

**PROJECT CONCEPT NOTE FOR USE OF
ADDITIONAL RESOURCES FROM THE FOREST INVESTMENT PROGRAM**

CONCEPT NOTE

Reducing Degradation and Deforestation due to Mining in
Forest Landscapes

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LIST OF ABBREVIATIONS

- AfDB – African Development Bank
BARADEP – Bamboo and Rattan Development Program
CIF - Climate Investment Fund
COCOBOD – Ghana Cocoa Board
CREMA - Community Resource Management Area
CRIG - Cocoa Research Institute of Ghana
CSO – Civil Society Organization
DA – District Assembly
DGM - Dedicated Grant Mechanism
ELCIR+ - Engaging Local Communities in REDD PLus
ENFALP - Enhancing Natural Forests and Agro-forest landscape Project
EPA - Environmental Protection Agency
ESIA - Environmental and Social Impact Assessment
ESMP - Environmental and Social Management Plan
ESMF - Environmental and Social Management Framework
ER-PIN -Emission Reduction- Project Identification Note
FC - Forestry Commission
FCPF - Forest Carbon Partnership Facility
FIP - Forest Investment Program
FORIG - Forest Research Institute of Ghana
FR – Forest Reserve
GFIP - Ghana Forest Investment Program
GHG - Green House Gases
GSGDA – Ghana Shared Growth Development Agenda
HFZ - High Forest Zone
LC – Lands Commission
MC – Minerals Commission
M&E - Monitoring and Evaluation
MDB - Multilateral Development Bank
MESTI - Ministry of Environment, Science, Technology and Innovation
MLNR - Ministry of Lands and Natural Resources
MoFA - Ministry of Food & Agriculture
MoF - Ministry of Finance
NREG – Natural Resources and Environmental Governance Programme
NDPC – National Development Planning Commission
PF – Process Framework
PMP – Pest Management Plan
PMU - Project Management Unit
PPMED – Policy Planning Monitoring and Evaluation

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ADDITIONAL RESOURCES FROM THE FOREST INVESTMENT PROGRAM**
March 16, 2015

FOREST INVESTMENT PROGRAM		
Concept Note		
Country/Region:	Ghana	CIF Project ID#:
Program/Project Title:	Reducing Degradation and Deforestation due to Mining in Forest Landscapes	
Date of Endorsement of the Investment Plan:	Ghana's FIP Investment Plan was endorsed by the Sub-Committee in November 2012.	
Funding Request (in million USD equivalent):	<i>Grant:</i> \$10 million	<i>Non-Grant:</i> N/A
Implementing MDB(s):	World Bank	<input checked="" type="checkbox"/> Public sector arm <input type="checkbox"/> Private sector arm
Executing Agency:	Ministry of Lands and Natural Resources, Ghana	In collaboration with Forestry Commission, Minerals Commission, private sector interests, and Communities
MDB Focal Point and Project/Program Task Team Leader (TTL):	<i>Headquarters- Focal Point:</i> Gerhard Dieterle	<i>TTL:</i> Tim Brown / Martin Fodor

1. Program/Project Description

1.1 Background on Ghana FIP Program

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

The FIP investments are aligned with national policies and priority development plans. Ghana's Shared Growth and Development Agenda” (GSGDA) supports “Accelerated Agricultural Modernization and Sustainable Natural Resources Management.” The GSGDA emphasizes improving cross-sectoral environmental management and reducing emissions from deforestation and forest degradation, as a contribution to the country’s climate change agenda. The FIP Program also builds on the GoG’s efforts to accelerate growth in the agriculture sector by transforming the

capacities of smallholder producers and processors, particularly women, and help them take advantage of larger scales and market opportunities.

Ghana FIP Program: <i>Aiming to reduce GHG emissions from deforestation and forest degradation, while reducing poverty and conserving biodiversity</i>		
IN FORESTED LANDSCAPE CORRIDORS	AGRIC & COCOA LANDSCAPES (Off Reserve, Outside Corridors)	ON & OFF FOREST RESERVES
World Bank: Project 1 Enhancing Natural Forests and Agroforest Landscapes	AfDB: Project 2 Engaging Local Communities in REDD+	IFC: Project 3 Building Private Sector Engagement in REDD+
FIP Dedicated Grant Mechanism for Local Communities: Working with Communities, CBOs, NGOs, Cocoa Agents on outreach, access, participation, equity		

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

1.2 Objective of Activities for Additional Financing and Expected Outcomes

The additional financing from FIP is proposed to augment existing FIP investments to address small scale mining issues in forest and cocoa landscapes in the Western and Eastern Regions. The Additional Financing activities will aim to address small scale mining as a threat to forest and cocoa landscapes, to engage communities in developing solutions, and to expand related community level interventions to address biodiversity and other issues critical to achievement of the FIP objectives. A key focus of the activity is to contribute to the reclamation of degraded mined out areas in forests thereby reducing deforestation and degradation whiles reducing emissions, enhancing carbon stocks and biodiversity conservation for the benefit of rural communities.

This would strongly complement the current multi-sectoral Government Programs aiming at preventing the degradation from unregulated small scale mining in the first place. These programs are broad ranged, and include (i) increasing law enforcement against illegal mining activities (galamsey) including the establishment of the Presidential Task Force; (ii) pursuing regulatory reform to encourage galamsey operators to legalize their operations and bring them under a regulatory framework as formal small scale operators; (iii) providing technical assistance to improve efficiency and reduce the impacts of small scale mining; and (iv) creating alternative livelihoods in the mining areas.

The Additional Financing will therefore contribute to the reclamation of degraded, mined-out areas through community engagement, reforestation and development of economically productive activities.

The outcomes/impacts expected from the FIP financed activities are complementary to the Ghana Forest Investment Plan and include:

- Regulatory environment to enhance recovery of mined out areas by operators improved
- Models and techniques for recovery of degraded mined out areas in forest landscapes developed and introduced
- Climate smart agriculture in mined out areas promoted
- Reduction in emissions from forest and environmental degradation caused by mining
- Improved livelihood opportunities and poverty reduction in mining areas through increased productivity of cocoa and food crops
- Increased area of mined out forest landscapes reclaimed
- Increased area of commercial plantations in mined out areas

The Project will be implemented in the Western and Eastern Regions of Ghana which are major mining areas in the country. These areas lie within the High forest zone of the country and studies commission during the preparation of the Ghana Forest Investment Plan indicate that these areas are among those with the highest potential for carbon sequestration and emission reduction. This will be a public sector project that will work closely with the private sector engaged in mining activities and nearby communities.

1.3 Description of the Problem

Surface mining is a prevalent means of mineral exploitation in Ghana but has serious environmental consequences especially as a driver of deforestation and forest degradation.

The environmental problems are more pronounced when the operations are illegal. This type of mining is predominant in the forest and cocoa agroforest areas in the country, especially in remote rural communities with fewer economic options. This includes both artisanal mining which involve the use of rudimentary implements as well as the more sophisticated mining operating at a relatively low level of production with limited capital investment. Small-scale surface mining is used to mine a number of minerals in Ghana, the main one being gold which makes up about 90% of production.

Illegal small scale surface mining (referred to as *galamsey*) in cocoa producing areas in Ghana is perceived as a major threat by a wide range of stakeholders. The mining sector is an economically important activity, but also has serious environmental consequences if not properly managed and potentially can conflict with the community livelihoods, particularly cocoa production. Illegal small scale mining activity is particularly associated with gold mining, and is usually independent of larger, registered, and regulated mining companies. Individual small scale mining activities, , entail digging pits and tunnels or creating sluices in small areas using small scale equipment by hand. Although each individual operates on a small scale, many hundreds or thousands of small scale miners converging on an area can lead to a much larger area of impact. In this way, *galamsey* creates environmental damage to landscapes and ecosystems and pollution that affects water supplies even in downstream areas. In cocoa producing areas, deforestation and uprooting of cocoa trees is a major impact on both livelihoods and the environment, including a

source of emissions from land use change and forestry. In many cocoa producing areas, *galamsey* directly competes with cocoa for land and labor.¹ The 1st Meeting of the Ghana National Cocoa Platform held in October 2013, and the 1st Cocoa Sector Scenario Planning Workshop held in May 2014 both identified *galamsey* as a major threat to the cocoa sector.

Small scale mining is a multi-dimensional, cross sectoral issue that poses threats to the cocoa sector and cocoa producing communities and landscapes, as well as to the natural forest landscapes. Small scale mining, as it grows or continues unchecked, also could undermine the achievements expected under the existing FIP-financed activities under FIP ELCIR and FIP ENFAL, which focus on engagement with local communities to address drivers of deforestation associated with agricultural practices (and policy driven incentives, which are also being tackled). For these reasons, addressing small scale mining is very much aligned with the aims and activities of the existing FIP financed project interventions in Ghana's cocoa and forest landscapes of the high forest zone.

Mining is an important driver of deforestation, especially in the High Forest Zone and the Eastern Region. Ghana's ER-PIN (2014) estimates that mineral exploitation and mining contributes 5 percent as a driver of deforestation, but notes that illegal gold mining activities have increased significantly the past several years, especially in the HFZ. Tetteh E N (2010) in a study considered surface mining as the greatest agent of land degradation and destruction, affecting about 13% of the total forested land in Ghana and resulting in excavations to depths of up to 3m. Emissions from deforestation and from other vegetation removals due to surface mining is estimated about ---- metric tons. In recent years observations suggest that mining as a driver of deforestation is an increasingly important threat to forests, possibly surpassing wood harvesting and population and development pressures. Physical destruction caused by illegal surface mining has put some forest reserves in Western and Eastern Regions in deplorable state reducing their conditions from closed to open forests. Water bodies predominantly used in illegal mining have been rendered undrinkable and their courses diverted by these illegal activities. Besides aiding increased emissions and destruction of water bodies, most surface mining destroys the agricultural base thus exacerbates rural poverty.

Currently, Ghana's Environmental Protection Act² requires a licensed operator to produce environmental impact assessment for the activities, which must demonstrate how the mining activities has been planned in an environmentally sensitive manner, and that appropriate mitigation measures and safeguards have been integrated into the design to protect the environment. This should be accompanied by a quality reclamation plan which should specify among others how topsoil will be preserved, slopes will be stabilized and restored, progressive reclamation will be carried out, and how re-vegetation will be effected. The concession holder will be expected to post a pre-mining financial assurance or security in the form of cash, letters of credit, surety bonds or trust fund to cover the cost of environmental damage. This is what is used to reclaim the mined site in case of default and where the community or regulatory authority is satisfied that reclamation

¹ See: <http://graphic.com.gh/news/general-news/32085-ashanti-region-farmers-laud-govt-for-increasing-cocoa-price.html> and Impact of illegal small scale mining (Galamsey) on cocoa production in Atiwa district of Ghana (in the International Journal of Advanced Agricultural Research, IJAAR 2 (2014) 89-99) by Dennis Owusu Boateng*, Francis Nana Yaw Codjoe and Johnson Ofori

² Environmental Protection Agency Act (Act 490) of 1994 and the Environmental Assessment Regulation LI 1652 of 1999

has been effective, a closure certificate is issued, allowing refund of whatever amount was awarded for reclamation.

Although a number research papers have been written on restoration after a piece of land has been mined, not much detail is provided on the actual processes involved for surface mining.

2. Alignment with Country Investment Plan

The proposed additional financing is aligned with the Ghana's FIP Investment Program (2012) and builds on its planned implementation approaches and target areas. The proposed additional financing will expand beyond the currently financed core set of FIP activities to help address additional / emerging drivers of deforestation, specifically targeting small scale mining. The activities will fit into the existing FIP investments by using the same implementation structures, community engagement approaches, land use planning and management processes, and outreach and communication tools.

This proposed activity will complement the FIP investment and its focus on climate change mitigation, GHG abatement, biodiversity conservation and poverty reduction. Through the project, mined out areas which have lost carbon sequestration potential will be rehabilitated to serve as carbon sinks to increase ecosystem resilience to climate change. Proposed activities in illegally mined forest landscapes (forest reserves and off reserve areas) will protect existing forests from further encroachment and degradation due to the presence of the project and enforcement of regulations thereby reducing emissions.

The proposed reclamation and rehabilitation of mining areas will encourage plantation development and climate smart agriculture which will enhance carbon sequestration and provide lands for communities to put to use lessons learnt from the implementation of the GFIP. In the on reserve areas, the option of natural re-generation, enrichment planting and plantation development will be explored in the restoration process to achieve maximum mitigation potential. During the preparation of GFIP, some forest reserves were identified as severely degraded by illegal mining activities. Most of these reserves though close to the GFIP sites were not included because they needed special attention in their total re-vegetation of the degraded portions. A few however like Krokosua Hills and Fure River FR were added for enrichment planting and securing internal boundaries. Reclamation of degraded portions of these reserves which includes Nueng North, Nueng South, Draw River, Bonsa Ben, Upper Wassaw forest reserves under the proposed project will contribute to enhancement of carbon and also emission reduction in general.

Complementary to the legal reforms in the GFIP, the regulatory framework under the proposed project will require mining companies and individuals to restore and rehabilitate mined out areas thereby enhancing carbon sequestration potential. Policy reforms on tree tenure and benefit sharing under the GFIP would encourage mining companies and individuals to actively engage in restoration and rehabilitation of degraded mined out areas. The proposed project will also pilot test improved and stronger enforcement approaches, as discussed in later sections.

Biodiversity conservation is an important element of Ghana's FIP program. The proposed project will re-vegetate areas that have lost vegetation cover as well as biodiversity. Interventions from the proposed project will in the long term recover flora and fauna improving ecosystem services and climate resilience.

2.1 Complementing the FIP Investment Plan and Addressing Additional Drivers of Deforestation

The proposed project will provide the opportunity to expand planned intervention under the GFIP. Key among these planned interventions are:

- Policy and legislation framework on tree tenure, carbon rights and benefit sharing.
- Climate Smart Agricultural and Cocoa Practices.
- Concept of Community Resources Management Area
- Mixed Species Plantation Development

Policy and Legislation Framework. As part of the World Bank coordinated project under the GFIP “Enhancing Natural Forests and Agroforest Landscapes (ENFAL), the Ministry of Lands and Natural Resources will develop the policy and legal framework on tree tenure, benefit sharing and carbon rights. The existing tree tenure regime and rights to benefits from naturally growing, especially commercial trees on farms have exacerbated the loss of trees on farms and forests in the agricultural landscape. The current benefit sharing regime on trees, enshrined in Ghanaian Constitution, posits benefit sharing arrangements under which stakeholders such as land owners, farmers and tenants may feel that they are not getting a fair share of the benefits accruing from trees harvest. This is a major disincentive in the off-reserve areas but also influence perceptions and attitudes towards trees and forests within reserves. The focus of interventions under the policy framework seeks to provide incentives for communities or individuals who nurture naturally occurring trees and also strengthen the ownership of planted trees. The intervention will be piloted in the Western and Eastern Regions. The proposed project which will be implemented in the Western and Eastern Regions will provide the opportunity to expand the policy and legislation on tree tenure and benefit sharing.

Climate Smart Agriculture and Cocoa Practices. Climate smart agriculture refers to sustainable agricultural practices and activities that can potentially benefit adaptation and mitigation, as well as development and food security issues. Agriculture is considered to be climate smart if sustainably increases productivity, increases resilience (adaptation) to climate change, removes/reduces greenhouse gases (mitigation), and/or enhances national food security and development. The proposed project will restore and rehabilitate mined out areas. These off reserves areas will provide an opportunity to expand the concept of Climate Smart Agriculture and Cocoa practices which is one of the innovative approaches under the GFIP. Under the African Development Bank coordinated project of the GFIP, Crop Research Institute of Ghana, Soil Research Institute and Cocoa Research Institute of Ghana have been allocated funds to undertake research to come up with best practices in Climate Smart and Agriculture and Cocoa production. Results from these researches will be implemented under the proposed project.

Community Resource Management Area (CREMA). In line with the Forest and Wildlife Management Policy of Ghana, the GFIP is piloting the CREMA concept which is a way of

involving local communities in resource management. The aim of the CREMA is to organize communities' members to pull natural resources together to manage as a group for the common good. The proposed project will explore the option of expanding the CREMA concept into interventions on the reclaimed mined out areas.

Mixed Species Plantation Development. Paramount to the GFIP is creating the enabling environment for large scale private plantation development. In line with this goal, the forestry commission is developing model plantation to demonstrate the feasibility of mixed plantation development (Local and Indigenous species). Successes from this intervention will be disseminated to all stakeholders and it is expected that these models will be adopted by mining companies or individuals involved in reclamation exercises to promote biodiversity conservation.

Specific Areas of Investment and Intervention. The proposed project seeks to reclaim forest lands degraded through mining and convert them to smart agricultural lands to enhance carbon sequestration and provide lands for communities to put to test lessons learned from GFIP implementation. There are several key areas where interventions in mining activities will directly complement and build on the environmental and livelihood aims of the FIP, and the economic interests of the cocoa sector actors. The following activities can be built into existing project activities and implementation structures set up under the FIP ENFAL Project (with World Bank as partner agency). It is crucial to address different sources of deforestation in order to assure that gains associated with reducing emissions linked to cocoa are not undermined by small scale mining activities.

- **Mapping and Prioritization of Affected Areas.** Conduct a rapid assessment to map out left over mined-out areas in the forest landscapes (forest reserves and off reserve areas) of Western and Eastern Regions for further review and segregation according to ownership, legal status and reclamation cost effectiveness. This will allow the planned recovery of mined out areas to be done under a conducive atmosphere.
- **Map and Characterize Mining Degradation in Cocoa Landscapes.** Identify and map areas that have been degraded by *galamsey* (beginning in areas where cocoa engagements are strongest). Work with farmer groups, licensed buyer companies and civil society organizations to identify areas degraded by mining that threaten or undermine the value of cocoa producing areas. Identify appropriate remediation options, which may include planting of timber trees, agroforestry trees, cocoa trees, or other land uses. Work with FORIG/CRIG to carry out pilot tests and demonstrations to test the effectiveness of different restoration options, with community engagement.
- **Testing of Rehabilitation Approaches and Sequencing of Interventions.** The project will seek to examine and document various reclamation methods which will allow a faster and better recovery of degraded forest landscapes. Smart agricultural practices to promote carbon enhancement in off reserve areas and restore degraded lands will also be pursued. While these activities are underway, policy review to improve the regulatory framework to limit illegal surface mining and create a conducive environment for operators recover mined out areas would be pursued. An early phase of project planning will consider the appropriate phasing of interventions. Rehabilitation activities may make sense in some areas where communities are engaged and demand is high. These activities will also provide useful lessons as pilot tests and demonstration activities. However, there should

be an equal or greater focus on reducing the level and rate of land conversion before pursuing reclamation activities on a wide scale.

- **The proposed project will also pilot test improved and stronger enforcement approaches.** This may involve improved training for field agents, training and awareness raising for law court officials and local government officials. Improvements in legal instruments and guidance to enforcement agents operating in the field will be needed. Stepped up law enforcement efforts need to be linked to better communication of the rights and responsibilities of miners (both small and large), and better engagement and information campaigns with communities, so that they understand the health and environmental consequences of the illegal mining activities for land and water pollution. Enforcement and awareness activities will also need to be coupled with community based land use planning and monitoring that will allow communities to exercise control at the local level. Local landowners and land users will need to accept a greater level of responsibility for land care and management. Communities can play a role in aiding or informing law enforcement officials of specific acts of environmental degradation.
- **Productive Species for Rehabilitation.** Rehabilitation of these mine sites can be accomplished through establishing plantations of economic species, including bamboo, and engagement of communities in economically productive activities and investments. Bamboo and fast growing plantation species are particularly attractive because of the short rotation and quick production of tangible benefits for communities and households, plus create an economically productive activity that would reduce the incentive (and increase community resistance) to re-open mining sites in the future. Bamboo and fast growing species would also be beneficial for use in rehabilitating degraded areas along the degraded riverbanks, in terms of stabilizing soil and preventing further erosion and run off. The Bamboo and Rattan Development Programme (BARADEP) is a government initiative under the Ministry of Lands and Natural Resources MLNR that has been involved in piloting the use of bamboo in degraded mining areas – experiences gained under BARADEP will be directly applicable to the Project activities.
- **Engage with Local Land Use Planning Processes.** Work with CREMAs and other landscape-based local institutions on land-use planning. Actively build mapping, zoning and community engagement on mining activities into ongoing land-use planning and management activities, through CREMAs, with cocoa farmer user groups, and engaging district level governance structures. Use these processes to engage communities to consider land use priorities, community level sanctions, and needed assistance from higher level authorities. Consider needed land rehabilitation activities and prioritize these in local land use plans.
- **Leveraging Communication Platforms and Community Engagement.** Building on the existing set of FIP investments (AfDB ELCIR and WB ENFAL), this additional investment will also leverage community-level delivery systems being developed and deployed, as well as the extensive communications and outreach efforts being put in place, particularly under ENFAL. Through these means the additional investment can reach out to communities in cocoa landscapes (and beyond) to inform and encourage adoption of a

wider set of ground level interventions. Practical, economically successful farm level interventions will also be replicated beyond the original target zone (corridor) of the FIP ENFAL and ELCIR efforts to include a wider set of cocoa landscapes as envisioned in the Cocoa Landscapes Emissions Reduction Program, now under development for prospective results based financing under the FCPF Carbon Fund. This ER Program aims to scale up action across the cocoa landscape in the High Forest Zone and will rely on community organization and communications campaigns, among others. The existing communication channels will also be utilized for reaching out to the identified target groups with messages about *galamsey* and resulting environmental damage and with information on recommended mitigating practices.

3. Readiness and Capacity to Implement

The Government has shown its commitment in tackling issues with regards to the Environment and Natural Resources by constituting the Environment and Natural Resources Advisory Council which is seated at the Office of the President and Chaired by the Vice President of the Country. Key among the achievements to show the commitment of the Council is its decision to upgrade the status of Atewa Hills Forest Reserve to a National Park³ to give it the maximum protection from the menace of illegal mining.

3.1 Institutional and Technical Capacity

To ensure cross sectorial coordination in resolving crosscutting issues affecting the Natural Resources and Environment (NRE) sector, the NRE Sector working Group born out of the Natural Resources and Environmental Governance Programme has spearheaded the implementation of most environment and natural resources related projects since 2010. The NRE Sector Group consist of the Government, Development Partners, MDBs, Private Sector, Traditional Authority, Civil Society etc.

Under the existing set of Ghana FIP operations, the Government has set up the institutional arrangements for successful implementation. The Government has also demonstrated its commitment to reducing deforestation and degradation by establishing the current set of laws and policy statements and engaging in processes to improve and refine these. These arrangements demonstrate the GoG's readiness to handle successfully this incremental financing, which will pass through the same implementation systems, described further here. The current Project Implementation arrangement of the GFIP will be used to push forward the agenda of this new program and further co-opt officers from all relative institution to implement the program.

- For coordination of policy, resources and priorities, the proposed FIP implementation arrangement will be integrated with the existing **Natural Resources and Environmental Governance Technical Coordination Committee + (NREG TCC+)**, established in 2010 to facilitate the implementation of all natural resources and environment donor funded

³ Announcement made by Ms Barbara Asamoah, Deputy Minister of Lands and Natural Resources, at the launch of “Living water from the mountain-Protecting Atewa Water Resources” project on November 30, 2014.

programs.⁴ The TCC+ is also responsible for guiding Ghana's REDD+ agenda and includes representatives of key MDAs, plus the private sector, civil society and traditional authorities. For wider sharing and stakeholder engagement, the TCC+ can invite community-based organizations, women's groups, research institutions, etc.

- The **Ministry of Lands and Natural Resources** (MLNR) will be the lead Implementing Agency responsible for overall management, coordination and project reporting. MLNR has responsibility for policy and legislation formulation and for monitoring and evaluation for the forestry and natural resources sectors. The Ministry has a dedicated team of technical staff responsible for implementation of the on-going FIP program and supporting the New Forest and Wildlife Policy and the Forest Development Master Plan.
- The existing Forest Investment **Program Management Unit** (PMU) in the MLNR will coordinate the project under the Technical Director (Forestry) of MLNR. The FIP Management Unit in MLNR consists of a Project Coordinator (at Senior Director level), a Project Manager, a Project M&E unit, headed by the Director, Policy, Planning, Monitoring and Evaluation Division (PPMED), a Procurement Officer, a Planning/ Desk Officer FIP, a Financial Controller, and a Project Accountant. PMU staff resources can be augmented to ensure the successful implementation of this activity.
- A broader **Project Coordination Unit** will include the PMU and dedicated project Focal Points from other key involved agencies. These will likely include the Forestry Commission, the Minerals Commission, the Environmental Protection Agency, the Chamber of Mines, and others as needed for mapping, monitoring, field trials, etc.

The MLNR also has the administrative systems and procedures in place to handle monitoring and evaluation needs, financial management, and procurement as well as safeguard requirements – to a standard accepted by the AfDB and World Bank. Under a national framework reporting to the National Development Planning Commission (NDPC), each sectoral ministry, including MLNR, is responsible for sector M&E. MLNR is also responsible for ensuring that its associated agencies, including the Forestry Commission and Minerals Commission, operate and report within this M&E framework. The overall financial management responsibility throughout implementation will be handled by the Financial Controller at the MLNR. The Financial Controller of MLNR, supported by the Project Accountant would be responsible for ensuring compliance with financial covenants such as submitting regular reports, maintaining internal controls over project expenditure and engaging external auditors.

3.2 Supportive Policy Environment

The Government of Ghana (GoG) recognizes both the growing costs of natural resource degradation and the developmental threat of climate change. 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

⁴ The Technical Coordinating Committee (TCC), established in 2007 by GoG and Development Partners, was expanded (to TCC+) in 2010 to oversee the NREG reform program. The TTC+ is composed by Chief Director, MoF (Chair); Chief Director, MLNR (co-chair); Technical Directors for Forestry (MLNR), Mines (MLNR), and Environment (MESTI); Chief Executives of the Forestry Commission, the Minerals Commission, and EPA; Representatives include NREG Coordinator (MoF); NREG Policy Focal persons from MLNR, MC, MESTI, EPA; Representatives of the NDPC, MOFA, Ministry of Energy, Lands Commission; and Representatives of the Private sector, Civil Society, Forest Forum, Research Institutions and Traditional Authorities.

a comprehensive National Climate Change Policy (2012), which aims to build a climate resilient economy while achieving sustainable development. The GSGDA notes that the key forest and natural resource management challenges are to: (i) improve the enabling environment and incentives for better stewardship and investment by local institutions, communities, and farmers; (ii) improve and diversify livelihoods for communities as an alternative to forest degrading activities; (iii) coordinate and harmonize incentives across multiple layers of institutions and stakeholders for improved livelihoods; and (iv) capitalize on climate change as a focal initiative and financing opportunity. The Government has introduced the concept of Community Resource Management Areas (CREMAs) to devolve some management rights and responsibilities to the local level, particularly for wildlife. NREG TA is supporting the improvement of the regulatory framework of the mining sector and supporting both the MC and EPA in their monitoring and enforcement roles.

The government of Ghana has instituted a number of important policies and legislations governing the forestry and mining sectors.

Mining Policy Context. Thirteen laws and ten subsidiary legislations govern mining activities in the country. Article (6) of the Constitution of the Republic of Ghana, Section 1 of the Minerals and Mining Law (PNDC 153) states that every mineral in its natural state in, under, or upon any land in Ghana, rivers, streams, water courses throughout Ghana, the exclusive economic zone and any area covered by territorial waters or continental shelf is the property of the Republic of Ghana and is vested in the Government for and on behalf of the people of Ghana.

Forestry Policy Context. Forest is subsumed under the rubric of lands and natural resources under the current Constitution of Ghana, 1992. The Constitution devotes the whole of Chapter 21 to matters of lands and natural resources. These constitutional provisions generally define public lands and other lands. They also provide for the protection of other natural resources through parliamentary oversight of contracts involving natural resources and the establishment of natural resources commissions.

A key policy in the forestry sector is a Forests and Wildlife Policy (2012). The guiding principles of this Forest Policy are very expansive and speak directly to the issue of achieving sustainable forest management by reducing deforestation and forest degradation which are the “DD” of the REDD+ framework. The policy also envisages the development of sustainable forest resource for Ghana’s use. There is the idea of multi-sectorial approaches to planning and management of forest and wildlife resources. This implies the linkages between this forest policy and other fields of national policy such as agricultural policy, energy, employment, and poverty reduction.

3.3 Track Record of Forest Projects, With Participation of Stakeholders

The Ministry has successfully implemented many donor funded projects including Forest Resource Management Programme (FRMP), Natural Resource Management Programme (NRMP), Community Forestry Management Project (CFMP), Natural Resources and Environmental Governance Programme (NREG), Forest Carbon Partnership Facility (FCPF). Currently, the Ministry is implementing the Natural Resources and Environmental Governance Technical

Assistance, the Voluntary Partnership Agreement with the European Union and the Forest Investment Programme.

Through the Forest Carbon Partnership Facility (FCPF), the national capacity has been well developed to meet the technical capacity requirements for the implementation of REDD+ in the country. A Social and Environmental Assessment for REDD+ has been carried out and the necessary safeguards documents put in place to address social and environmental safeguards risks related to REDD+.

Similarly advanced is the development of a National MRV system which will continue to be operationalized with Additional Funding recently availed from the Forest Carbon Partnership Facility (FCPF). This system will be used to monitor carbon emission reductions and enhancements during the project.

In course of implementing budget support Natural Resources and Environmental Governance Program (from 2008-2011) as well as the Voluntary Partnership Agreements (VPA) with the EU, sufficient capacity has been developed and inter-governmental coordination strengthened. The NREG sector group has become a platform to effectively tackle cross-cutting issues in the sector.

4. Potential to Generate Co-Benefits

The ultimate beneficiaries of this operation are the rural communities (current and future generations) in the target regions who are currently being affected by mining activities and associated environmental damage and pollution. These small scale farmers and tenant farmers, including women, will gain access to new skills, opportunities, and land through engagement in rehabilitation activities at mining sites. Farmers and cocoa farmers will gain through the reduced impact of mining activities on their production and land holdings. The Ministry of Lands and Natural Resources (MLNR), the Forestry Commission (FC), and the Minerals Commission, charged with forest, landscape and mining management, will also benefit from improved policies, capacity development programs, and outreach and communication programs. Other stakeholders, including the private sector and civil society, will benefit through improved land use planning and zoning, plus communication and outreach activities. The project will also have benefits at the global level through the contribution to reducing mining impacts over the long term.

Reclamation or rehabilitation of areas degraded by galamsey with planted forests, economically useful species (e.g., bamboo), climate-smart cocoa agroforests will generate benefits from emission reduction and carbon enhancement, as well as wider co-benefits for the communities, farmers and downstream water users. These activities will enhance habitats, reduce water pollution, and create livelihood and poverty reduction opportunities for nearby community members, potentially even for those originally engaged in galamsey activities. There should be positive impacts on a broad range of environmental and human health issues, and increased biodiversity.

The concept of this program is to reclaim mined out and degraded areas in the forest and make them available to communities to undertake agroforestry activities. The project has a very huge

potential to generate co-benefit in the sense that lands which were otherwise considered as waste and unfertile will be made available to communities to develop for their socio-economic benefit. Models which will be developed for the reclamation of the land will provide direct benefits to the communities as well as environmental benefits. Rivers which have been diverted and rendered useless will be protected and rehabilitated as part of the program. With the appearance of vegetation, biodiversity will be improved.

Social Effects. The project will have a large beneficial impact on local communities. The proposed project will benefit from interventions under the Ghana FIP investment in areas of carbon rights, tree tenure rights, benefit sharing, institutional and management models, such as the CREMAs, and landscape planning. All of these interventions provide opportunities to local communities to build social capital and empowerment of local institutions. The capacity building component under the proposed project will strengthen local communities to effectively engage in dialogue with mining companies.

Economic impact and poverty reduction. The proposed project will adopt participatory approaches in every stage of project or sub project development. The reclamation activities will provide direct employment to local communities. Through improved communication methods, communities outside the project area could learn of the successes of the innovative models being implemented under the project and replicate it without the direct involvement of the project. The Project will increase food production through climate smart agricultural practices thereby increasing food security and household income. Participating communities will have a sound policy and legislation regime to trade carbon from trees incorporated into their farming system. The project is going to increase the area of land holding outside forest reserves through the reclamation initiative for local communities and this will increase their land holdings hence increased productivity. Generally the project will improve livelihood of local communities and provide them with alternate land uses.

Ecosystem Services and Climate Resilience. Re-vegetation of mined out areas will have significant environmental and ecosystem services benefits. The project will provide the opportunity to improve biodiversity in mining degraded areas. Improved biodiversity presents improved ecosystem services and climate resilience. Mining in Ghana particularly illegal mining destroys important river bodies. With the presence of the project and strategic communication materials, awareness will be created on the destruction caused by some mining activities and the need to mitigate them. This will help fight some of the destruction to water bodies. The project will support planting along river banks to protect them. Mined out pits which have been left uncovered giving way to the breeding of all kinds of health related problems will be covered. It is expected that biodiversity will be improved in these areas serving as a mitigation action against climate change.

Ghana has already set up the systems, institutional means and partnerships to support, measure and monitor the delivery of field based activities that help to reduce emissions and enhance forest carbon. The proposed activity will also generate co-benefits in terms of quality of life and quality of environment.

5. Financial Sustainability of Intended Results

5.1 Key Factors Contributing to Sustainability of Results

To ensure that the project is sustained beyond the duration and to achieve maximum impact, the following important factors will contribute to sustaining the results and outcomes after the project period, namely:

- Changes in policies and institutional norms;
- Changes in skills and practices at ground level;
- Changes in management responsibilities and authorities for local institutions; and
- Improved communication approaches and tools.

Policy and Legislation. Policy reforms and implementation practices will have a positive and sustainable effect on people's lives and land uses. Changes in policy implementation and institutional practices, which will be embedded in project design, guidance documents and training manuals, will last long after the project life. The project will have a component on review and strengthening of the policy and legal framework for the reclamation of mined out areas. It is expected that this intervention will change the practices of the mining industry to implement fully their Environmental Assessment Reports. This will ensure that the industry leads the reclamation process therefore funding would not be the responsibility of the government making this project sustainable. For farmers and communities, policies like the tree tenure, benefit sharing and climate-smart agricultural practices and other agroforestry management practices will help to improve yields and boost incomes, while also helping farms to become more resilient and adaptable. With evidence of tangible benefits, improved practices should be taken up and shared more widely among farmers.

Capacity Building. Capacity development will build skills and help to instill new organizational ways of working, including improving relations and outreach to key stakeholders, which will be a long term sustainable change and benefit to local resource users and managers. Through these pathways, the project design and interventions should contribute to financial and social sustainability. Capacity of small scale miners who are the major drivers of the deforestation and destruction of lands will be developed to manage resources sustainably and in an environmental sound manner. Training will include models of reclamation. Skill development will contribute to project sustainability beyond the project duration. Currently, the Minerals Commission is building the capacity of District Assemblies to monitor the operations of mining companies and individuals which will contribute to the sustainability of the project. The project will be mainstreamed into the implementation agencies to ensure that capacity developed remains in the institutions beyond the project duration.

Improved Communication. Improved communication products and dissemination of success

stories and lessons learnt will play a key role in sustaining the achievements of the project. Once community members feel the tangible benefits from practices, they are unlikely to depart from them and possibility to replicate these practices elsewhere are very high. Multi-stakeholder dialogue platforms like the Ghana Cocoa Platform (GCP), National Forest Forum (NFF) would serve as links to knowledge and best practices for all stakeholders thereby ensuring continues access to knowledge, inputs, after the project period. Awareness creation and knowledge sharing will be a key component of this project so that stakeholders will buy into the need to undertake the mining in environmentally sustainable manner.

5.2 Potential to Leverage Additional Resources, Including From Private Sector

The program has a component of reviewing the legal framework for the closure of mined out areas as part of the component, the legal regime will be tightened to ensure that mining companies implement to the later their EA reports. Capacity of small scale miners who are the major drivers of the deforestation and destruction of lands will be built and a special program will be designed for them to include the reclamation of the mined out areas in their operations. With the tree tenure and the review of benefit sharing, community members will now have the option of short term financial gains of releasing their lands for illegal mining activities and legally owing trees which they can directly get benefit from. This policy will go a long way to ensure the sustainability of the project.

Corporate Social Responsibility (CSR) may be an important opportunity for engaging the private sector and leveraging resources. Aspects of laws and policies (and a draft CSR policy at national level) provide CSR guidelines for companies to follow, although these activities are undertaken more in response to ethical convictions rather than legal obligations. Most companies have their own CSR policies as well as adhering to other initiatives such as International Council on Mining and Metals (ICMM) Sustainable Development Framework. Large-scale mining companies put down reclamation bonds, based on their costing of reclamation required. MESTI has indicated its commitment to direct EPA to take reclamation bonds from all companies involved in small, medium or large-scale mining activities that required environmental clearances or renewals. These bonds would generate enough financial resources to reclaim the land and water bodies polluted through mining activities.

6. Potential co-financing:

Source of Funding	Amount (USD million equivalent)	Type of contribution
Government	1.0	In kind (office space, staff salaries, etc.)
MDB		
Private Sector (please specify)		
Bilateral (please specify)		
Others (please specify)		
TOTAL	1.00	N/A

7. Expected Results and Indicators

Core Indicator	Target
Total TCo ₂ e generated	TBD
Area of mined out forest reserve rehabilitated (Ha)	5,000
Area of Mined out off-reserve rehabilitated (Ha)	10,000
Area planted (Ha) resulting in carbon enhancement	15,000
Total Area Managed under biodiversity (Ha)	5,000
Policy/legal framework developed to guide reclamation of mined out areas.	Yes
Number of people with farm lands from reclaimed mined out areas disaggregated to male and female	TBD
Number of people with direct benefit from the project disaggregated to male and female	TBD
Number of companies and people trained	
Tons of Food produced under the project.	
<i>Development Result(s):A total of 15,000 hectares of mined out area rehabilitated and manage sustainably under climate smart agriculture and sustainable forest management regimes for carbon abatement potential and environmental services for the socio-economic benefit for rural communities</i>	

8. Implementation Arrangements and Feasibility

The program will be implemented by the Ministry of Lands and Natural Resources (MLNR) and its Agencies (Forestry Commission and Minerals Commission) in strong collaboration with the Environmental Protection Agency, and the Chamber of Mines, as well as selected District Assemblies, Traditional Authorities, Affected Communities, Civil Society Groups, Small Scale Miners organizations, and NGOs. The current structures for the implementation of the GFIP (as described above in section 3) will be used to manage the project. Lessons from the implementation of the GFIP will inform the improvements of systems for better coordination and achievement of project goals, as well as engagement of communities and the private sector

The project is expected to commence in 2016 and run for 4 years, until June 2020. Approval by the FIP Subcommittee is expected in November 2015 and by the World Bank Board in March 2016.

9. Potential Risks and Mitigation Measures

Political Economy. The GoG's vision for reform and improved management of the sector is sound, but complex and involves multiple levels of government and society, which need to work together to address key priorities. There is a risk that as well as mining issues are highly political and contested; changes in policies, practices and benefit sharing approaches will result in unequal gains among current power holders and stakeholders. Vested interests and distorted incentives over natural resource use and control appear at different levels. The need to maintain focus and coordination is addressed through high level political commitments and by providing resources for coordination and governance bodies, with appropriate representation. This risk is addressed through high level political commitments and by providing resources for coordination and governance bodies, with appropriate representation (i.e. ENRAC and NRE Sector WG).

Tangible Results for Communities. The proposed project will need to deliver tangible results to constituents, communities to sustain support for the overall change process. The need to deliver tangible results to communities to sustain support for the overall change process is addressed through disseminating success stories from the implementation of the GFIP which works directly with community-based institutions on activities that aim to improve productivity and livelihoods

Governance. The issues of governance, vested interests and distorted incentives are addressed through ongoing dialogue platforms, policy studies and stakeholder engagement processes, funded by both FIP and FCPF. The will to address long standing regulatory and practical implementation issues associated with mining, forest management rights and responsibilities appears to be higher than in the past. Engaging citizens, civil society organizations and economic interests is a way to increase scrutiny and give a wider set of constituents a stake in positive outcomes.

Environment and Social. Social and environmental effects are expected to be positive in terms of improving governance, participation and benefit sharing, and sustainability. The project concept note follows the GFIP and benefits from the consultative processes and SESA initiated under FCPF. Issues of land use and access, as well as REDD+ and local livelihoods, raise concerns among civil society groups and communities, so scrutiny and criticism can be expected. Social risks may manifest in several areas: (i) entrenched interests may try to block reforms, so that results and wider benefits are not systematically achieved, (ii) interventions may have unequal impact on vulnerable groups or not achieve equitable benefits despite consultations and information sharing, and (iii) there may be misperceptions about the project's benefits or unrealistic expectations about benefits. The project incorporates consultative processes and a grievance redress mechanism to address these identified risks. Under the FCPF and FIP investments, Ghana has developed a comprehensive set of safeguards instruments and procedures. These will help to mitigate environmental and social risks by providing for consultations, grievance redress, and clear procedures for addressing potentially negative consequences. The SESA conducted under the FCPF outline a number of potential risk associated with the implementation of REDD+ in Ghana. Notable among them is restriction to resources. Gender vulnerability, introduction of pesticides for plantation and smart cocoa production. Building on the preparatory phase of the GFIP, consultations will continue with stakeholders to ensure that their concerns are addressed. Currently, the GFIP has three social and environmental mitigation (safeguards) documents i.e. the Environmental and Social Management Framework (ESMF),

Process Framework (PF), and the Pest Management Plan (PMP). These documents have laid down the procedures in addressing potential risks of the project; they will be reviewed to bring onboard any potential risk due to introduction of additional activities / expansion under this Additional Financing.

Gender. The role of women in managing forests, trees, agricultural landscapes – and their potential role in mining activities -- will need to be considered carefully as the project concept is refined toward implementation. Models for reclamation, tree tenure pilots, incentives and benefit sharing arrangements all need to consider the needs and potential vulnerabilities of women and disadvantaged groups. The needs and potential vulnerabilities of women and disadvantaged groups will have to be factored into the design. Participatory consultation and planning processes will be needed to accommodate women's participation and to take account of women's concerns and potentially differential access to resources and information. Findings have shown through the FCPF and the GFIP that there is gender differentiation in terms of mining, managing forests, trees and agricultural landscapes and in terms of land tenure, the choice of pilot locations and the formulation of activities and interventions will require sustained attention to gender equity during implementation. To mitigate this risk, Participatory consultation and planning processes will be designed to accommodate women's participation and to take account of women's concerns and potentially differential access to resources and information. This approach is being used under the GFIP and other appropriate mitigations are discussed in the safeguards instruments developed for the GFIP.

10. References

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