usually one party is still not satisfied. It is therefore proposed to adopt a simple procedure for affected persons to be able to follow easily, and which will provide aggrieved people with an avenue for amicable settlement without necessarily opening a court case.

Proposed grievance management and redress mechanism

The Forestry Commission engaged a consultant to specifically develop a Dispute Resolution Mechanism (DRM) for the REDD+ Mechanism in Ghana and the processes and procedures outlined for the FIP must be consistent with the REDD+ DRM document in addressing disputes and conflicts arising from resettlement/compensation related issues. The DRM for REDD+ also proposes amicable

settlement/mediation as a first option, which is in line with the stated above objectives under this ESMF.

In compensation and resettlement operations, it often appears that many grievances derive from misunderstandings of project policy and procedures, land/asset valuations, property demarcations and boundaries among others as mention above, which can usually be solved through adequate mediation using customary rules and some mediation. This is why a first instance of dispute handling will be set up with the aim of settling disputes amicably.

The proposed DRM for the FIP which is consistent with the REDD+ recommends the model provided below.

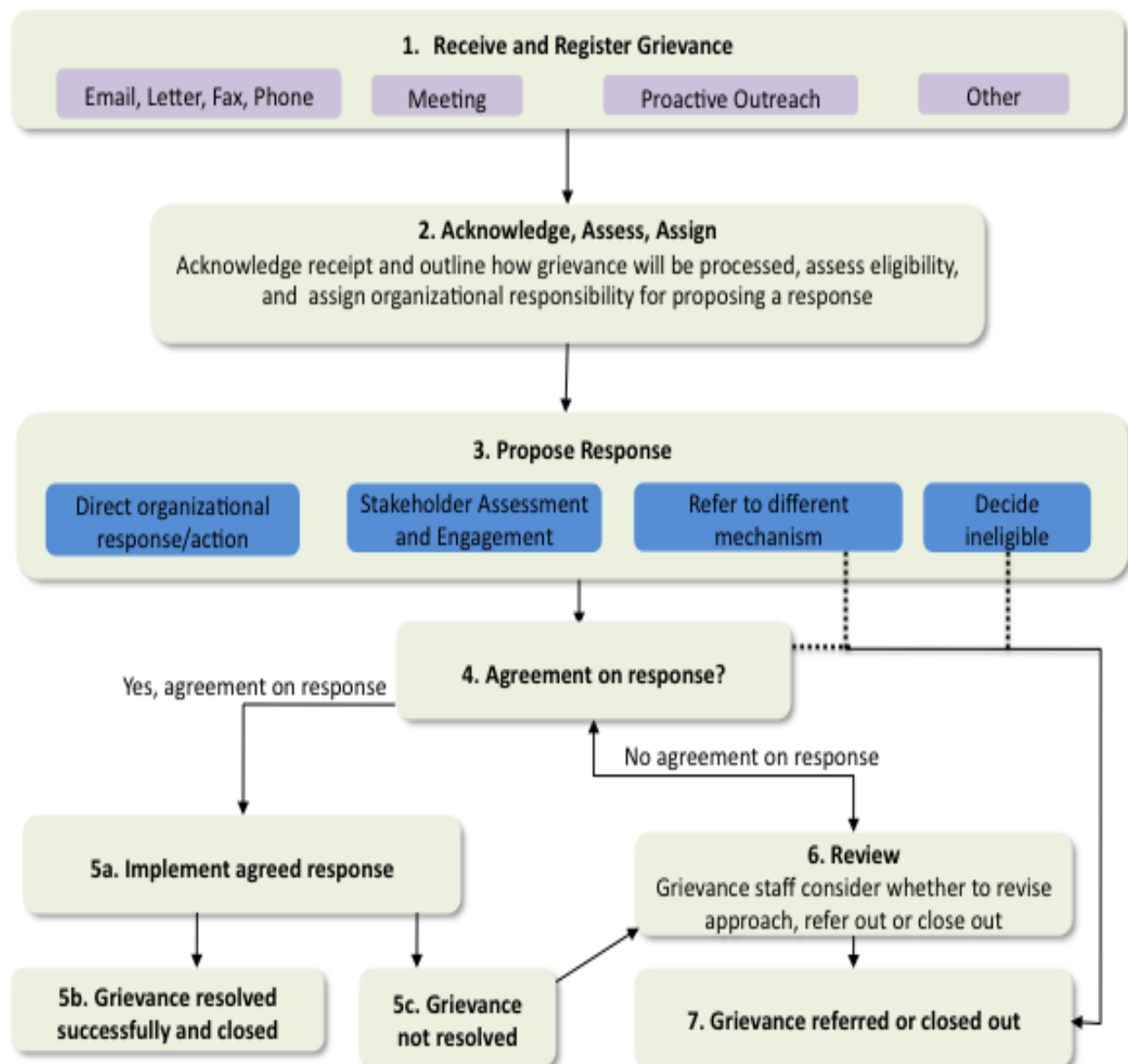


Figure 8: Grievance redress mechanism (Source: Proposed DRM model for REDD+ presented at the SESA Workshop in Kumasi- Ghana, July 2014)

The proposed DRM recommends four key steps as follows:

- receive and register grievances or complaints;
- acknowledge, assess and assign (acknowledge receipt of grievance, outline how grievance will be processed, assess eligibility and assign responsibility);
- propose response;
- agreement on response;
 - If agreement is reached, implement agreement,
 - If agreement is not reached, review case and if no agreement is reached under the review process, then the case can be referred to the law courts.

The proposed DRM also recommends various levels of institutional arrangements in addressing the disputes/grievance and these include:

- Options 1: Resolve disputes/ grievance within
 - Community level (Community Resource Management Centres (CRMCS)
 - District level (District Dispute Resolution Team)
 - National level (National Dispute Resolution Team)
- Option 2: refer to outside bodies
 - Use or delegate functions to Alternative Dispute Resolution (ADR) centres (National and District)

Details of the grievance resolution process, institutional arrangements, composition, and capacity needs requirements for all the levels (community, district, national) are all provided in the DRM which will be the basic document for addressing grievances and disputes under the FIP and also REDD+.

Dissatisfaction and alternative actions

Courts of law will be an option, which in principle should only be triggered where first instance amicable mechanisms and review processes have failed to settle the grievance/dispute. However, the Constitution allows any aggrieved person the right of access to court of law.

Documentation and tracing

Annex 8 presents a template form for the grievance reporting. The Grievance Redress Management team at each level (i.e. community, district or national) will file the completed form (as shown in Annex 8) appropriately as part of data keeping /documentation and for future reference to confirm resolution of grievance. It is also advised that photocopies of these documented resolved cases be collated on a quarterly basis into a database held at the Forestry Commission/REDD+ Secretariat.

Financing

The entire GRM process will be financed by the Ministry of Lands and Natural Resources in collaboration with the Forestry Commission under the project budget.

Recommended grievance redress time frame

The recommended time frames are summarised in Table 9. Resettlement and compensation issues or disputes are unique and may differ from the general REDD+ potential conflict issues such as land and tree tenure and carbon tenure conflicts, benefit sharing conflicts, economic concessions-timber rights in project areas, illegal chainsaw milling, land clearing for agriculture, encroachments, social responsibility issues etc.

It is therefore recommended different timelines for addressing resettlement/ compensation disputes/ conflicts. The table below presents recommended timeframes for addressing grievance or disputes related to resettlement and compensation. It is envisaged that resettlement/ compensation disputes could be resolved at the community or district levels.

Table 10: Suggested time frame

Step	Process	Time frame
1	Receive and register grievance	within 5 Days
2	Acknowledge, assess grievance and assign responsibility	within 14 Days
3	Development of response	within 14 Days
4	Implementation of response if agreement is reached	within 1 Month
5	Close grievance	within 7 Days
6	Initiate grievance review process if no agreement is reached at the first instance	within 1 Month
7	Implement review recommendation and close grievance	within 2 Months
8	Grievance taken to court by complainant	-

7.0 CONCLUSION

The project will benefit many rural communities in the target regions currently adversely affected by the environmental and social consequences of illegal artisanal and small-scale mining (ASM) practices. The project will expose community members engaged in ASM, including women, to greater awareness of risks, as well as new skills and economic opportunities through engagement in rehabilitation activities at inactive mining sites, including opportunities created by tree planting and plantation establishment. Plantation establishment will further help to create jobs for community members, contribute to knowledge sharing and uptake, increase awareness of sustainable forestry management practices, and increase opportunities for promoting positive private sector contributions to the overall REDD+ effort.

Some negative impacts may emanate from the implementation of the sub projects and this document has provided guidance to mitigate these identified concerns, and also provided an implementation plan as well as training programmes to ensure project environmental and social sustainability.

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ANNEX 1: Screening Checklist for Environmental and Social Issues

1. Project Information: Name and Contact Details:			
Project Name	Location: (region/district/village)		
	If other, explain:		
FSD District Manager			
Name of reviewer:		Date of screening:	

Subproject Details: Attach location map (longitude – latitude coordinates (GPS reading) if available):	
Type of activity: <i>What will be done, who will do it, what are the objectives and outcomes</i>	
Estimated Cost:	
Proposed Date of Commencement of Work:	
Expected Completion of Work	
Technical Drawing/Specifications Reviewed:	Yes/No – refer to Application Portfolio

2. Physical Data:	Comments
Subproject Site area in ha	
Extension of or changes to existing land use	
Any existing property?	
Any plans for construction, movement of earth, changes in land cover	

3. Preliminary Environmental Information:	Yes/No	Refer to Process Framework	Specify/ Provide Comments
Is there adjacent/nearby critical natural habitat?			
Is there activities On Forest Reserve?			
Is there activity adjacent to Forest Reserve?			
What is the land currently being used for? (e.g. agriculture, gardening, etc.)			List the key resources.

Will the proposed activities have any impact on any ecosystem services, biodiversity issues or natural habitats?			
Will there be restrictions or loss of access to using natural resources in any traditional areas including medicinal plants or those of economic value for livelihoods?		?	
Will there be water resource impacts?			
Will there be soil impacts?			
Will the subproject require use of pesticides?			If Yes, refer to Pest Management Plan
Are there any new or changing forest management planning or activities?		?	
Any cultural heritage/sacred sites in project area?		?	

4. Preliminary Social and Land Information:	Yes/No	Refer to Process Framework	Specify/ Provide Comments
Has there been litigation or complaints of any environmental nature directed against the proponent or subproject?		?	
Will the subproject require the acquisition of land?			
What is the status of the land holding (customary, lease, community lands, etc.)?		?	
Is there evidence of land tenure status of farmers and/or occupants (affidavit, other documentation)?		?	
Are there outstanding land disputes?		?	
Has there been proper consultation with stakeholders?		?	
Is there a grievance process identified for PAPs and is this easily accessible to these groups/individuals?		?	
Will there be any changes to livelihoods?		?	
What are the main issues associated with farmer benefits and community benefits?		?	
Will any restoration or compensation be required with “admitted” farmers?		?	

5. Impact identification and classification:

When considering the location of a subproject, rate the sensitivity of the proposed site in the following table according to the given criteria. Higher ratings do not necessarily mean that a site is unsuitable. They indicate a real risk of causing undesirable adverse environmental and social effects, and that more substantial environmental and/or social planning may be required to adequately avoid, mitigate or manage potential effects. The following table should be used as a reference.

Issues	Site Sensitivity			Rating (L,M,H)
	Low	Medium	High	
Natural habitats	No natural habitats present of any kind	No critical natural habitats; other natural habitats occur	Critical natural habitats present; within declared protected areas	If High Refer to Annex 3.1 and Contact Regional EPA
Water quality and water resource availability and use	Water flows exceed any existing demand; low intensity of water use; potential water use conflicts expected to be low; no potential water quality issues	Medium intensity of water use; multiple water users; water quality issues are important	Intensive water use; multiple water users; potential for conflicts is high; water quality issues are important	If High Refer to Annex 3.1 and Contact Regional EPA
Natural hazards vulnerability, floods, soil stability/ erosion	Flat terrain; no potential stability/ erosion problems; no known flood risks	Medium slopes; some erosion potential; medium risks from floods	Mountainous terrain; steep slopes; unstable soils; high erosion potential; flood risks	If High Refer to Annex 3.1 and Contact Regional EPA
Land and Farming Tenure	No conflicts, disagreements around use of land, tenant farmer rights and location of admitted farms and farmers transparent	Process of land regularization and rights to natural resources being worked out with clear communication and grievance process in place	Land conflicts historically unresolved, admitted farmers being evicted, tenant farmers losing rights and no transparency or grievance redress available	If Medium or High Refer to Process Framework

Summary of Site Sensitivity (Rate as Low/Medium/High for the site and provide comments)					
Site	Natural habitats	Water quality and water resource availability and use	Natural hazards vulnerability, floods, soil stability/ erosion	Land and Farming Tenure	Comments

<p>6. E & S assessment comments based on site visit (use additional sheet and attach if necessary):</p>
<p>Summary Observations</p>

Potential Environmental and Social Issues That Require Referral to EPA or Using EA1 Form

	Benchmark and Issues	Impact description	Yes	No	Remark
1.	Statutory provisions	Is the proposed plantation area less than 40ha?			If yes, proceed with EA1 Form
2.	Statutory provisions (see <i>Natural Habitat Issues in Checklist</i>)	Are there any ecologically sensitive/ critical areas within the proposed project area			If yes, contact regional EPA
3.	Protected areas and wildlife	Will project activities potentially impact natural habitats or critical wildlife species			If yes, proceed with EA1 form
4.	Biodiversity loss	Will land use change or vegetation clearance lead to loss of exceptional flora/ fauna			If yes, proceed with EA1 form
5.	Water pollution	1. Is there a local stream close to the project site? 2. Does it flow all year round? 3. How long does it take to walk to this stream 4. Do you think any project activity will affect this stream			If 4 is yes, proceed with EA1 form
6.	Soil erosion	Are there steep slopes in the project area? Can you easily walk on the slopes without falling			If yes, proceed with EA1 form

7. Impact Identification and Mitigation (use additional sheet and attach if necessary)	
Impact/Risk	ESMF Mitigation Options & Others

Determination of environmental category based on findings of the screening: A ____ B ____ C ____

- A ☐ Requires an EIA/ESMP
 B ☐ Requires preparation of additional E&S information to support ESMF
 C ☐ Does not require further environmental or social due diligence – Refer to ESMF

Prepared by:

Date:

ANNEX 2: Environmentally Sensitive and Critical Areas

NB: *Projects sited in these areas could have significant effects on the environment and the EPA could require a more stringent environmental assessment*

All areas declared by law as national parks, watershed reserves, forest reserves, wildlife reserves and sanctuaries including sacred groves

Areas with potential tourist value

Areas which constitute the habitat of any endangered or threatened species of indigenous wildlife (flora and fauna)

Areas of unique historic, religious, cultural, archeological, scientific or educational interest

Areas which provide space, food, and materials for people practicing a traditional style of life

Areas prone to disaster (geological hazards, floods, rainstorms, earthquakes, landslides, volcanic activity etc)

Areas prone to bushfires

Areas classified as prime agricultural areas

Recharge areas of aquifers

Water bodies characterized by one or any combination of the following conditions:

Tapped for domestic purposes

Within controlled/ protected areas

Which support wildlife and fishery activities

Mangrove areas characterized by one or any combination of the following conditions:

With primary pristine and dense growth

Adjoining mouth of major river system

Near or adjacent to traditional fishing grounds

Which acts as natural buffers against shore erosion, strong winds and storm floods

Estuaries and lagoons

Other coastal areas of ecological, fisheries or tourism importance or which are subject to dynamic change

Wetlands

Rivers

Areas of high population density

ANNEX 3: Undertaking requiring Registration and Environmental Permit (EPA LI 1652 (1999))

SECTOR	Sub sector	Description
AGRICULTURE	Community Pastures	Involving the clearing of land greater than 40 ha Involving the clearing of land located in an environmentally sensitive area
	Fruit and other vegetable farms	Management areas: Involving the clearing of land greater than 40 ha Involving the clearing of land located in an environmentally sensitive area
FISHING AND TRAPPING	Fishing	a. fish or shell fish farming in salt water, brackish water or fresh water, where the proposal includes the construction of shore-based facilities other than wharves; b. permanent traps or weir fisheries, salt water.
	Services incidental to fishing	Fish or shellfish breeding and propagating services, or fish or shellfish hatchery services, where the proposal includes the construction of shore-based facilities other than wharves.
LOGGING AND FORESTRY	Logging	Management of forested land for the primary purpose of harvesting timber in a contract area.
	Forestry services	a. application of pesticides; b. introduction of exotic species of animals, plants or microbial agents.
MINING	Metal mines Non metal mines	-
CRUDE OIL AND NATURAL GAS	Crude oil or petroleum production facilities Natural gas production facilities	
QUARRIES AND SAND PITS	Stone quarries	Where the total area is greater than 10ha, OR Where any portion is to be located within an environmentally portioned area
	Sand and gravel pit	a. where the total area is greater than 10 hectares, or b. where any portion is to be located within an environmentally sensitive area.
FOOD	Meat and poultry products	a. abattoirs; b. meat, fat or oil processing facilities c. poultry processing facilities.
	Fish products	-
	Flours, prepared cereal foods and feeds Feed mills	-
BEVERAGES	Distillery products Brewery products	-

SECTOR	Sub sector	Description
	Wines	
RUBBER PRODUCTS	a. tyres and tubes; b. rubber hoses and beltings; c. other rubber products	-
PLASTIC PRODUCTS	a. tyres and tubes; b. rubber hoses and beltings; c. other rubber products	-
LEATHER AND ALLIED PRODUCTS	Man made fibres and filament yarns Spun yarns and woven cloths Broad knitted fabrics	-
TEXTILE PRODUCTS	Natural fibres processing and felt products Carpets, mats and rugs Canvas and related products Other textile products	-
WOOD	Sawmill, planning mill and shingle mill products industries Veneers and plywoods Other wood products Wood preservation facilities which use hazardous chemicals or similar chemical processes Particle board or wafer board production	-
PAPER AND ALLIED PRODUCTS	Pulp and paper Asphalt roofing Other converted paper products	-
PRIMARY METALS		-
FABRICATED METAL PRODUCTS		-
TRANSPORTATION EQUIPMENT		-
REFINED PETROLEUM PRODUCTS	Agricultural chemicals Plastics and synthetic resins Paints and varnishes Soaps and cleaning compounds	-

SECTOR	Sub sector	Description
	Other chemical products	
OTHER MANUFACTURING	Scientific and professional equipment	Photographic films and plates manufacturing Floor tiles, linoleum and coated fabrics manufacturing Other manufacturing products
CONSTRUCTION	Industrial construction (other than buildings)	a) Construction of pipelines for the transmission of oil, natural gas and other related products from the source to the point of distribution, where: Any portion of the pipeline is to be located at a distance greater than 500m from an existing right of way; or Any portion of the pipeline is to be located in an environmentally sensitive area b) diesel electric power generating plants having capacity greater than 1 megawatt a gas turbine electric power generating plants having capacity greater than 1 megawatt c) nuclear electric power generating plants
HIGHWAYS AND HEAVY CONSTRUCTION	Roads	-
	Waterworks and sewage system	Construction of trunk pipelines for transmission of water from the source to the point of distribution Construction of trunk sewer pipelines Construction of trunk sewer pipeline outfalls
	Hydroelectric power plants and related structures	Construction of dams and associated reservoirs Inter or intra basin water transfers Construction of hydroelectric power developments
UTILITIES		Establishment of waste disposal sites Establishment of facilities for the collection or disposal of hazardous waste materials
WHOLESALE TRADE	Petroleum products	Wholesale establishment of petroleum products storage facilities
	Waste materials, wholesale	Establishment of facilities for the purpose of assembling, breaking up, sorting or wholesale trading of scrap, junk or waste material of any type
SERVICES	Economic services administration	Resource conservation and management programmes involving introduction of exotic species of animals or plants for any purpose; Resource conservation and management programmes involving introduction of native species

SECTOR	Sub sector	Description
		of animals or plants into areas where those species do not occur at the time of the proposed introduction Designation of land for cottage development or other recreational development
ACCOMMODATION SERVICES	Establishment of recreation and vacation camps	-
AMUSEMENT AND RECREATIONAL SERVICES	Commercial spectator sport	Establishment of horse racetrack operations Establishment of racetrack operations for motorized vehicle sports and recreation clubs and services Establishment of facilities, including trails Establishment of outdoor firearm ranges Establishment of marina operations Establishment of facilities, including trails for motorised recreational vehicles Other amusement and recreational services

ANNEX 4: Sample Copy of EPA Registration Form, EA1

ENVIRONMENTAL PROTECTION AGENCY, GHANA

ENVIRONMENTAL ASSESSMENT REGISTRATION FORM

(To be completed in Duplicate)

FEE: ₵50,000

Serial No.

FORM EA1

PROPONENT:

Address for correspondence:

Contact person:

Position:

Phone No.:

Fax No.:

Email:

ASSESSMENT NO:		FILE NO:	
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Environmental Protection Agency

P.O. Box M 326

Accra, Ghana

Tel: 664697/8, 664223, 662465

Fax: 662690

Email: support@epagghana.org

Web-site: www.epa.gov.gh

*This form shall be submitted to the relevant EPA Regional Office. It is important that you read carefully the guide for completing the form before starting.

1. PROPOSED UNDERTAKEN/DEVELOPMENT

Title of proposal (General Classification of undertaking)

Description of Proposal (nature of undertaking, unit processes [flow diagram], raw materials, list of chemicals (source, types and quantities), storage facilities, wastes/ by-products (solid, liquid and gaseous)

Scope of Proposal (size of labour force, equipment and machinery, installed/production capacity, product type, area covered by facility/proposal, market)

2. PROPOSED SITE

Location (attach a site plan/map)

Plot/House No.

Street/Area Name

Town

District/Region

Major Landmarks (if any)

Current zoning

Distance to nearest residential and/or other facilities

Adjacent land uses (existing & proposed)

Site description (immediate activities should be described)

3. INFRASTRUCTURE AND UTILITIES

Structures (buildings and other facilities proposed or existing on site)

Access to water (source, quantity)

Access to power (type, source & quantity)

Drainage provision in the project area

Nearness to water body

Access to project site:

Other major utilities proposed or existing on site(e.g. sewerage, etc)

4. ENVIRONMENTAL IMPACTS

Potential environmental effects of proposed undertaking (Both constructional and operational phases)

5. OTHER ENVIRONMENTAL ISSUES

Potential significant risks and hazards associated with the proposal (including occupational health and safety).

State briefly relevant environmental studies already done and attach copies as appropriate.

6. CONSULTATIONS

Views of immediate adjoining neighbours and relevant stakeholders (provide evidence of consultation)

7. MANAGEMENT OF IMPACTS AND ENVIRONMENTAL ENHANCEMENT MEASURES

ATTACHMENTS

Tick appropriate boxes below indicating that the following required documents have been attached:

- ☐ Authentic site plan (signed by a licensed surveyor and certified by Survey Dept.)
- ☐ Block plan of the site
- ☐ Photographs of the site
- ☐ Fire report from the Ghana National Fire Service
- ☐ Zoning letter from Town & Country Planning Department

DECLARATION:

I,, hereby declare that the information provided on this form is true to the best of my knowledge and shall provide any additional information that shall come to my notice in the course of processing this application. I also declare that information provided is true.

Signature

Date

* Use additional sheets where spaces provided in 3, 4 and 5 are inadequate.

ANNEX 5: ToR for the recruitment of ESIA consultants

The ESIA Consultant will support the overall project environmental and social due diligence with:

- development of background information related to E&S application requirements
- development of checklists and manuals for implementation of safeguards
- public dissemination of all E&S requirements at appropriate forums
- assist the FC E&S FP in ensuring that sub projects are screened and reviewed using the E&S Screening Form
- discussions with the head office, regional and district FPs concerning the E&S requirements
- technical advice, on an as needed basis to FPs on provisions in the ESMF and any other E&S issues
- monitoring subproject progress as it relates to adherence with the ESMF requirements and associated guidelines,
- resolving implementation bottlenecks, and ensuring overall that E&S subproject implementation proceeds smoothly;
- collecting and managing E&S information relevant to the subproject and accounts (i.e. environmental monitoring and audit reports); and
- developing the annual E&S report

A Consultant will be retained on a full or part time basis pending determination by the FC on the work requirements per year.

In addition, the Consultant will provide technical advice on environmental management and mitigation during the life of the FIP, and to enhance E&S provisions to:

- develop series of Technical Planning Guidelines (including manuals and checklists) specific to the FIP and the types of subprojects that build upon the checklists and E&S and other Guidelines provided with this ESMF.
- liaise with the appropriate FPs to share knowledge and explain the objectives and ESMF requirements for approved subprojects in their Districts
- raise awareness among stakeholders on E&S issues related to the FIP, and
- lead the delivery of capacity-building programmes for relevant stakeholders.

ANNEX 6: FORMAT FOR MONTHLY SAFEGUARDS REPORTING

MINISTRY OF LANDS AND NATURAL RESOURCES ENHANCING NATURAL FOREST AND AGROFOREST LANDSCAPES PROJECT (ENFALP) FORMAT FOR MONTHLY SAFEGUARDS REPORTING	
Month	
District	
Prepared by	
Submitted to	
Date Submitted	
1. Environmental & Social Safeguards Issues (including Health & Safety, Grievances, etc.)	
2. Challenges	
3. Recommendations	
4. Attachments (eg. Copies of grievance registration forms, etc.)	

ANNEX 7: STAKEHOLDER CONSULTATION

Stakeholder institutions and communities have been consulted in the two regions to discuss the upcoming sub project activities as well as to learn lessons from current activities in the Western Region. These have facilitated the development of this additional financing ESMF and are described as follows:

Eastern Region

Key project stakeholders consulted include Mining communities, Municipal/District Assemblies, Forest District Officers and Non-governmental organizations. These comprise the following:

- Begoro Forest District;
- East Akyem Municipal Assembly;
- Adadientem mining community in the East Akyem Assembly;
- Mampon mining community in the – District;
- Women’s Group at Adadientem;
- Youth Group at Adadientem;
- Presby JHS Headmistress and school prefects in Mampon community; and
- A Rocha Ghana (NGO).

The design and format for the meetings were gender sensitive and discussions were centred on the following questions:

- general socio-economic profile of the municipalities and mining communities;
- general menace of the ‘galamsey’ activities in terms of food security, health, education, water resources, and social vices;
- successes and challenges faced with the current national operation ‘Vanguard’ to stop illegal mining;
- any intervention/Planned measures to reclaim mined out areas;
- knowledge /Ideas on World Bank’s safeguard issues;
- capacity of MA/Forest District Officers to implement safeguard issues.

It is expected that Stakeholder consultation process will continue through various stages of the project implementation.

Meeting with East Akyem Municipal Assembly

The list of key Municipal Assembly (MA) staff present at the meeting is provided below:

List of key Municipal staff

No	Name	Designation	Contact
1.	Hon. Owusu Twum Ampofo	Municipal Chief Executive Officer	
2.	Paulina A. Agaah	Deputy Planning Officer	0543297900
3.	Vivian A. Adam	Human Resources Manager	0244969272

4.	Kwesi Kwakye Twum	Social Welfare & Community Development	0245696354
5.	Francis Onai	Municipal Works Engineer	0246062375
6.	Kwame Oteng Awuah	Forest Service Division-Begoro	0243373059

Highlights of the comments/discussions included the following:

- the Atewa forest is bounded by six (6) Municipal and District Assemblies (MDAs) namely the East Akyem Municipal, Atewa District, Suhum District, Kraboa Kotaa District, New Juabeng Municipal and Fanteakwa District Assemblies;
- three MDAs are most affected by the galamsey activities, these are the East Akyem Municipal, Atewa District and Kraboa Kotaa;
- the main occupation of the people in the Akyem Municipality is farming and mining with others in the service industry, craftsmanship, trading activities;
- both small and large-scale mining firms exist in the Municipality, these include Akooko/US Goldlines, X'tra Gold Gold Mining, Kibi Goldfields Limited, Mos Mining Limited, Managing God's Resource Limited and Narawa Mining Company;
- on a scale of 1 to 10 in terms of the impact of illegal mining (10 being the worst), the MA ranked the menace as 10 due to the severe negative effects on health, education, water resources, food security and social behaviour within the municipal assembly;
- galamsey is carried out by both locals and migrants but with the current ban on their operations, in addition to the operations VANGUARD, the migrants have moved out of the Municipality;
- some women are directly involved in the 'galamsey' activities while others trade in food and water at the mining sites;
- the MA in collaboration with A ROCHA Ghana and FSD, has carried out re-afforestation of some degraded forest areas;
- the MA has constituted a mining taskforce responsible for monitoring and controlling the activities of 'galamsey' workers with limited success;
- after the conduct of an alternative livelihood assessment programme, plans are currently underway to use part of its internally generated funds to roll out support programs for some 'ex-galamsey' workers. This will be done in collaboration with AROCHA Ghana. Alternative livelihoods include animal farming, agro-processing cooperatives, etc.
- the Social Welfare and Community Development Unit of the MA undertakes periodic community sensitizations on the menace of galamsey;
- the MA key staff are knowledgeable in World Bank safeguard procedures learnt from the implementation of other World Bank projects. A safeguards committee has earlier been formed comprising the Planning Officer, Health Officer, Works Engineer, Procurement Officer and Budget officer. They have achieved limited success;
- generally, individuals may own land under the stool land tenure system;
- The MA levies mining companies to generate revenue for developmental projects;

- the MA is happy with the government ban on small scale mining and the on-going operation 'VANGUARD' against illegal mining involving the military but would have wished to be part of the process;
- general, there is the perception that the native people belong to royalty and would not indulge in some activities not befitting their status as royals. Many such economic activities including farming are left to migrants;
- T they are hopeful that the project would include sampling and analyses of environmental media in the degraded areas prior to reclamation to inform the methodology to be adopted for the reclamation process.



Plate 1: Meeting with key Forestry and Municipal Assembly staff

Meeting with Adadientem Community Chief and Elders

Adadientem has a population of about 2,500 persons who are mostly engaged in farming and trading prior to the onset of the intense mining activities. There is no health facility in the town as they visit the Kyebi health centre for medical attention. The only two basic schools in the town are the Roman Catholic Primary & JHS and one other Private Primary School. The people of Adadientem are predominantly Christians with about seven denominations in the community. Other discussions and comments from the community members included the following:

- there are six (6) boreholes within the community but which unfortunately have poor water quality (high iron content). Though the local Birim and Adensua rivers are highly polluted from mining activities, some community members are forced to use the water for some household chores. Water supply is therefore an urgent problem for the community;
- mining activities including illegal mining has been very active in the community. Migrants from all over the country and beyond have invaded the community to mine for gold. However, the current ban has halted their activities and most of the migrants have fled the community.
- women have been involved in illegal mining though most of them are usually traders at the galamsey sites;
- they confirmed that the impact of mining on the community include the following:

- *Loss of farmlands*
- *Dug pits filled with contaminated water serving as death traps for the people*
- *Polluted water resources*
- *Increased social vices*
- *Health related issues due to breeding of mosquitoes from the ponds of water*
- livelihood support options proposed by the community in the absence of ‘galamsey’ may include:
 - *Financial support for trading by the women*
 - *Support for poultry and other livestock rearing*
 - *Aquaculture*
 - *Support for transport businesses*
 - *Apprenticeship for dressmaking and hair dressing*
 - *Artisan training for the youth*
- the chief and elders pledged to protect the reclaimed lands and will ensure that any encroachers/trespassers are arrested and prosecuted.



Plate 2: Meeting with Elders and some community members Adadientem

Meeting with Adadientem Women’s Group

The comments from the women included the following:

- some women have been actively involved in galamsey activities;
- women would require financial support for trading to support their families;
- women would need support to enter into apprenticeship to ensure their economic independence;
- the poor water quality of the existing boreholes is burdensome and expensive as some families are forced to buy imported sachet water for cooking;
- food is expensive in the community due to unavailability of good lands and they are forced to travel to Kibi and other places to buy foodstuff. Most of their lands are contaminated from mining activities and local food may be unwholesome.
- the women agreed that illegal mining should not be tolerated. They pledged to if required, sign an undertaking to report encroachers on reclaimed lands to the Chief and Elders, and ensure their prosecution.

Meeting with Adadientem Youth Group

The youth commented as follows:

- they have abandoned the ‘galamsey’ work due to the ban and are currently unemployed;
- promised to stop the ‘galamsey’ activities if alternative jobs are made available;
- they were willing to undertake poultry, transport business and artisan training when supported financially; and
- they are not happy with the effects of illegal mining on their community and therefore promised to form a watchdog committee to protect reclaimed land from further destructive mining operations by migrants or even among themselves.

Meeting with Akyem Mampon Community Chief and Elders

Mampong has a population of about 1,200 persons and farming has been the main occupation of the people prior to the onset of the mining activities. The Presbyterian Primary and JHS is the only basic school in the town. The people of Mampon are predominantly Christians.

- there are currently four (4) boreholes in the community, one is broken down and the remaining three have quality issues (metallic taste, bad smell and oily surface). The Birim River drains the community and its water quality is poor;
- galamsey has been practised mainly by migrants though some locals are also involved;
- usually, the individual land owner may negotiate with the migrant on the use of the land for farming purposes and subsequently the former will inform the Chief;
- the chief has participated in educational meetings and workshops on impacts of mining on the environment and expects that their soils will be tested to confirm suitability for food crop cropping;
- there is a decree from the paramount chief confirming that reclaimed lands by the government or the stool would revert to the stool and the owners may forfeit their right to all such lands, unless the land owners ensure that such lands are reclaimed by the miners. However, community members are of the opinion that to ensure sustainability and the success of the decree, land owners should be allowed to benefit from any future use of such lands after reclamation;
- there have been some initiatives to set up community cooperatives to promote community enterprises such as soap making by the women but these have not been successful due to insufficient funding and lack of management skills;
- the perceived effects created by the galamsey operations on the community include:
 - *Increased poverty levels*
 - *Loss of farmlands*
 - *Food scarcity*
 - *High cost of living*
 - *Lack of fuel wood*
 - *Dug pits filled with contaminated water serving as death traps for the people*

- *Polluted water resources*
- *Increased social vices*
- *School drop out*
- *Health related issues due to breeding of mosquitoes from the ponds of water*
- *Increased Divorce cases*
- livelihood support options proposed by the community in the absence of 'galamsey' include:
 - *Financial support for trading by the women*
 - *Support for poultry and other livestock rearing*
 - *Support for transport businesses*
 - *Apprenticeship for dressmaking and hair dressing*
 - *Artisan training for the youth*
- the chief and elders pledged to protect the reclaimed lands and will ensure that any encroachers/trespassers are arrested and duly prosecuted.



Plate 3: Meeting with Elders and some community members of Mampon

Interaction with Mampon Community JHS and Primary School

The school has a population of 36 pupil at the JHS level and 110 pupils at the Primary with six (6) teachers. Eleven (11) prefects including six (6) girls and five (5) boys, with ages between 12 and 16 years from both the Primary and JHS including the headmistress were met. The discussions and comments included the following:

- all students appreciate the problems associated with illegal mining in the community;
- some of the students are involved in the business and use their income to support their families;
- they undertake the galamsey activities after school, from 2pm;
- menace created by the galamsey activities in the community include:
 - *Destruction of farmlands/forest reserves*
 - *Teenage pregnancy in some girls who are lured by the 'galamsey' workers*
 - *Dug pits filled with contaminated water serving as death traps for the students*

- *Polluted water resources*
- *Truancy in students*
- *Increased social vices*
- *School drop out*
- *Frequent malaria*
- *Unable to do assignments (homework)*
- one of the school prefects was not happy about the proposed reclamation works which would deny him access to cash because he uses the money to support his grandmother.



Plate 4: Interactions with Headmistress and School Prefects of Presby Prim. & JHS-Mampon

Meeting with A ROCHA Ghana (NGO)

A ROCHA Ghana is Christian Environmental NGO with a field base at Kibi purposely for the conservation efforts within the Atewa forest reserve. They have other field bases serving Lake Bosomtwi and the Mole National Park. Their ultimate objective is to inspire and empower people to care for nature whiles promoting and supporting sustainable natural resource management. Their activities and comments include:

- afforestation activities for about 34ha land in Begoro area in collaboration with the Forestry Commission;
- the fight against illegal mining can be won if the authorities will maintain the pressure on galamsey miners and communities.
- currently implementing a training programme for small scale miners on responsible mining in anticipation of the lifting of the ban on their activities soon;
- the NGO has provided alternative livelihood support programs for some community members in such areas as:
 - *Grasscutter rearing*
 - *Snail keeping*
 - *Mushroom cultivation*
 - *Rabbit rearing*

- the above programme has been met with mixed success as some reclaimed lands were later encroached upon while some animal rearing programmes were also not very successful;
- community income from livelihood support programs is not comparable to that of galamsey work hence communities would invariably revert to mining unless strict disincentives backed by law are enforced;
- the involvement of traditional authority including the paramount chief (Okyehene) and his sub chiefs is crucial to help sustain reclamation activities;
- P previous work in the sector include recent field studies by FORM International (an NGO) on appropriate reclamation strategies which would be published soon;
- there is a recent directive from the office of the Traditional authority instructing that all mined out lands are to be reclaimed by the respective landowners OTHERWISE if the Traditional authority reclaims it those lands become the property of the Traditional authority and the individual then forfeits ownership to the authority;
- 'Grains of paradise' plantation within cocoa farms could also be considered for the alternative livelihood support programs;
- Okyeman Environmental Foundation is an NGO with similar objectives as A ROCHA Ghana in the Atewa Forest Reserve landscape in the Eastern Region.



Plate 5: Meeting with the Project Manager, A ROCHA Ghana



List of Elders and members of Adadientem during the community meeting

No.	Name	Position	Contact
1.	Lawrence Abokyem	Asafoakye Sripi	
2.	Aaron Ofori	Okyeame	0245444760
3.	Michael Ofori	member	
4.	Benjamin Narh	member	
5.	Bright Adomako	Asafoakye	
6.	Dominic Amanning	Youth Leader	0207318404
7.	Dickson Brobby	Member	
8.	Kumi Kingsford	Member	
9.	Asare Nicholas	Member	
10.	Antwi Dominic	Member	
11.	Prince Oware	Member	
12.	William Nuamah	Member	
13.	Gyasi Boadu	Member	0244764434
14.	Appianing Samuel	Member	
15.	Konadu Amoaning	Member	
16.	Mark Amaning	Member	
17.	Kwame Appiah	Member	
18.	Benjamin Zigler	Member	
19.	Dora Boadu	Member	
20.	Eva Opoku	NPP Women Organizer	0246052203
21.	Mary Adu	Member	
22.	Yaa Rose	Member	
23.	Susanna Ankomah	Member	
24.	Faustina Akoto	Member	
25.	Charity Amoakoa	Member	
26.	Vida Serwaa	Member	
27.	Mercy Yeboah	Member	
28.	Bernice Amemaa	Member	
29.	Mary Amponsah	Member	
30.	Mary Otomah	Member	

List of Elders and members of Mampon during the community meeting

No.	Name	Position	Contact
1.	Nana Kofi Asare	Abusua Panyin	0204499719
2.	Nkansah Buabeng	WATSAN Chairman	0246282111
3.	Amankwah Daniel	Member	0241415301
4.	Francis Oware	Member	0242347511
5.	Ante Bea	Member	
6.	Maame Boahemaa	Member	
7.	Kwadwo Buadu	Secretary – Water & Sanitation	0240773017
8.	Kwadwo Asare	Asafoakye	0262780651
9.	Op. Kofi Adweda	Member	
10.	Asamoah Joseph	Member	
11.	Yaw Owusu	Member	0242988981
12.	Maame Akosua Kesewa	Member	
13.	Kofi Kyei	Member	0246722668
14.	Maa – Abena	Member	0544076220
15.	Kwame Danso	Member	0245783929
16.	Esi Awuah	Member	
17.	Maame Abena Nkansah	Member	
18.	Kwame Ketewa	Member	
19.	Kwaku Asare	Member	
20.	Kwame Asamoah	Member	
21.	Kwadwo Boakye	Member	0546053139
22.	Kwasi Asare	Member	0249877286
23.	Kofi Asare	Member	0262790716
24.	Dorithy Amankwa	Member	
25.	Harrieta Effah	Member	0241764418
26.	Charles Ayim	Member	0504451137
27.	Kingsley Kwaku	Member	
28.	Bosompem	Member	0206150045
29.	Vera Ntowaa	Member	0204240239
30.	Shirley Effah	Member	
31.	Karim Issaka	Member	0554435658

List of pupils of Presby Primary and Junior High School the community meeting

No.	Name	Stage/Level/Class	Phone Number
1.	Ivy Constance Eghan	Headmistress	0240486419
2.	Babara Ohene Asare	Assistant Girls Prefect	-
3.	Harriet Owusu Asare	Office Girl	-
4.	Sandara	Girls Prefect	-
5.	Ashiagbor Christian	Assistant Boys Prefect	-
6.	Bosompem Richard	Boys Prefect	-
7.	Azuma Michael	Compound Overseer	-
8.	Opoku Isaac	Sports Prefect	-
9.	Derick Kissi	Class Prefect	-
10.	Boateng Richard	Class Captain	-
11.	Afi Precious	Girls Prefect	-
12.	Adjeibea Florence	Assistant Prefect	-

Meeting with AROCHA, KIBI

No.	Name	Designation	Phone Number
1.	Emmanuel Akom	Project Manager	0243422538

WESTERN REGION

Some local community members have been consulted during FIP activities in the Asankrangwa and Tarkwa Forest Districts in the Western Region. The consultations were aimed at identifying and assessing the benefits of GFIP to the local communities and other stakeholders including plantation workers. The outcome of the consultations is summarized below.

Outcome of Consultations at Asankrangwa

Workers of Emma Agyeiwaa Nursery

- The nursery is owned and operated by two women, Emma Agyeiwaa and Benedicta Boakye, who are natives of Asankrangwa.
- The nursery produces and supplies tree seedlings (Ofram, Asanfena, Teak, Cidrella, Mahogany, Edinam, Emre, Wawa, Black hyedua, etc.) for GFIP interventions.
- Prior to GFIP, the nursery was operated by Emma Agyeiwaa, producing seedlings for farmers on a small scale. It had only one (1) permanent staff and engaged casuals occasionally.
- With the onset of GFIP, the nursery has expanded and had approximately 120,000 tree seedlings at the time of visit.
- The nursery supplied 80,000 seedlings for GFIP interventions at Asankrangwa and 30,000 seedlings for Enchi in 2016. Seedlings for 2017 were yet to be supplied at the time of visit.
- FSD purchases the seedlings for GFIP interventions at a cost ranging from ₵0.75 to ₵2.50 per seedling.
- Emma Agyeiwaa Nursery now has a staff of thirteen (13), with eight (8) being permanent, comprising four (4) males and females each; and five (5) being casuals. The workers are all natives of Asankrangwa. The details of the workers engaged during the consultation are provided in the table below.
- The workers are provided with food daily and are paid ₵50 per week and also on commission (percentage of net income after selling seedlings).

Details of workers consulted at Emma Agyeiwaa Nursery

No.	Name	Occupation prior to FIP	Dependants
1.	James Tetteh	Farmer	5 (mother, 2 kids & 2 siblings)
2.	Augustina Boadu (Caterer for nursery)	Farmer	5 (mother, 2 kids & 2 siblings)
3.	Afia Pokua	Farmer	3 (mother & 2 kids)
4.	Mavis Amponsah	Trader	1 child
5.	Afia Sarpong	Unemployed	2 kids
6.	Emmanuel Addae	Farmer	17 (7 kids & 10 siblings)

The picture below shows the engagement with some of the workers of the nursery.



Owner and Wife of Akrofi Nursery

- The nursery is owned by William Akrofi and managed together with his wife, Paulina Akrofi.
- The nursery produces tree seedlings including Abakro, Edinam, Ofram, Mahogany, Emire, Nankom and Cidrella for GFIP.
- Prior to GFIP, the nursery was operated on a small-scale, producing seedlings for farmers.
- There were approximately 60,000 seedlings at nursery at the time of visit.
- The Akrofi nursery supplied 54,000 seedlings for GFIP in 2016. As at the time of visit, the nursery had supplied 11,000 seedlings for planting at Ankobem, Abura and Mamiri forests under GFIP.
- The nursery engages 5 casual workers from the community who are paid ₵20 per day.
- The owner has been trained by FSD on nursery management under GFIP.
- The GFIP has been beneficial to them. William Akrofi has purchased a motor tricycle (Motor King) from money earned from the GFIP. He uses it to supply the tree seedlings and also uses it for other jobs to earn additional income. He has also completed his building using proceeds from seedlings supplied for GFIP and saved the rest at the bank. According to his wife, she now gets more housekeeping money due to the GFIP project.

The following pictures show the engagement with William Akrofi and wife, and the purchased motor tricycle.



Supanso Work Gang

- The Supanso Work Gang carries enrichment planting in Compartments 15, 16 and 25 of the Bura Forest Reserve.
- The work gang is made up of twenty (20) members, who are all from the Supanso Community (nearest community to the Forest Reserve).
- Food and water is provided for the workers daily.
- They are also transported to and from the forest reserve daily to carry out their work.
- The women in the gang cook and carry the seedlings to the planting site.
- Wages are paid promptly.
- Gang members however complained that the wages are low. Though the project has provided them with jobs, other ventures in the area such as galamsey provide higher wages. Also, the planting season for GFIP coincides with the farming season, hence some of the gang members who are farmers go to their farms instead.

The following pictures show the engagement with the Supanso Work Gang



Work Gang Leader for Enrichment Planting at Angobin Forest Reserve

- The Gang Leader, by name Kwadjo Asante, claims the GFIP project has been very beneficial to him.
- He has purchased a tricycle (Motor King) from the money earned from the project. He uses the tricycle to work when they are not on the field to get additional income.
- His work gang involves twenty-two (22) members, twelve (12) females and ten (10) men, all from the local community.
- The women do planting and weeding.
- His challenge is that the gang members have not been supplied with PPEs.

The picture below shows the interaction with Kwadjo Asante by his motor tricycle.



Work Gang Member for Boundary Planting and Watershed Planting

- The worker, by name Augustine Bisa (25 years), was unemployed after completing Senior High School. He wanted to train in ICT but did not have money to purchase a computer.
- He joined the GFIP project to get money for a computer and further his education.
- He has been engaged on the GFIP project for about 7months.
- He worked for three (3) weeks on the boundary planting and three (3) months on the planting of degraded watersheds.
- He earned ₵1000 for each of the projects and has been able to purchase a computer.

The picture below shows the interaction with Augustine Bisa.



Work Gangs for Planting of Degraded Watersheds

- Two (2) work gangs were engaged:
 - Gonukrom Work Gang, with ten (10) members, all men; and
 - Koduakrom Work Gang, with five (5) members, all men.
- Gonukrom work gang is headed by Kofi Nyonkopa who is also the Community Chairman for Gonukrom.
- Koduakrom work gang is headed by Paul Kweku.
- FSD provided wellington boots to the Koduakrom Gang on credit and the cost deducted from their wages.
- All the gang members are farmers and do the GFIP project on part time.
- The GFIP project has been beneficial to them through the additional income they earn.

The picture below shows the engagement with the Gonukrom and Koduakrom Gangs



Outcome of Consultation at Tarkwa

Work Gang Leader for Seed Orchard

- The GFIP project has been very beneficial through job creation and additional income for the workers.
- The establishment of the seed orchard involved the use of two (2) work gangs from the neighbouring Obengkrom and Buokrom communities.
- One (1) gang of twenty (20) people were involved in the land clearing and another gang of ten (10) were involved in the pegging and planting.

- The gang members received between ₵380 and ₵1100 based on the work done which span three (3) months.

The picture below shows the interaction with the work gang leader at the project site.



Lessons from Safeguards Implementation in the Western Region

- The selection, appointment and training of Regional and District level safeguards persons is crucial and should be carried out before the project begins to ensure proper implementation of safeguards measures at project sites, as well as monitoring and supervision.
- The frequent transfer of FSD staff who have been appointed and trained as Safeguards Focal Persons is a major challenge to safeguards implementation for the current GFIP project. As much as possible, transfers of such appointed staff should be avoided, and where unavoidable, the staff should be considered for transfer within the GFIP regions.
- The necessary forms for registration of farmers, tree registration, etc. should be made available at the various district offices for use to ensure proper documentation. At least MoUs should be signed with farmers, land owners and other project beneficiaries as a first step of documentation.
- The engagement of NGO's to work as community liaisons should be extended to all the GFIP regions to ensure effective safeguards implementation at the community level.
- Adequate budget has to be set aside for safeguards implementation to ensure effective monitoring and supervision by the Safeguards Focal Persons.
- The project should provide PPEs for workers' use at the project sites which should be enforced by the District Safeguards Focal Persons/project supervisors/gang leaders.

List of selected safeguards focal persons for the GFIP

Western Region			
Name	Designation	Region/District	Contact
Augustine Gyedu	Assistant Regional Manager	Western Region	0208170822
Michael Benni Kofi	Assistant District Manager	Bibiani	0244515172
Emmanuel Anim Brew	Assistant District Manager	Sefwi Wiawso	0208182715
Emmanuel Antwi	Assistant District Manager	Asankrangwa	-
Theodore Banoeyole	Assistant District Manager	Tarkwa	0234318635
Ishmael Boakye Agyemang	Assistant District Manager	Enchi	-
Baba Musa Mohammed	Assistant District Manager	Juabeso	0242524704
Kofi Asano Horatius	Assistant District Manager	Takoradi	0241423950
Brong Ahafo			
Clement Amo Omare	Assistant Regional Manager	Brong Ahafo	-
Edward Nyamah	Assistant District Manager	Goaso	-
James Kubasi Wuni	Assistant District Manager	Dormaa	0243541504
Raymond Ayipah	Assistant District Manager	Bechem	0243147632
Eric Asare	Assistant District Manager	Sunyani	0244419436
Ruth Vivian Azu	Assistant District Manager	Atebubu	0244892063
Gideon Yaw Woolie	Assistant District Manager	Kintampo	0244138788

ANNEX 8: GRIEVANCE AND RESOLUTION FORM

Name (Complainant):

ID Number (PAPs ID number):

Contact Information (house number/ mobile phone):.....

Nature of Grievance or Complaint:

Details of Grievance:

Name (Receiver): Signature:..... Date:.....

Name (Filer): Signature..... Date:.....

Relationship to Complainant (if different from Complainant):

Review/Resolution **Level 1 (District)** ☐ **Level 2 (Regional)** ☐ **Level 3 (National)** ☐

Date of Conciliation Session:

Was Filer/Complainant Present?:	Yes	No

Was field verification of complaint conducted?	Yes	No

Findings of field investigation:.....

Summary of Conciliation Session Discussion.....

Issues.....

Was agreement reached on the issues?	Yes	No
1. The proposed changes to the constitution are necessary and justified.		
2. The proposed changes to the constitution are in the best interests of the club.		
3. The proposed changes to the constitution are fair and equitable.		
4. The proposed changes to the constitution are consistent with the club's values and mission.		
5. The proposed changes to the constitution are supported by the majority of the members.		
6. The proposed changes to the constitution are supported by the majority of the committee.		
7. The proposed changes to the constitution are supported by the majority of the board.		
8. The proposed changes to the constitution are supported by the majority of the stakeholders.		
9. The proposed changes to the constitution are supported by the majority of the community.		
10. The proposed changes to the constitution are supported by the majority of the industry.		

If agreement was reached, detail the agreement:.....

If agreement was not reached, specify the points of disagreement:.....

Signed:
(Independent Observer eg. Assembly Member/Opinion Leader)

Implementation of Agreement

Feedback from Filer/Complainant: Satisfied ☐ Not Satisfied ☐

If not satisfied, recommendation/way forward:.....

(Signature & date of Concilia