Republic of Ghana

MINISTRY OF LANDS AND NATURAL RESOURCES

FOREST INVESTMENT PROGRAMME (FIP)- ENHANCING CARBON STOCKS IN NATURAL FORESTS AND AGROFOREST LANDSCAPES

Environmental and Social Management Framework (ESMF)

Draft Final Report

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LIST OF ABBREVIATIONS

AfDB	African Development Bank
CFC	Collaborative Forest Committee
CIF	Climate Investment Funds
COCOBOD	Ghana Cocoa Board
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
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
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
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
MLGRD	Ministry of Local Government and Rural Development
MLNR	Ministry of Lands and Natural Resources
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
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
SEA	Strategic Environmental Assessment
SESA	Strategic Environmental and Social Assessment
SRI	Soil Resource Institute of Ghana
SRA	Social Responsibility Agreement
TAs	Traditional Authorities
ToR	Terms of Reference
VCS	Voluntary Carbon Sequestration
VPA	Voluntary Partnership Agreement
WB	World Bank
WD	Wildlife Division
WRC	Water Resources Commission

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EXECUTIVE SUMMARY

The World Bank's FIP financed project aims to reduce forest loss and land degradation and contribute to sustainable livelihoods through participatory planning, improved practices and incentives in Ghana's high forest zone, using a programmatic or sectoral approach. The project will incentivize the development, piloting and validation of models for replication and scale up.

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 the project; specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to project interventions; and determine the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF.

The project will have four main components at a total investment cost of US$29,500,000 and comprising:

- Component 1: Policy Reforms and Institutional Strengthening
- Component 2: Pilot Investments for Improved Forest and Landscape Management
- Component 3: Innovation, Capacity Building, and Communications
- Component 4: Project Management, Monitoring and Coordination

The key pilot projects comprise:
Pilot 2.1: Enhancing Trees and Climate-Smart Practices in Agroforestry Corridors and Cocoa Landscapes on Farms with Communities; and
Pilot 2.2: Pilot Investments on Forest Reserves for Reducing Degradation, Enrichment Planting, Nurseries, and Plantation Development for Restoring Degraded Forest Landscapes

The key project activities which would potentially impact on the environment comprise the following:

- 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

Meetings were therefore 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 contacted is given in the report as well as issues discussed.

The significant potential social and environmental impact issues which may become important from the implementation of the project activities have been provided in the report. Mitigation guidelines have also been given to address the significant impacts. The responsibilities for implementing these measures are described in the report.

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 be 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. 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 have Focal Point at the FC to oversee all environmental and social safeguard activities. 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.

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. The capacity building requirements will mostly be in the form of training workshops and a Plan as well as a budget of US$800,000 has been presented in the report for the 4 year 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 as well as responsibilities for the various monitoring issues.

1.0 INTRODUCTION

The Forest Investment Program (FIP) finances three inter-related projects in Ghana, implemented by the World Bank, the African Development Bank (AfDB) and the International Finance Corporation (WBG). The overall goal of FIP-financed activities in Ghana is to reduce GHG emissions from deforestation and forest degradation, while reducing poverty and conserving biodiversity. The FIP set of activities collectively aim to ensure the integrity, restoration and sustainable forest management of Forest Reserves by introducing more inclusive management and benefit sharing models, financial incentives, and investments; restore forest cover in off-reserve areas by securing tree tenure and benefits, forest plantations and landscape restoration, and rehabilitation of degraded forest land; increase trees and enhance carbon stocks in the farming system by promoting sustainable cocoa and agriculture practices; and develop viable alternative livelihoods for local communities by addressing a broad range of technical, financial and market incentives, to reduce pressure on existing forests.

1.1 Development Objective

The World Bank's FIP financed project aims to reduce forest loss and land degradation and contribute to sustainable livelihoods through participatory planning, improved practices and incentives in Ghana's high forest zone, using a programmatic or sectoral approach. The project will incentivize the development, piloting and validation of models for replication and scale up.

The project is expected to:

- Support reforms in forest policy and improve institutional practices, procedures and capacities will be improved;
- Strengthen community based natural resource management institutions with improved practices and incentives for managing landscapes sustainably;
- Enhance reforms and practices and reinforce these through improved communication methods and materials, including platforms for information sharing;
- Reduce tons of CO_2 emissions from reduced deforestation and forest degradation (relative to reference emission level developed separately).

1.2 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 the 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.

1.3 Approach to the ESMF Study

This ESMF study has benefitted from 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. This study is sub- national and has focused on the pertinent regions which are the Brong Ahafo and Western Regions. The Consultant has therefore actively engaged key stakeholders such as the relevant government ministries and agencies including district assemblies in these two regions to prepare this report.

1.3.1 Baseline Information

The consultant collected and analyzed baseline information regarding:

- key components of the Project
- relevant existing environmental and social policies, laws and regulations related to the forestry sector in Ghana,
- existing conditions of the main environmental and social components,
- key environmental and social issues associated with the proposal,
- key stakeholders in relation to the identified issues,
- requirements for the detailed analysis of potential effects:
    - Technical studies required,
    - Public participation and stakeholder involvement,
    - Available information resources, including other ESA studies available as reference.

1.3.2 Stakeholder Consultations

Key stakeholders were defined as those to be directly affected by the proposed interventions, i.e. those that may be expected to either benefit or lose from the proposed alternative/project, particularly among the poor and the marginalized. Those directly involved included persons and institutions with technical expertise and public interest in the Bank-supported programs as well as with linkages to the poor and marginalized.

The ultimate beneficiaries of this project are the communities in the Brong Ahafo and Western Regions who manage land and forests for their livelihoods and will have access to new skills, opportunities and markets. They were therefore mostly the target for consultation. The Ministries, Departments and Agencies responsible for natural resources and environmental management will also benefit from improved policies, capacity development programmes and outreach and communication programmes and it was important to solicit their views. Other stakeholders including the private sector and civil society, will also benefit through the institutional and policy

reform, and improved resource management practices in the key regions and sectors of focus. The stakeholders include:

- Regional Forest Service Division officials
- Regional Wildlife Division officials
- Regional COCOBOD
- District Forest Service Division officials
- District Assemblies
- MOFA District officers
- Office of the Administrator of Stool Lands (OASL) – District Offices
- CREMAs
- Timber Industry Development Division officials, Takoradi; and
- Fringe communities

1.3.3 Analysis of data and Content of report

The Consultant will analyse the gathered data and produce the ESMF which will comprise the following content:

- Introduction
- Description of the Project and Related Activities
- Institutional Framework
- Ghana Baseline Description
- FIP Activities, Potential Impacts and Issues, and Screening Provisions
- Guidelines for Mitigation and Enhancement Measures
- Environmental and Social Management Plan
- Institutional Capacity for ESMF Implementation
- Monitoring and Evaluation
- Consultations, ESMF Disclosure and Grievance Mechanism
- Conclusion
- References/ Bibliography

2.0 DESCRIPTION OF PROJECT AND RELATED ACTIVITIES

2.1 Background

The Government of Ghana (GoG) recognizes both the growing costs of natural resource degradation and the developmental threat of climate change. The cost of environmental degradation is estimated to be as high as 10 percent of GDP annually (about half of Ghana's Official Development Assistance). In 2008, the GoG launched a five-year Natural Resources and Environmental Governance (NREG) program to help ensure economic growth, alleviate poverty, increase revenues and improve environmental protection. The GoG has a comprehensive National Climate Change Policy (2012), which aims to achieve a climate resilient economy while achieving sustainable development and equitable low carbon economic growth.

Forest cover has almost halved since 2000: only 4.6 million hectares remain today with 1.6 million hectares as forest reserves. Ghana's deforestation rate is about 2% per year, representing a loss of 65,000 ha of closed forest per year. Recent assessments indicate that rates may have been accelerating in Brong Ahafo and the Western Region The major direct causes of deforestation as summarized in Ghana's Readiness Preparation Proposal (R-PP, 2010) are: (i) agricultural expansion, including for cocoa; (ii) harvesting for fuel wood and charcoal, illegal logging, wildfires and biomass burning; (iii) population and development pressure; and (iv) mining and mineral exploitation. In addition, the complex tree tenure and benefit sharing regime fails to provide incentives to communities to protect trees. The domestic market absorbs about 85% of timber production, mostly supplied by informal sources using inefficient and unsustainable practices. Although timber demand is high, there is very limited investment, because policy and market failures hinder private sector engagement.

Community members are both actors in and victims of forest decline. Mining, timber harvesting, and agriculture are critical economic activities. Agricultural expansion – led by the production of cocoa, but also including cassava, plantain, coco yam, oil palm, and rubber – accounts for about half of deforestation and degradation. Cocoa production occupies about 1.6 million ha (7 percent of all land), and employs about 800,000 small farmers. Recent expansion has been greatest in the Western Region which now accounts for over half of production. Increasingly, farmers are shifting from shaded cocoa cultivation (under primary or secondary forests) to open cocoa cultivation, as well as encroaching into forested lands.

The GoG plans improvements in forest sector governance, incentives, benefit-sharing, tenure and institutional effectiveness. The GoG has prepared a new *Forests and Wildlife Policy* (2012) and a *Strategy for Plantations* (2013). Under this legal framework, the GoG is working to improve the complex tree tenure system to provide better incentives to maintain trees off-reserve. To improve governance and law enforcement, Ghana has established a *Voluntary Partnership Agreement*, which requires verification of legality for timber exports to the European Union. The Bank-supported NREG TA will address certain policy and institutional weaknesses, improving the enabling environment for

increased private sector, farmer and community involvement, and enhancing the capacity of state agencies to deliver forest management services. Ghana is engaged in readiness for Reduced Emissions from Deforestation and Forest Degradation (REDD+) with support from the Forest Carbon Partnership Facility (FCPF) and the World Bank. REDD+ readiness aims to build the legal, institutional base as well as the awareness and constituency needed to participate in global performance based payment systems for reduced emissions from deforestation and forest degradation.

Civil society engagement and dialogue on the natural resource sectors, climate change, and the REDD+ process has been increasing. In 2010, the Civil Society Review of the Natural Resources and Environment Sector was established to provide a forum for CSO inputs into the government's own review of the sector. A National Forest Forum is a platform to influence policy formulation, promote good governance and sustainable forest management. Much of the engagement and dialogue occur in Accra with representation of advocacy and technical civil society organizations. Some observers see a need for more engagement at grass roots level and with field-based organizations. The Dedicated Grant Mechanism for Local Communities – a FIP-financed mechanism to promote dialogue, capacity, and engagement – aims to address that need.

All forest sector issues converge in Ghana's high forest zone (HFZ), where deforestation rates and carbon stocks are highest. The HFZ is also a core cocoa production area with significant degradation. There is good potential to move toward more sustainable forest and land management (and reduce emissions and store carbon) by enhancing policies, incentives, and practices for better stewardship, agroforestry, and farming approaches. The GoG has initiatives to reduce the cocoa frontier expansion by providing incentives for rejuvenating old cocoa plantations and bringing old cocoa fallows under more sustainable agroforestry-based cultivation. The Ministry of Food and Agriculture also promotes certification of sustainable cocoa production, but there are several different systems and standards advocated by different organizations.

Financing from the Forest Investment Program (FIP) provides an opportunity to finance transformative co-management and benefit sharing approaches. The FIP will finance policy and institutional reforms, capacity building, and communication (building on NREG TA and FCPF). The FIP-supported program will also pilot test innovative applications of community based planning and management, including tree management rights with communities and farmers. Based on a consultative process, FIP investments (implemented by World Bank, IFC and African Development Bank) will focus on results-based interventions on the High Forest Zone in the Western and the Brong Ahafo regions, where deforestation rates and carbon stocks are high. The proposed FIP-financed project will also complement and enhance the NREG TA effort (approved in June 2013), and build on consultation and measurement work that began under the FCPF (approved in November 2012).

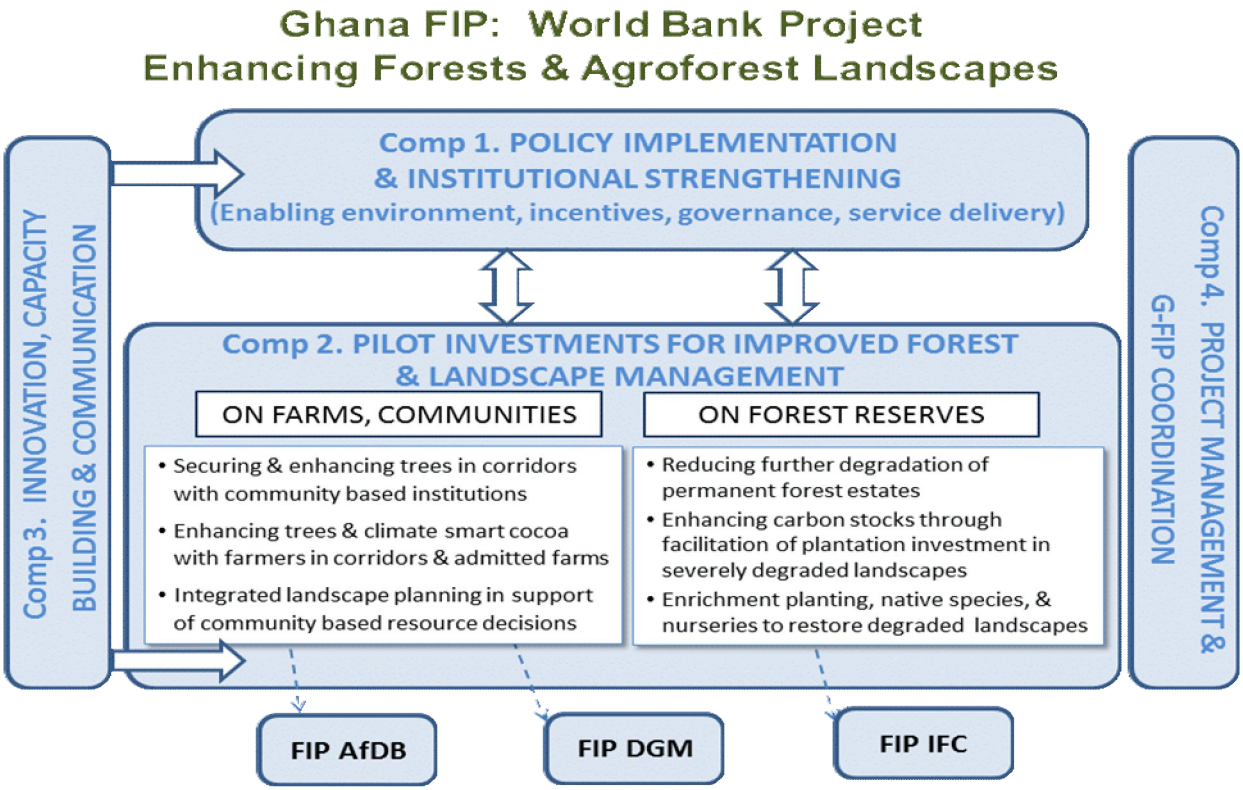
2.2 Project Description

The Bank's Enhancing Natural Forests and Agro-forest Landscapes Project is designed to address the sectoral and environmental challenges mentioned above through improved policy

implementation, improved management practices in targeted landscapes in one corridor of the HFZ, targeted capacity building, and systematic outreach and communications efforts to improve understanding and practices and to prepare for wider replication. The project will have four main components, as follows:

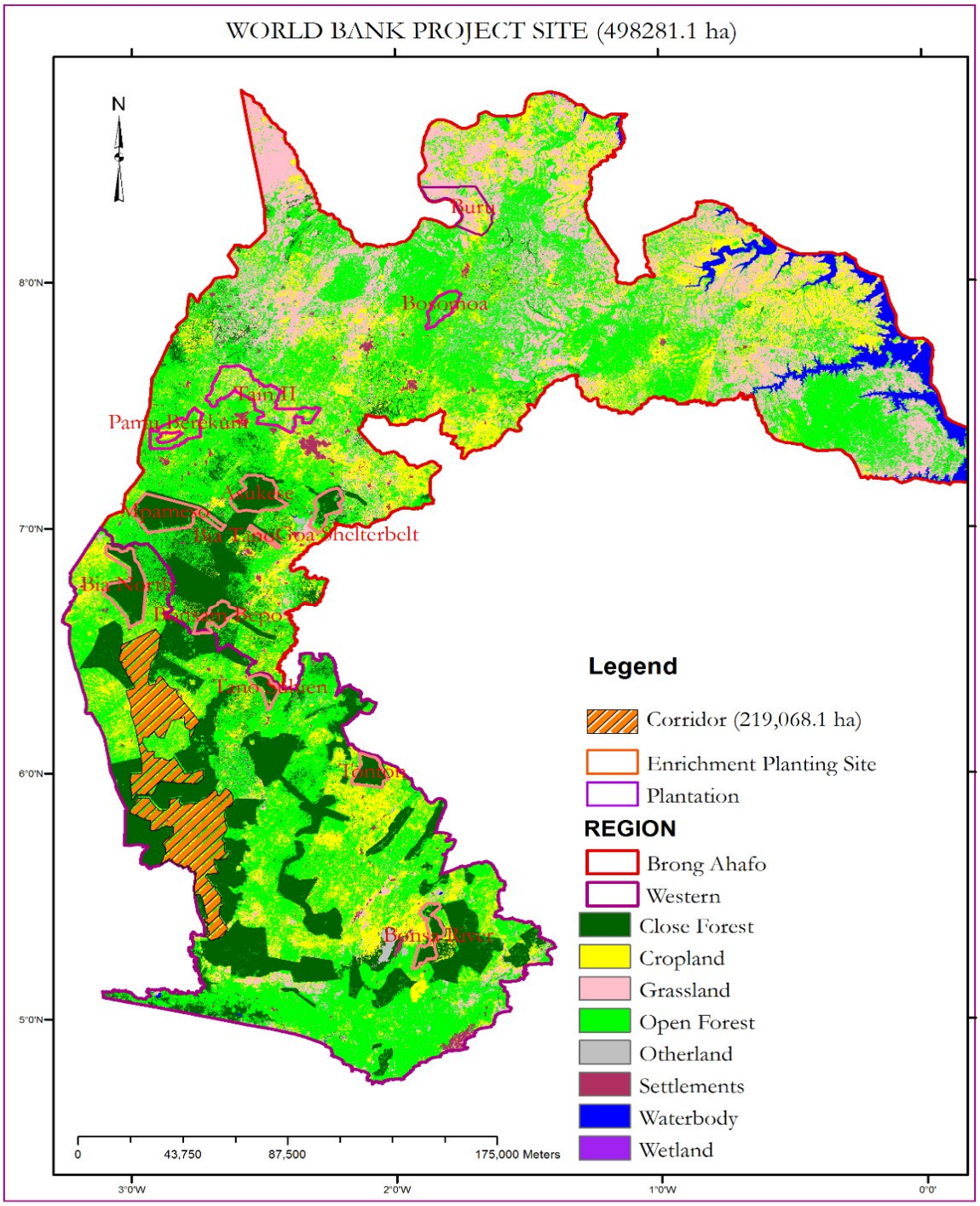
Comp. 1: Policy Reforms and Institutional Strengthening	$ 2,700,000
Comp. 2: Pilot Investments for Improved Forest and Landscape Management	$21,310,000
Comp. 3: Innovation, Capacity Building, and Communications	$ 2,440,000
Comp. 4: Project Management, Monitoring and Coordination	$ 3,050,000
TOTAL	$29,500,000

The organization and relations among the four components are illustrated below. The core of the project (Component 2) is a set of pilot activities implemented in a few target landscapes designed to address key drivers of deforestation. The policy implementation, institutional strengthening, capacity building, and communications activities in other components aim to support the field demonstration of improved management practices, and lay the ground work for later scale up. A final component covers management, monitoring, and coordination across the range of FIP-financed activities. Each of the components is further described below.



Location of Field Activities. The map below shows all the proposed locations for field activities in the Western and Brong Ahafo Regions, as described in the text above, including work with communities on cocoa and agroforestry in the corridor, enrichment planting in specific forest reserves and model plantation sites. The total area of the corridor is about 195,000 hectares

linking the key forest reserves in the Western Region. Each of the components is further described below.



Component 1: Policy Reforms and Institutional Strengthening. This component consists of efforts to advance implementation of reformed policies, improve the enabling environment, and strengthen the institutional means to achieve sustainable landscape and forest

management. This will involve three main sets of activities: improvements to policy practice and incentives, improvements to the institutional guidance and procedures for implementation, and support for multi-stakeholder governance platforms and consultative processes. The first set of activities will support analysis of options, review of legal frameworks, gathering and dissemination of evidence on the effectiveness of various options, and development of pilot testing approaches in collaboration with stakeholders. Improving policy "practice" means changing the translation and interpretation of the way policies are deployed on the ground – as well as incentives (including delivery of services, capacity, inputs, and information) to improve the enabling environment for sustainable landscape and forest management.

The second will strengthen the institutional procedures, guidelines and institutional models to ensure that policy implementation improves on the ground. Changes in institutional practices, embedded in guidance documents and training, will influence the working norms of government officials in their approaches to and interactions with stakeholders (e.g., timely delivery of services and inputs should become a norm). Capacity development activities, based on an institutional needs assessment, will enhance the skills of staff and the quality of service delivery by the Forest Commission to support field implementation and extension activities at landscape level. The third set of activities will provide support to sustain, refine and expand consultation and governance platforms initiated under NREG and FCPF at both national and local level. The MLNR will support and enhance a Stakeholder Forum (Traditional Authorities, Civil society groups, local communities and public sector institutions) to consult and engage toward consensus around the issues and incentives that influence landscape management practices and tree/forest stewardship by communities.

Component 2: Pilot Investments for Improved Forest and Landscape Management with Communities. As noted, field- and community-based investments are the core of this Ghana FIP project. These will aim to establish and demonstrate improved forest and landscape management practices, while building the case for wider replication in terms of results. These pilots represent up-front investments required to restore/ protect/ reduce deforestation, and thus build on the REDD+ Readiness Process. Pilots will be supported by efforts to consolidate lessons from implementation to improve policy implementation and institutional practices, as well as outreach efforts that encourage replication to landscapes beyond the target corridors. Pilot demonstration activities will be implemented in two main landscape areas: on farms and in communities in a specific landscape corridor and on forest reserves as follows.

Pilot 2.1: Enhancing Trees and Climate-Smart Practices in Agroforestry Corridors and Cocoa Landscapes on Farms with Communities. This pilot will focus on drivers of deforestation and land degradation on community managed agroforestry and cocoa cultivation landscapes in selected corridors in a target corridor linking several Forest Reserves of the HFZ. It aims to secure and enhance trees in corridors with community-based institutions, enhance trees and climate smart cocoa with farmers both in corridor landscapes and on admitted farms, and to deploy integrated landscape planning in support of community based resource decisions. These activities will enhance carbon stocks in the agroforestry and cocoa landscape by scaling

up support (a combination of extension, inputs, certification, incentives) to smallholder farmers to increase protection of existing trees, planting of new trees, practicing agroforestry and shade grown climate smart cocoa production. It will aim to improve the care and maintenance of trees on private farmland, by devolving management responsibilities and improving incentives, coupled with extension and communication efforts. Pilot efforts will be developed in consultation with communities and land users in targeted zones indicated on the map and table in this section.

Activities to be financed will cover three main areas: securing and enhancing trees in key landscapes/corridors with communities, enhancing trees and smart cocoa practices in admitted farms within forest reserves, support integrated landscape level planning in support of community based resource use decisions. This includes field equipment and logistical means for delivering goods and services to communities and farmers in remote landscapes and the fringes of forest reserves. This will also increase the presence of FC staff in the field for management and monitoring purposes.

The transformative nature of this activity will come from giving community level institutions and cocoa farmers the incentives, knowledge, and tools to improve farm level outcomes and gain local benefits from managing trees and forest mosaics within the larger landscape, while also enhancing co-benefits associated with increased tree cover and carbon sequestration. This field demonstration will build on two key entry points: (i) the current willingness of GoG to revise implementation practices and devolve key management responsibilities to community level, particularly through Community Resource Management Areas (CREMA); and (ii) the alignment of interests among cocoa producers, buyers and regulators to ensure a more sustainable and climate-friendly supply/value chain. These efforts will be enhanced by innovative communication approaches to facilitate the delivery of practical, timely and useful information to farmers and community level institutions (see Component 3).

Pilot 2.2: Pilot Investments on Forest Reserves for Reducing Degradation, Enrichment Planting, Nurseries, and Plantation Development for Restoring Degraded Forest Landscapes. This pilot will aim to reduce further degradation of permanent forest estates; enhance habitat and carbon stocks through enrichment planting and nursery development with ecologically and commercially important native species to restore degraded landscapes, and facilitate the enabling conditions for plantation investment in severely degraded landscapes, with community involvement. This set of activities will help to address the imbalance in timber supply and demand, improve the enabling environment and investment climate for sustainable forest management and plantation development, particularly on severely degraded forest reserves. This activity will augment the supply of important native species within the high forest ecosystem, while also creating incentives and employment opportunities and markets for native seed stock, for communities and farmers to engage in the planting and preservation of native tree species, rather than encroachment into forests.

Activities to be financed will cover three main areas: reducing further degradation of permanent forest estates (by engagement with admitted farms and CBOs), enhancing carbon stocks through facilitation of plantation investment in severely degraded landscapes, and enrichment planting, nurseries and native species for restoring degraded forest and agricultural landscapes.

The transformative nature of the pilot is to provide clear models and management practices for enhancing investment, including clear designation of target areas. Increased private sector investment in sustainable forest management can help to generate local employment opportunities in planting, maintenance, seedling production, service delivery and out-grower arrangements.

Component 3: Innovation, Capacity Building and Communications. This component will support communication, capacity building, and monitoring activities to support innovation, engage communities, and provide information relevant for improved landscape management practices. It will support the field demonstration activities described above by supplying information, improved approaches, and training materials needed to achieve improved outcomes. Activities in support of innovation will involve consolidation of economic, environmental and social assessments to provide knowledge and specific cultivation techniques to improve the acceptability and uptake of native trees in landscapes and in plantations. Communication, outreach and dissemination will be supported with development of strategic communication approaches, improving existing communication channels and capacities (in GoG), improving and targeting communication materials aimed at local institutions and stakeholder groups, using practical and efficient dissemination technologies (e.g., mobile phone, radio, etc). Communication efforts will be supplemented by technical know-how developed for practical uptake by farmers and landscape managers at the local institutional level. Research and dissemination efforts will be informed through surveys and feedback from target groups, so that outreach, community relations and management practices can be constantly improved and aimed at the people who need to apply the information to effect change on the ground. This activity will also support development of information materials and campaigns and will aim to engage locally appropriate delivery agents. Links with DGM-financed activities and related institutions are being developed and defined. This component will also include training, development of innovations, communication and MRV.

Component 4: Project Management, Monitoring and Coordination. This component will support project management and oversight, project monitoring and evaluation system, and wider coordination of the range of FIP-financed activities, including reporting at the international level. It provides support to the GoG in regular communication and coordination among FIP-financed interventions and related activities, to promote synergies among all FIP projects (WB, AfDB, IFC, DGM), as well as information and knowledge sharing with other FIP countries. The activities to be financed include project coordination, financial management,

procurement management, contract management equipment and supplies, and Monitoring and Evaluation.

2.3 Implementing and collaborating institutions

The main responsible ministry is the Ministry of Lands and Natural Resources (MLNR) with the Forestry Commission as the lead implementing agency. The Forestry Commission will work with partners with skills in communication, community engagement, landscape management practices especially those already engaged with CREMA development. Others are stakeholders in the cocoa landscape supply chain and will include COCOBOD, licensed buying companies, private agents and extension agents and service providers (Solidaridad, NCRC, IUCN etc) , research institutions (FORIG and CRIG) .

The project will also support the GoG in regular communication and coordination among FIP financed interventions and related activities, to promote synergies among all FIP projects (WB, AfDB, IFC, DGM) as well as information and knowledge sharing among other FIP countries.

3.0 INSTITUTIONAL FRAMEWORK

The national policies and legal provisions related to the project are presented in the Annex 1 of this report. The institutions with urgent bearing are described below:

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. Currently, the Agency has no district offices but the ten (10) regional offices are largely accessible and sufficiently staffed and equipped to perform its functions satisfactorily. The FIP programme and projects will abide by statutory requirements and the implementing institutions will liaise sufficiently with the EPA to ensure compliance.

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:

- Forest Services Division
- Wildlife Division
- Timber Industry Development Division
- Wood Industries Training Centre
- Resource Management Support Centre

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.

District/Municipal/Metropolitan Assemblies

The current local government structure or the district assembly system is established by two main Acts, namely Act 462 and Act 480. Both Act 462 and Act 480 designate 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.

It is anticipated that the Regional Coordinating Councils (RCCs) will be active participants in the FIP and therefore the DAs through the Assemblypersons will as and when required, liaise between subproject owners and the administrative authorities for permitting and other statutory issues.

3.1 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 impact livelihoods. However, these will be voluntary and based on community based decision making. The specific locations of activities and intervention are still being identified. A Social and Environmental Strategic Assessment (SESA) is being prepared under FCPF which is identifying other possible social and environmental risks. Also, an Environmental and Social Management Framework (ESMF) is being developed for the FCPF.

Based on the work done to date, a project specific ESMF and Process Framework will be developed, consulted upon and disclosed by the time of appraisal.

- 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. An ESMF will be prepared, consulted upon, and disclosed before appraisal.
- 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.

<u>Process framework</u>

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.

4.0 GHANA BASELINE DESCRIPTION

4.1 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 1: Description of Protected Areas in Ghana

Typology	Area	Comments
Off-Reserve areas	201,000 km²	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 km² of unreserved forests, 60,000 km² of bush fallow, 71,000 km² of bush fallow, 36,000 km² of unimproved pasture, and 29,000 km² of tree and annual crop land
Forest Reserves	26,000 km²	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 km²	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 km²	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 prac-tices). 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.
Resource Reserves (Game Production Reserve)	1,664 km²	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.

Typology	Area	Comments
Wildlife Sanctuaries	66km²	Wildlife sanctuaries can be created on state land or local land. There is a revenue sharing mechanism at Agumatsa Wildlife Sanctuary in place. (Com-munity 57%,FC 23% and Hohoe Dist Assembly 20%)
CREMA-Community Resource Management Area	30km²	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 km²	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 in-clude GSBAs and Southern Dry Forests the Provenance Protection Areas.
Strict Nature Reserve (SNR)	385 km²	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 km²	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 plan-ning. 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"

4.2 Description of the Project Regions

The two project regions, Brong Ahafo and Western are described through the figures provided in this report. The figures show the present forest reserves, cocoa growing areas and the drainage patterns in these two regions. Also, satellite images of some of the forest reserves within the Ankasa- Bia- Krokosua corridor and which span both project regions are provided. The classified satellite image maps for the Subri River Forest Reserve for example, taken in 199, 2010 and 2010 are provided in the Annex 2. During this 20 year period, the significant changes in the characteristics of the reserve are illustrated in the table below. The closed canopy regime appears to have shrunk by about 65% whereas the built up/ bare surface increased over 24- fold. It is however important to mention that, these observations are based only on the interpretation of the satellite images and not confirmed by ground truthing or any other means.

Table 2: Changes in land cover in the Subri River Forest Reserve from 1990 to 2010

No.	Class	Area (ha)			Percentage difference between 2010 and 1990
		1990	2000	2010	
1.	Closed canopy/ very active bushes	44,741	27,773	15,522	-65%
2.	Open canopy/ active bushes	9,844	24,021	30,894	+214%
3.	Shrub/ herbaceous	4,051	3,965	3,919	-3.3%
4.	Herb/ grass	530	1,760	591	+11.5%
5.	Built up/ bare surfaces	337	1,791	8,575	+2445%

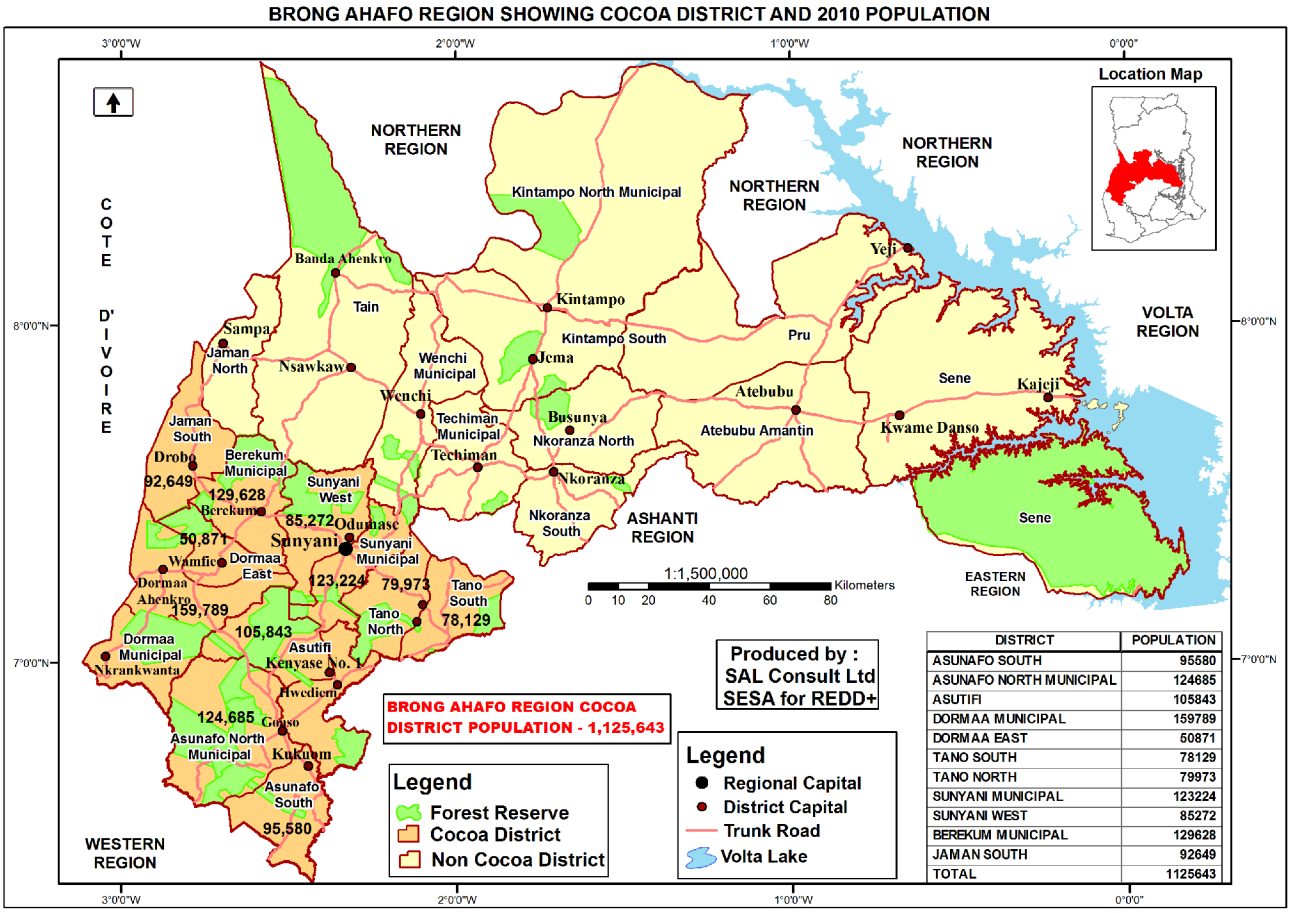


Figure 1a: Brong Ahafo region showing cocoa growing areas

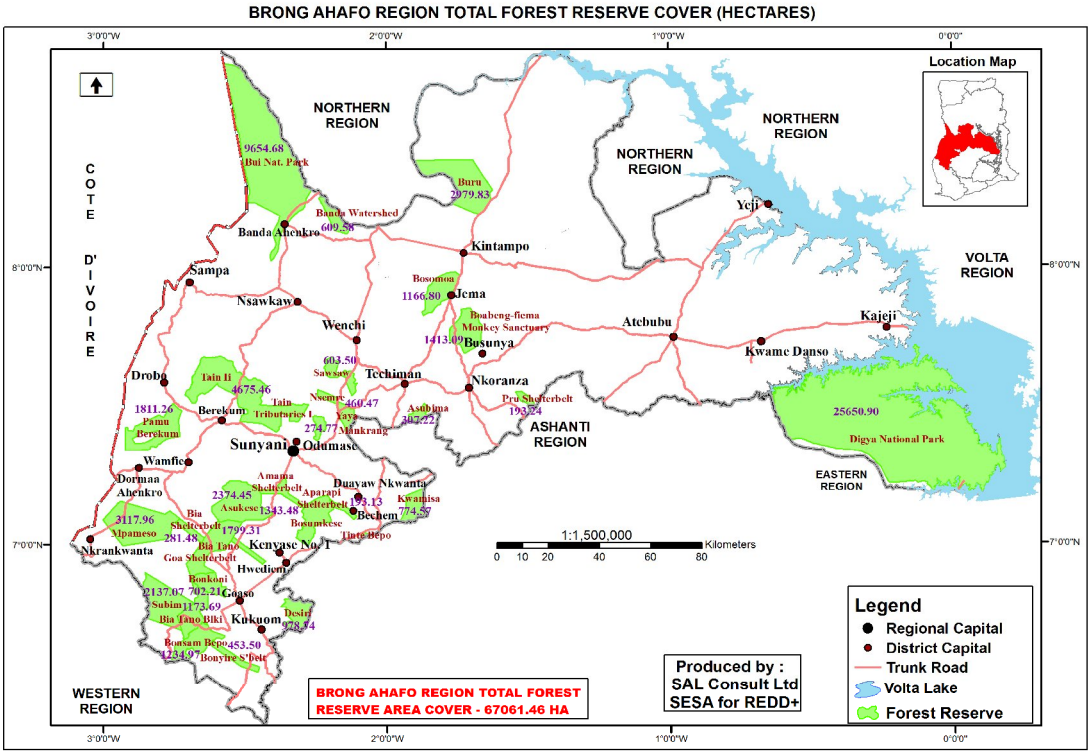


Figure 1b: Brong Ahafo region showing forest reserve cover

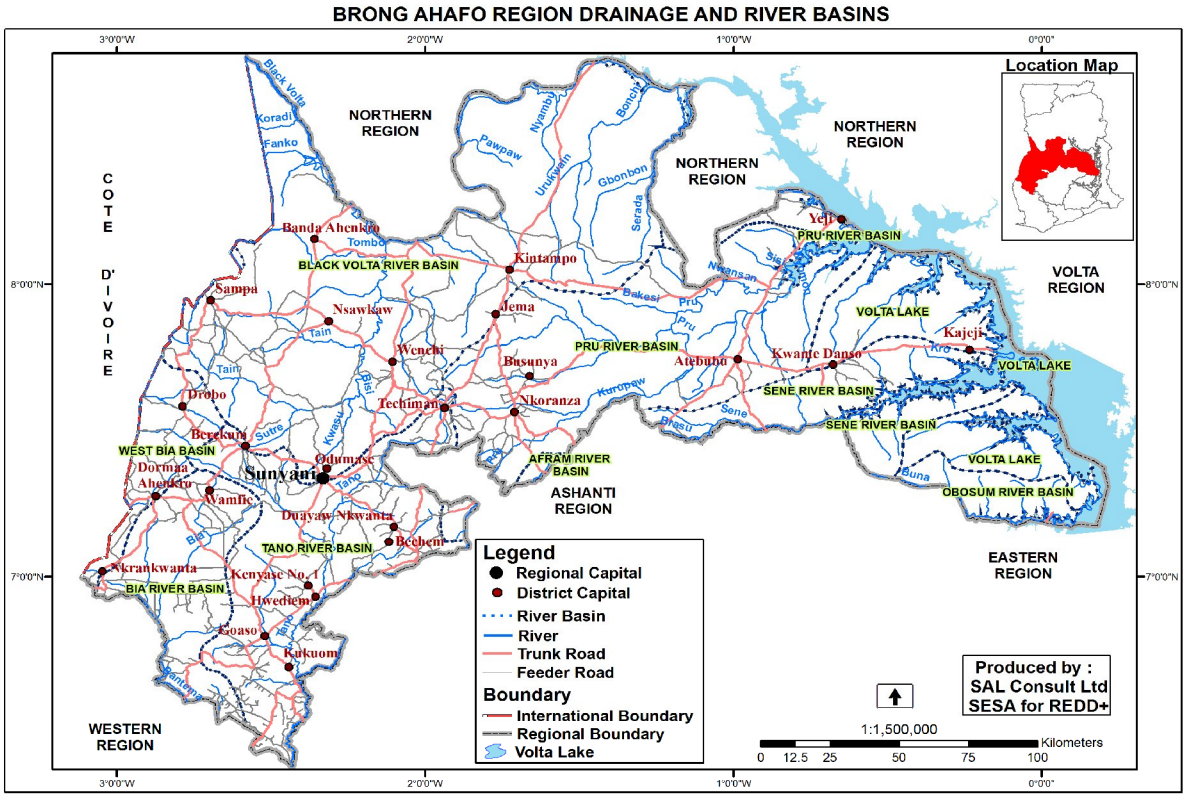


Figure 1c: Brong Ahafo region showing drainage pattern

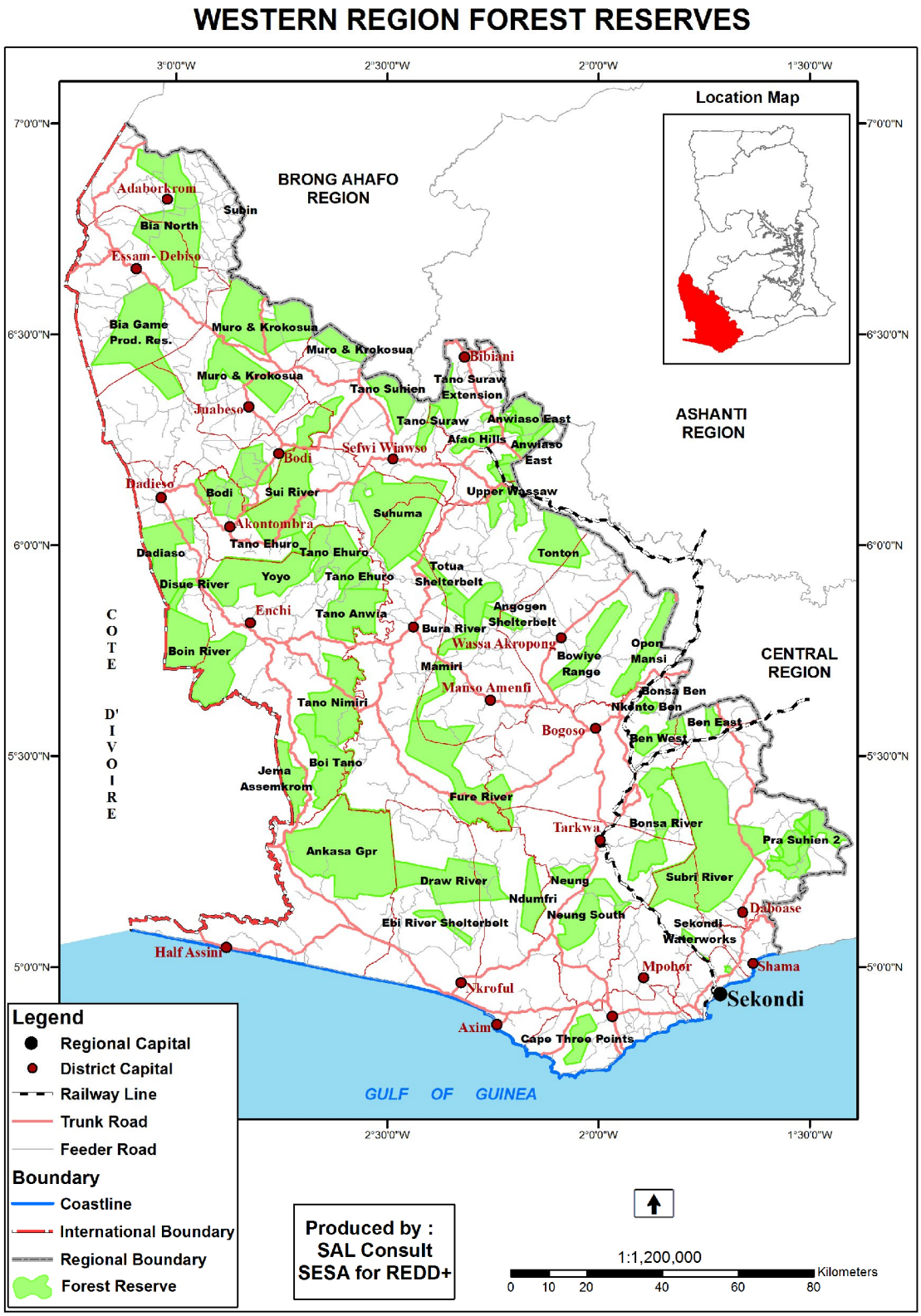


Figure 2a: Western region showing forest reserve cover

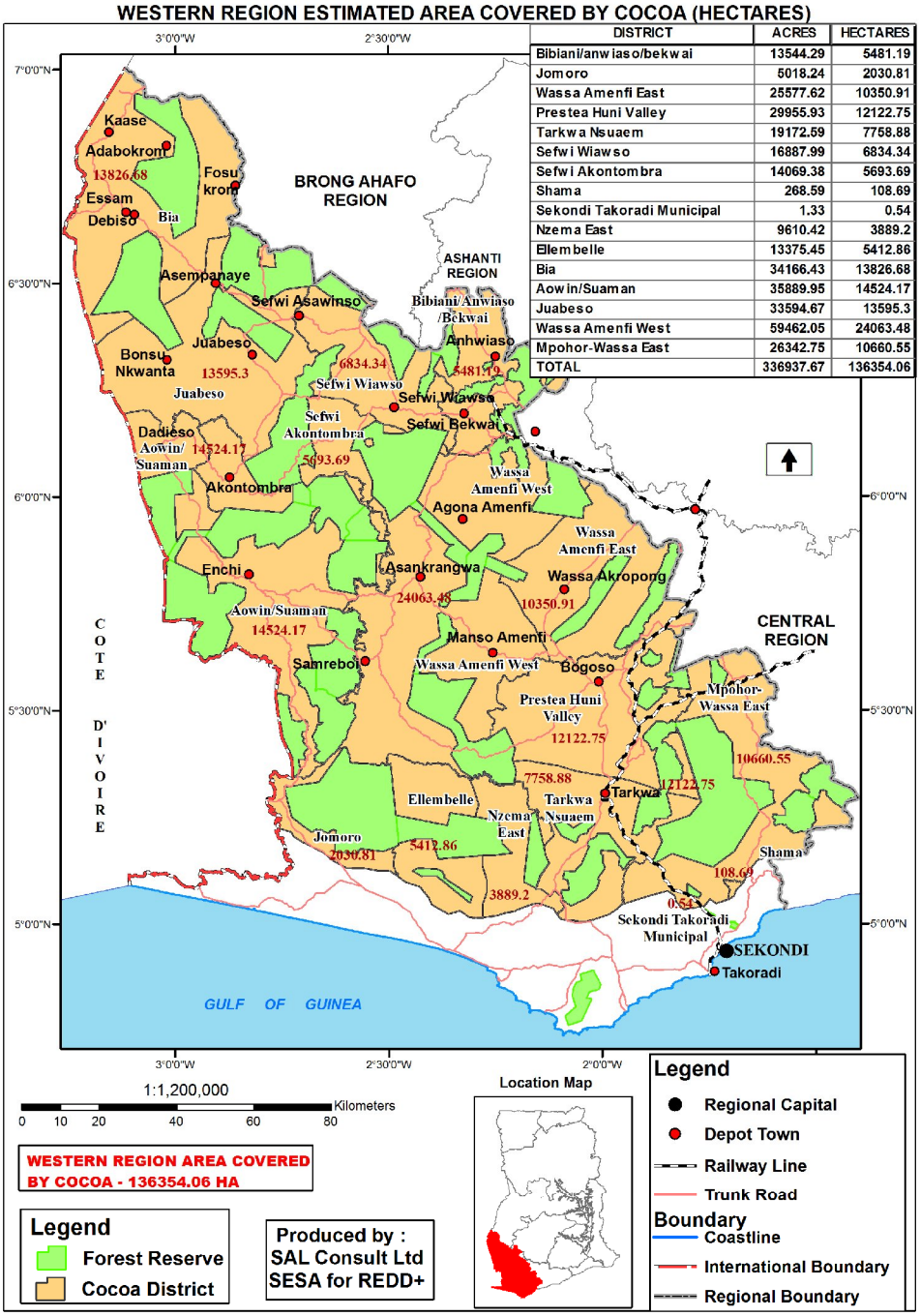


Figure 2b: Western region showing cocoa growing areas

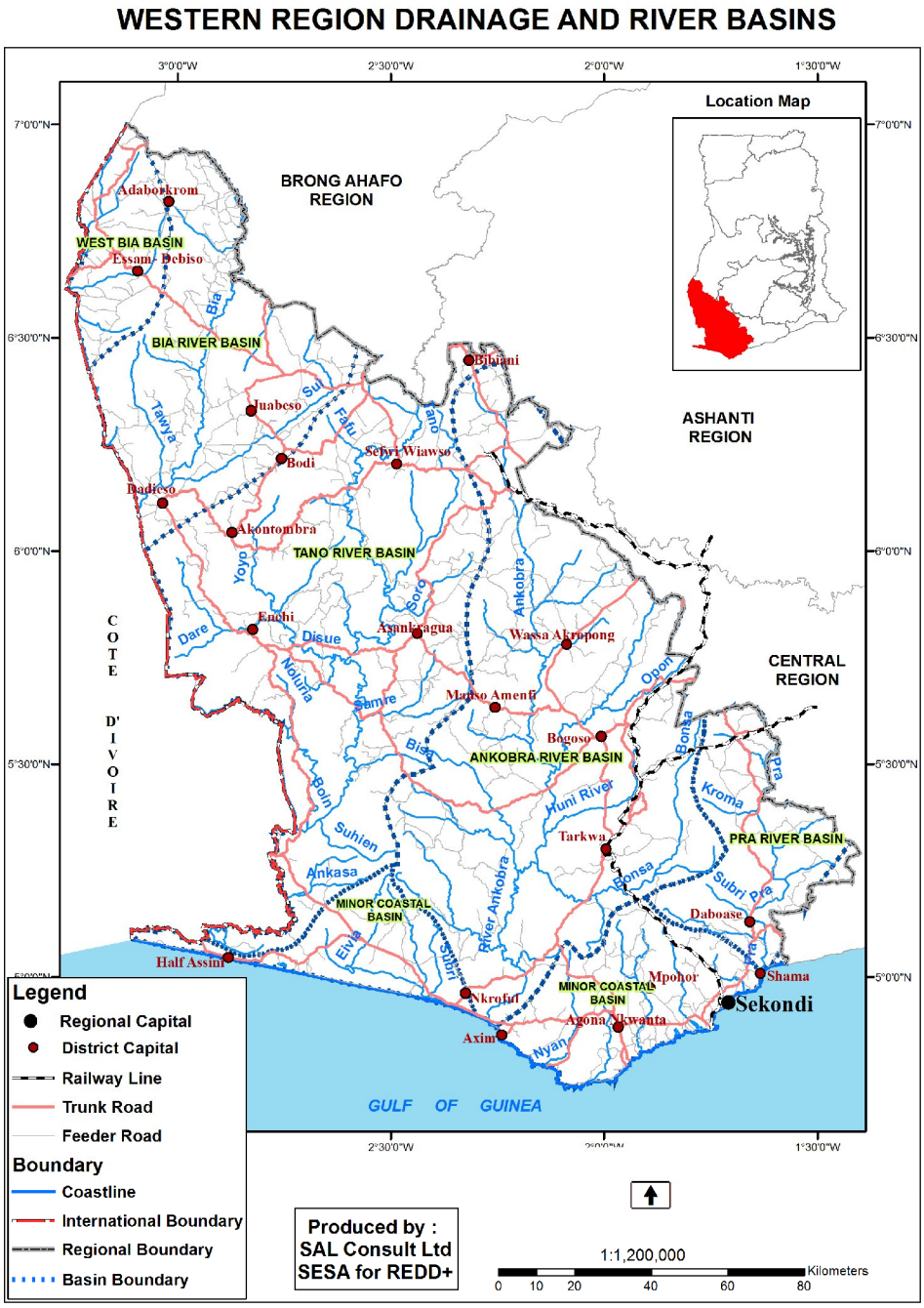


Figure 2c: Western region showing drainage pattern

4.3 Forestry and agricultural (cocoa) sectors

According to the Forestry Development Master Plan (FDMP) in 1996 the annual sustainable harvest is 1 million m^3, of which 0.5 million m^3 from the FRs based on inventory and yield data, and 0.5 million m^3 from off-reserve forests based on estimates. This latter was later revised to 1.5 million m^3 around 2002, based mainly on economic considerations, and hence the current annual allowable cut (AAC) is set at 2 million m^3.

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 m^3 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 m^3. 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 financers 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 that 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 household. 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 that under the Ministry of 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.

In an effort 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 farm, 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 given 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. Insecure 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).

4.4 Analysis of carbon stock distribution

Ghana's terrestrial carbon stocks are estimated to total 7.46 GtCO2e, comprising 6.22 GtCO2e, in above- and below-ground biomass and about 1.24 GtCO2e in soil carbon to 1 m depth (Katoomba Group *et al.* 2011a). Reflecting rainfall and vegetation zones, biomass and soil carbon are distributed unevenly over the country. Areas of high biomass carbon density contain 6% of Ghana's biomass carbon but cover only 2% of the country's land area. High carbon density areas are associated with intact natural forest in the moist forest zone and contain over 730 tCO2e/ha in above and below-ground biomass, and soil carbon (Katoomba Group *et al.* 2011a). Although the total area is small, mangroves also contain substantial carbon stocks per unit area (*cf.* Table 2).

Land-use and land-use change has added significant heterogeneity and variation in carbon stocks. Broadly carbon stocks decline from southwest to northeast, and moving from intact forest to increasingly open farming landscapes. The national biomass map shows that the highest biomass is in the HFZ, with carbon stocks (above and below-ground biomass, and soil carbon) ranging from 180 to more than 700 tCO2e/ha. In the entire savannah and the transitional zone, i.e. the northern two-thirds of the country carbon stocks are on the average below 140 tCO2e/ha.

Data on soil carbon stocks is limited. Conservative estimates based on IPCC default values estimate Ghana's soil carbon stocks to be about 260 tCO2e/ha (RoG 2010b). Soil carbon stocks in the high forest zone and savannah zone would range from 110 – 340 tCO2e/ha and from 100 – 125 tCO2e/ha respectively. In the cultivated areas within the high forest zone soil carbon stocks range from about 100 – 260 tCO2e/ha, while the respective estimates in the savannah zone would be 70 – 160 tCO2e/ha (Abu-Bredu *et al.* 2010, Katoomba Group *et al.* 2011b).

4.5 Carbon emissions

According to Ghana's second national communication to the UNFCCC, Ghana's total emission in 2006 was about 24 MtCO2e, amounting to around 1.1 tCO2e per capita. Ghana's emissions were still low by global standard (0.05%) and ranked 108 in the world. However, the rapidly growing oil and gas sector (already third in export earnings in 2011) is changing Ghana's overall emissions profile. Consequently Ghana's position in the world ranking for overall emissions is expected to change dramatically in next few years.

Emission data for the period 1990 – 1996 indicates that the country was a net sink due largely to high levels of carbon sequestration in the Land Use, Land Use Change and Forestry (LULUCF) sector (66%) in 1990. However, Ghana's Second National Communication to UNFCCC estimated a 96% decrease of the net greenhouse gas removals within the LULUCF sector from around from -26.1

MtCO2e in 1990 to -1.04 MtCO2e in 2000, and 5.6 MtCO2e in 2006 (cf. Figure 5). Since 2001 the sub-sector has become a net emitter, contributing 25%, of total emissions in 2006.

Deforestation and conversion of forests and grasslands was the major reason for this change accounting for 20% share of total LULUCF emissions in 1990 to 50% in 2006. This together with changes in forest and woody biomass accounted for 95% of the LULUCF emissions in 2006. Ghana's low carbon growth plan estimates that 65% of baseline emissions come from land use changes, whilst a further 10% comes from the burning of biomass. Combined, these are estimated to produce 42.3 MtCO2e emissions.

5.0 FIP ACTIVITIES POTENTIAL IMPACT ISSUES AND CONCERNS AND SCREENING PROVISIONS

A key activity under this study is to clearly indicate the potential environmental and social issues and concerns, both positive and negative, to be elicited by the project. 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.

The sub projects which may be of some environmental and social impact significance are found within the following Pilots:
Pilot 2.1: Enhancing Trees and Climate-Smart Practices in Agroforestry Corridors and Cocoa Landscapes
Pilot 2.2: Enrichment Planting, Nurseries, and Plantation Development for Restoring Degraded Forest Landscapes

5.1 List of key FIP project activities/ interventions

The specific sub project activities and interventions arising from the pilots are listed in the table below. The table also includes initiatives by the African Development Bank under the FIP.

Table 3: FIP activities/ interventions

FIP Activity/Intervention	World Bank- Project component	AfDB- Project component
Policy And Reforms	C1	-
Tree Plantation- On Reserve	C1, C2 Policy/Transaction Enabling Land Bank	C1- Community restoration of degraded off-reserve forests and agricultural landscapes
Enrichment Planting On Reserve	C2 Policy/Transaction Enabling	-
Tree Plantation- Off Reserve	C1, C2 A-B-K Ecological Corridor CREMA Approach	C1- Community restoration of degraded off-reserve forests and agricultural landscapes
Seed Orchards In Districts on Reserve	-	C1- Community restoration of degraded off-reserve forests and agricultural landscapes
Model Forest Nurseries for Native Species	C2	-
Cold room storage facilities	-	C1- Community restoration of degraded off-reserve forests and agricultural landscapes
Migrate Sacred Groves to Community Dedicated Forest Reserves	C2 Ankasa-Bia-Krokosua Ecological Corridor CREMA Approach	C1- Community restoration of degraded off-reserve forests and agricultural landscapes
Shade Tree Planting in Cocoa Farms	C2	C2- Promoting sustainable cocoa and agroforestry systems that are, climate smart and environmentally responsible.

FIP Activity/Intervention	World Bank- Project component	AfDB- Project component
Shade Trees in Agricultural Farming Systems	C2 Ankasa- Bia- Krokosua Ecological Corridor CREMA Approach	C2- Promoting sustainable cocoa and agroforestry systems that are, climate smart and environmentally responsible.
Capacity Building- Extension and Communications	C1, C3	-
Landscape Planning for corridors	C2	-
Cocoa Marketing Incentives and Sustainability Production	C2	-
Plantation Field Trials/ Models/ Innovations On Reserve	C3	-
Timber and Non-Timber Innovation, Community Based Enterprise Trials	C3	-
Community Based Enterprises	-	C3 small woodlots in charcoal areas artisanal milling
Promotion of Improved Charcoal Production	-	C3- Community alternative livelihoods
Non-Timber Forest Industry Promotion	-	C3- Community alternative livelihoods
Community Based Nurseries	-	C3- Community alternative livelihoods

The key World Bank FIP sub projects requiring the design and implementation of mitigation actions as per this ESMF 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

Projects concerning capacity building and extension and communication are deemed to be 'soft projects' which will not be associated with any physical infrastructural development. They are therefore not considered in subsequent analyses in later sections of this report.

5.2 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 5. The discussion that follows addresses these concerns from a thematic context, such as biodiversity, soils and social issues and concerns.

5.2.1 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 planatation 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 prunings 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 fertilisers 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 a 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.

5.2.2 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.

5.2.3 Impacts on soil

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

- 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

- Increased silt load in water courses from storm run-off after clear cuts

5.2.4 Other Impacts

Where there is 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

5.2.5 Social Issues with Plantation Plantings

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.

In summary, Table 4 below lists some significant potential social and environmental impact issues from the implementation of the various sub-project activities.

Table 4: WB FIP sub-project activities and potential environmental and social impact issues/ concerns

Sub- Project activities/interventions	Potential Impact Issues/ concerns
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 Plantation Field Trials/ Models/ Innovations On Reserve Timber and Non-Timber Innovation, Community Based Enterprise Trials	ENVIRONMENTAL *Biodiversity* ✓ 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 *Water Resources* ✓ Alterations in local natural water cycles/ hydrology *Soils* ✓ 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 *Air quality* ✓ deterioration from burning of biomass from clearing ✓ reverse gains from carbon sequestration – adding carbon into atmosphere ✓ dust emissions from milling operations *Pesticides* ✓ 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 SOCIAL *Land tenure and ownership* ✓ 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 *Maintaining Livelihoods* ✓ 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

Sub- Project activities/interventions	Potential Impact Issues/ concerns
	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 *Farmer Rights* ✓ 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. *Forest Management* ✓ Fire prevention and control ✓ 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 *Security and Safety* ✓ 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 *Occupational health and Safety* ✓ 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 *Cultural Heritage* ✓ Limited access to shrines ✓ Preservation of local cultural identity and heritage ✓ Compensation issues ✓ Community pride and support ✓ Community relinquishing/ sharing heritage for greater good *Resource Access and Possible Restriction* ✓ Rights to question and have individual considerations addressed ✓ Possible alternative options ✓ Established grievance redress options

6.0 GUIDELINES FOR MITIGATION AND ENHANCEMENT MEASURES

6.1 Mitigation Measures

These mitigation guidelines are given to address the significant impacts. The responsibilities for implementing these measures are described later in the report.

Table 5: Environmental and social mitigation measures

Environment, Social and Health Impact Issue/ Concern	Proposed Mitigation Action/ Measures
Biodiversity	✓ 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.
Water Resources	✓ 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.
Soils	✓ 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, useBio 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
Air quality	✓ 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. ✓ Extractor fans should be available in mills to manage dust
Pesticides	✓ The use of pesticides on plantations will be minimal. ✓ The main control methods for pests and 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. ✓ 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.

Environment, Social and Health Impact Issue/ Concern	Proposed Mitigation Action/ Measures
	✓ Labour-intensive approach using simple farm tools like hoes and cutlasses will be employed. ✓ Encourage use of organic farming practices when possible
Land tenure and ownership	✓ 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 be approved by government after studies are done and stakeholders validate the findings. ✓ 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
Maintaining Livelihoods	✓ 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.
Farmer rights	✓ 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 on their farms and possible benefits/ compensation arrangements for affected cocoa trees; ✓ FSD to streamline procedures for registering shade trees to make it more- friendly to farmers.
Forest Management	✓ Educate and train community fire fighting volunteers on fire hazards, prevention and use of equipment and implement regular drills ✓ Create fire rides around plantation ✓ Ensure regular patrols to identify and remove fire threats early ✓ Apply appropriate sanctions on offenders including fines and jail sentences ✓ The plantation development will be phased in order to generate biomass which could be manageable at a given time. ✓ Salvaging of useable biomass can significantly reduce the volumes of waste that has to be disposed of. ✓ Felled trees and cleared under- brushes will be chipped and formed into windrows and allowed to decompose and/or used as pegs for planting. ✓ Proper collection of unused and damaged polythene bags for seedlings will be placed at the nursery site
Safety and security	✓ FSD to devise policies and procedures to protect field staff ✓ FSD forestry prosecutors to be adequately trained to efficiently handle court cases for swift determination.
Occupational health and	✓ 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

Environment, Social and Health Impact Issue/ Concern	Proposed Mitigation Action/ Measures
safety	Environmental, Health and Safety (EHS) plan which will outline procedures for avoiding health and safety incidents and for emergency medical treatment. ✓ Workers will be required to wear suitable Personal Protective Equipment (PPE) as appropriate. ✓ 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 ✓ The project will encourage the use of personal protective equipment/apparels such as Wellington boots/safety boots, gloves, overalls and raincoats for field workers. ✓ 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.
Cultural Heritage	✓ Any cultural site including sacred groves on proposed plantations will, with the agreement of the community be well demarcated and the area not cleared for development. ✓ Necessary cultural rites agreed with community and performed prior to access to groves

7.0 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 should be 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.

7.1 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 3. 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 FC 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 FC E&S Focal point.

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

7.2 Environmental and Social Assessment Procedure to be followed for 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 projects for which ESIA is mandatory. These have been given in the Annex 4 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

Every regional forestry office will designate an Environmental and social safeguard Officer. The appointed/ designated Officer 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 EA Assessment Registration Forms will also completed

A sample copy for the screening form is given as Annex 3 and the EA1 Form is provided in the Annex 5 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 and 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 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, an appointed National Safeguards Specialist 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 6 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 to 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;
- Advice 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 MMLNR/ 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 6:Summary of Environmental Screening Process and Responsibilities

No.	Stage	Institutional responsibility	Implementation responsibility
1.	Environmental and Social screening of proposed project interventions to assist in project formulation using checklist	FC/ MLNR	Secretariat (MLNR)/ FC/ National Safeguard consultant
	Statutory Environmental Registration of Project	FSD/ Private sector	Regional Environmental and Social Safeguard Officer/ Plantation owner
2.	Determination of appropriate environmental assessment level/ category	EPA	-
3.	Implementation of environmental assessment	FSD/ Private sector	Regional/ District Environmental and Social Safeguard Officer/ Plantation owner
3.1	If ESIA is necessary		
3.1a	Preparation of terms of reference	FSD/ Private sector	Regional Environmental and Social Safeguard Officer/ Plantation owner
3.1b	Validation of ESIA/EMP TOR (Scoping)	EPA	National Safeguard consultant
3.1c	Selection of Consultant	FSD/ Procurement Office/ Private sector	Secretariat/ Procurement Office
3.1d	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 Officer
4	Review and Approval	EPA	-

No.	Stage	Institutional responsibility	Implementation responsibility
4.1	EIA Approval (B1)	EPA	-
4.2	Approval simple measures (B2&c)	FSD	Regional Environmental and Social Safeguard Officer/ Plantation manager
5.	Public Consultation and disclosure	FSD/EPA	Regional Environmental and Social Safeguard Officer /Plantation manager/Consultant
6.	Surveillance and monitoring	FSD/EPA/ MLNR	Secretariat/ Regional Environmental and Social Safeguard Officer / Safeguard specialist
7	Development of monitoring indicators	FSD	Regional Environmental and Social Safeguard Officer/ Safeguard Consultant

7.3 Technical Specifications and Standards

7.3.1 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.

7.3.2 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.

8.0 INSTITUTIONAL CAPACITY FOR ESMF IMPLEMENTATION

8.1 Institutional roles and responsibility for the ESMF Implementation

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

It is anticipated that the FC will also coordinate environmental and social due diligence for FIP projects across all donor lending arrangements (eg. WB, AfDB, IFC)

Therefore, the main institutions implementing the FIP and which will 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;
- Forestry Commission- Forestry Services Division, Resource Management Support Centre, Climate Change Unit
- 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.

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.

8.1.1 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 and ensure linkages and coordination with other interventions under the FIP, including the Dedicated Grant Mechanism.

The focal point ministry may work with the Ministry of Food and Agriculture (MOFA), the Cocoa Board, the Ministry of Environment Science and Technology, 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 Forestry Commission Environmental and Social Focal Point and will be supported by, as needed, environmental and social experts who will 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.

8.2 Institutional Strengthening and Capacity Building

The FC will establish a new functioning coordination and implementation group to address environmental and social due diligence across the FIP and other forest related programmes (REDD+, FCPF, DGM, and carbon fund, UNFCCC)

8.2.1 Forestry Commission Environmental and Social Safeguard Focal Point

The FC ESS focal point will be responsible for:

- Coordination of environmental and social safeguards across all programmes
- 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

8.2.2 Environmental and social consultants

The Consultants who will be conversant with the WB safeguard policies and their instruments and application as well as other REDD safeguard principles, will be hired periodically as and when required to support the implementation of the environmental and social safeguards including the preparation of manuals and checklists. The consultants will be 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 should be adequate to facilitate training and other capacity related activities on safeguards. The template for the preparation of ToRs to recruit consultants is provided in Annex 6.

8.2.3 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
- 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 FC ESS Focal Point to whom s/he will report.

8.3 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 7 describes the environmental and social due diligence on the capacity of project institutions and recommended actions to improve capacity.

Identification of Capacity Needs

The first step in pursuing capacity building will be to identify the capacity needs of the various stakeholders. 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:

Training programme 1:

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

Participants: MLNR (Secretariat); FC/ FSD; COCOBOD; MMDAs; Private sector (Plantation managers).

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/ Plantation managers (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 Plantation development manual (ESMP).
Participants: District/ Regional Forestry Officers; Plantation managers (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	Limited	Project management unit will require assistance to provide proper reporting	Designated individual for safeguard reporting to participate in training.
1.2	Forestry Commission	Limited	Limited experience with env and soc safeguards (Usually will collaborate with EPA on projects)	• Designated environmental and social safeguards focal point at the national office; • Some Regional and district staff to be designated as safeguard officers; • Safeguard training across all levels; • Development of safeguard guidance and tools; • Development of national safeguard system
1.3	MOFA	Established	Environmental Unit established at Ministry and also some competence at the Regional level. No capacity at districts	Environmental unit to establish coordination with the FC
1.4	MESTI	Established	Parent ministry of the EPA.	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.	Capacity at the national and regional level	Improve coordination and support for the permitting process
2.3	Water Resources Commission (WRC)	Functional	MOU with EPA on areas of mutual interest/ overlap	Enhanced collaboration
3.0	Local Government Service			
3.1	Regional Coordinating Councils	Limited	Planning Officers trained by EPA on SEA activities	Basic training in ESIA for identified staff and also for checklist
3.2	Metropolitan, Municipal and District Assemblies (MMDAs)	Limited	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	Basic training in environmental and social due diligence for forestry interventions and programmes

The main recipients for 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 are limited. The training will be organized in collaboration with the regional EPAs and will be in the form of seminars and workshops. 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 will explore the possibility of having community environmental and social safeguard facilitators, and training them.

The FSD regional offices will then be expected to organise training workshops for selected plantation managers/ farmers. It is proposed to collaborate with the MOFA and COCOBOD extension officers 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. 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.

Production of guidelines and tools

The ESMF provides guidelines to mitigate adverse environmental and social impacts arising out 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 3. Consultants may be hired to produce additional manuals and checklists as and when required by the project.

8.4 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$800,000 over the 4- year project life as explained in the Table 8 below:

Table 8: Estimated budget to implement ESMF

No	Activity	Description	Annual cost, US$	Total Cost, US$
1.	Staffing	1. Forestry Commission Environmental and Social Safeguards (ESS) Focal Point; 2. Environmental and Social Safeguard Experts 3. Safeguards Information Systems Specialist (Local and International)	 40,000 20,000 local 30,000 intl 90,000	360,000
2.	Training 2a. Awareness creation and Capacity building for MLNR (Secretariat), FSD regional project staff	Training workshop/ seminars on Programmes 1,3 and 4	10,000	20,000
	2b. Capacity building for district FSDs (safeguard officers)	Training workshop/ seminars on Programmes 1, 2 and 4	5,000 per region 10,000	40,000
	2c. Capacity building for FSD, MMDAs and RCC	Regional training workshops on Prog 1,4 (per diems, travel, workshop venue, materials, meals)	7,000 per region 14,000	56,000
	2d. Awareness creation and capacity building for selected members of community	Community meetings and training	3,750 per region 7,500	30,000
3.	Guidance and tools	Guidance Documents, Checklists, Forms, TORs, Technical Planning Tips	14,000	56,000
4.	Communications	Radio, TV discussions, Newspaper adverts on issues relating to PPP/ ESMF/ RPF	10,000	40,000
5.	Transport, per diem, registration fees (participation in training)	Transport for staff to travel to regions and districts and HQ; Site visits, attending training, Per diem for official travel; Specific meeting and workshop registration fees (local and international)	15,000 local per region 30,000 7,500 intl	 120,000 30,000
6.	Monitoring and Evaluation	Safeguards component for M&E is addressing E&S due diligence and verification	12,000	48,000
	TOTAL			800,000

9.0 MONITORING AND EVALUATION

Monitoring plans will be developed to track safeguard provisions at both the Environmental and social safeguards framework level and sub-project activity level. The proposed plans are presented in the Table 9. The table confirms the verifiable indicators as well as responsibilities for the various monitoring actions.

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	FSD regional FP/ EPA/ FC E&S FP

10.0 CONSULTATIONS, ESMF DISCLOSURE AND GRIEVANCE MECHANISM

10.1 Stakeholder consultations

The 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 Brong Ahafo 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 contacted and issues discussed are summarized in Annex 7.

10.2 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.

10.3 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 realistion 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.

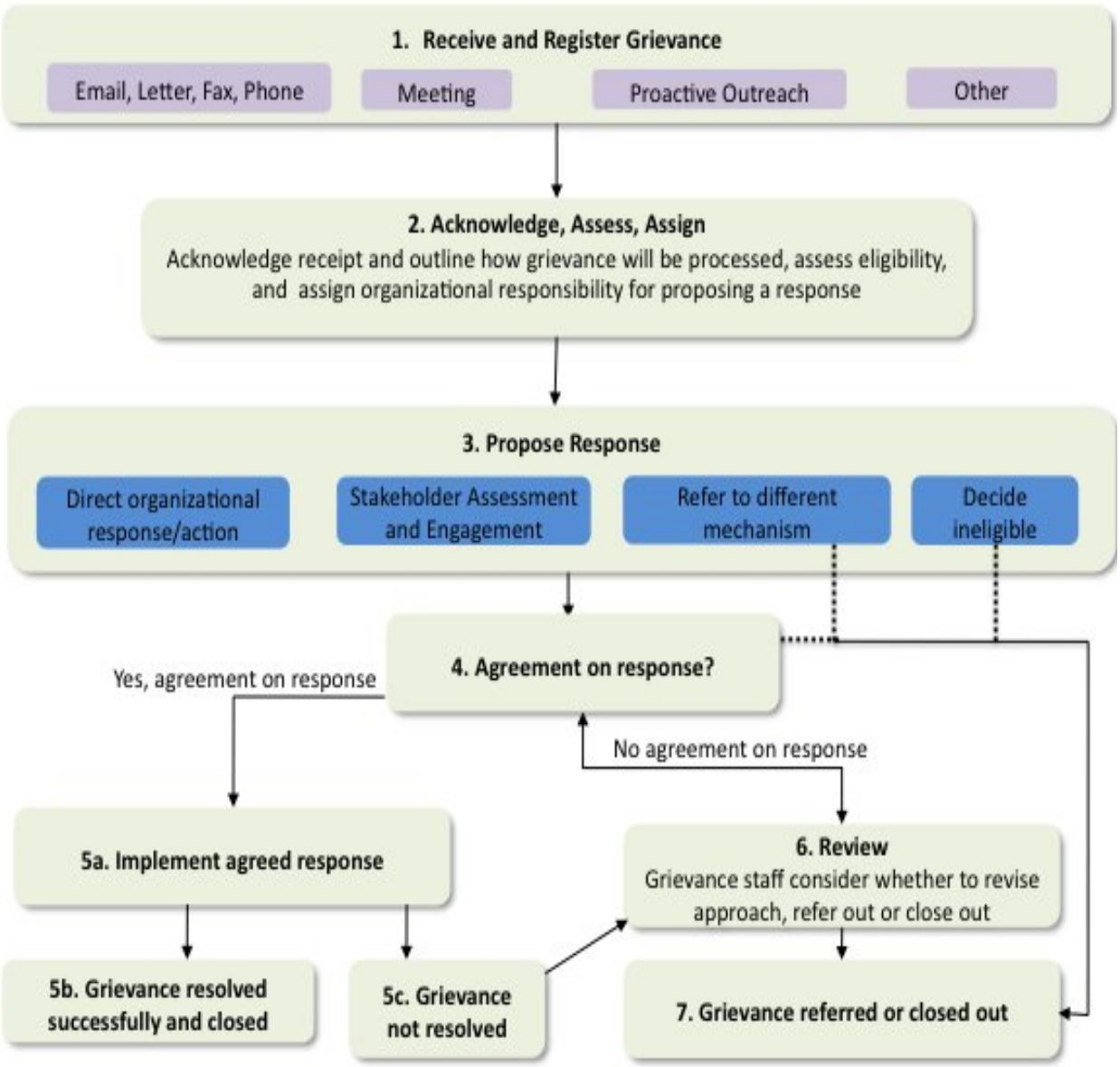
Court cases are known to be cumbersome and take a long time before settlements are reached and usually one party is still not satisfied. It is therefore proposed to adopt a simple procedure for affected persons to be able to follow easily, and which will provide aggrieved people with an avenue for amicable 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 other 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.



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 a "last resort" 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 redress process. 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 Forestry Commission and the Ministry of Lands and Natural Resources.

Recommended grievance redress time frame

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	-

11.0 CONCLUSION

The project if well implemented, will support needed reforms in forest policy and improve institutional practices, procedures and capacities; strengthen community based natural resource management institutions with improved practices and incentives for managing landscapes sustainably; enhance Reforms and practices and reinforce these through improved communication methods and materials, including platforms for information sharing; and reduce tons of CO_2 emissions from reduced deforestation and forest degradation (relative to reference emission level developed separately).

The mitigation measures advocated will address adverse impacts, and also the implementation plan and training programmes suggested are sufficient to ensure the success of the project.

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ANNEX 1: Policy and Legislative Framework

National Policy Framework

No.	Policy	Description
1.	Forest policy	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. The stated overall aim of the FWP was: "Conservation and sustainable development of the nation's forest and wildlife resources for the maintenance of environmental quality and perpetual flow of benefits to all segments of society." The policy represented a shift towards the principles of sustainability. This is most evident in the objectives for management of the off-reserve forest areas. In order to further strengthen the objectives of the FWP and the FDMP, the Government enacted the Timber Resources Management Act, 1997 (Act 547), the Timber Resources Management (Amendment) Act, 2002 (Act 617), and the Timber Resources Management Regulations, 1997 (LI 1649). These pieces of legislation focused on efficient resource allocation and prevention of illegal logging and chainsaw lumbering. However, the Timber Resources Management Act made it illegal for farmers and other users of off reserve lands to harvest any naturally growing trees for commercial or domestic purposes, even if it is growing on their land. It also prohibited logging without prior authorisation from concerned groups or individuals. However, regardless of the efforts Ghana still struggles with illegal logging and good governance of the forest sector (RoG 2011a). There appears to be no significant reductions in illegal logging. The problems are most obvious in the CSM sector and the domestic timber supply. Though parliamentary oversight of forest agencies is relatively good, information management and use of best practise in law enforcement remains weak.
2,	Environmental Policy	Ghana's Environmental Policy resulted from a series of Government actions initiated in March 1988 to put environmental issues on the priority agenda. Subsequent to this, an Environmental Action Plan (EAP) was drawn up which identified specific actions to be carried out to protect the environment and ensure better management of natural resources. The plan addresses itself to sustainable development issues as defined by the World Commission on Environment and Development in 1987 and provides a broad framework for the integration of environmental issues into development strategies and actions. The National Environmental Policy (NEP) was adopted in 1991 to provide the framework for the implementation of the National Environmental Action Plan (NEAP). The ultimate aim of the policy is to ensure sound management of the environment and the avoidance of exploitation of resources in ways that may result in irreparable damage to the environment. The policy makes provision for: • Maintenance of ecosystem and ecological processes essential for the functioning of the biosphere; • Sound management of natural resources and the environment;

		• Protection of humans, animals and plants and their habitat; • Guidance for healthy environmental practices in the national development effort; • Integration of environmental considerations in sectoral, structural and socio-economic planning at all levels; • Seek common solutions to environmental problems in West Africa, Africa and the world at large. The Project will be guided by these policy considerations to ensure that the interventions do not adversely impact on the environment or cause harm to persons.
3.	Agricultural Policy	Agricultural expansion is one of the major underlying causes of deforestation in Ghana. The first Food and Agriculture Sector Development Policy (FASDEP) was developed in 2002 as a framework for the implementation of strategies to modernise the agricultural sector in order to increase food and cash crop production. The strategies in the policy were based on the Accelerated Agricultural Growth and Development Strategy, which was designed to forge linkages in the value chain. The revised policy of 2006 (FASDEP II) encourages the formation of inter-ministerial teams to ensure environmental sustainability in agricultural production systems. These could be common platforms to consider also in the implementation of FIP.
4.	Land Policy	The revised National Land Policy (NLP) in 2002, and the implementation of the World Bank supported Land Administration Project (LAP), has promoted the judicious use of land and natural resources in the pilot areas. However, the achievements have so far been local and there is need to upscale the achievements.

Legislative Framework

	Legislation	Description
	Forestry	
	Forestry Commission Act, 1999 Act 571	An Act to re-establish the Forestry Commission in order to bring under the Commission the main public bodies and agencies implementing the functions of protection, development, management and regulation of forests and wildlife resources and to provide for related matters.
	Timber Resource Management Act, 1997 - Act 547:	An ACT to provide for the grant of timber rights in a manner that secures the sustainable management and utilization of the timber resources of Ghana and to provide for related purposes.
	Timber Resources Management Act 617 (Amendment) Act, 2002:	An ACT to amend 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.
	Forest & Plantation Development Act, 2000 Act 583 *L.I. 1649 - Timber Resources Management Regulations, 1998* *L.I. 1721 Timber Resources Management (Amendment)* *The Forest Protection (Amendment) Act, 2002 Act 624* *The Trees & Timber (Amendment) Act, 1994*	- - - -
	Environmental	
	EPA Act 1994 (Act 490)	Provides for the establishment of an Environmental Protection Agency with functions among others, to 'advise the minister on the formulation of policies on all aspects of the environment and in particular make recommendations for the protection of the environment'. The other parts of the Act include Enforcement and Control which gives powers to the Agency to request for an ESIA; Part three establishes an Environment Fund and finally Part four describes the administration and general provisions of the Act.

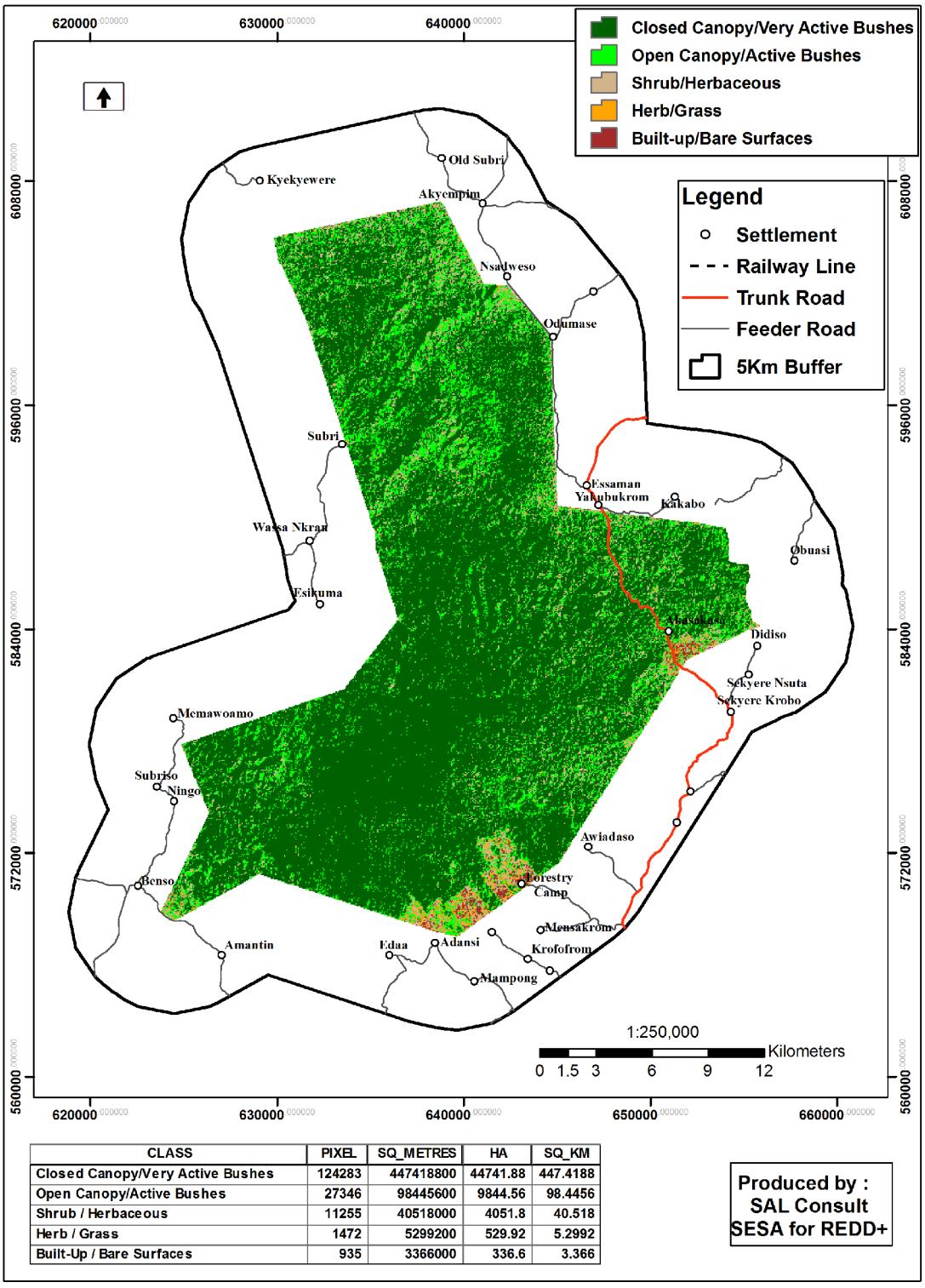
		Part 1 of the Environmental Assessment Regulations, 1999 LI 1652 on Environmental Permit describes undertakings requiring registration and issuance of environmental permit, as: 1. (1) No person shall commence any of the undertakings specified in Schedule 1 to these Regulations or any undertaking to which a matter in the Schedule relates, unless prior to the commencement, the undertaking has been registered by the Agency and an environmental permit has been issued by the Agency in respect of the undertaking. 2. No person shall commence activities in respect of any undertaking which in the opinion of the Agency has or is likely to have adverse effect on the environment or public health unless, prior to the commencement, the undertaking has been registered by the Agency in respect of the undertaking.' The list of undertakings requiring environmental assessment is provided in the Annex 1 together with the list of environmentally sensitive areas, Annex 2 in which developments are to a large extent, prohibited. The procedures establish an ESIA process to among others, provide enough relevant information to enable the EPA to set an appropriate level of assessment of any proposed undertaking, investment or programme for the necessary review and to facilitate the decision making process for the ESIA approval. The procedures comprise activities such as project Registration, Screening, Scoping, EIS preparation, and Public hearing. The administrative flow chart suggesting a total processing time of 90 days is shown in the Annex 3. The procedures are statutorily recognised under the EPA Act 1994 (Act 490). The Environmental Assessment (Amendment) Regulations, 2002 (LI 1703) is an amendment to LI 1652 and provides for the substitution of regulations relating to 'fees and charges for environmental permits and certificates'. It is anticipated that the Programme will abide by these legislative provisions and procedures as and when applicable, and that all proposed interventions will be mindful of the requirements of the EPA Act 1994 (Act 490).
	Land	
	The Lands Commission Act 2008, Act 767	The Lands Commission Act 2008 establishes the Lands Commission to integrate the operations of public service land institutions in order to secure effective and efficient land administration to provide for related matters.
	The State Lands Act 1962, Act 125	The State Lands Act 1962, Act 125 vests in the President of the Republic the authority to acquire land for the public interest via an executive instrument.
	Survey Act 1962, Act 127	The Survey Act 1962, Act 127 relates to geological, soil and land survey. Part II of the Act deals with demarcation and survey of lands. Under the law, the sector minister may appoint official surveyors and the Chief Survey Officer (Director of Surveys) may license private surveyors. It is the official surveyor or licensed surveyor that shall certify plans for attachments to instruments of conveyance, leases, assignment, charge or transfer. Under the law it is an offence to damage, destroy or alter any boundary mark.

		The Act 127 gave legal backing to the Director of Surveys to carryout cadastral and other surveys through official surveyors who work directly under him at the Survey Division of the Lands Commission. It also gave authority to the Director of Surveys to recommend from time to time experienced surveyors to the Minister responsible for Lands to be licensed to undertake surveys.
	The Lands (Statutory Wayleaves) Act, 1963	The Lands (Statutory Wayleaves) Act 1963, Act 186 details the process involved in occupation of land for the purpose of the construction, installation and maintenance of works of public utility, and for the creation of right-of-ways for such works Further to this Act, the Statutory Wayleave Regulations, 1964, provide procedural details and address grievance mechanisms.
	The Land Title Registration Act 1986, PNDCL 152	The challenges arising from registration of instruments under the Land Registry Act 1962, Act 122 led to the promulgation of the Land Title Registration Act 1986, PNDCL 152 which would be an improvement on the registration of deeds. The Law provides for among others, accurate parcel or cadastral maps which would reduce fraud, multiple registrations and reduce litigation.
	Office of the Administrator of Stool Lands Act 1994, Act 481	The Act establishes the Office of the Administrator of Stool Lands as enshrined in Article 267 (2) of the 1992 Constitution and it is responsible for establishment of stool land account for each stool, collection of rents and the disbursement of such revenues.
	Water Resources	
	Water Resources Commission Act 1996, Act 522	The Water Resources Commission (WRC) Act 1996 (Act 522) establishes and mandates the WRC as the sole agent responsible for the regulation, management and utilisation of water resources and for the co-ordination of any policy in relation to them. The Commission does this through the granting of water rights to potential water users.
	Water Use Regulations 2001, LI 1692	The Water Use Regulations 2001 (LI 1692) enjoins all persons to obtain Water Use Permits from the Water Resources Commission for commercial water use. The Commission is also mandated to request for evidence that an environmental impact assessment or an environmental management plan has been approved by the EPA before issuance of the Water Use Permit.
	Others	
	Ghana Investment Promotion Centre Act 1994, Act 478	The Ghana Investment Promotion Centre Act 1994 (Act 478) requires that every investor wishing to invest in the country must in its appraisal of proposed investment projects or enterprises, "…have regard to any effect the enterprise is likely to have on the environment and measures proposed for the prevention and control of any harmful effects to the environment…".
	The Local Government Act 1993, Act 462	The Local Government Act 1993 (Act 462) empowers the Assemblies to establish Waste Management Departments to be responsible for the development and management of waste disposal sites within their areas of jurisdiction.
	Factories, Offices and Shops Act 1970, Act 328	The Factories, Offices and Shops Act of 1970 (Act 328) requires all proponents to register every factory with the Chief Inspector of Factories Inspectorate Division.
	The New Labour Act 2003, Act 651	Section 118(1) of the New Labour Act 2003 (Act 651) stipulates that it is the duty of an employer to ensure that every worker employed works under satisfactory, safe and healthy conditions.
	The Fire Precaution (Premises)	The Fire Precaution (Premises) Regulations 2003 (LI 1724) requires all premises intended for use as workplaces to have

	Regulations 2003, LI 1724	Fire Certificates.
	The Constitution of the Republic of Ghana 1992	The Constitution of the Republic of Ghana 1992 makes provisions that protect the right to private property and sets principles under which citizens may be deprived of their property in the interest of the public.
	The State Lands Act 1962, Act 125	The State Lands Act 1962 (Act 125) has vested authority in the President of the Republic of Ghana to acquire land for the public interest via an executive instrument.

ANNEX 2: CLASSIFIED SATELLITE MAPS- SUBRI RIVER FOREST RESERVE (1990-2010

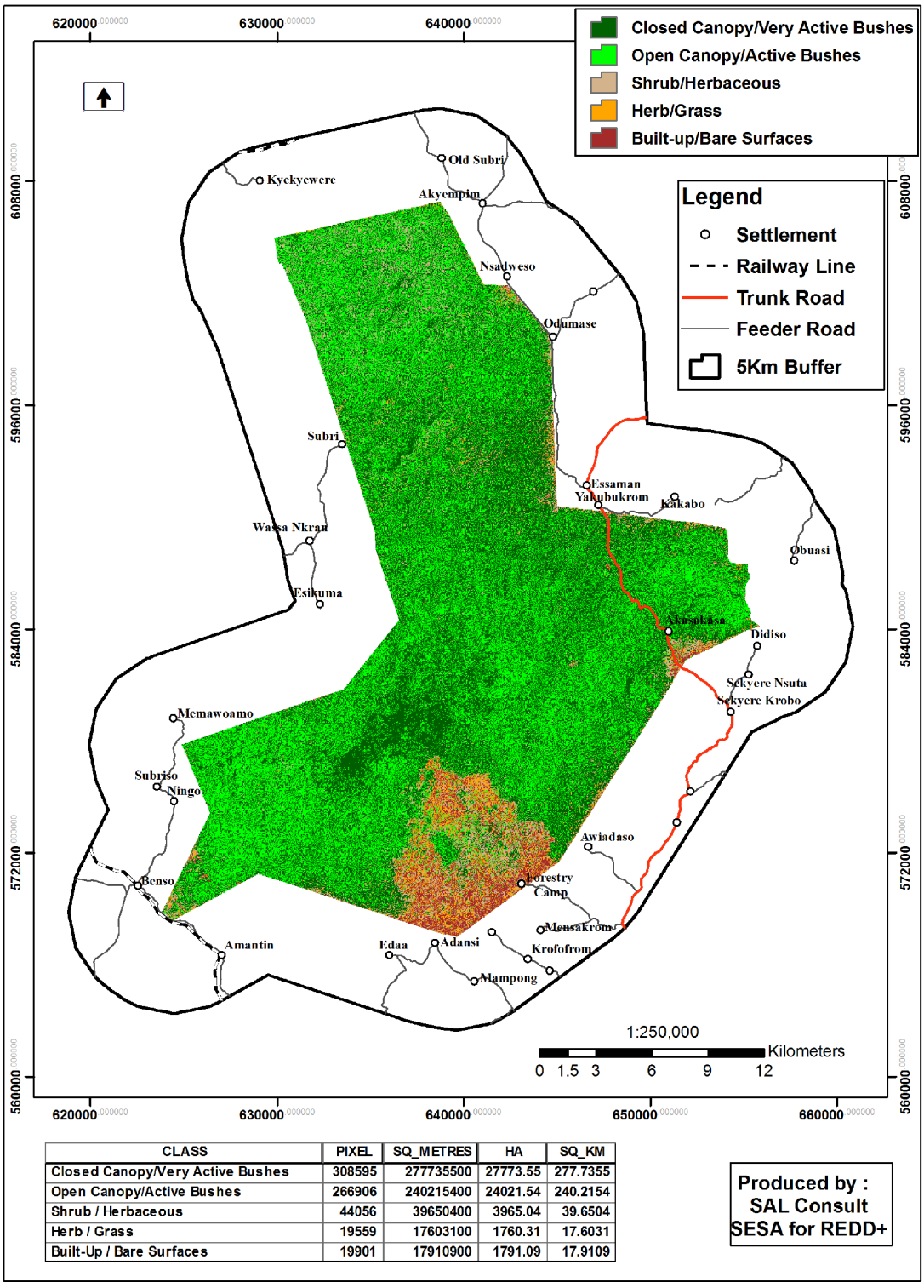
CLASSIFIED SATELLITE IMAGE MAP OF SUBRI RIVER FOREST RESERVE (1990)



CLASS	PIXEL	SQ_METRES	HA	SQ_KM
Closed Canopy/Very Active Bushes	124283	447418800	44741.88	447.4188
Open Canopy/Active Bushes	27346	98445600	9844.56	98.4456
Shrub / Herbaceous	11255	40518000	4051.8	40.518
Herb / Grass	1472	5299200	529.92	5.2992
Built-Up / Bare Surfaces	935	3366000	336.6	3.366

Produced by :
SAL Consult
SESA for REDD+

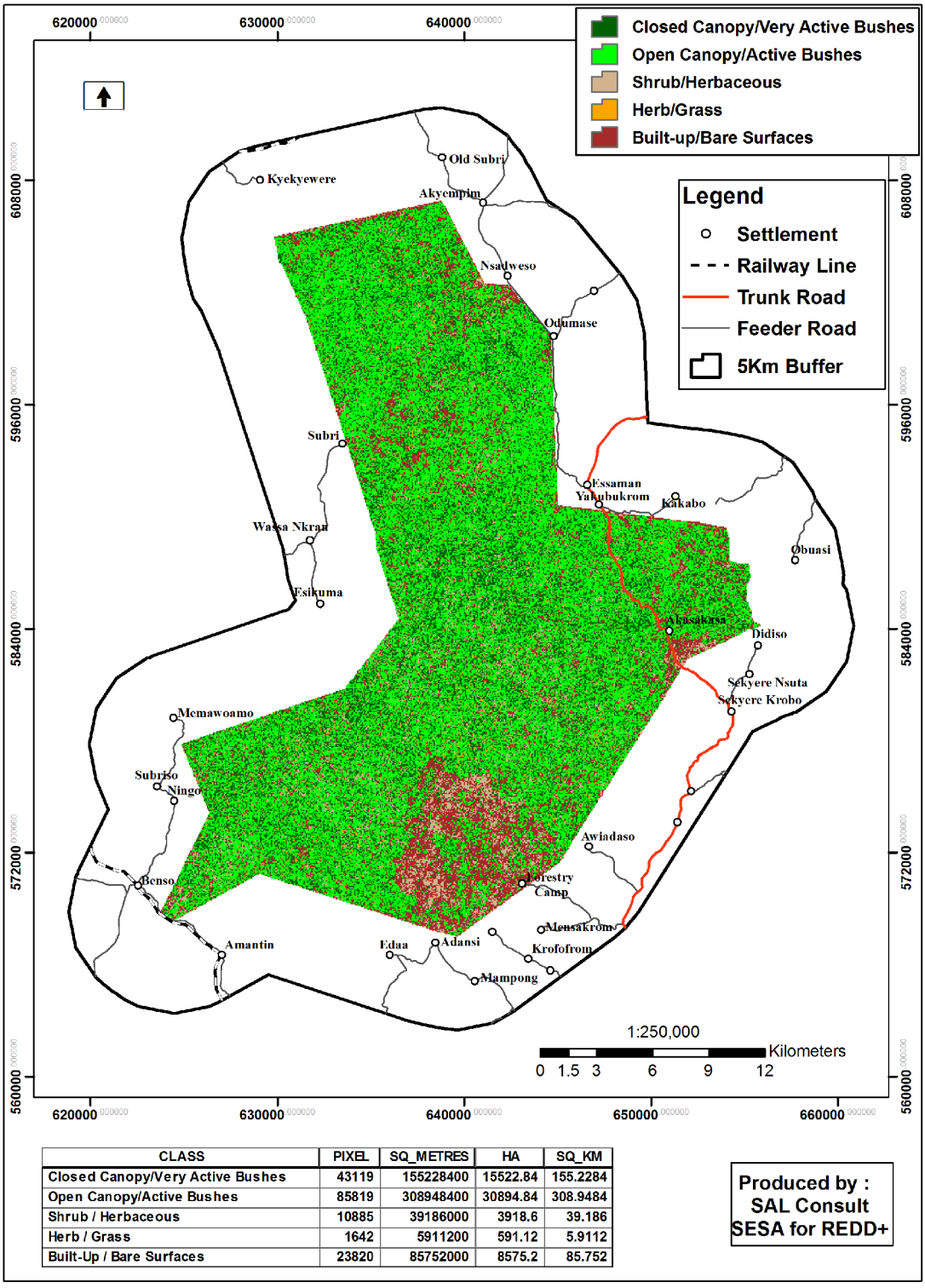
CLASSIFIED SATELLITE IMAGE MAP OF SUBRI RIVER FOREST RESERVE (2000)



CLASS	PIXEL	SQ_METRES	HA	SQ_KM
Closed Canopy/Very Active Bushes	308595	277735500	27773.55	277.7355
Open Canopy/Active Bushes	266906	240215400	24021.54	240.2154
Shrub / Herbaceous	44056	39650400	3965.04	39.6504
Herb / Grass	19559	17603100	1760.31	17.6031
Built-Up / Bare Surfaces	19901	17910900	1791.09	17.9109

Produced by : SAL Consult SESA for REDD+

CLASSIFIED SATELLITE IMAGE MAP OF SUBRI RIVER FOREST RESERVE (2010)



CLASS	PIXEL	SQ_METRES	HA	SQ_KM
Closed Canopy/Very Active Bushes	43119	155228400	15522.84	155.2284
Open Canopy/Active Bushes	85819	308948400	30894.84	308.9484
Shrub / Herbaceous	10885	39186000	3918.6	39.186
Herb / Grass	1642	5911200	591.12	5.9112
Built-Up / Bare Surfaces	23820	85752000	8575.2	85.752

Produced by :
SAL Consult
SESA for REDD+

ANNEX 3: 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 Focal Point			
Name of reviewer:		Date of screening:	

Subproject Details: Attach location map (longitude – latitude coordinates (GPS reading) if available):	
Type of activity: *What will be done, who will do it, what are the objectives and outcomes*	
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 to transfer to subproject	
Any plans for construction, movement of earth, changes in land cover	

3. Preliminary Environmental Information:	Yes/No	Refer to Process Framework	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	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	
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	
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 loosing rights and no transparency or grievance redress available	If Medium or High Refer to Process Framework

6. E & S assessment comments based on site visit:
Summary Observations

Determination of environmental category based on findings of the screening: A ____B ____C ____

- ☐ Requires an EIA
- ☐ Requires preparation of additional E&S information
- ☐ Does not require further environmental or social due diligence

Prepared by: Date:

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 Natural Habitat Issues in Checklist*)	Are there any ecologically sensitive/ critical areas within the proposed project area (refer to Annex 3.1)			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	IAre there steep slopes in the project area? Can you easily walk on the slopes without falling			If yes, proceed with EA1 form

ANNEX 3.1 ENVIRONMENTALLY SENSITIVE/ 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 4: 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	-

SECTOR	Sub sector	Description
	Brewery products 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 Other chemical products	-

SECTOR	Sub sector	Description
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 of animals or plants into areas where those species do not occur at the time of the proposed

SECTOR	Sub sector	Description
		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 mortised recreational vehicles Other amusement and recreational services

Annex 5: 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:	

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 adjourning 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 6: 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 7: STAKEHOLDER CONSULTATION

Stakeholder institutions and communities have been consulted in the two regions:

Western Region:

- Regional Forest Service Division officials, Tarkoradi
- Regional Wildlife Division officials, Takoradi
- Timber Industry Development Division officials, Takoradi
- Regional COCOBOD, Sefwi Wiaso
- Ankasa Wildlife Camp, Elubo
- Nsuano community in the Jomoro District, fringe community
- Amokwaw CREMA executives

- Forest Service Division –District Manager, Enchi
- Aowin District Assembly – District Planning Officer, Enchi
- MOFA – District Director, Enchi
- CSSVCD/Extension Service, Enchi
- Office of the Administrator of Stool Lands (OASL) – District Officer, Enchi

- Forest Service Division, District officials, Sefwi Wiaso
- Sefwi Wiaso Municipal Assembly –Municipal Planning Officer
- CHRAJ, Sefwi Wiaso
- OASL, Sefwi Wiaso
- Akurafo community-fringe community
- Kunuma community-fringe community

Key environmental and social Issues discussed

<u>Major drivers of forest deforestation</u>

The major drivers of forest degradation identified during the consultations include:

- Illegal farming and admitted farming in the forest reserves – both food and cash crops
    - Illegal farms from encroachment into forest reserves
    - Admitted farms have increased beyond original allotted areas in the reserves
    - Food crops include plantain, cassava, cocoyam
    - Main cash crop is cocoa, especially in the Enchi, Sefwi Wiaso and Juabeso forest areas
- Illegal small scale mining/Galamsey, especially within the Tarkwa and Bibiani areas
- Admitted settlements/villages in the forest reserves

Other drivers include:

- Chain saw operations especially in off-reserve areas
- Illegal Logging of timber, especially in off-reserve areas

- Legal exploitation of timber

Off Reserve: Access to Land/ Land Tenure/ Land Ownership

- Land can be obtained from individuals, family or stool
- Land can be accessed through crop sharing arrangement. 'Abunu' System is mostly practised in these areas. The Abunu system is of two kinds, (i) where the cultivated farmland is divided into two equal parts between the tenant farmer and the landowner. In such a case, the tenant farmer has some form of ownership to land. Land usually reverses to owner for re-negotiation with tenant farmer when cash crop is cleared or removed due to disaster or diseases or when life span of crop is over. (ii) where only cash crop is divided into two equal parts between landowner and tenant farmer. With the second case, the tenant farmer has no ownership to land.
- Land/Farmland documentation challenges
    - No proper site plan is done by farmers.
        - Farmers claim cost of site plan is expensive.
    - 'Special' site plan is usually done –using GPS to pick key points for plotting.
    - Land agreement or indenture on land is not usually done.
- Lease period unclear or undefined in most cases between owner and tenant farmer even when land is obtained through the Abunu system
- Tenant farmers pay farm rent to the stool through OASL after getting land via 'Abunu' system
- Land conflicts occur in the area mostly due to improper and inadequate documentation on land and is mostly exacerbated when one party dies/incapacitated and or from inheritance issues.

Off Reserve: Deforestation/ Tree Plantation Issues

- Competing land use interest : Competition and Demand for Land
    - Jomoro and Assin areas – Gradually, rubber plantations coming up and may be competing with other economic trees (e.g. oil palm, cocoa, citrus) in the near future (due to access to credit facilities and support from Ghana Rubber Estates Limited (GREL))
    - Enchi areas – Some land owners giving out their cocoa farms/land for galamsey activities
    - Demand for land for food crop farming, cash crop farming and for settlement expansion
- Land availability and access for tree plantations
    - In cocoa growing areas, it may be difficult for tenant farmers to have access to land (through customary land tenure system) for tree plantations, unless tenant farmer fully acquire or purchase such lands with indenture/agreement from landowners/stool
    - Forest reserve fringe communities face challenges with land for farming. Tree plantations in such communities will put more pressure on community land use. Non-fringe communities are more likely to have land/access to land for tree plantations.
- Chain saw operations and illegal logging a major cause of off-reserve deforestation
    - Is a serious business and livelihood issue especially in the Assin Fosu areas
- Fuel wood fetching and charcoal production especially along the coast of Central Region
    - Fuel wood for commercial fish smoking
- Lack of land use control
    - Timber tree species on the land are under the control of FC but the land use is under the control of the landowner-individual, family or stool.

- Community/traditional authority involvement in managing and caring for off-reserve forests not clearly defined except for traditionally/culturally protected areas such as sacred groves, cemeteries in forested areas

Cocoa and Shade Trees

- Farmers clear land by slash and burn practices
    - As a result lot of old cocoa farms (at Elubo, Enchi, Wiawso areas) are without or with less shade trees.
        - The farmers' reason for that was ignorance.
- The interaction revealed that most farmers through bad experience and some through education now know and accept that shade trees enhance cocoa production.
- Farmers gave the following reasons why they are not wholly embracing shade trees or have their own reservations to shade trees:
    - The Forestry Commission (FC) gives out shade cocoa farms to lumber contractors to harvest the mature shade trees (timber species). This results in destruction of their cocoa trees.
    - Sometimes no compensation is paid for destroyed cocoa trees and where compensation is paid, the value is not commensurate with cocoa trees destroyed/damaged. Most cases, farmers disagree with compensation values.
    - Farmers not informed by FC when such areas are given out to lumber contractors. Rather, the contractors go and show their permit to farmers that the area including timber species in their farmers have been given out for harvesting
    - Even though the contractor is to seek their consent/permission as well before any harvesting is done, usually farmers' consents are not sought.
    - Farmers do not benefit either in cash or in kind (using part of tree for their building projects) from the shade trees harvested even though they have contributed to its growth. Though the stool benefits, it is unfair to them as their efforts and labour are not recognized.
    - It is more difficult to convince FC officials that native timber tree species occurring in cocoa farms were grown and or nurtured by farmer.
    - Though farmers are being encouraged to register trees they have planted in the cocoa farms, the support and registration process is challenging:
        - Support in terms of provision of tree seedlings for planting is irregular and untimely. Occasionally, get some support from NGOs.
        - Sometimes tree seedlings come at the time when the rainy season is over
        - Tree registration process is not cost effective. Currently, every interested farmer has to make a trip to the district FSD as part of the registration process. The District FSD is larger and covers three or more political districts and so a lot of communities may not be close to the district FSD office. Farmers have accommodation challenges if they have to spend some nights outside.
        - Farmers are not able to satisfy tree registration requirements when it comes to the provision of agreement/ indenture to cover the farmland.
- Cocoa certification: NGOs encouraging and assisting farmers to plant shade trees.
- Farmers not interested in long gestation species/native species

Forest Reserve Degradation/ Rehabilitation Issues

- Admitted farms and settlements in the forest reserves have served as fertile grounds for reserve degradation. These farms and settlements allowed in the forest reserves are expanding beyond their original permitted area when the reserves were constituted. The issue of inheritance and migration has perpetuated this act.
    - E.g. in the WR, Suhuma forest reserve has 25 admitted farms; Krokosua has 38 admitted farms,; Sui forest reserve has 58 admitted farms.
    - Increasing population of admitted settlements in the forest reserves also putting a lot of pressure on the reserve. E.g. Kofikron, an admitted settlement in a forest reserve in the WR has a population of about 834. Kobo village, an admitted settlement in the Suhuma forest reserve cover an area of about 3.89 km^2.
- Demand for forest lands for farming/settlement expansion
    - The farmers believe that forest lands are much fertile and produce good yield of food/cash crops and they need not incur any fertilizer cost
    - Fringe communities in general face challenges with land for farming and other uses, mainly due to population increase and settlement expansion

- Weak law enforcement
    - Community involvement in forest management and care has been pushed largely on project basis and when such projects are over, community involvement also wanes/declines. The Community Forest Committee (CFC) in the communities visited existed in name but was not functional. The communities indicated that the support expected from the FC for the CFC was not forthcoming. The CFCs were identified with production forest reserves while CREMAs were identified with protected areas. The CREMAs appear to be more organized and empowered than the CFCs.
    - Safety and security of community informants/whistle blowers
        - Key informants are usually identified and assaulted and therefore most people are not willing to give out information about forest encroachers. The community believe FC officials are also to blame for not able to keep secrets
        - Key informants do not receive any reward or benefit for their efforts
    - Safety and security of FC field officers
        - FSD forest guards and range supervisors are not armed unlike their counterpart at the Wildlife Division
        - Some communities tend to be hostile to FSD field officers who also live in the communities and this usually does not encourage them to be strict
    - Dispute resolution, court injunctions and adjournments
        - Farmers who have encroached upon forest reserves usually prefer the court than the FSD dispute resolution process
        - Court injunctions and adjournments make illegal activities to thrive
            - ✓ E.g. when an encroacher clears part of a forest reserve and plant cocoa and such illegal activity is identified by the forestry guards and earmarked for destruction, the farmer quickly goes to the court to seek an injunction to stop the FSD from destroying the illegal farm. The delays in the court

process sometimes make the farmer to harvest the cocoa before ruling is given. If the ruling does not favour the farmer, an appeal is made which further delays the justice process

- Court penalties not deterrent enough
  - According to regional and district FC officials, court penalties given out to offenders are not deterrent enough and does not encourage them to ensure that illegal activities are brought to book.
- Motivation for FC/FSD officers
  - FC officials believe their current salaries/wages is nothing to write home about as compared to their counterparts in other government institutions
  - Both field and office staff at the regions/districts bemoaned the lack of promotion in the organisation. Some complaint of the lack of promotion for the past 10 to 18 years.
  - Field officers complaint of lack of logistics/support for effective field monitoring. (Lack of 4x 4 vehicle, Lack of appropriate PPEs)
  - Field officers indicated that there is the need to review by reducing the forest area given out to the forest guards and rangers to take care of due to increasing pressure on the forest reserves

Gender Issues: Land Ownership and Access/ Land Tenure/ Forest Reserves/ Governance

- Co-ownership by spouses (e.g. cocoa, economic trees) often bring conflict resulting in divorce and rancour (sharing arrangements contentious)
- Many women face land disputes and litigation alone from land tenure/inheritance issues.
- Lease acquisition and documentation- Affordability Issues.
- Women do a lot of food cropping in cocoa areas and are faced with shortage of farmlands for food cropping
- Restrictions into Forest Reserves for fuel wood needs (for cooking etc) are major concerns of women.
- Tree species to be planted should have double usage (should also be used as fuel wood)
- Ownership and benefit sharing of trees planted as shade cocoa trees not concluded by government and is a discouraging farmers
- Both men and women are aware of restrictions into forest reserves and men are major violators of forest regulations and laws at the community level
- Violations of women with regard to forest regulations/laws include:
  - providing services like carrying sawn lumber, financing charcoal burning, purchasing chain saws for illegal loggers
- Women appear to benefit most from alternative livelihood programmes
- Women act as 'middlemen' in the sale of forest products and resources
  - Illegally hunted game, wood trading
- Community members expect women to be freed on moral grounds when arrested.
- Negligible percentage of women in leadership and decision-making positions in the Forestry Commission.
- Working as forest rangers and guards are thought to be a man's job and dangerous for women.

- All 3 or so forest guards/rangers killed for the past 2 years are all men even though there are few women forest guards/rangers. The worst that happened to a women was severe beating, undressing (no rape mentioned)
- Women are very much involved in the activities of CREMAs as well as men.

Brong Ahafo Region:

Contact person	Position	Contact number	Date
Goaso			
Joseph Bempah	FSD District Manager	0244804624	12-04-2014
Edward Nyamaah	Forester/ Range Supervisor	0243462897	12-04-2014
Kintampo			
Edward Opoku Antwi	FSD District Manager	0244043657	14-04-2014
Samuel Abisgo	DPO-Kintampo South D. A.	0208288577	14-04-2014
Sunyani			
Mariam Awuni	Form Ghana - HR & Development Manager	0266374047	15-04-2014
Isaac Kwaku Abebrese	Dean-School of Natural Resources-University of Energy & Natural Resources	0200863738/ 0277825094	15-04-2014
Dr (Mrs) Mercy A. A. Derkyi	Lecturer (NRM governance, policy and conflict management-Dept. of Forest Science, University of Energy & Natural Resources	0242186155	15-04-2014
Clement Amo Omari	FSD Assistant Regional Manager	0244549463	15-04-2014
Geoffrey Osafo-Osei	OASL-Regional Stool Lands Officer	0243536375	16-04-2014
Daniel Acheampong	OASL-Assistant Regional Officer	0246375788	16-04-2014
Nat Opoku Tandoh	OASL- Accountant	0209153153	16-04-2014
I.K.A Baffor Anane	Department of Community Development -Regional Director	0208162334	16-04-2014

Boadikrom settlement, Ayum Forest Reserve, Goaso Forest District 12-04-2014

No.	Name	Position/Designation	Occupation
1	Abdulai Alhassan	-	Farmer
2	Kobina Mensah	-	Farmer
3	Kwame Matthew	-	Farmer
4	Sika Sanvia	-	Farmer
5	Daniel Boadi	Odikro/ 0205253201	Farmer

Akwaboa No. 2 Community, Ayum Forest Reserve, Goaso Forest District 12-04-2014

No.	Name	Position/Designation	Age	Occupation
1	Yaw Amoah		58	Marketing clerk
2	Abu Samual		29	Farmer
3	Kwasi Basare		61	Farmer
4	Adams Fuseini		21	Student

5	Akwasi Addai		35	Farmer
6	Nii Ogye		50	Farmer
7	Isaac Tetteh		10	Student
8	Kwame Amagro		40	Farmer
9	Dogo Busanga		85	Farmer
10	Nana Beng		75	Farmer
11	Yakubu Adams	Chief's spokesman	40	Farmer
12	Emmanuel Tetteh		60	Farmer
13	Osei Tutu Kontre	Opinion Leader	54	Farmer (0203737205)
14	Nana Akwasi Badu	Chief		Farmer
15	Akwasi Agoda		38	Farmer
16	Mohammed Lamini		34	Farmer
17	S. B. Emini		57	Teacher
18	Osei Prince		24	Student
19	Boateng		20	Student
20	Ali Mohammed		23	Student
21	Kwame owusu		14	Student
1	Charlotte Atawiah		22	Farmer
2	Alberta Adampaka		20	Farmer
3	Mary Forkua		24	Farmer
4	Adams Ramatu		20	Farmer/hairdresser
5	Mary Serwah		32	Farmer
6	Ruth Lamisi		37	Farmer/hairdresser
7	Afia Wusuwah		35	Farmer/hairdresser
8	Grace Mansah		52	Farmer/Trader
9	Akua Cecilia		38	Farmer
10	Comfort Asieduwaa		22	Farmer
11	Naomi Odartey		40	Farmer
12	Yaa Comfort		31	Farmer
13	Gladys Brago		32	Farmer
14	Maame Mali		50	Farmer
15	Rita Kondadu	Queen mother	44	Trader
16	Esther Amadu		23	Farmer
17	Abena Leyoma		30	Farmer
18	Janet Yaye		35	Farmer/Trader

Bosomoa Forest reserve, Kintampo Forest District

Nante Community – 14-04-2014

No.	Name	Position/Designation	Age	Occupation
1	Kofi Asante	-	40	Farmer

2	Kwaku Taapen		28	Farmer
3	Pena Daniel		45	Farmer
4	Idrisu Salemana		25	Farmer
5	Adamu Ibrahim		45	Farmer
6	Abukari Sudisu		25	Farmer
7	Yakubu Atteh		21	Farmer
8	Issaka Adam		20	Driver's mate
9	Alhaji Sofo Alhassan	Imam/CFC chairperson	57	Farmer
10	Atta Kofi	Roman Catechist	50	Farmer
11	Kofi Yamawule		30	Farmer
12	Abubakari Bibioboto		28	Driver
13	Yakubu Isahaku		35	Farmer
14	Abubakari Abdul Rahamadu		28	Farmer
15	Abdul Razak Yaya		20	Student
16	K. Asuman		31	Storekeeper/trader
17	Osei Prince		18	Mason Apprentice
18	Rashid Adoku		19	Carpentry apprentice
19	Kwabena Badu		46	Farmer
20	Ibrahim Nuhu		36	Machine operator
21	Gyan Kwame		32	Carpenter
22	Kwaku Gyamfi		25	Driver
23	Kojo Asante		29	Farmer
24	Kojo Damoah		31	Carpenter
25	Tassil Kwabena		27	Bar owner
26	Adu Amponsah	Youth leader	38	Farmer
27	Yaw Apaw		52	Farmer
28	Hon Cpl Gyiwaa		53	Farmer
1	Helena Anane		46	Trader/business woman
2	Naomi Pokua		45	Farmer
3	Akosua Kesewa		41	Farmer
4	Mary Jato		28	Dressmaker
5	Ramatu Mohammed		39	Waakye seller
6	Salamatu Zawe		30	Dressmaker
7	Akua Agness		22	Trader
8	Saah Florence		22	Farmer
9	Georgina Akolowa		40	Yam seller
10	Zamabu Seidu		45	Trader
11	Margaret Adobea		48	Farmer

12	Comfort Dusie		34	Farmer
13	Asin Forsa		40	Farmer
14	Asanjia Doko		40	Farmer
15	Akua Kandusi		38	Farmer
16	Rahinatu Issaku		30	Farmer
17	Tada Benedicta		22	Student
18	Tukusama Rose		20	Dressmaker
19	Akose Churepo		33	Farmer
20	Komeol Akose		28	Farmer
21	Yaa Appiah		40	Farmer
22	Gyasi Emelia		40	Yam seller
23	Afia Angelina		30	Farmer
24	Afia Gyamea		48	Farmer/Trader/Queen Mother
25	Rafatu Muhammed		38	Trader

Krabonso Dagombaline – Kintampos Forest District 14-04-2014

Forest reserve - Bosome

No.	Name	Age	Occupation
1	Potuo Bilaba	65	Farmer
2	Latif Alhassan	18	Farmer
3	Azizu Alhassan	20	Farmer
4	Yaw Sangi	20	Farmer
5	Mohammed	35	Farmer
6	Abduli	35	Farmer
7	Hadi Adama	20	Farmer
8	Yaw Bawuu	30	Farmer
9	Kari Wagi	23	Farmer
10	Dassaan Isaac	20	Farmer
11	Yaawuloza Mohammed	20	Farmer
12	Felimon Nubolanaa	20	Farmer
13	Kwabena Dassaan	30	Farmer
14	Bawuloma Nubosie	40	Farmer
15	Alahassan Iddrissu	25	Farmer
16	Ibrahim Iddrissu	30	Farmer
17	Zakari Osman	31	Farmer
18	Soribo Alfred	70	Farmer
19	Fusena Iddrissu	80	Farmer
20	Abdulai Tanko	40	Driver
21	Wuudo Ada	55	Farmer

22	Abduliman Ibrahim	56	Farmer
23	Isaah Tayii	20	Farmer
24	Yakubu Idrissu	32	Farmer
25	Abdulai Razak	28	Farmer
26	Amentus Karpiyie	65	Farmer
27	Siedu Ibrahim	39	Farmer
28	Latif Alhassan	42	Farmer
29	Jato Dassaan	45	Farmer
30	Alidu Karih	32	Farmer
31	Nbuli Dassaan	40	Farmer
32	Imoro Mohammed	32	Teacher
33	Isahaku Amadu	25	Farmer
34	Tayii Isaaku	33	Farmer
35	Yamusa Awudu	53	Teacher
36	Bawa Jannaa	75	Farmer
1	Tikayi Bawa	60	Farmer
2	Lukaya Amidu	40	Farmer
3	Afukyetu Abdulai	40	Farmer
4	Naapo Yeyereku	35	Farmer
5	Alociyo Cynthia	41	Farmer
6	Polina Kando	34	Farmer
7	Faalinbon Akosua	42	Farmer
8	Moolesia Mathew	38	Farmer
9	Kambrenya Selina	39	Farmer
10	Ayesetu Yakubu	44	Farmer
11	Tanpo Daana	38	Farmer
12	Akosua Deri	46	Farmer
13	Afua Abdulai	38	Farmer
14	Latif Ibrahim	39	Farmer
15	Alishetu Mohammed	40	Farmer/NPP Women organiser
16	Ama Ankomah	22	Farmer
17	Janet Dorzea	23	Farmer
18	Sakinatu Alidu	30	Farmer
19	Abiba Mohammed	32	Farmer
20	Asana Mohammed	36	Farmer
21	Felicia Akua	45	Farmer
22	Faati Martha	42	Farmer
23	Afua Gyinapo	48	Farmer
24	Adwoa footi	35	Farmer

25	Akosua Juliet	36	Farmer
26	Grace Tan	37	Farmer
27	Akosua Nyobea	42	Farmer
28	Akua Dordaa	44	Farmer
29	Rahina Alhassan	39	Farmer
30	Mariama Tuahilu	50	Farmer
31	Ama Wajuli	60	Farmer
32	Philomena Soo	42	farmer/NDC women organiser

BRONG AHAFO REGION	
Stakeholder	Discussions, activities, issues, concerns, suggestions
District Manager FSD, Goaso 12th April, 2014	-FSD issues permit for commercial removal of NTFPs -Illegal chainsaw people usually come from Mim. Mim youth are used to timber business because of history -Chainsaw operations not widely spread in the Ayum forest -Disposal of confiscated logs/lumber: Committee is formed for the disposal of confiscated logs/lumber and the district manager is not part of the committee Challenges and Concerns -Logistics -Personnel: Average age of forest guards above 50 years -Replacement for retired forest guards is a problem -Need to recruit local people -Lack of vehicle for operations -CFCs were created through NGOs (e.g DANIDA) support and when support stopped CFC activities also collapsed -Some old CFC members have become key informants -Management plans make room for communal rights for NTFPs but this opportunity is being abused. -NTFPs allowed for domestic purposes but permit is required for commercial purposes -Most reserves are without admitted farms and settlements. -Reserves at Sankore are gradually coming under threat. Way forward for SRA distribution Need to form a bigger CFC of all the blocks. Have a pool for funding and the beneficiary communities near the reserve share proceeds as and when funds accrue. (Similar to what Newmont is doing for both North and South Ahafo Mines. Currently Newmont if mining at South Ahafo but communities at North Ahafo also benefit from social responsibility arrangements).
District Manager FSD, Kintampo 14th April, 2014	-2no. forest reserve in the district. (i) Buru FR, not gazette, about 302.25 km^2 and (ii) Bosomoa FR, about 150.50km^2 - The two reserves are covered with plantations, mostly teak and milina trees. -It is a transitional zone, teak was used so that it can resist fire. -There are still patches of degraded areas in the reserves especially the Dagombaline. -Dagombaline village has asked to be given the patches for farming -Soil fertility in the reserve is very good, so most farmers want to farm in the reserve -Some farmers kill the trees by setting fire under and around the tree -Bosomoa has 51 admitted farms. Their boundaries are blocked but RMSC has brought schedule for re-demarcation of admitted farm boundaries

	-Admitted farm sizes can reach up to 50ha or less -Ampoma community is an admitted settlement. Their shrines, cemeteries are all inside the reserve. -Bosomoa FR covers four political districts and has about 12 fringe communities. -The biggest fringe community is Jema, capital of Kintampo South District Royalties -FSD not aware of how DAs use their royalty share from forest revenue -Fringe communities benefit from SRA and not from royalties. DAs and Stools benefit from royalties. -Stumpage fees have been reviewed upwards -Off-reserve communities also benefit from SRA Major activities and challenges -Management of the teak -on-going project – national forest plantation project -Collaborate with DA in tree plantation -Register private plantations – mostly teak growers -Give people permits to operate off-reserve. E.g. grant salvage permits -Need additional forest guards especially for off-reserve areas Key challenges -Farmers destroying trees to have land for farming -indigens wanting land in the FR though they can access land elsewhere just because some settler farmers have access to forest lands -Annual bushfires from floaters/group poachers/group hunters ▪ Floaters come from kintampo township in groups and come with guns, sticks, cutlasses and wild dogs ▪ Contact with the assemblies to make by-laws -Chainsaw operation – illegal logging of rose wood, black wood from off-reserve areas and export to Asia- China and India -Off-reserve: Sometimes, landowners ask FSD, land is not for you, what do you want here? -Community and chief do want contractors operating in off-reserve areas changed to their choices Less known species -Formally rose wood, black wood were all classified under lesser known species. But market in China for such species has put value and attention on them. -These species were used for local charcoal production and were of no significant value -One single axle truck of black wood sells at GHC3,000 -Rose wood export was banned in December 2013 Offences/penalty issues -Stolen logs/lumber when impounded are usually given to registered timber company with valid operating documents after announcements are made for interested firms to respond -Punishment for illegal logging not deterrent enough. E.g. Court fines person GHC200 for logging tree worth GHC1,200 from the forest -Court cases drag on for a long time, increasing cost of adjudication
Samuel Abisgo DPO Kintampo South D.A	Challenges with DA operations -It is a new district, deprived and poor. -Sandwiched between Techiman, Wenchi and Kintampo North districts -Has very limited revenue generation options

14th April, 2014	-Depends mostly on common fund and DDF. -If common funds do not come regularly, DA activities are hindered -Not able to fully fund budget of decentralized bodies e.g. NADMO etc Challenges in the district -Bushfire is a major challenge in the district -Floaters/group hunters from Kintampo do hunting using fire -Access to land for tenant farmers to grow economic trees such as cashew, teak, is a problem Suggestion -Consider sensitization and alternative livelihood for floaters/group hunters (Lessons from World Vision success story from Atebubu may be useful)
University of Energy and Natural Resources, Sunyani Dr. Isaac Kwaku Abebrese (Dean, Natural Resources) Dr. (Mrs) Mercy A. A. Derkyi (Department of Forestry Science) April 15, 2014	Forestry training and plantation development • Have certificate courses in Natural Resources o Certificate in forest ecology o Diploma o Degree- (top-up programmes for diploma holders to upgrade to BSc) • FC can collaborate so that the University develops curricula for technical personnel for the forestry services. • Need support from the FC to train people they will absorb. • Need assistance from FC for release of one or two degraded forest reserve (e.g. Tain II) for training of students in practical forestry activities and to use students to enrich forest. o University has nursery to raise seedlings o University has capacity to go into commercial plantation arrangement ▪ Institutions will like to maintain their integrity and will thus undertake the plantations well. • Programs on gender run at first year. Gender is linked to contemporary issues. • University can handle some forest inventory contracts for FC Collaborative forest management/taungya system ▪ Modified taungya system was largely successful in spite of challenges. ▪ It improved the livelihood of the people. ▪ Benefit sharing was clearly stated – e.g. 25 years ▪ Can there be system of growing food under canopy? ▪ FC should have extension department. ▪ Forests are open resources and people can enter and conflicts are bound to occur ▪ Admitted communities verses fringe communities in Taungya system. Their roles and benefits? REDD+ issues ▪ Communities have immediate needs to meet such as food as against long term benefit from REDD+ ▪ Benefit sharing – the strategy should be made clear to the people and the people should accept it ▪ Create a market for trees. State should serve as a broker like COCOBOD. Right price regime required. ▪ If trees are planted, who buys the carbon and at what price? ▪ Transparent and effective monitoring arrangement required ▪ Need for FC to step up its supervision and monitoring for REDD+ ▪ Conflict resolution mechanism should include traditional system and ADR, which is usually preferred by local people

	▪ Develop more eco-tourism sites which will serve as conservation, using especially GSBAs as ecotourism sites. ▪ Currently, most GSBAs are in the WR and TAs do not benefit ▪ Other TAs enjoy royalties from production forests but TAs with GSBAs do not enjoy any benefit ▪ Chiefs/landowners should benefit from ecosystem service provided by GSBAs / and other protected areas such as game reserves/ national parks ▪ Proposed trees to be planted should be both indigenous and exotic ▪ Has FC done any assessment of the modified taungya to learn lessons for the REDD+? ▪ Collaboration between FC and universities/research institutions needed to tailor activities to suit community needs and to provide ideas/solutions to likely problems/challenges to emerge during implementation ▪ How do you convince people into REDD+ as carbon trading on the international market is going down and cannot be guaranteed Sustainability issues for REDD+ a. Need for exist strategy as part of REDD+ ▪ If the practice ends abruptly, the community people will cut down the trees and continue to farm. ▪ There should be a clear vision to sustain the system b. Integrating project into national agenda. c. REDD+ should not be project driven. It should be part of national agenda. d. REDD+ be issue for all sector related. e. Mainstream the project into national program. f. Ensure strategy should be made part of project from start. g. Learn lessons from failure of previous projects. h. Benefit sharing and carbon market very key
Assistant Regional Manager FSD, Sunyani April 15, 2014	Background -6no. forest districts in BA – Sunyani, Goaso, Dormaa Ahenkro, Bechem, Kintampo, and Atebubu. -Total coverage of FR is 2937 sq km and total BA area is about 39,487 sq km -Each district mapped by a professional forester with at least first degree. Each district supported by 2 assistant district managers. Have district managers attached to the regions -The region is within both HFZ and Transition zone. -Have 9 forest reserves in Goaso district alone. -No forest reserve at Atebubu. Main activity is plantation development off-reserve Main activity -Plantation development and protection activities -Management of FR/off-reserves include exploitation of timber resources in both off and on reserves Forest reserve issues -Some FRs within Dormaa, Bechem, Sunyani and Kintampo districts degraded -FRs in Goaso under threat of degradation -Have earmarked 2 areas for CREMAS (movement of wildlife/elephants from Bediako to Kasapin) Main drivers -Annual fires – Fulani herdsmen are one of the major causes of fire -Over exploitation -Chain saw operations at Sankore areas under Goaso district

	Timber utilisation -For a permit you need a letter of consent from the chiefs/ TAs. -At Sunyani district, it is exploitation of teak for local and for export Major NGOs -FoE, Form Ghana. FC has arranged with Form Ghana to operate commercial plantation in Tain II (teak plantation) for carbon trading. -NGOs providing more forest investment Application for farming in FRs -FSD receives applications from fringe communities for release of portions of degraded FRs for farming. Last 3 years when Zoil tree plantation started, the applications stopped and it started last year when FSD projects started. Challenges -Operational challenges – Timely release of allocations/ funds; operational vehicles/ equipment and tools inadequate -Staff strength – forest guards needed -Promotion and motivation for staff -Chain saw operations at Sankore areas. -Community refusing accommodation for forest guards. -Investment in forestry /timber has long gestation period and requires strong political will. -off-reserve challenge is access to land Suggestions -Massive reforestation/plantation needed. Nation benefitting from plantation projects carried out in the 1970s. -In service training for FSD officials needed to prevent situations where officials sneak out to upgrade themselves. -Orientation on timber needs should be changed. Lesser known species should be researched into and considered.
Regional OASL 16th April, 2014	Land ownership and access -To access land for farming, negotiations start from individual or family level for food or small scale farm projects. For big commercial projects, negotiations start from the paramount chief level. -Have vested lands in the region, which are managed by the LC. E.g. Goaso, Sankore, Kasapin lands. Inventory of vested lands not proper. Chiefs still allocating lands in such areas. -Commercial farm owners get site plan and agreement for 50 years. -Rural parcel demarcation project – enabling farm sizes to be demarcated. But challenge is that correct farm sizes are being made know to chiefs and landowners, which previously was not done by farmers and farmers do not want to be exposed. Farm rent and plantation issues -Lack of site plan for peasant farmers. -Large tracks of land being taken by NGOs for plantation development at the expense of other land uses. Eg. Acquisition of 50,000 acres by Africa Sustainable. Development Plantation for electricity generation using woodfuel between Pru and Sene rivers. Other large land take occurring at Atebubu, Kwame Danso. -Commercial agric NGOs sometimes change land use from agric to residential at off-reserve areas. Challenges -Inadequate staff

	-Lack of data on vested lands -Lack of documentation on farm sizes- farm sizes not known, making farm rent collection difficult Suggestion -Community should be involved in approving large tracks of stool/skin lands being acquired by NGOs through community forum/hearing and publication
Department of Community Development, Sunyani 16th April, 2014	Background -Part of Ministry of Local Government and Rural Development. Part of the 11 decentralised departments of the district assembly. -Have 25 vocational and technical institutions in Ghana. -Regional department is for supervision and monitoring Activities -Community education and sensitization -Mass education – Involved with government interventions. Department involved with education on NHIL, HIVs at community level. -Identify community based income generation groups, women income generating groups for home science extension education. -Involved in community water and sanitation programmes. Identify communities that needs water and sanitation projects. -Identify community priority needs -Carry out extension services. Collaborate with other agencies such as MoFA, MoH; -Recruit field officers for NGOs. -Organize trainer of trainees -Participate in NGO programmes in the region- World Vision, Action Aid, by assisting with community awareness and sensitization. Re-forestation education -Department did education on reforestation programme at Techiman. Organised focus groups, interest groups such as seamstress, market women. Role in REDD+? -Has rich experience in community development issues and can assist FC/FSD with identification of communities for REDD+.

Community consultations

Boadikrom settlement 11/04/2014

Background

- Is a settler community in the Goaso Forest District. A village under Kasapin.
- Mr. Boadi, the founder of the settlement is from Asante Mampong in the Ashanti Region. Came there purposely to acquire land and grow cocoa.
- The settlers are largely caretakers of cocoa farms. Cocoa farm owners are absentee farmers.
- Other tribes apart from Asante are Kussasi, Dagarti, Lobi, Akuapim
- No school in the community. Attend primary school at Akwaboah and JHS at Kasapin.

Cocoa, shade trees, pesticide use, extension services

- There are currently only few shade trees in the cocoa farms and these trees are natural, that is, were not planted by the farmers.

- Alleged that extension services do not often come to the area but when cocoa matures, various agents/buys troop to the area
- Farm owners provide pesticides and the caretakers engage sprayers from nearby settlements to do the spraying
- Have their cocoa farms fringing the forest reserve and therefore take keen interest in controlling any fire within or outside the forest reserve.

Land issues

- Land in the area belongs to the Akwaboa stool lands, which is under the Asantehene
- Land can be accessed for cocoa cultivation through the customary land tenure system, via the Abunu system of shared cropping.
- For food cropping, land can be accessed through the Abusa system for maize, and Abunu for cassava.
- The community claim that there is land scarcity in the area

Issues with forest reserves

- Settlement close to Ayum forest reserve.
- It is a production forest reserve which has been give out as TUC
- Both the forest reserve guards and the timber contractor guards do prevent them from accessing the forest reserves for NTFPs
- They go to the reserves illegally for NTFPs

Fire

- Experienced fire outbreak in the reserve in 1983 and 1993
- Community assist with creation of fire belts
- Community observe measures like no fire hunting

Akwaboah II Community 11/04/2014

Background

Is a settler community in the Goaso Forest District. A village under Kasapin. Forest reserve fringed by community is Ayum forest reserve. Community owns allegiance to the Asantehene. Ethnic groups are Ahafo, Kussasi, Dagarti, Basare, Gruma, Asante, Akuapim, Bono, Krobo

Land tenure, ownership and major crops

- The area is under Akwaboa stool land under Asantehene.
- Cocoa is mostly grown.
- Use patches of land for food crops
- Some farmers have bought the land for farming; others are on Abunu system.
- Normally, indentures are prepared for outright sale of farm or land in the area
- Abunu farmers who get their farms destroyed do not lose their land as in other places such as the Sefwi areas in the Western Region.

Farm support issues and challenges

- Care International helps with provision of cocoa seedlings, and farmer awareness creation
- No access to credit facility
- Do not have easy access to pesticides, e.g. confidol. Chemicals marked not for sale are on the market. Cocoa input shops/ offices have none
- Sometimes obtain pesticides from illegal sources
- Community is of the view that Cocobod should make pesticides marked not for sale available on the open market legally because it is illegally being sold.

Shade vs sunshine cocoa

- Most farms are without shade trees
- Some trees like emire, ofram, sapa help as shade trees
- Logging in farms go on
- Contractors show documents to farmers to indicate that the area has been given to them by FSD as their contract. Compensation for destroyed cocoa trees is always an issue/problem
- If farmers will benefit equally from shade trees, then shade trees will be accepted

- Access to use of trees by farmer is a problem.
- Suggest that government should change policy that all timber trees are vested in the state.
- Suggest that farmers should be allowed to use shade trees local building and roofing

Suggestions for Community afforestation and shade cocoa tree planting

1. Establish community committees
2. Identify cocoa farmers and their lands
3. Community and cocoa farmers should be supported with tree seedlings
4. Seedlings should be provided at the right time, during the rainy season and distributed to farmers
5. Community and farmers should know benefit to be obtained from growing tree
6. Community and farmer should be assisted with land documentation. Cost of site plan is expensive.
7. Develop rules to guide farm after demise of farmer so that when family members want to share cocoa farm, farm will still remain
8. Tenant farmers and land owners should both benefit from trees on farm.

Forest benefits/management issues

- NTFP – community members not allowed free entry into forest to harvest canes, pestles, etc unless permitted by FSD
- The community protects the forest.
- Employment – local people not considered for employment.
- Community alleges that guards connive with people to harvest wood from the forest and this makes or pushes local people to also enter forest illegally to do same
- Recruitment process: FSD district level does interview and but selection of applicants is done in Accra.
- Community suggest that selection of applicants should be done at the district/regional level

- Community members should be empowered with I.D cards to arrest chainsaw operators
- Local people be given some authority from the FSD/ FC to protect the forest

Social Responsibility and community concerns

- Community aware of 5% but they claim that they are not getting their due. They claim that the stool usually benefit more from this.
- Conveyance of logs/lumber through communities poses safety threat to residents and suggest that rules for safety of residents/community from contractor conveyance of logs should be put in place
- Community members should be empowered to arrest illegal chainsaw operators
- The timber contractors operating in the area do not assist them.
- The timber contractors do bulk harvest over a period of time before leaving the forest. Community not made aware when contractor is expected to leave the area or block for another place.

Community: Dagombaline Village Date: 14th June, 2014
Kintampo Forest District
Transition Zone
Forest Reserve: Bosomoa Forest reserve

Access to off-reserve land and challenges

- Community made of largely settler farmers.
- Stool land owners are Ampomahene and Nkoranza paramount chief
- To obtain land for farming, one has to see land owner (mainly family heads) and arrange through customary way
- Land is very scarce for settler farmers in the area as forest reserve has taken a chunk of the land
    - Settler farmers do rent land for annual food crops from landowners at a price or annually or for 2 years depending on type of food crop to be cultivated
    - Landowners do not allow settler farmers to plant cash/economical trees like mango
- Landowners grow or plant cash/economic plants and allow settler farmers to grow annual food crops in the farm in order to take care of the cash/economic plants

Access to forest lands and challenges

- Most settler farmers accessed the forest lands illegally for their farming activities while a few admitted farmers also exit in the area
- FSD allow some settler farmers to farm (annual food crops only) at a degraded area of the reserves which is to be planted with trees.
    - Farmers are allowed to farm at such identified areas for about 3 to 4 years in which time tree canopy may not permit farming activities to continue and farmer is expected to leave
- Because farmers who have access to forest lands do not want to leave the forest lands they do things to stay in the reserve, some of which are
    - intentionally damaging or destroy tree seedlings planted on farm
    - degrading other portions of the reserve so that they can be sent there

Benefits from forest and challenges

- Produce from illegal farms in reserve do well and fetches money for farmers when sold and farmers do not use fertilizers on such farms. Cost of farming in forest reserve much lower than off-reserve
- Obtain trees for roofing/building illegally, i.e. without permit from FSD
- Do illegal hunting because FSD do not allow them to enter and hunt
- No forest guards or CFC in the area

Fire issues

- When fire is observed in the forest, villagers/farmers refuse to take action to control or put out fire because they will be taken as suspects. They prefer to stay aloof for fire to engulf reserve
- Group hunters (commonly referred to as floaters) from Kintampo come and hunt in the reserve and also set fire to aid their hunting.
    - Group hunters are usually armed with cutlasses, sticks, guns and so community do not confront them and they come in cars and with dogs
    - Usually set fire to kill or make animals come out from forest
- There was no recognized fire volunteer group operating in the community during the visit
- Community confirmed that GNFS have come to train fire volunteers in the village before and took photographs of volunteers but because there was no periodic support in terms of provision of cutlasses, boots for volunteers, group was not effective or became non-existent with time.
- Trained fire volunteers were promised ID cards and working gears but this did not materialise
- Fire volunteers and individuals involved in tree plantations make some money from FSD through tree plantation and creation of fire belt

Reforestation/ Tree plantation issues and challenges

- Benefitted from the modified taungya system a lot and want programme to be revived
- Some private companies (e.g. Zoil, Ecoteck) that were used for tree plantation programme in the area in 2012 still owns farmers or labourers in 6 - 8 months wages.
    - Farmers are losing faith or trust in forestry projects because their labour is being taken for granted
    - Farmers claim that this was not so when FSD were directly in charge of reforestation/tree plantation in the area
- FSD making effort to pay Zoil debt to community but there are still outstanding payments of about 4 months to be made
- If forest reserve is re-stocked or replanted without any serious alternative livelihood programme to take illegal farmers or encroachers off the reserve, the forest will be re-attacked as farmers need to survive

Major problems in the area

- Lack of land or farmland for farming
- No sustainable alternative livelihood programme in place
- Off-reserve lands are given in very small sizes, at best 1acre and are expensive and so very difficult to embark on large scale commercial farming.

Suggestions from community

- Want to be allowed to cultivate remaining patches of degraded areas in the reserve
- Alternative livelihood programme is urgent for the community to take them off the reserve
    - E.g. of ALP suggested include animal farming (sheep, goats), soap making for women preferred to pomade making and screen printing

Nante community 14-o4-2014
Kintampo Forest District

Access to land for farming/customary land access/acquisition

- To access or acquire land via customary means, one has to contact the odikro first and then to the Nkoranza Chief. Farmer also has to see the family taking care of the lands and negotiate for use of land as well
- For shared cropping, the Abusa system prevails
- Chief's do not permit tree or economic tree plantations for land obtained through customary means.
- Land owners give land to farmers for food crops and the landowners plant tree crops
- Land can also be rented for cultivation of food crops
- Land can be made available for REDD+ project

Forest reserve issues and benefits

- Patches of degraded areas still exist for rehabilitation
- Individuals from community contacts district officials of FSD and some patches are released to them for farming whiles FSD plants trees in such areas
- Some individuals also illegally enter reserves to farm. Illegal farmers do not attack or assault FSD workers. FSD officers do not destroy illegal farms but cease farmers tools and sent them to office
- Farmers in forest reserves intentionally kill trees to make way for crops to grow properly
- Farmers also use local political leaders to get access to forest reserves for farming
- FSD plans to re-demarcate admitted farm boundaries
- Complaints from community on lack of payment for tree plantation projects by Zoil services and SADA (SADA projects were off-reserves)
- Farm and get proceeds from the forest.
- Get NTFPs for construction of their homes. Usually ride on the owners of admitted farms to enter forests for NTFP
- Community helps protect the forest – cease illegally harvested wood/teak for the FSD/FC – get a share
- Are trained as fire volunteers to protect it and assist with fire belt creation
- Had CFC but it is no longer effective
- Community confirmed benefitting from SRA
    - SRA is received by Unit Committee through the DA. E.g. SRA used for community clinic.

Charcoal business

- Community noted for charcoal making. Obtain wood from both on and off reserve and farmlands for charcoal production
- Women more involved with charcoal production and sale than me
- Charcoal production done on individual or family level, not as cooperatives or groups
- Sold locally by women along the road

Farming and alternative livelihoods

- Men are more involved in farming than women
- Women hire labour for their farming work
- Community suggest
    - Potential for burnt brick business
    - Irrigation farming using Nante stream – According to community is a project that has been in the pipeline for long
    - Animal husbandary
- Confirmed that some women received training in tye and dye, soap making, ointment making but lack of funds have affected progress or use of

Major challenge

- Chieftaincy dispute at the local level – odikro level

<u>Gender Issues</u>

Gender Roles and Responsibilities: Farm Roles

Caretaker farmers, mostly migrants from northern Ghana tend cocoa farms, cultivating food crops as their share of proceeds from farms. Male farmers and their families undertake the responsibilities of managing farms for land owners who are most Chiefs and indigenes.

Whereas men undertake the strenuous tasks of cutting trees and preparing the land for cultivation, women supported by weeding, harvesting cocoa and food crops and transporting them to markets for sale. They also supported the drying of cocoa beans, playing a significant role in the cultivation and processing of cocoa trade.

Women also have the additional responsibility of ensuring sale of food crops and feeding the family with proceeds from food sold.

Gender Access and Control: Land Tenure Systems/Land/Tree Ownership

Land is owned mostly by Chiefs and indigenes in the communities visited. Transactions for land begin with acquiring land from individuals and Chiefs and regularizing ownership or lease from Chiefs.

Farm practices are undertaken by farmers who act as caretakers for land owners. Migrant farmers do not own land but are employed as caretakers of cocoa farms, cultivating large tracts of land for landowners. Most caretakers are men, with women helping to weed farms, carry cocoa after harvesting and cultivating food crops for domestic use.

Indigenes inherit from parents of family relations and there tend to be custodians of family farms. These category of farmers including many women own farms with their spouses. They work for a common goal of sharing benefits equally for their welfare.

Individual settler women farmers also constitute and undertake caretaking roles of planting cocoa trees, tending, harvesting, breaking and drying cocoa beans in a male dominated field. These are either widowed or determined women who to have entrepreneurial spirits to have their own farms.

In some communities it was realised that many women request for land but men lead applications for land. The FSD grants permission to both female and male farmers who cultivate trees, providing opportunity for them to cultivate food crops as their share of benefits.

There's also the absence of formal documentation (Plans) on land acquired for farming with both male and female peasant farmers acquiring land for cropping after presenting customary gifts to the Chiefs or landowners as an informal form of ownership.

Vested lands are however administered by the Lands Commission, which collects rent from tenant farmers. Rents of 10GHC per acre is collected and paid annually. Very few women are able to own lands.

According to the Stool Lands Administration there are various forms of acquiring land for commercial purposes, which involves taking leases of 50 years. Land for commercial agricultural purposes are particularly leased for up to 90 years or more, renewable automatically.

Gender and Benefit Sharing

Farm owners use the "Abusa" system to provide a third of proceeds to caretakers through simple agreements, unofficially institutionalized to avoid conflicts.

Caretakers mostly farm food crops cultivated as their share of tending, weeding and managing cocoa farms for farm owners and do not pay for the lands. In that sense, sharing of benefits is by simple consensus and agreements that have prevented conflict.

Sharing of benefits within married couples does not necessarily involve sharing monies but monies are used to cater for the welfare of families. While this is done, some proceeds are repatriated "home" for housing projects and care of families.

Farm proceeds and shared benefits are used for daily stipend ("chopmoney"), children's education, construction of shelter and healthcare. Some benefits are sent to families in original homes, such as parents, grandparents and siblings.

Individual women caretakers gain proceeds from the farms cared for by themselves, using proceeds to pay children's school fees and general welfare.

Children in Boadikrom indicated that parents could not afford to pay fees or buy school supplies during the lean season when money is scarce. They indicate that parent adopt all kinds of coping strategies such as hunting in the forest, which is illegal. Children want their parents provided with alternative sources of livelihood, such as tailoring, to prevent dependence on farming which contribute to degrading of forests.

Gender Mainstreaming in Policies, Laws and Regulations

Both female and male farmers were very conversant with the laws and regulations governing entry into forest reserves. They knew of prohibitions and the consequences of encroachment and illegal entry into reserves. They acknowledged that the FSD and other organizations had sensitized and educated them on the rules and regulations but they had no alternatives.

Farmers were also aware of the ownership of trees, whether in the off-reserves or on-reserves and were careful not to violate them. There were aware of the prohibitions of burning charcoal and hunting.

Communities request for degraded lands from forest reserves from the FSD for farming.

Gender and Institutional Forest Management:

Women's potential in providing protective services in forest reserve has gone fundamentally untapped due to perceptions of fear for their safety, marital and familial reasons and ethnocentric reasons. As a result very few women are found in organizations that work in the forestry sectors and institutions.

Only about 30% of students at the University of Energy and Natural Resources (UEN) are females undertaking courses outside forestry. The area is supposed to be male-dominated.

Summary of Gender Issues Arising

- Significantly most men and women also shared benefits in the "Abunu" system with their spouses, sharing proceeds equally among themselves. Many individual women however owned their farms through the caretaker system and had sole ownership of the proceeds from farms in addition to sharing with husbands.

- According to the Brong Ahafo Regional Stool Lands Administrator, Queen mothers who nominate chiefs to the stools do not play any significant roles in administration of stool lands, especially those of providing land to farmers for lease. This is a result of the patriarchal systems of traditional norms and customs.

- Significantly too, Queen mothers do not directly receive royalties from land sales as even the Constitution does not make provision for them. This affects benefit sharing and breeds discontent among the female farmers.

- Serious issues of benefit sharing in the cultivation of the trees have generated loss of interest among farmers to manage and tend trees. As farmers do not benefit economically from trees they cultivate.

- New settler farmers could not access enough land for farming. Acquisition of huge tracts of land by private companies to develop electricity and cultivation of commercial trees pose a threat to farming communities who might need to be resettled. Women are particularly going to be affected by these threats as they originally do not own lands due to cultural, inheritance and traditional customs and norms.

- In the Brong Ahafo region, less than 20% of farmers who pay rent are women, an indication of fewer women accessing lands for farming on their own. Most women in the region either access lands belonging to their husbands or family lands for farming mostly food crops.

- The soil was also degraded and not very suitable for vegetable cultivation. The land has been overtaken by weeds (the "danku" weed in particular) and women farmers could not afford weedicides. These made it difficult for farmers to recoup labour costs and to gain enough

- Issues of perceived cheating by timber contractors and officials have eroded confidence in nurturing of commercial trees on farms, resulting in some farmers burning them. Farmers have not been paid by organizations using their services to plant trees.

- Social Responsibility funds do not reach the local people, with chiefs particularly taking all of royalties paid to them

- Some communities share resentment against timber contractors for destroying their cocoa and food crops while others blame government officials with conniving with encroachers and illegal loggers.

- Farmers prefer acquiring farm lands to planting trees as a result of problems of benefit sharing and would go at length to fell trees presumed to be threats to their farms.

- Only males turned up for meetings indicated they were not aware females were to be present, an indication of absence of females in issues concerning decision-making, land tenure, community conversations and dialogue. Women also stayed away because they were not invited or considered men as spokespeople or whose voices had to be considered. This is an accepted patriarchal norm of role of men

- Men didn't consider women's roles of planting, weeding cropping of trees and others in farming as "work". "It's a difficult task so they can't do it," they intoned, confirming consideration of women's work as mainly reproductive and unproductive. Men weeded while women planted the crops.

- Women offered labour on other people's farms to cater for themselves and their children, mostly healthcare and educational needs. They claim they are mostly not aware how men utilize their proceeds from farming. "They keep them in their pockets, or hide them somewhere.

- Whereas migrant farmers, both males and females, owned individual farms, farmers in the Brong Ahafo region were mainly caretakers of farms belonging to absentee farmers or indigenous landowners.

- There is still dependency on husbands for farming and acquisition of farm contracts and control of proceeds by them. Many financial problems emanated from lack of transparency in spouses' disclosure of proceeds to each other. Men 'hid' their gains while women used their proceeds for family care, women intimated. Men said the same.

- The same issues of benefit sharing between spouses and individual farmers existed in both areas, with differences in tribe and ethnicity dictating issues of benefit sharing. However, there is less conflict among spouses as to sharing of benefits as both play the role of caretaker farmers and work equally on the farms.

- Decision of benefit sharing, for women working together with their husbands, depended on the men choice of providing some of the benefits to them. Husbands decided to give some profits to their wives or not. As a result "wiser" women decided to cultivate their own farms to avoid dependency on their husbands.

- Most women intimated that recognition was given to their contributions to managing farms for farm owners and they benefited reasonably from proceeds, albeit how small. There were however few cases of domestic violence resulting from sharing of proceeds among spouses.

    - Conforming to traditional customs and norms encouraged northern women to prefer peaceful settlement of issues of benefit sharing, thereby minimizing conflicts and divorce.

    - Significantly many individual women had made much progress in their individual work as caretakers of peoples' farms

    - Women exhibited entrepreneurial skills in charcoal production, competing almost equally with their male counterparts in the destruction of forest lands.

    - Women lack credit or alternative sources of livelihood leading sole dependence on farming. However, a significant minority undertake other jobs, such as petty trading, hairdressing, dressmaking, etc.

Community Suggestions and Demands

- Farmers want more land for cultivation of food crops as tree planting/forest has taken over their lands.

- Access to fertilizer and weedicides to regenerate the farmlands and improve farm yields
- Access to credit for women in particularly, for to enable them hire farm labour.
- Women proposed access to credit for trading or micro-enterprise - soap making, pito brewing - to stop felling trees for firewood or charcoal production
- REDD+ projects should consider other tree species, economic trees.
- Need for a regulatory marketing body for bio-carbon /tree projects to regularize benefit sharing to guarantee stable price for farmers

ANNEX 8: GRIEVANCE AND RESOLUTION FORM

-GRIEVANCE AND RESOLUTION FORM FOR RESETTLEMENT AND COMPENSATION-

Name (Filer of Complaint): ……
ID Number (PAPs ID number): ……
Contact Information (house number/ mobile phone) :……
Nature of Grievance or Complaint: ……

Date	Individuals Contacted	Summary of Discussion
……	……	……

Signature…… Date: ……
Signed (Filer of Complaint): ……
Name of Person Filing Complaint (if different from Filer): ……
Position or Relationship to Filer: ……

Review/Resolution
Date of Conciliation Session: ……
Was Filer 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
If agreement was reached, detail the agreement below:
If agreement was not reached, specify the points of disagreement below:
……
……

Signed (Conciliator): …… Signed (Filer): ……

Signed: ……
(Independent Observer)

Date: ……