

Document of
The World Bank

FOR OFFICIAL USE ONLY

Report No: {PAD2477}

PROJECT PAPER

ON A

PROPOSED LOAN

IN THE AMOUNT OF US\$7.00 MILLION

A

PROPOSED GRANT

IN THE AMOUNT OF US\$2.89 MILLION

AND A

PROPOSED GRANT

IN THE AMOUNT OF US\$10.00 MILLION

TO THE

REPUBLIC OF GHANA

FOR AN

ADDITIONAL FINANCING FOR GHANA FOREST INVESTMENT PROGRAM (FIP) -
ENHANCING NATURAL FOREST AND AGROFOREST LANDSCAPES PROJECT

April 30, 2018

Environment and Natural Resources Global Practice
Africa Region

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

CURRENCY EQUIVALENTS

(Exchange Rate Effective November 13, 2017)

Currency Unit	
Ghana Cedi 4.4	= US\$1
SDR 1	= US\$1.40388

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AF	Additional Financing
AfDB	African Development Bank
ASM	Artisanal Small-scale Mining
ASGM	Artisanal Small-scale Gold Mining
BSP	Benefit Sharing Plan
COCOBOD	Ghana Cocoa Board
CPS	Country Partnership Strategy
CREMA	Community Resource Management Area
CSC	Climate Smart Cocoa
DGM	Dedicated Grant Mechanism
ENFAL	Enhancing Natural Forest and Agroforest Landscapes
EPA	Environmental Protection Agency
ERPA	Emission Reductions Purchase Agreement
ER-Program	Emission Reductions Program
ESMF	Environmental and Social Management Framework
FC	Forestry Commission
FCPF	Forest Carbon Partnership Facility
FGRM	Feedback and Grievance Redress Mechanism
FIP	Forest Investment Program
FSC	Forest Stewardship Council
GNASSM	Ghana National Association of Small Scale Miners
GCFRP	Ghana Cocoa Forest REDD+ Program
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GoG	Government of Ghana
GRS	Grievance Redress Service
GSGDA	Ghana Sustainable Growth and Development Agenda
HFZ	High Forest Zone
IDH	Sustainable Trade Initiative
IFR	Interim Financial Report
IIED	International Institute for Environment and Development
IUCN	International Union for Conservation of Nature
JCC	Joint Coordination Committee

M&E	Monitoring and Evaluation
MC	Minerals Commission
MDB	Multilateral Development Bank
MESTI	Ministry of Environment, Science, Technology and Innovation
MLNR	Ministry of Lands and Natural Resources
MMIP	Multilateral Mining Integrated Project
MOF	Ministry of Finance
MOFA	Ministry of Food and Agriculture
MRV	Measurement, Reporting and Verification
NCRC	Nature Conservation Research Centre
NDC	Nationally Determined Contribution (under the Paris Agreement of the UNFCCC)
NDPC	National Development Planning Commission
NGO	Non-Governmental Organization
NPV	Net Present Value
NRS	National REDD+ Secretariat
PADO	Private Afforestation Developers Organization
PDO	Project Development Objective
PMU	Project Management Unit
PPMED	Policy, Planning, Monitoring and Evaluation Division
REDD+	Reducing emissions from deforestation and forest degradation, conservation of forest carbon stocks, sustainable management of forest, and enhancement of forest carbon stocks in developing countries
SESA	Strategic Environmental and Social Assessment
SCF	Strategic Climate Funds
SMTDP	Sector Medium-Term Development Plan
TCC+	Technical Coordination Committee +
UNFCCC	United Nations Framework Convention on Climate Change
WBG	World Bank Group

Vice President:	Makhtar Diop
Country Director:	Henry G.R. Kerali
Senior Global Practice Director:	Karin Kemper
Practice Manager/Manager:	Magda Lovei
Task Team Leaders:	Timothy Brown, Asferachew Abate Abebe

REPUBLIC OF GHANA
ADDITIONAL FINANCING FOR GHANA FOREST INVESTMENT PROGRAM (FIP) -
ENHANCING NATURAL FOREST AND AGROFOREST LANDSCAPES PROJECT

CONTENTS

Project Paper Data Sheet	v
Project Paper	
I. Introduction	1
II. Background and Rationale for Additional Financing	2
III. Project Design	8
IV. Proposed Changes	15
V. Appraisal Summary	22
VI. World Bank Grievance Redress	31
Annex 1. Revised Results Framework and Monitoring Indicators	32
Annex 2. Revised Estimate of Project Costs	38
Annex 3: Lessons Learned	39
Annex 4. Background on ASGM in Ghana and the Multilateral Mining Integration Project	41
Annex 5. Financial Management	45
Annex 6. Procurement Management	49
Annex 7. Partner Organizations and Projects Rehabilitating Mined-Out Areas in Ghana	52
Annex 8: Ghana FIP Alignment with Global FIP Purpose and Criteria	56

ADDITIONAL FINANCING DATA SHEET

Ghana

Additional Financing for Ghana Forest Investment Program (FIP) - Enhancing Natural Forest and Agroforest Landscapes Project (P163745)

AFRICA

GEN01

Basic Information – Parent				
Parent Project ID:	P148183	Original EA Category:	B - Partial Assessment	
Current Closing Date:	30-Jun-2020			
Basic Information – Additional Financing (AF)				
Project ID:	P163745	Additional Financing Type (from AUS):	Scale Up	
Regional Vice President:	Makhtar Diop	Proposed EA Category:		
Country Director:	Henry G. R. Kerali	Expected Effectiveness Date:	01-Dec-2017	
Senior Global Practice Director:	Karin Erika Kemper	Expected Closing Date:	30-Jun-2023	
Practice Manager/Manager:	Magda Lovei	Report No:	PAD2477	
Team Leader(s):	Timothy H. Brown, Asferachew Abate Abebe			
Approval Authority				
Approval Authority				
Board/AOB Decision				
Please explain				
The same level as approval authority for original financing.				
Borrower				
Organization Name	Contact	Title	Telephone	Email
Government of Ghana	Sauda Ahmed Seinu	Ag. Head, World Bank Unit, Ministry of Finance	244-233-973278	Sahmed@mofep.gov.gh
Republic of Ghana				

Project Financing Data - Parent (Ghana FIP - Enhancing Natural Forest and Agroforest Landscapes Project-P148183) (in USD Million)

Key Dates							
Project	Ln/Cr/TF	Status	Approval Date	Signing Date	Effectiveness Date	Original Closing Date	Revised Closing Date
P148183	TF-18842	Effective	27-Feb-2015	10-Apr-2015	22-May-2015	30-Jun-2020	30-Jun-2020

Disbursements									
Project	Ln/Cr/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Un-disbursed	% Disbursed
P148183	TF-18842	Effective	USD	29.50	29.50	0.00	12.95	16.55	43.89

Project Financing Data - Additional Financing Additional Financing for Ghana Forest Investment Program (FIP) - Enhancing Natural Forest and Agroforest Landscapes Project (P163745) (in USD Million)

[X] Loan [X] Grant [] IDA Grant
 [] Credit [] Guarantee [] Other

Total Project Cost: 19.89 Total Bank Financing: 0.00

Financing Gap: 0.00

Financing Source – Additional Financing (AF)	Amount
Strategic Climate Fund Grant (Concessional Loan)	7.00
Strategic Climate Fund Grant (Grant)	2.89
Strategic Climate Fund Grant (Grant)	10.00
Total	19.89

Policy Waivers

Does the project depart from the CAS in content or in other significant respects? No

Explanation

Does the project require any policy waiver(s)? No

Explanation

Team Composition					
Bank Staff					
Name	Role	Title	Specialization	Unit	
Timothy H. Brown	Team Leader (ADM Responsible)	Sr Natural Resources Mgmt. Spec.	Team Leader	GEN01	
Asferachew Abate Abebe	Team Leader	Senior Environmental Specialist	Team Leader	GEN01	
Thomas Kwasi Siaw Anang	Procurement Specialist (ADM Responsible)	Senior Procurement Specialist	Procurement Specialist	GGO01	
Robert Wallace DeGraft-Hanson	Financial Management Specialist	Sr Financial Management Specialist	Sr. FM Specialist	GGO31	
Anita Takura	Environmental Safeguards Specialist	Environmental Specialist	Environmental Safeguards Specialist	GEN01	
Charity Boafo-Portuphy	Team Member	Program Assistant	Program Assistant	AFCW1	
Charles Ankisiba	Team Member	Senior Social Development Specialist	Social Safeguards Specialist	GSU01	
Hardwick Tchale	Team Member	Senior Agriculture Economist	Sr. Agriculture Economist	GFA01	
Kirsten Lori Hund	Team Member	Sr Mining Spec.	Sr. Mining Specialist	GEEX1	
Steven Jay Silverstein	Team Member	Consultant	Environmental Specialist	GEN01	
Yasmina Oodally	Team Member	Consultant	Operations Officer	GEN01	
Yesmeana N. Butler	Team Member	Program Assistant	Program Assistant	GEN01	
Extended Team					
Name		Title	Location		
Locations					
Country	First Administrative Division	Location	Planned	Actual	Comments
Ghana	Western	Western Region	X	X	
Ghana	Eastern	Eastern Region	X		
Ghana	Brong-Ahafo	Brong-Ahafo Region	X	X	

Ghana	Ashanti	Ashanti Region	X		
Institutional Data					
Parent (Ghana FIP - Enhancing Natural Forest and Agroforest Landscapes Project-P148183)					
Practice Area (Lead)					
Environment & Natural Resources					
Contributing Practice Areas					
Additional Financing Additional Financing for Ghana Forest Investment Program (FIP) - Enhancing Natural Forest and Agroforest Landscapes Project (P163745)					
Practice Area (Lead)					
Environment & Natural Resources					
Contributing Practice Areas					
Agriculture, Energy and Extractives					
Consultants (Will be disclosed in the Monthly Operational Summary)					
Consultants Required? Consultants will be required.					

I. Introduction

1. **This Project Paper seeks Board approval to provide an additional loan and grant in an amount of US\$19.89 million to the Republic of Ghana** for an Additional Financing for Ghana Forest Investment Program (FIP) - Enhancing Natural Forest and Agroforest Landscapes (ENFAL) Project (P163745).
2. **The proposed additional loan and grant would help finance the costs associated with augmenting the REDD+ and Forest Investment Program (FIP) in Ghana** by supporting: (i) the reduction of degradation and deforestation due to illegal artisanal small-scale mining (ASM) in forest landscapes, and (ii) the enhancement of private investment in forest plantation development, with community job creation, in forest and cocoa landscapes in Ghana's High Forest Zone (HFZ), which includes areas of Brong-Ahafo, Western, Ashanti and Eastern Regions.
3. **The proposed additional financing (AF) activities are focused on supporting the Government of Ghana (GoG)'s efforts to address the impacts of illegal ASM on forests, community agroforestry areas and natural landscapes through improved coordination and implementation of policies, testing of mine site clean-up and reclamation approaches, including tree planting and plantation establishment, with community and media engagement, and communication, outreach and training activities.** While supporting the GoG's overall efforts to control illegal ASM for gold, known also as *galamsey* or ASGM, these AF activities will focus mainly in technical areas where the Ministry of Lands and Natural Resources (MLNR), Forestry Commission (FC), Minerals Commission (MC) and the Environment Protection Agency (EPA) already have a comparative advantage and in geographic areas where the project already has established community engagements. Ghana will be able to utilize these funds effectively, efficiently and quickly through the operational systems established under the original FIP ENFAL project, with the World Bank as partner agency.
4. **This Additional Financing is based on two new tranches of funding approved by the FIP governing body based on Ghana's requests:** a) US\$10.00 million for Reducing Degradation and Deforestation due to ASGM in Forest Landscapes was approved by the FIP Sub-Committee (SC) in October 2015); and b) US\$9.89 million¹ to build private sector engagement in REDD+ was approved for transfer from IFC to the World Bank in June 2017. This second funding source includes US\$7 million in the form of concessional loans targeting private sector activities. The remainder is grant.
5. **The proposed AF activities are designed to fit into the existing FIP ENFAL implementation structures, demonstration pilot approaches,** community engagement efforts, land use planning and management processes, and outreach and communication tools. The proposed AF follows the existing component structure of the ENFAL project, by adding substantial funds for additional field components focused on site reclamation and plantation establishment, as well as resources to expand policy engagement, communication and coordination activities.

¹ The original FIP allocation to IFC consisted of US\$7 million of concessional finance and US\$ 3 million in grants. Of the grant amount, US\$ 250,000 was allocated for a project preparation grant (PPG). Of this amount, US\$ 114,850 was used for a market assessment of the role of private sector in the context of Ghana's FIP Investment Plan.

II. Background and Rationale for Additional Financing in the amount of US\$19.89 million

6. **The original project is financed by a Strategic Climate Funds (SCF) grant in the amount of US\$30.00 million** which was approved by the Bank Board on February 27, 2015 and US\$3.00 million of in-kind co-financing by GoG. The project design is based on Ghana's Forest Investment Plan, which was approved by the FIP Sub-Committee in 2012 and which included three projects supported by the participating Multilateral Development Banks (MDBs). The FIP has a related facility, the Dedicated Grant Mechanism for Local Communities (DGM), which works to engage local communities in FIP related activities at community level. Ghana's DGM (US\$5.50 million) was approved by the Bank Board on April 26, 2017 and aims to strengthen knowledge and practices of targeted local communities in REDD+ processes and sustainable forest management.

7. **Progress of the original project towards the achievement of its project development objective (PDO) is currently rated as Moderately Satisfactory.** There is evidence of success for many activities implemented on a local scale with communities, including livelihood activities, establishment of timber tree nurseries, boundary planting of forest reserves, enrichment planting of forest reserves, and watershed rehabilitation planting. Cocoa extension agents and Forestry Commission field staff have been trained to promote shade-grown cocoa and counter the misinformed practice of removing shade trees from cocoa farms. Tree seedlings have been distributed to cocoa farmers seeking to increase shade on farms and a tree registration system has been established to allow farmers to own and benefit from planted trees. These demonstrations of better forest and land management practices are also building improved collaboration among key agencies, which is resulting in improvements on the ground. At the national level, substantial progress was made on moving forward three major policy initiatives: tree tenure and benefit sharing; wood procurement of domestic legal timber; and the plantation strategy. Institutional systems have been put in place as a coordination and communication platform for work planning, implementation and monitoring of performance among the key implementing agencies, including FC and Ghana Cocoa Board (COCOBOD), led by a Project Management Unit (PMU) at MLNR. The original project is also supporting consultation, communication and outreach to build constituency for improved forest and tree management practices.

8. **However, drivers of deforestation and degradation continue to degrade Ghana's rural landscape.** The pace of expansion of illegal ASM in recent years has accelerated forest and agroforest loss in affected areas. This FIP AF is designed to support demonstration pilots that can inform and influence the important steps that the GoG is taking to combat deforestation in the cocoa sector and commitments to address illegal mining through scaled up action. The Government's renewed attention to these issues creates new opportunities for FIP to support action needed to accelerate implementation, replicate good practices, and roll out reformed policies on a larger scale. However, addressing the full scope of the ASGM issue will also require mobilization of additional resources on a much grander scale, both from Ghana's own budget and from external partners and sources. Mobilization of additional resources will be critical to realize Ghana's ambitions to protect remaining forests, increase trees on farms, increase cocoa production under shade, and improve the lives of smallholders working in the rural landscape.

9. **The proposed Additional Financing is fully consistent with the World Bank Group's (WBG) goals** to end extreme poverty and to promote shared prosperity with environmental, social, and fiscal sustainability. It is also well-aligned with the Country Partnership Strategy (CPS) for FY13-

FY16², which aims to assist Ghana in the transition to middle-income status. The CPS recognizes that Ghana's natural resource wealth is a platform for economic and social development but needs prudent and transparent management as well as strategic actions to prevent negative outcomes. The proposed activities will contribute to improved livelihoods of communities in the target areas (through engagement in landscape restoration and tree planting) and to enhanced environmental services (through land stabilization and enhanced forest cover).

10. **This operation also aligns with the Ghana Sustainable Growth Development Agenda (GSGDA-II, 2014-2017)**, which seeks to achieve socio-economic transformation to create a significant number of quality jobs while promoting decent work to raise average incomes. The GSGDA notes critical forest and natural resource management challenges, including the need 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 GSGDA-II focuses on leveraging Ghana's natural resource endowments, agricultural potential, and human resource base for accelerated economic growth and job creation.

11. **This operation is well aligned with Ghana's National Strategy for Reducing Emissions from Deforestation and Forest Degradation (REDD+³) Strategy**, which provides the framework for action and investment under FCPF, FIP, and other sources. The National REDD+ Strategy aims to significantly reduce emissions while also addressing threats that undermine ecosystem services and environmental integrity to maximize the co-benefits of the forests. REDD+ is a key pillar of action for the national climate change agenda and an important step toward sustainable, low emissions development. This broader engagement includes support to REDD+ Readiness through readiness grants (P124060) of US\$8.80 million in total under the Forest Carbon Partnership Facility (FCPF) Readiness Fund, a US\$30.00 million Forest Investment Program Project (P148183), this FIP Additional Financing, and a related project under the Dedicated Grant Mechanism for Local Communities (US\$5.50 million, P145316).

12. **This operation also supports Ghana's National Climate Change Policy (2012)**, the National Climate Change Policy Action Program for Implementation: 2015–2020, the Environment Policy (2012), and the Low Carbon Development Strategy (2013). This operation also supports Ghana's efforts to achieve Sustainable Development Goal 13 (Take urgent action to combat climate change and its impacts) and Goal 15 (Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss).

13. **Rationale for Bank and FIP Further Engagement.** Ghana's FIP Program is already implementing projects focusing on agricultural drivers of deforestation by working with cocoa farmers

² The WBG CPS for the Republic of Ghana for FY13-FY16 (Report #76369-GH, discussed by the Executive Directors on August 20, 2013) has been extended until end of FY17. Preparation of the new Country Partnership Framework is ongoing.

³ Reducing emissions from deforestation and forest degradation, conservation of forest carbon stocks, sustainable management of forest, and enhancement of forest carbon stocks in developing countries. REDD+ is a key element of the UN Framework Convention on Climate Change (UNFCCC).

and rehabilitating and protecting forest reserves. These are the ENFAL project with the World Bank and the Engaging Local Communities in REDD+ (ELCIR+) project with the African Development Bank (AfDB). Ghana's Forest Investment Plan (2012) also noted that artisanal small-scale gold mining (ASGM) is an important driver of deforestation (confirmed in Ghana's recent Emission Reduction Program Document, 2017). The investment plan also noted that engaging the private sector in plantation development is needed to reduce pressure on natural forests and to meet the construction, housing and furniture needs of a growing economy. Engaging the private sector is also emphasized in the Ghana Forest Plantation Strategy: 2016-2040 and the Ghana Forestry Development Master Plan (2016-2036). The AF is also designed to align with FIP Investment Criteria, as noted in Annex 8.

14. **This additional financing is timely as Ghana's new government is accelerating efforts both to address ASGM's environmental degradation and to promote sustainable jobs in the rural sector.** The GoG has prioritized efforts to control the destructive effects of *galamsey* and the MLNR has an initiative to address the associated environmental degradation, the Multilateral Mining Integrated Project (MMIP). However, this AF is relatively small and aimed at developing pilot demonstrations that cannot address all the concerns of uncontrolled ASM in Ghana, nor cover all the areas affected by illegal ASM.

15. **Public funding for these activities is justified by the public benefits that go well beyond the private or community-owned goods,** which include rehabilitated lands and timber stands that can be used for economic purposes. Pilots will demonstrate approaches to and benefits of reclamation of mining sites, which will reduce erosion that is currently polluting public water courses. Developing timber stands will help to reduce illegal logging pressure on natural forests. Reclamation, replanting and tree planting will also sequester carbon relative to the degraded situation, provide downstream environmental services (e.g., water retention), and eventually return habitat suitable for biodiversity.

Country Context

16. **Ghana is a lower middle income country with population of 28 million and land area of nearly 240 square kilometers.** Ghana's government is a multi-party democracy known in Africa for freedom of speech and the press. Two decades of growth and political stability have improved the economic situation and reduced poverty. A new government was elected in December 2016 and sworn in January 2017. The election conferred a sufficient mandate to carry out the government's agenda, which includes pledges to reduce the budget deficit and cut waste.

17. **Despite recent growth and poverty reduction, Ghana still faces challenges, including fiscal deficits, rural poverty, youth unemployment, and natural resource sustainability.** Ghana has made good progress in reducing the number of Ghanaians living below the poverty line from over fifty percent in 1991 to less than one quarter in 2013, with less than 10 percent in extreme poverty. Sustained economic growth, broadly shared, has been a major factor in the reduction of poverty, but structural transformation, including the increasing shares of services and industry in the economy have also contributed. Increased productivity in agriculture has led to higher rural incomes. Improved education and skills have also contributed to better wages and hence the reduction in poverty.

18. **Ghana's near term economic prospects are good but challenges remain.** Economic performance improved to 6.6 percent (annualized) growth in the first quarter of 2017, and is expected

to meet targets for deficit at 3.5 percent of GDP. Overall debt, though, increased from US\$29.20 billion in 2016 to US\$31.70 billion (68 percent of GDP) in 2017. The industry sector grew at 11.5 percent in the first half of 2017, with significant contributions from mining and petroleum. The agriculture sector grew by 7.6 percent, driven by good performance in crops, fisheries, and cocoa. Service sector growth slowed to 3.7 percent due to slower growth in information, communication, and finance.

19. **Ghana's extreme poor are mainly rural and natural resource dependent.** More Ghanaians live in the moister, richer south, while deeper poverty occurs in the semi-arid, rural north. There is more poverty in rural, agriculture and natural resource sectors. Coastal areas have stubbornly persistent extreme poverty. More heavily forested areas are below the national average of extreme poverty incidence (Ghana Living Standards Survey, 2012-2013; 2010 Population and Housing Census, 2015).

20. **Natural resources are critically important in Ghana's economy.** Activities based on use of land, water, forest and fisheries resources contribute more than 20 percent of GDP and about 40 percent of jobs, especially in rural areas, where most of the poor live. Though the economic structure is shifting to services, 35 to 45 percent of jobs are still based in renewable natural resource sectors: agriculture, forests, livestock, fisheries (GLSS6, Aug. 2014; and 2015 Labour Force Report).

21. **Ghana's export earnings are mainly from natural resource commodities.** In 2015, export earnings of gold, cocoa and oil accounted for 80 percent of exports (MIT Observatory of Economic Complexity). Gold exports were valued at US\$4.30 billion; Cocoa beans at US\$2.00 billion; and Crude oil at US\$1.70 billion.

Sectoral and Institutional Context

22. **Ghana's natural resources are being severely degraded through poor land and water management practices, which undermine agricultural productivity.** The World Bank Country Environmental Analysis (dating from 2006, and planned for update in 2018) estimated the annual cost of environmental degradation as greater than 10 percent of GDP. Net primary productivity has declined across Ghana (except a few pockets in south), over the 15 years from 2000. The Northern Savannah, where people are poorest, is experiencing severe land degradation, coupled with water stress. Reduced output and earnings also increase pressures for rural farmers to encroach into forest areas. This creates a vicious cycle by removing forest cover and disturbing ecosystem processes, which increases rural vulnerability to weather variability, climate change and economic shocks.

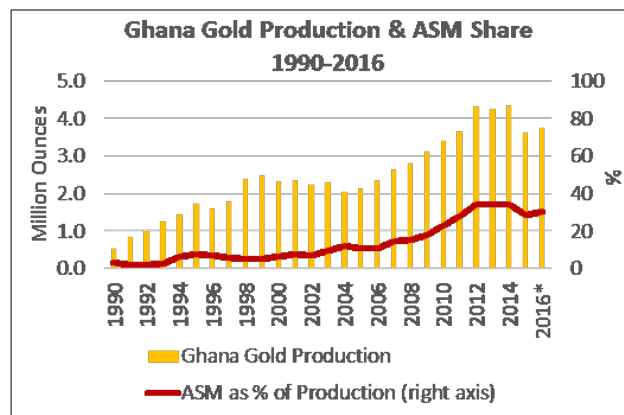
23. **Forestry and agroforestry, together with agriculture, account for more than 50 percent of land use.** Ghana is the world's second largest exporter of cocoa, an agroforestry crop worth US\$2.0 billion per year, important for both the economy and rural employment. Although global demand for chocolate continues to increase, Ghana's cocoa production faces economic, environmental, and sustainability challenges. Increasing global demand for sustainable cocoa is creating a positive incentive for cocoa producers, buyers, and regulators to move to more sustainable and climate-friendly production practices. Unsustainable agricultural practices contribute to lower soil quality, more erosion, and lower output. Soil erosion is just one indicator of degradation processes that contribute to the reduction of environmental services that would otherwise regulate water flows, stabilize soils and maintain their quality and productivity, cycle nutrients through ecosystems, and moderate climate and weather extremes.

24. **Ghana’s forest cover has almost halved since 2000.** Deforestation contributes to the loss of environmental services, soil erosion and loss, reduced agricultural productivity, declining crop yields, and economic losses to the country. Conversion of forests to agricultural land is the primary driver of deforestation. In the HFZ, 110,000 ha of forests were lost each year to agricultural conversion from 2005-2014. About a third of this was due to cocoa expansion. The MLNR, FC, the Ministry of Food and Agriculture (MOFA), COCOBOD, the private sector, and non-governmental organizations (NGOs) are working in the supply chain to improve productivity and returns to farmers, increase trees on farms, and reduce environmental degradation. This support includes providing training, delivering inputs, including tree seedlings, and promoting certification of sustainable cocoa production; however, several different systems and standards are in use. The GoG also supports initiatives to reduce cocoa frontier expansion by providing incentives for rejuvenating old cocoa plantations.

25. **Timber harvesting, and accompanying illegal chainsaw practices, also contribute to forest loss and degradation and loss of trees in farming systems.** The forest sector provides jobs - approximately 50,000 formal jobs and 260,000 informal - revenues and critical inputs for a growing economy. There are, perhaps, another 100,000 illegal, unregulated chainsaw loggers and millers. Illegal logging results in at least US\$ 18 million in lost timber stumpage revenue each year. Domestic timber production (which accounts for 85 percent of total output) comes mainly from informal and illegal sources using inefficient and unsustainable practices. Timber demand is high and Ghana could grow more trees for domestic use and processing, but the enabling conditions are weak for long-term private plantation investments (e.g., poor access to land and low security of land tenure). The tree tenure system does not provide incentives to small holders to protect naturally occurring trees on farms; by law, these belong to the Government. However, efforts are underway to change policies and practices to allow and register farmer ownership of planted trees, supported by FIP ENFAL, the parent of this AF. Women and men use forest and land resources differently and play different roles in community-based institutions. Gender aspects are further discussed in the Project Design, Section III.

26. **Gold mining is a major contributor to national economic wealth and to poverty reduction.** In 2016 Ghana produced 110 tons of gold; 31 percent of this came from artisanal and small scale miners (Minerals Commission, 2017). Mining contributes to the economy, foreign exchange, and jobs. *Galamsey* may account for over 1.1 million jobs, half of which are informal (UNECA, 2011). Indirect economic benefits accrue to 4.4 million people, including women who work in supporting services (World Bank, 2015). Small-scale gold mining is of three types: i) hard rock (lode), ii) deep alluvial mining, and iii) shallow alluvial mining. Though data are scarce, the first two types are mostly licensed and the third type is most unlicensed, and is referred to as *galamsey*. Small scale production increased substantially since 2010 (see Figure 1) both in overall volume and as a share of total gold production. This increase in ASGM in recent years was a response to high gold prices, high unemployment and a slump in agricultural production, and thus benefited the

Figure 1: Ghana Gold Production and ASM Share



poor. However, there are also other drivers of the increase, particularly in the illegal alluvial mining operations, which are highly visible and destructive. Gold mining attracts not only poor local miners, but also entrepreneurial and politically connected Ghanaians, foreign investors and equipment providers, and itinerant, non-local (often immigrant) laborers.

27. **Illegal AGSM also raises gender issues and specific impacts on women.** The Minerals Commission (2016) conducted a limited survey that showed that about 28 percent of the galamsey workers are women (though very few are mine owners or managers). Typically, in the open pit mines that characterize galamsey mining, women serve as panners, carriers, and processors, transporting heavy loads of ore on their heads to washing sluices. Women are also involved in providing ancillary services to mining communities, such as petty trading and food preparation. Thus, women's estimated participation in artisanal mining-related activities could be around half of the workforce. When gold amalgamation occurs at home, women and children are disproportionately exposed to toxic mercury fumes, leading to serious long-term health consequences (Teschner 2012, Hilson 2002).

28. **Illegal ASGM threatens health, wealth, water, food, cocoa, and forests.** Although ASGM is an important source of jobs and income for rural communities, the rural poor and smallholder farmers are also among those most affected by the adverse environmental effects of illegal mining. *Galamsey* has resulted in serious deforestation and land degradation. Illegal ASGM also undermines legal mining activity and cocoa production – both key economic sectors. Illegal ASGM is associated with a suite of destructive and polluting practices, including degradation of stream beds and riparian zones, and incursion into agricultural land, including high value cocoa plantations. Mining associated degradation, siltation and pollution affects 75 percent of water courses in various ways including: restricted stream flow, upstream flooding, and downstream loss of access to clean water. Use of toxic mercury in gold amalgamation threatens water supplies and the human food chain. Beyond these environmental and health impacts, *galamsey* represents a cross-sectoral, inter-disciplinary challenge with wide ranging social and economic impacts. Through the loss and degradation of forested areas, uncontrolled mining practices negatively affect people who depend on forests, habitat and biodiversity, and cocoa agroforestry systems, which are critical to rural jobs and the wider economy.

29. **Climate change will undermine Ghana's efforts to achieve poverty reduction and economic growth.** An important share of economic activity depends on climate-sensitive resource and land-based sectors. Agriculture, cocoa, forestry and fisheries contribute most to the livelihoods of the rural poor and will be significantly affected by climate change. Climate impacts are expected to include increase of mean annual temperature, decline in total annual rainfall, changes in seasonality of rainfall, and substantial sea level rise by 2050. Climate change is expected to adversely affect crop yields, leading to a decline in agricultural GDP of 3 to 8 percent. Unpredictable rainfall, in combination with increased energy demand, is expected to result in energy shortfalls due to the reliance on hydropower. Increases in frequency and intensity of extreme weather events, including severe storm, winds, and drought, will have negative economic impacts. Agronomic zones and weather patterns will shift, increasing uncertainty for already vulnerable rural households. The zone best for cocoa cultivation will likely shrink over a generation, while varying rainfall and seasons will add uncertainty and weather shocks. Ghana has "high hazard" flood potential – with the potential to affect 20 percent of the population, particularly in greater Accra (<http://thinkhazard.org/en/report/94-ghana/FL>).

30. **Weak institutional coordination and ineffective law enforcement contribute to these environment, climate and resource challenges.** Natural resource management institutions have overlapping mandates, but also gaps in coverage of key issues. Consultation and participation with communities and civil society stakeholders can be improved, recognizing that they are the intended beneficiaries of rules and programs for improving natural resource and environmental outcomes.

III. Project Design

31. The **Project Development Objective (PDO)** will become the following (with changes in boldface): *to improve forest and tree management practices by cocoa farmers, CREMA communities and forest reserve managers to reduce forest loss and degradation and **demonstrate rehabilitation of mined-out sites** in selected landscapes in Ghana's High Forest Zone (HFZ).*

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

33. To reflect and monitor the activities under the AF, a new PDO level indicator on *Number of mining sites that have been rehabilitated (to a standard agreed with local stakeholders)* has been included, and targets for the indicators on *Area of forest in targeted landscapes* and *Area re/afforested* have been revised upwards (see Annex 1).

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

35. **Component 1: Policy reforms and institutional strengthening (US\$2.00 million grant).** This AF will expand support for strengthening institutional coordination across a wider array of central, regional and local government agencies. This will particularly include the MC of MLNR and the Ministry of Environment, Science, Technology and Innovation (MESTI), which has a leadership role in the effort to control *galamsey*, as well as the EPA, which has an important role in setting standards for reclamation activities, controlling water pollution and toxic materials associated with all

types of mining. The Ministry of Chieftaincy and Traditional Affairs, local chiefs and traditional authorities, and District Assemblies will need to be more proactively engaged in addressing *galamsey* issues. The AF will support additional analytical and policy studies that aim to assess the magnitude and geographical spread of ASM impacts on forest, and draw lessons from previous and existing activities/strategies – including those of legally operating firms – with regards to rehabilitation and restoration of mines-out sites. Based on this, guidance for practitioners on the ground will be developed, taking a multi-stakeholder approach. Policy and guidance development will have opportunities to collaborate with and learn from several projects and partners working toward similar goals (see Annex 7). It is important to mention that the GoG under the Natural Resource and Environmental Governance Technical Assistance Project has developed an ASM Framework (2015) and several studies on alternative livelihoods and on rehabilitation costs. Also, the GoG and the Bank are developing a GEF-financed regional project for Reducing environmental health risks in artisanal gold mining and e-waste in Ghana (GEF Program ID: 9444). This AF will support additional analyses, studies, workshops and dialogue platforms to ensure the widespread understanding and uptake of these technical learnings and analytical results to address the environmental footprint of *galamsey*. Legal analysis and policy development will specifically look at putting in place a policy on mined-out lands; standards and guidance for mine site rehabilitation (based on international good practices); and systems and capacity at national, regional and local level to sustainably protect rehabilitated sites.

36. **Component 2a. Pilot demonstration of clean up and reclamation practices with alternative livelihood support after forest and land degradation and loss due to ASM (US\$6.00 million grant).** This pilot activity aims to reclaim and rehabilitate mined-out areas in selected sites as localized demonstrations of appropriate technical approaches, analysis and testing technologies and policies, and clean up / reclamation practices.

37. **Rehabilitation, in this document, means that a degraded and disturbed site is returned to a condition** where pollutants and runoff are contained and some economically productive activities can be pursued with minimal risk to site users. In 2016, the Minerals Commission (with NREG TA support) prepared a study on the approaches and costs of old mine site rehabilitation. Rehabilitation includes a reclamation phase, with regrading of land and filling of pits, followed by a remediation or replanting phase (some details in Box 1). The MC report recommended “Phytoremediation” as a cost-effective approach that uses plants to remove, transfer, stabilize, or destroy contaminants in soil, sediments and groundwater. Bamboo, grasses, and rushes have been researched or successfully used in phytoremediation, per the MC report. Sites rehabilitated under this approach would not be suitable to grow edible crops, but could be suitable for timber or bamboo plantings. The expected use

Box 1: Rehabilitation of Old Mining Sites

Reclamation Phase (Engineering Works)

- Clearing of access roads
- Dewatering & Backfilling of pits
- Hauling of additional fill materials
- Topographic survey/Leveling
- Trimming of drainage channels
- Preparation of reclaimed land
- Maintenance and monitoring of rehabilitated lands

Replanting Phase (Phytoremediation)

- Demarcation of contaminated zones
- Design of appropriate phytotechnology options
- Implementation of phytotechnology in all mediums (soil and water)
- Maintenance and monitoring of rehabilitated areas / plantings

of the land would have to be agreed upon by all stakeholders and the rehabilitation approach would be designed accordingly.

38. Specific activities will learn from and be developed in collaboration with projects and partners that are already engaging in this area. Annex 7 provides some examples of organizations and their work. Implementation will be combined with effective engagement of land owners, traditional authorities, mine managers and workers, and community members. Activities may include:

- **Site selection and characterization for clean-up.** Mapping, prioritization and characterization of mining degradation in forest reserves and cocoa landscapes in the Western and Eastern Region. This will include site sampling and assessment of potential clean up approaches and techniques⁴. The AF will support assessments and stakeholder consultations for site selection, for community engagement, and for organizing collective action.
- **Community engagement in planning, collaboration and training.** Engagement with local and traditional authorities and land use planning processes to improve district government collaboration with communities on forest and land protection; Provision of training for communities, including miners, and local governments on responsible management and protection of reclaimed areas.
- **Community engagement in implementation.** Engagement with community and Community Resource Management Area (CREMA) members in reclamation of selected sites, using appropriate land contouring and replanting approaches. Replanting efforts will consider appropriate crops and materials after analysis of site contamination requirements and the need to avoid uptake in potential food crops. Use of climate-smart agriculture or restoration of cocoa plantations may not be appropriate in some cases.
- **Alternative livelihood support.** Engagement with communities, particularly miners, to identify suitable and beneficial alternative livelihood activities that can complement reclamation efforts. This will draw on the surveys and assessments on Alternative Livelihood Programs in Mining Communities conducted by MC under the NREG TA (June 2016). Livelihood support would be designed in collaboration with community members and could include nursery stock for timber and bamboo planting, value added processing and sale of more beneficial natural resource products, equipment rental and operation for land contouring, monitoring and patrols to prevent re-entry into reclaimed sites (see Component 2b).
- **Private sector engagement for lessons.** Engagement with legally operating small- and large-scale mining operations for support, understanding of incentives, lessons on good practices from existing sites, technical assistance and potential visits to demonstration sites. Organizations with lessons and experience with rehabilitation are summarized in Annex 7.
- **Guidance on improved practices and promotion of replication.** The AF will finance development and roll out of guidance materials on site assessment, clean up / reclamation approaches and success stories, as well as the preparation and studies needed in advance of reclamation efforts. The MC has already developed an ASM Framework (2015) and benchmarking studies that can form the base for more locally oriented guidance. The AF will support site visits, media engagement and outreach activities to ensure that successful small scale demonstrations are used to influence policy makers, resource allocators, and local land

⁴ Through a collaboration with the Pollution Monitoring and Environmental Health Trust Fund program on Contaminated and Toxic Land Pollution, the Bank team will access resources for a Rapid Screening Assessment that will help to help identify and characterize up to 100 contaminated sites, in collaboration with Ghanaian institutions.

use decision makers. These efforts will be supplemented with communication and awareness raising activities financed under Component 3.

39. **Criteria for selection of mined-out sites for rehabilitation will include:** strength of local institutions including both traditional and District Assembly; ownership and control of the land; representative of various land uses and geographic areas; balance of on- and off- reserve sites; and proximity of potential partner institutions (training, service delivery). These criteria will be further developed and informed by the results of case studies of selected mining sites, and learning from existing mine reclamation experiences, particularly from private sector operations.

40. **Theory of Change.** The transformative nature of this activity is to provide positive demonstrations of the potential for local community action to reclaim and rehabilitate locally affected sites and waterways following the destructive impacts of ASGM/*galamsey*. The siting of these pilots, the lessons learned, and the outreach activities aim to promote replication and scale up with non-FIP resources. If successful, these demonstrations will influence wider scale Government-driven, locally-owned interventions, with support from the MMIP, and potentially other development partners. The AF interventions, albeit on a small scale, will help to show the uses of alternative livelihoods, reduce environmental risks in target mined-out areas and support communities to engage in more sustainable forest and land management, which will enhance carbon stocks. Land reclamation has the potential to create sustainable local economic opportunities in the forestry sector through production of timber, bamboo and other fast-growing species, along with the nurseries that support them, which will help to diversify livelihoods away from illegal ASM at those sites. Local communities will benefit from improved ecosystem services, through soil stabilization, erosion control, and increase in biodiversity. The demonstration sites should become focal points for learning-by-doing as part of an effort to promote wider replication and scale-up to other degraded, mined-out areas across Ghana. Increased community engagement and activity in these areas should also serve as a buffer to further illegal degradation practices and re-mining. These demonstrations and knowledge transfers will also inform and involve local officials, traditional authorities and regulators, who will learn practical approaches, and inform national authorities who will be improving guidelines and policies under Component 1.

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

42. **Specific activities may include financial assistance for (small and medium) private plantation developers (including nurseries) to expand planted areas,** focusing on trees in high demand for specific markets. Firms will be selected based on interest, willingness, business model to promote local employment opportunities (targeting vulnerable groups and forest fringe communities) and to promote quality wood products for domestic markets (criteria to be further refined). Support

may include: low cost tree seedlings of economic species; transport and delivery of the seedlings; training, tools and equipment for site preparation, planting/spacing, and care. Low cost loans will also be considered for financially viable firms (based on financial assessment/due diligence and track record). The low-cost loan funds will be held at the Bank of Ghana and will be managed by the Ministry of Lands and Natural Resources and the Forestry Commission. Following the learning of the Uganda Sawlog Production Grant Scheme⁵ (SPGS), this activity will provide both technical assistance and financial assistance for small-scale timber plantations companies. Incentive payments will be conditioned on compliance with seed quality and stand maintenance standards.

43. **Component 2c. Field Activity Monitoring and Technical Assistance (US\$2.29⁶ million grant).** This sub-component will also finance professional monitoring, technical assistance and follow up to ensure that investments and plantation maintenance remain on track during the loan period. Technical assistance activities will focus on advising on tree planting and nurturing techniques, business planning, species selection, mapping and land titling services. In providing the technical assistance, the activity may build on the work of organizations that are currently working in this field, such as the Solidaridad, International Institute for Environment and Development (IIED), Nature Conservation Research Centre (NCRC), the Sustainable Trade Initiative (IDH); certification standards such as UTZ Quality Foods, Forest Stewardship Council (FSC), Rainforest Alliance and Roundtable on Sustainable Palm Oil (RSPO); research institutions and certification bodies.

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

45. **The activities will include mobilization of community members** (in targeted, degraded, mined-out areas) to engage in planting of economic trees and plants (possibly including indigenous bamboo) that can contribute to short term livelihoods, longer term economic options, landscape restoration, and soil/stream bank stabilization. Support may also include local livelihood opportunities, including (carefully selected) crops that can be grown within plantation systems at the early planting stage before the canopy closes. Agricultural production assists with plantation maintenance and weeding, and provides an early income source in advance of the first thinning and timber harvest. This work will proceed in parallel with reclamation activities mentioned in Component 1, based on assessment, criteria development, and consultations with communities and decentralized government authorities. For communities organized into CREMAs, support may include technical assistance in

⁵ **Lessons from Uganda's SPGS.** Under SPGS, plantation establishment and maintenance costs are partially reimbursed (50 percent) in staggered payments over the first two years. Payments are conditional on operator compliance with standards for tree seedling quality, maintenance and weeding. Operators are monitored closely and provided technical assistance to improve the chance of longer term success. Commercial plantations supplied timber at a lower cost than illegally logged timber. Over time, SPGS built the confidence of the private sector and leveraged more investment, while also contributing to development of a modern, commercial timber subsector, with improved planting material, certified nurseries and contractors supplying forest advisory services (SPGS, 2014).

⁶ This activity is noted separately to indicate the different forms of financing available in this tranche of FIP financing, which includes both grants and concessional finance.

business planning so that the tree/timber output is eventually used efficiently to contribute to local economic development (processing of timber into sawn wood, poles, building components and other value added/downstream markets).

46. **Theory of Change.** The transformative nature of this activity is to stimulate private sector investment in tree planting which creates employment and supplies local markets. It will also empower communities to engage in local timber production and processing. Both actions will reduce pressure on natural forests, create alternative livelihood options, rehabilitate degraded landscapes and sequester carbon. Components 2b and c aim to create viable businesses and employment through investment in timber plantations, which will eventually reduce pressure on natural forests and enhance carbon stocks. This activity supports and operationalizes the GoG's plans to augment the legal, sustainable supply of timber through a plantation development program, which aims to enhance and promote private sector investments. It also helps to demonstrate one approach to promote SME investment in plantations, which has been constrained by a weak enabling environment and a poor investment climate. In addition to direct employment generation, plantation development has the potential to generate additional local economic opportunities through seedling production and service delivery or out-grower arrangements. Local government, traditional authorities and the state will benefit from increased revenue, as well as increased economic activity and business opportunities. Ecosystem services will be enhanced also, especially when plantations are located as part of a natural and planted forest mosaic, with enrichment planting of indigenous species under the original ENFAL project.

47. **Component 3: Innovation, capacity building, and communications (US\$1.00 million grant).** Following the structure of FIP ENFAL, this AF will expand support for communication, outreach and regular reporting on trends and results of the activity by MLNR to coordination bodies and higher authorities engaged in the MMIP implementation and follow on planning, including MESTI, EPA, MC and others. It will support scaled up communication and outreach activities to engage communities and miners (both legal and illegal) with awareness campaigns about the government's plans and programs. Outreach activities will be designed to engage miners on good environmental practices in artisanal gold mining and mine site rehabilitation, including use of established, legal small-scale mining operations as learning sites and mentors (to the extent possible). Where useful, training programs will be conducted with communities, mine owners and workers, local and traditional authorities and others to introduce improved practices, raise awareness of health impacts, and raise awareness of environmental degradation costs and impacts. Outreach activities will also be aimed to promote replication of good practices and scale-up of mine site rehabilitation at additional sites across Ghana.

48. **Component 4: Project management, monitoring, and coordination (US\$1.00 million grant).** Additional support for management, monitoring and coordination recognizes the need to expand the G-FIP Steering Committee to include key agencies, such as the Ministry of Chieftaincy and Traditional Affairs and others as needed. Project management and reporting functions will expand to ensure regular reporting on and integration of the FIP ENFAL- and AF-funded activities with larger scale Government programs to address and control the negative effects of illegal ASM.

49. **Results Monitoring and Evaluation.** Under a national framework reporting to the National Development Planning Commission (NDPC), each sectoral ministry, including MLNR, is responsible for sector M&E. Section 10 of the National Development Planning (Systems) Act, 1994 (Act 480)

requires the Ministries to monitor the implementation of their Sector Medium-Term Development Plans (SMTDPs) and submit reports at intervals in prescribed formats to the NDPC. MLNR is also responsible for ensuring that its associated agencies, including the Forestry Commission, operate and report within this Monitoring and Evaluation (M&E) framework. Under this system, the Minister and the Chief Director have ultimate responsibility for the following: (i) Development and implementation of Sector M&E Plans; (ii) M&E capacity building within the Ministry; and providing the necessary funds and supporting conditions for M&E in the sector. NREG TA supports work on improving the forestry-sector M&E system. Within MLNR, the Policy, Planning, Monitoring and Evaluation Division (PPMED) is responsible for all aspects of M&E, plus reporting into the national system.

50. **Project level M&E** will be implemented under the current MLNR M&E system. Project monitoring and evaluation will serve to: (a) monitor and report on implementation progress; (b) identify gaps that require corrective actions; and (c) assess and report on results (see Annex 1 for Results Framework). The M&E system will feed into the country FIP Program reporting per the guidelines on "Result monitoring and reporting in the FIP" approved by the Sub-Committee on October 30, 2013. The FIP Coordination Unit will be responsible for data collection and upstream reporting of progress towards achieving results to the World Bank and the FIP Steering Committee annually. The FIP Coordination Unit will also coordinate data collection across the three MDB-financed projects. Cost for collection of monitoring information is embedded in the overall budget.

51. **Gender aspects.** The project considers gender and demographic gaps arising under business as usual, as well as those that may skew the outcomes of the project's activities. In the current environment, where illegal artisanal mining is prolific, negative environmental effects have a disproportionate effect on women, children, and other vulnerable populations. There is the differential impact of mining pollution, specifically from mercury, on women and children through toxic exposure in water and diet. *Galamsey* also contributes to restricting, and in many cases precluding, access to resources, such as clean water and fuel wood—which women and children are most often tasked with obtaining—as well as agricultural lands, most notably cocoa farms. Contributing to these impacts is the fact that women and children often have lower levels of awareness about the risks and costs of artisanal mining to their health and to their households. Implementation will assess and monitor potential gender gaps arising from access to project benefits, including access to revenues from alternative livelihoods and jobs created – in reclamation, maintenance, and monitoring and enforcement of private woodlots and community resource areas.

52. **The project will take the following steps to address potential gender gaps.** The project will follow international best practices in transitioning women in pilot sites away from illegal mining, including lessons from previous projects, e.g. the recently closed Ethiopia: Support to Artisan Miners project (P125487). The project will use and leverage toolkits on gender and extractives to best meet the needs of women involved in or affected by ASM at target sites. The project will strive to support women's organizations, which can help to represent women's interests within the community and help to create "economic groups" that can support and exchange knowledge, training, and alternative livelihood pathways. Currently under the ENFAL project, women are increasingly benefitting economically from tree planting as part of village work groups, as well as work on local plant nurseries. Finally, the project will look at the linkages between mining, natural resources management, and gender; typically job and revenue generation are accorded the highest priority. Under its communications component, the project will help to raise awareness of this nexus to the highest levels

of state, as well as to the international community, with the potential to showcase case studies and lessons learned at international conferences and venues.

IV. Proposed Changes

Summary of Proposed Changes	
The changes proposed are: Change in PDO, change in M&E results framework, and amount of financing.	
Change in Implementing Agency	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Project's Development Objectives	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Change in Results Framework	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Change in Safeguard Policies Triggered	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change of EA category	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Other Changes to Safeguards	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Legal Covenants	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Change in Loan Closing Date(s)	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Cancellations Proposed	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Disbursement Arrangements	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Reallocation between Disbursement Categories	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Disbursement Estimates	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change to Components and Cost	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Change in Institutional Arrangements	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Change in Financial Management	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Procurement	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Implementation Schedule	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Other Change(s)	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Development Objective/Results	
Project's Development Objectives	
Original PDO	
The Project Development Objective is to improve forest and tree management practices by cocoa farmers, CREMA communities and forest reserve managers to reduce forest loss and degradation in selected landscapes in Ghana's High Forest Zone.	
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.	
Change in Project's Development Objectives	

Explanation:
 The AF proposes changes that expand the scope of activities conceptually to include explicitly land management and rehabilitation after mining; and geographically to allow pilot sites in the Ashanti and Eastern Regions, which are part of Ghana's HFZ but were not the target of prior interventions.

Proposed New PDO - Additional Financing (AF)
 To improve forest and tree management practices by cocoa farmers, CREMA communities and forest reserve managers to reduce forest loss and degradation and demonstrate rehabilitation of mining sites in selected landscapes in Ghana's High Forest Zone (HFZ).

Change in Results Framework

Explanation:
 The existing key performance indicators that measure the achievement of the project development objectives remain valid and are not changed; however, a new indicator is introduced at the PDO level to capture the new rehabilitated mining sites and targets for indicators on Area of forest targeted and Area reforested have increased to reflect the plantation activities. See revised Results Framework in Annex 1.

Compliance

Covenants - Additional Financing (Additional Financing for Ghana Forest Investment Program (FIP) - Enhancing Natural Forest and Agroforest Landscapes Project - P163745)

Source of Funds	Finance Agreement Reference	Description of Covenants	Date Due	Recurrent	Frequency	Action
				<input type="checkbox"/>		

Covenants - Parent (Ghana FIP - Enhancing Natural Forest and Agroforest Landscapes Project - P148183)

Ln/Cr/TF	Finance Agreement Reference	Description of Covenants	Date Due	Status	Recurrent	Frequency	Action
TF-18842		Finance Agreement: Recruitment of External Auditor Description: The Recipient shall, by no later than six (6) months after the date on which this Agreement becomes effective, appoint and maintain at all times during the implementation of the Project, external auditors with qualifications, experience and		Complied with	<input type="checkbox"/>		No Change

		under terms of reference satisfactory to the World Bank, and in accordance with the provisions of Section III of Schedule 2 to this Agreement. Due Date :30-Nov-2015					
--	--	--	--	--	--	--	--

Conditions

Source Of Fund	Name	Type
CSCF		

Description of Condition

Risk

Risk Category	Rating (H, S, M, L)
1. Political and Governance	Substantial
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Substantial
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Moderate
7. Environment and Social	Substantial
8. Stakeholders	Substantial
9. Other	-
OVERALL	Substantial

Finance

Loan Closing Date - Additional Financing for Ghana Forest Investment Program (FIP) - Enhancing Natural Forest and Agroforest Landscapes Project

Source of Funds	Proposed Additional Financing Loan Closing Date
Strategic Climate Fund	30-Jun-2023

Loan Closing Date(s) - Parent (Ghana FIP - Enhancing Natural Forest and Agroforest Landscapes Project - P148183)

Explanation:

The project Closing Date is extended by 3 years from 30 June 2020 to 30 June 2023 (bringing the total project duration to 8 years and 4 months).

Ln/Cr/TF	Status	Original Closing Date	Current Closing Date	Proposed Closing Date	Previous Closing Date(s)
----------	--------	-----------------------	----------------------	-----------------------	--------------------------

TF-18842	Effective	30-Jun-2020	30-Jun-2020	30-Jun-2023	
Allocations - Additional Financing (Additional Financing for Ghana Forest Investment Program (FIP) - Enhancing Natural Forest and Agroforest Landscapes Project - P163745					
Source of Fund	Currency	Category of Expenditure	Allocation	Disbursement %(Type Total)	
			Proposed	Proposed	
CSCF	USD		7,000,000.00	100.00	
CSCF	USD		2,885,000.00	100.00	
CSCF	USD		10,000,000.00	100.00	
		Total:	19,885,000.00		
Components					
Change to Components and Cost					
<p>Explanation:</p> <p>The proposed AF activities support the GoG's efforts to address the impacts of illegal ASM on forests, community agroforestry areas and natural landscapes through improved coordination and implementation of policies, testing of clean up and reclamation approaches, including tree planting and plantation establishment, with community and media engagement, and communication, outreach and training activities. AF activities will focus in technical areas where the MLNR, FC, MC and EPA already have comparative advantage and in geographic areas where the project already has established community engagements.</p> <p>The AF activities fit into the existing FIP ENFAL component structure and implementation structures, demonstration pilot approaches, community engagement efforts, land use planning and management processes, and outreach and communication tools. The AF adds substantial funds for additional field components focused on site reclamation and plantation establishment, as well as resources to expand policy engagement, communication and coordination activities.</p> <p>Ghana has qualified for new funding from the SCF FIP to finance the activities outlined in this additional financing request. The FIP governing body has approved two tranches of funding based on Ghana's requests: a) US\$10.00 million for Reducing Degradation and Deforestation due to ASGM in Forest Landscapes was approved by the FIP Sub-Committee (SC) in October 2015); and b) US\$9.89 million⁷ to build private sector engagement in REDD+ was approved for transfer from IFC to the World Bank in June 2017. This second funding source includes US\$7 million in the form of concessional loans targeting private sector activities and Ghana's Ministry of Finance has requested the funding in this form. The remainder is grant. See summary of proposed component financing in the table below and more detailed breakdown in Annex 2.</p>					
Current Component Name	Proposed Component Name	Current Cost (US\$M)	Proposed Cost (US\$M)	Action	

⁷ The original FIP allocation to IFC consisted of US\$7 million of concessional finance and US\$ 3 million in grants. Of the grant amount, US\$ 250,000 was allocated for a project preparation grant (PPG). Of this amount, US\$ 114,850 was used for a market assessment of the role of private sector in the context of Ghana's FIP Investment Plan.

Component 1. Policy Reforms and Institutional Strengthening	Component 1. Policy Reforms and Institutional Strengthening	3.00	5.00	Revised
Component 2. Pilot Investments for Improved Forest and Landscape Management with Communities	Component 2. Pilot Investments for Improved Forest and Landscape Management with Communities	22.94	38.82	Revised
Component 3. Innovation, Capacity Building, and Communications	Component 3. Innovation, Capacity Building, and Communications	2.80	3.80	Revised
Component 4. Project Management, Monitoring, and Coordination	Component 4. Project Management, Monitoring, and Coordination	3.77	4.77	Revised
	Total:	32.50	52.39	

Other Change(s)

Implementing Agency Name	Type	Action
Minerals Commission	Governmental	Addition
Environmental Protection Agency	Governmental	Addition

Change in Institutional Arrangements

Explanation:

The AF will work within existing implementation structures include primarily MLNR, NREG Technical Coordination Committee, FC, COCOBOD, EPA and the Forest Research Institute of Ghana (FORIG). Under the AF, the institutional engagement will expand to include the MC, the minerals and land directorates within MLNR, the local Mineral District offices and the EPA.

Project Steering Committee. This project will be adopted by the existing GFIP project Steering Committee (NREG TCC+) for coordination of policy, resources and priorities. The proposed FIP implementation arrangement is 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 programs. The TCC+ also supports the implementation of Ghana's REDD+ agenda and includes representatives of key MDAs including (Minerals Commission and Local Government), 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 DGM is represented in the GFIP Steering Committee.

Implementing Agency. The Ministry of Lands and Natural Resources (MLNR), which host the Minerals Directorate and the proposed Multilateral Mining Integrated Project (MMIP) which seeks to tackle illegal mining and ensure that legal mining is done in a sustainable way, 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 including mines and lands. The Ministry has a dedicated team of technical staff responsible for the implementation of the on-going Ghana Forest Investment.

Project Management Unit. The existing Forest Investment 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 may be supplemented as needed with consulting expertise for communications, reporting, and logistics.

A broader Project Coordination Unit will include the PMU and the dedicated project Focal Points from the Forestry Commission, Minerals Commission, Environmental Protection Agency and Ministry of Local Government and Rural Development and may include representatives of other collaborating agencies as needed. FC will implement field activities and provide services to local committees (of CREMAs and other CBOs) as outlined in paragraph 4. The FORIG, which undertakes forestry research, will lead on activities related to selection of appropriate tree species for the plantation activities and be a collaborating partner under Component 2. The Minerals Commission and the district offices in the pilot areas will be responsible for supporting project activities including field activities and policy and legislation reforms to ensure that reclaimed lands are not explored again. The EPA which represent MESTI at the district level will ensure compliance with all environmental regulations. District Assemblies in the pilot areas will be members of local implementation committees and will be responsible for monitoring implementation of field activities. A subcommittee of the PCU made of representatives from the District Forestry Offices, District Minerals Offices, district EPA offices, and the District Assemblies will be directly responsible for overseeing implementation of field activities including monitoring of the reclamation activities, and Alternative Livelihood activities at community level.

Stakeholders to be engaged in consultations, policy dialogue processes and implementation of activities under this project include the following:

- Communities and institutions supporting the development and implementation of CREMAs.
- Traditional authorities and land owners.
- District and Local Governments
- Local and International NGOs.
- The Ghana Investment Promotion Centre
- Professional communication enterprises, plus other intermediate service providers that may bring skills in training, visual communication, survey design, and M&E approaches.
- Ghana National Association of Small Scale Miners (GNASSM) and the Private Afforestation Developers Organization (PADO).

Financial Management Assessment and Arrangements.

Consistent with the guidelines of the Financial Management Manual for World Bank-Financed Investment Operations issued on March 1, 2010, a financial management (FM) assessment was conducted for MLNR, the key implementing agency under the Project, and FC. MLNR has in the past successfully implemented a series of IDA project and is presently managing original and first Additional Financing for FIP project for which the Financial Management arrangements are rated as **Satisfactory (S)**. Likewise, the FC is also presently managing several Trust Funds and their ratings are moderately satisfactory.

Even though the technical design of the Project is anchored between the MLNR/FIP Secretariat and the Forestry Commission, for purposes of financial management, the FM will be managed by the Accounts

Department of the MLNR. The FM staffing strength at MLNR is strong and has been further strengthened by the assignment of a dedicated qualified Project Accountant.

MLNR. The overall financial management responsibility throughout implementation will be handled by the Financial Controller (FC) at the MLNR. The responsibility of the FC is to ensure that throughout implementation there are adequate financial management systems in place which can report adequately on the use of project funds. As recommended during the first AF, the MLNR has now assigned the daily transactional processing to a fully dedicated qualified accountant and this has helped in ensuring improved fiduciary arrangements. Under the direct technical oversight of the Financial Controller, the overall financial management responsibility will be handled by the dedicated Project Accountant assigned by the Director and *imbedded* as part of the PIP/PIU. The responsibility of the Project Accountant is to ensure that throughout implementation there are adequate financial management systems in place which can report adequately on the use of project funds. In addition, and with the supervisory role of the Director, the Project Accountant will be tasked with maintaining oversight responsibilities with regards to ensuring compliance with financial covenants such as submitting Interim Unaudited Financial Reports (IFRs), maintaining internal controls over project expenditure and engaging external auditors. The Project Accountant will also be responsible for maintaining and operating the designated account and support the processing of payments to contractors and service providers and verifying and authorizing payments for all contracts and activities.

The Project Accountant, working closely with the Project Director/Coordinator will be the focal person for fiduciary oversight and is expected to interact frequently with accountants at the various implementing agencies (FC, COCOBOD, EPA, MC) to ensure timely submission of imprest reports and documentation of expenditure in a manner that facilitates their consolidation into the project's financial system. In sum, the Financial Controller of MLNR, supported by the Project Accountant would be responsible for ensuring compliance with financial covenants such as submitting Interim Unaudited Financial Reports (IFRs) to the Bank, maintaining internal controls over project expenditure and engaging external auditors.

Forestry Commission. Even though the Forestry Commission (FC) will play a critical role in the technical aspects of implementation, it has been proposed that in terms of financial management their role will be limited to **receiving funds from the single designated account**, to be operated by the MLNR. Transfers will be made to the FC to support eligible project activities based on quarterly releases as per the approved annual work plans. As such the FM assessment focused on the systems in place at the FC to ensure that there will be adequate record keeping and documentation of project activities. The Finance Section of the FC is headed by the Director of Finance who is a qualified accountant with relevant years of experience and supported by a team of accounts officers with varying levels of qualification. As done in the current projects, a dedicated Project Accountant will be assigned the role of managing the FIP project to ensure that there is more focus on project financial activities. It is expected that the Project Accountant will be directly supervised and accountable to the Director of Finance.

Compliance with Financial management covenants. In terms of compliance of the Financial Covenants as per the Financing Agreement, throughout the implementation of the original credit and the additional financing the project has generally complied fully with the covenants (*submitting acceptable interim quarterly financial reports and audit reports*). The March, June and September 2017 IFRs were submitted before the due dates and in form and content that is acceptable to the Bank. With regards to the submission of audited financial statements, the project has complied satisfactorily. The most recent audit report was for the year ending 2016 and the audit report was received on June 30, 2017 which was within the six months' period after the end of the fiscal year and thus in-compliance with the provision of the Financing Agreement. In addition, the audit indicated that the control environment for implementation was adequate and that minor issues noted were not material or significant to affect the underlying records.

In conclusion, the assessment of the financial management arrangements at the MLNR and FC concludes that there are adequate systems in place that satisfy the Bank’s minimum requirements under OP/BP10.00 and the overall FM risk has been assessed as **Moderate**.

Strengths and weaknesses of the Financial Management System. MLNR has a fully functioning accounts unit which is staffed with a mix of qualified and unqualified accountants with varying degrees of experience particularly in public sector accounting. The presence of an existing accounting unit with established processes and procedures as complemented by adequate staffing who are already conversant with IDA projects is the key advantage of the finance and accounting team within the MLNR. As part of the ongoing implementation of the FIP and the first AF, the accounts team has been further strengthened by the assignment of a fully dedicated qualified accountant who oversees the transactional processing and reporting arrangements. This has helped to ensure full compliance with IDA FM guidelines.

A possible weakness could arise from the inherent risk associated with challenges in inter-departmental coordination, oversight and controls between the MLNR and the key implementing agencies e.g. EPA, COCOBOD, FC, MC etc. Specifically, for Financial Management this could result in delays in preparing and approving consolidated budgets, delays in releasing of fund and challenges in providing appropriate supporting documentation. In addition, a major challenge has been delays in preparing and submitting acceptable financial returns from the implementing agencies. To address this risk, the Bank has recommended that the Project should only transfer additional funds to the beneficiary agencies only if they have **documented up to 75 percent** of the outstanding balances (advances). Furthermore, the accountants should understand that the funds are not “earmarked” and so they can be used for any eligible project activity as determined in the approved AWP& Budget. This should help address the issue of funds being requested for new activities even though funds are still available for planned activities which are yet to be initiated. *The proposed changes have been discussed and agreed and will be amended in the revised Project Implementation Manual (PIM).*

In general, the assessment indicates that both primary implementing agencies have in-depth prior experience of implementing Bank and donor-financed projects. They thus have the requisite know-how and experience to carry out the accounting function of the proposed project when supplemented by dedicated incremental staff over the life of the project.

Change in Implementation Schedule

Explanation:

Project will be extended to 2023.

Other Change(s)

Explanation:

Additional financing which includes a loan of US\$7.00 million and a grant of US\$12.89 million.

V. Appraisal Summary

Economic and Financial Analysis

Explanation:

This intervention is expected to generate significant and positive benefits that outweigh the costs. This expectation is based on the rationale that the mined-out sites are currently generating negative costs and externalities, including erosion/soil loss, river siltation, loss of productive forest and agricultural areas, and waste and chemical pollution. Without intervention, negative externalities will continue to flow from these sites affecting both the local and downstream communities (yielding a discountable stream of future costs imposed on Ghanaian society). This project aims to begin the process of reducing this stream of negative

costs, in a few pilot sites, while also mobilizing community labor and leveraging wider GoG interventions, such that the basic investment costs are limited, while the potential benefits are great.

A full economic analysis awaits more complete data on the size and locations of interventions, specifically for mine site reclamation, which needs careful assessment before selection. The project's primary activities can be expected to yield multiple categories of benefits, and some areas of potential costs, as follows:

- Quantifiable benefits include: increased tree cover due to plantations and associated carbon benefits, productive economic activities of communities engaged in alternative livelihoods, earnings associated with plantation establishment, long term values of the timber produced, and the multiplier effects of processed wood products in the economy.
- Less tangible benefits include: strengthened institutions, habitat connectivity, offsite pollution reduction from mine site reclamation, ecological health benefits of reduced pollution loads, and improved water quality.
- Opportunity costs: the lost value of gold extraction is a potential cost to be considered, which would be quite high per hectare relative to any traditional or alternative livelihoods. However, selection criteria aim to focus on sites that are mined-out, so these opportunity costs should be low.

For the categories of quantifiable benefits, an economic analysis framework is being developed based on expected areas and yields resulting from project interventions. These are not yet fully defined, but the approach would rely on standard timber and crop growth/yield estimates and the areas expected to be involved. Reduced emissions and carbon sequestered by fast growing plantations are another category of benefits, where potential values can be estimated. Ghana's Emission Reduction Program Document (2017) provides the data needed for estimating the value of potential emissions reductions.

The economic analysis approach would use project level data, where available, supplemented with market information and literature values, where needed. Conservative assumptions for interest rates and prices would be applied, including ranges of values to address potential uncertainties. The analysis would be based on a 30-year horizon with a discount rate of 7 percent (with other rates analyzed for sensitivity analysis and comparison). Because this is a public investment in forest and land management, an even lower discount rate would be reasonable to capture the long-term nature of the expected benefit stream. Sensitivity analysis of a range of discount rates, unit values and areas can be used to show how benefits might vary under different scenarios of project impact and the degree of replication achieved, particularly where the full area and cost of specific interventions is still being examined.

Less tangible benefits. This project will generate local and offsite benefits and public goods that are difficult to measure in advance. These benefits would be focused in a few pilot sites primarily. However, the potential for wider replication is also recognized and would be an unquantified benefit. These benefits include improvements to land stabilization in riparian zones, water quality in demonstration sites, resilience building and risk reduction associated with reduced illegal activity and community control over local resources. Assisting the government and the communities to address and control a widespread environmental problem promotes learning and social mobilization, and builds social capital, institutional confidence, and respect for the rule of law – all societal goods that are not generally quantified, though of high value to Ghana in the current situation. Enumerating unquantified benefits raises the confidence that project costs are justified by the benefits achieved.

Technical Analysis

Explanation:

The project design follows international good practice guidelines in the interventions supported. Activities are designed to fit within the responsibilities of MLNR and FC, as institutions with mandates for forest conservation, management, and improvement. Due to the cross-cutting nature of the illegal ASGM

challenge, the project design involves additional agencies with relevant mandates – MESTI, EPA, MC, the minerals and land directorates within MLNR, the local Mineral District offices – and amplifies the project’s outreach to communities, local governments, and traditional authorities. The project dovetails with the GoG’s wider efforts to control illegal ASM and mitigate its consequences, though it is focused in a few sites. To promote alternative livelihoods for *galamseyers*, the project provides the means, capacity building, and incentives to engage more effectively with: a) rural communities, providing a role in rehabilitation which becomes a source of alternative livelihoods; b) the private sector, supporting investment in plantations, to create jobs and develop a source of sustainable timber; and c) the traditional authorities, to identify alternatives to land allocation for ASGM. Communications efforts build on the original project design and will promote coordination within the government and among stakeholders, including communities, while outreach and awareness raising efforts will target illegal miners, their communities, and traditional authorities. The components work together to enable key GoG agencies to work more fully and cooperatively with citizens to prioritize, incentivize, and render durable the sustainable use of forest lands, shifting away from destructive practices. If the demonstration value of the pilots is high, scaling up should occur in other illegal mining-affected areas and regions of the country.

The technical design draws on best practices from complementary analytical studies and synergies with ongoing and planned projects operating in related areas. The analytical studies informing this project include: a) in-depth analysis of natural resources issues, including those related to artisanal and small-scale mining and their effects on forests, from the Natural Resources and Environmental Governance NREG Technical Assistance (NREG TA) Project; b) a PROFOR-financed Forest Smart Mining – Identifying Good and Bad Practices of Artisanal and Small-Scale Mining in Forested Landscapes case study that focuses on ASGM in Ghana; and c) the Frugal Reclamation report from Mongolia, financed by the Asia Foundation, which looks into ways in which Mongolia can mitigate environmental negative impacts from illegal ASM and formalize the sector. Simultaneous to the FIP AF are three related projects that create opportunities for collaboration and will strengthen overall support to the GoG in this complex area. The first is the GEF-funded Reducing environmental health risks in artisanal gold mining and e-waste in Ghana (GEF Program ID: 9444). One subcomponent is dedicated to addressing mercury pollution and will complement this project by pilot testing cost-effective and environmentally sound extraction technologies and support policy enhancements for improving monitoring and enforcement of mercury use regulations. Second, the PMEH Contaminated and Toxic Land Pollution and Ghana – Rapid Screening Assessment is a trust funded program that will offer rapid assessment of the public health risks posed by mercury toxicity. Under this project PMEH is providing resources to identify and characterize approximately 100 contaminated and toxic sites across Ghana and to carry out in-depth analysis/research of two or three sites to assess the health and related economic effects of toxic land pollution. Finally, there is a proposed analytical activity on Ghana Artisanal Mining for sustainable development: Structurally Addressing the Galamsey Crisis (P166265). This is a small analytical project that will also complement this AF by looking at international good practices for ASM formalization. Additionally, multiple organizations operating in Ghana have expertise and some years of experience in reclamation practices. The AF will leverage the work in rehabilitation that has been done or is currently ongoing by large scale mining companies, non-governmental organizations, and universities. Annex 7 provides more details on these projects and organizations.

Component 1 (Policy Reforms and Institutional Strengthening) responds to the need for cross-sectoral coordination and improved policy to control illegal ASM and mitigate damage. The design recognizes that agencies need to work together given the complexity of the situation. The project expands on existing institutional platforms for cross sectoral coordination that help to synchronize the ability of relevant agencies to use their mandates in a more holistic approach toward the goal of halting and remediating the effects of ASGM. The project also provides resources to correct policies and incentives to discourage *galamsey* and foster reclamation and rehabilitation. The project provides technical expertise, private sector experience, and international best practices to equip project implementers with knowledge on how to cost effectively engage

in rehabilitation with community engagement and how to protect these sites from re-entry. These policy, coordination and information interventions come at an opportune time where higher level decision-makers are seeking effective approaches to address an issue with national political visibility.

Component 2 includes two pilot demonstrations that aim to influence wider perceptions and investments. The first pilot (Demonstration of Clean Up and Reclamation Practices with Alternative Livelihood Support) responds to the need to show action on the ground, as well as more sustainable economic alternatives. This activity contributes to the effort to characterize the extent of *galamsey*-affected areas, which will assist the GoG in planning for nationwide rehabilitation efforts. The pilot interventions also aim to highlight and strengthen currently weak local land use planning and allocation processes, which do not sufficiently engage community stakeholders and have enabled illegal ASM to proliferate with high benefits flowing to some and negative externalities flowing to many. This intervention also will build (to the extent possible based on site selection) on the CREMA approach, which is being expanded under the original FIP ENFAL project. Working through communities and local authorities, the project aims to foster greater participation and increased benefits through demonstration of better planning and management of forests, trees and natural resources within mined-out areas in key target landscapes. This community based approach holds the potential to help transition former illegal miners onto sustainable livelihood paths, including in timber production. The approaches will also be informed by technical knowledge and guidance legal mining enterprises that have demonstrated positive experience with site reclamation and rehabilitation in targeted sites. These interventions should contribute to reviving ecosystem functions, improving soil productivity, increasing tree cover, and restoring water courses, which will benefit both the targeted community and wider users of the landscape, especially those downstream from the affected area.

The second pilot activity (Incentivizing Investment and Local Level Job Creation in Timber Plantations) responds to the need to augment legal, sustainable sources of timber for the domestic market and to reduce illegal logging and unsustainable exploitation of forest resources. The pilot also addresses credit constraints for long term capital needed for forest plantation development. Pilots aim to demonstrate plantation timber as a viable business model that is currently under-recognized in the commercial banking sector due to slow returns on investment. The activity follows a financial assistance scheme based on Uganda's demonstrated experience, which generated revenue for timber farmers and helped rebuild that country's commercial timber sector. The transformative nature of this activity is to empower communities and entrepreneurs to engage in local timber production and processing, which will also create livelihoods, rehabilitate landscapes and sequester carbon. Technical assistance activities – a related subcomponent to the second pilot – provide a range of services to timber farmers, including agronomic advice, business planning and land and tree tenure services. Local communities should also benefit from employment and opportunities for service delivery, maintenance and out-grower business opportunities, such as seedlings for nurseries, transport and logistics.

Component 3 (Innovation, Capacity Building, and Communications) responds to the needs of the government to strengthen engagement with illegal miners and the communities in which they operate. This builds on existing communication and outreach efforts and increases focus on public health and environmental awareness raising, training, and good environmental practices. The project will leverage the experiences of legal LSM and SSM practitioners to transfer knowledge and aid in the rehabilitation of degraded forest landscapes. Improved communication with and outreach to illegal miners and illegal mining communities should lead to improved relations, reduced conflict, and more cooperative and informed reclamation efforts.

Component 4 (Project Management, Monitoring, and Coordination) responds to the needs of an already complex institutional environment for proper coordination and communication channels between the multiple agencies involved in combatting *galamsey*. The activity will expand and support existing institutional governance structures and build skills and networks to strengthen and align GoG priorities,

objectives, and interventions. This should facilitate ongoing efforts to address the *galamsey* challenge and channel GoG capacity in a concerted effort to protect the environment and preserve natural resources.

Financial Management

The MLNR follows the budget preparation guidelines as per the per the Public Financial Management Act (921) 2016 and the annual budget guidelines issued by the Ministry of Finance. Specifically, for this project (FIP), the budget and expenditure allocations have been agreed between the government and IDA and will form the basis of the annual work plans and budgets. The current budgetary control processes used mostly for the government's discretionary budget are capable of monitoring commitments and outstanding balances. The assessment indicates that budgeting processes are satisfactory and can be relied upon to reflect the various components of the project (see Annex 5 for detailed arrangements and assessment).

Procurement Management

The procurement management arrangements remain unchanged. The implementing agency will be the Ministry of Lands and Natural Resources (MLNR), who will be responsible for the project's procurement and contract management, in collaboration with the Forestry Commission (FC), Minerals Commission (MC) and other relevant agencies under the MLNR. (see Annex 6 for procurement assessment and further details).

Social and Environmental Analysis

Explanation:

This AF includes new activities: 2a. Pilot demonstration of clean up and reclamation practices with alternative livelihood support after forest and land degradation due to ASM; and 2b. Pilot for incentivizing investment and local level job creation in timber plantations. These components will be implemented in forest and cocoa landscapes in Ghana's High Forest zone, which includes areas of Brong-Ahafo, Western, Ashanti and Eastern Regions. These activities will have positive social and environmental benefits; possible adverse impacts will be mitigated by safeguard instruments prepared for FIP ENFAL. The project is classified as Environmental Assessment (EA) Category B.

Under component 2a there is a plan to rehabilitate some pilot sites from a mined-out and degraded state to an economically usable state. Since mined sites may be contaminated with heavy metals, including Mercury, which is toxic to humans and the environment, care should be taken – including appropriate soil testing – in the process of reclaiming mined-out sites to protect people and the environment from contamination. Soil management measures such as liming are required to prevent the contaminant migration from the topsoil into the subsoil and groundwater as well as to provide suitable conditions for planting trees. Similarly, the choice of species for rehabilitation of degraded land must consider the potential for soil (and water) contamination, for example timber trees or bamboo would likely be preferred to crops that would be handled or processed for consumption. The ESMF is being updated to provide a procedure on how contaminated sites will be reclaimed to avoid adverse impacts on people and the environment.

The original ENFAL project has benefited from parallel environmental and social assessments and due diligence developed under the FCPF support to the REDD+ Readiness Process, including development of a Social and Environmental Strategic Assessment (SESA) that has identified possible social and environmental risks. The FIP ESMF, Pest Management Plan (PMP) and Process Framework identified specific safeguard activities, roles and responsibilities, capacity building and budget requirements. The Environmental and Social Management Framework (ESMF) and Process Framework will be updated to include the new areas that have been added in this Additional Finance. The update will provide for a revised budget incorporating the capacity building needs of the additional implementation agencies.

The updated PF would continue to be applicable to project activities that impose restriction on access to forests areas including the historically admitted farms. On the other hand, the new activities to be undertaken under the AF on degraded land on mined-out sites would be clearly marked out and mitigation measures, as appropriate would be developed to address any potential social risks and impacts that would be identified in the ESMF. The criteria for the selection of project sites for plantation development in mined-out sites would be discussed in a participatory manner with the local communities to ensure that these lands are abandoned and not currently under any use, since they would have been degraded by the illegal mining activities and may be contaminated. To that extent, it is envisioned that the rehabilitation of tree plantations on such lands would not result in restriction nor access to the use of the land. Potential social risks and impacts that may be identified would be mitigated by appropriate measures in the ESMF.

The following safeguard policies remain applicable to this AF.

- *Environmental Assessment OP/ BP 4.01.* The project will continue to engage in many activities that use forest resources in selected sites and potentially impact other environmental areas. However, key to the AF is the rehabilitation of degraded areas as a result of artisanal mining. Due to the general processing methods used by artisanal miners, it is envisaged that additional land pollution risks with chemicals such as mercury and arsenic would need further elaboration in an updated ESMF to provide for testing of areas to be rehabilitated within the ESMF. The updated Environmental and Social Management Framework (ESMF) will be, consulted upon, and disclosed in-country and cleared and disclosed by the Bank.
- *Natural Habitats OP/BP 4.04.* The project activities within the AF will still involve forest areas which may contain critical ecosystems; the project will enhance the quality of the management of these critical ecosystems and reduce risks associated with cocoa production, degraded land restoration and other agroforestry practices. The updated 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 storing carbon through sustainable forest management. The ESMF includes guidance on managing forestry issues.
- *Pest Management OP 4.09.* The project will not directly finance the use of pesticides but will promote integrated pest management (IPM) and application of pesticide to minimize risks to human health and the environment, particularly in situations when pesticide use may increase in association with the project, such as promotion of suitable food crops as part of degraded landscape activities. The project-specific Pest Management Plan (PMP) will be updated based on this background and the potential crops to be promoted if any, to ensure that the project does not increase the environmental impacts of pesticide use, and where possible these are managed responsibly, in line with sound environmental and human health protection objectives.
- *Physical Cultural Resources OP/ BP 4.11.* The ESMF and Process Framework incorporate screening to ensure that the project would not have any negative impact on sacred sites. Decisions on pilot activities will be made in consultation with local communities; the location of sacred sites is local knowledge and rarely (if ever) documented or mapped. Screening of sites for pilot activities will include specific screening under the ESMF to avoid adversely affecting physical cultural heritage, such as sacred groves.
- *Indigenous Peoples OP/BP 4.10.* Based on portfolio review, previous experience, and Bank guidance, this policy is not triggered for projects in Ghana.
- *Involuntary Resettlement OP/BP 4.12.* No involuntary resettlement is anticipated as a result of activities undertaken under the AF. However, as part of the plans for ensuring forest reserves are protected and mined-out sites are restored through investment in tree planting and other rehabilitation activities, these activities may reduce or restrict access to locations or resources by community members. The reclamation of mined-out sites, including regrading and replanting, for example, may

have adverse impacts on livelihoods. Livelihoods may be restricted by the introduction of new land uses (e.g., riparian zones, timber plantations) or by the introduction of remedial actions or regulations on for example, space needed for water treatment / settling needs, or restrictions on activities due to contamination. These restrictions of access will be negotiated with farmers through consultative processes, and alternative livelihoods support and other inputs and incentives will be offered to increase agricultural productivity. Similarly, use and access to resources may be restricted due to changes in forest management, delineation of boundaries and resource management plans, including those developed voluntarily by CREMAs. A Grievance Redress Mechanism has been set up under the FIP ENFAL project and will continue to be improved for more functional application in collaboration with the communities to provide avenues for complaints redress and social accountability. These activities will be guided by the Process Framework to ensure participatory processes are incorporated into resource management plans and appropriate alternative livelihood support. The Process Framework would be consulted on, disclosed in-country and on the World Bank’s website.

Recipient’s Institutional Capacity. The Government of Ghana has gained significant experience in implementing projects that are similar to this project using the World Bank safeguards instruments. Since the thematic areas under the proposed AF are similar to the original project and past projects, the team is confident that the Government has the appropriate capacities to properly prepare and enforce safeguards policies. The Ministry of Lands and Natural Resources (MLNR), the main implementing agency, is in the process of building capacity on safeguards at the district levels. Since the AF will be implemented within the same Ministry, it would benefit from existing experience and knowledge transfer from the main FIP project. The Minerals Commission, being introduced under this AF, already has experience with the implementation of other World Bank projects. EPA will be instrumental in developing regulations and standards to address adverse impacts of artisanal mining. However, to bridge any capacity gaps and to ensure consistency in knowledge across the implementing agencies, the Bank will continue to provide guidance and training on safeguards policies and procedures to key project staff during implementation to ensure the project is in compliance with safeguards requirements.

Environmental Analysis

Explanation:

The safeguards policies that are triggered under the original project are relevant for the AF activities. The safeguard instruments mainly the SESA, ESMF, PMP and PF are currently being reviewed and updated by the GoG to ensure that all potential social and environmental risks and impacts are covered and to ensure that additional affected communities in the targeted geographical areas, in the Brong-Ahafo, Western, Ashanti and Eastern regions are effectively consulted.

Risk

Overall project risk is substantial. (The current project is rated moderate in risk). During site visits and meetings with decision makers and stakeholders, however, the mission noted the complexity of the small-scale mining issues and the risks associated with stakeholder engagement to prevent further environmental degradation and scale up rehabilitation efforts. Implementation risks are increased overall due to the topic area related to rehabilitation of mining areas and the addition of new implementation partners. The project design is being adjusted to mitigate risks where possible, but engaging with the mining sector in Ghana will have its own set of risks.

Political and Governance (Substantial). 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. The project will need to deliver tangible results to communities to sustain support for the overall change process. The election of the new government in late 2016 creates new opportunities and entry points for improving natural resource governance.

Proposed Mitigation Actions. The issues of governance, vested interests and distorted incentives will be addressed by using technical criteria and technically-sound established institutional frameworks for making decisions on allocation of project support at community level. Engagement will be increased with traditional authorities and will aim to be led by community demand and interest to the extent possible.

Macroeconomic (Substantial). Ghana is one of the most stable economies in West Africa, yet it suffers from budget deficit ballooning during electoral cycles. Macro-economic shocks and challenges continue to weigh on economic growth, which has slowed down significantly since 2013. Inflation remains high and may affect prices of inputs provided by the project. Significant increase in the price of gold could incentivize illegal mining even in the face of government programs and safeguards.

No mitigations for these risks are proposed as risks are external to the Project and beyond its scope.

Sector Strategies and Policies (Substantial). GoG, and particularly MLNR, has high engagement and interest to address the problems of illegal ASM. A new GoG initiative, the MMIP, see annex 1, has been developed and will add resources and political resolve to addressing the issues. However, this initiative will require coordination across a range of national agencies with different mandates, as well as engagement with local governments and law enforcement entities at several levels. This yields a complex playing field. Likewise, policies will need to be updated and strengthened to ensure that the legal authorities and mechanisms are in place to address degradation, contamination, and illegality issues.

Mitigation Measures. The proposed AF activities allocate substantial resources to policy assessment, coordination and implementation among key agencies – and consultative processes to ensure that policies are developed and improved with a sound basis of stakeholder input. The project will focus on a few targeted districts in a pilot testing approach to determine what forms of intervention – considering both land reclamation and timber plantations for livelihoods – have prospects for success. The proposed design includes resources for consultation, communication and dissemination of lessons and success stories. These allocations aim to build the role of change agents in communities and to build constituency for practical and legal solutions to the problems at hand.

Technical Design of Project (Moderate). The project design does not rely on complex technologies or procedures. There is a need to pay attention to site selection criteria, consultation with affected communities, and the potential replicability of interventions, such as tree planting, community engagement and monitoring. Developing community and company partnerships for establishment of timber plantations may be challenging in terms of convening and negotiating.

Institutional Capacity for Implementation and Sustainability (Substantial). Implementation capacity under the current project has improved so that the risk is currently rated Moderate. However, the proposed AF will introduce new implementing agencies that have less experience with implementation of Bank projects and less experience with MLNR acting as a coordinating agency. This will create some growing pains for implementation of new activities in new areas under the AF.

Mitigation Measures. The project will work from a good institutional base and coordination procedures. The new institutions brought into the implementation framework will have access to training, learning by doing, and examples of success among their partner agencies. This should help to bring all parties up to speed relatively rapidly. The PIM will be updated and disseminated for training, on the job learning, and practical application among new members of the coordination team.

Environment (Substantial). A key activity of the project is to design, consult, and pilot test interventions that can improve the environment around abandoned mining sites through reclamation and replanting, including with timber plantations. However, beyond the project, there is substantial risk of continuing environmental degradation related to the pace and scale of *galamsey* activities. Also, newer excavation or processing technologies could come into play that make subsoil extraction easier or less costly, further exacerbating the issues of illegal mining, even to the point of allowing re-entry to mined-out areas (as has happened in Rwanda). There is also the potential for toxics (e.g., mercury) used in the mineral processing to contaminate the soil in the reclamation areas or to make those areas unsuitable for certain agricultural uses, including food crops. In addition, there will be a significant risk of polluting surface and ground water as well as impacting public health with heavy metals such as mercury.

Mitigation Measures. The project will need strong implementation guidelines on what kinds of crops can be considered, or only timber or construction materials, such as bamboo. Proper monitoring and oversight of the reclamation process will be needed to ensure that project activities do not contribute to hazardous materials entering the environment or food chains. Participation, consultation, and communication will be needed to ensure that the right messages go out to project participants and affected communities. Training and communication components will aim to ensure that people understand the contamination risks and have the skills to conduct activities with exacerbating contamination through crops or livelihood activities. The ESMF would provide detailed procedures for reclaiming mined-out sites to avoid and mitigate impacts of heavy metals such as Mercury on human health and the ecosystem.

Social (Substantial). Social risks arise from multiple aspects. The project will focus on community engagement and land/forest rehabilitation plus timber stand establishment. These will provide alternative livelihoods for some in the near term. However, earnings in these alternative activities may be substantially lower (though more sustainable) than what illegal miners can earn. Also, the project activities will occur alongside government actions, such as increased law enforcement and other efforts to deter illegal ASM. These may further curtail the livelihoods of substantial numbers of people in wider areas than the project interventions. This may also lead to conflict between groups or with the implementing agencies.

Mitigation Measures. Project activities will focus in a few areas and on some technical activities that can pilot test steps toward improvement. Participatory and consultative approaches will be followed in conjunction with a functional GRM that serves an avenue for addressing any issues resulting from the project implementation. Assessments and international comparisons will be used to advise the government on sound approaches that lessen the risk of conflict and social exclusions. Communication activities will be designed to understand that participant and observers understand the pilot nature of the activities and the need for scale up beyond the existing project resources.

Stakeholders (Substantial). Numerous sets of stakeholders need to be engaged and satisfied, including communities; district level authorities; small, large and legal miners; land owners and land users. It may be difficult to obtain equal buy-in from different groups. There may also be competing claims to land that is planned to be reclaimed/rehabilitated or to lands where the government determines to grant concessions to small scale miners (who have been registered and legalized).

Mitigation Measures. Consultative processes will be followed when engaging communities and stakeholder groups. Pilot activities will be localized to a small set of districts where political will and community awareness are already aligned toward positive action. Strong communication and outreach activities will be planned. Educating and raising awareness with traditional authorities and organized local groups such as farmers, traders, religions, youth and women will be an important element of stakeholder engagement.

Fiduciary (Moderate). Financial Management (FM). Risks under the current project arose from the capacity of MLNR to manage World Bank funds and from the multiple agencies involved in implementation. These risks were rated moderate after implementation of key recommendations requiring dedicated FM staff and additional training, plus close monitoring.

Mitigation Measures. The current set of mitigating actions has allowed the current project to obtain a moderate risk rating and a satisfactory performance rating. The moderate risk rating is because of the positive changes in the FM arrangements due to the coming on board of a new and more experience accountant, and more proactive involvement of the senior project management team in the fiduciary matters of the project. It is expected that this level of performance can be maintained. However, continued attention is needed with the addition of more implementing agencies and work with district assemblies and communities.

Procurement Management. Procurement management has improved under the current project implementation, but is still assessed as substantial. This is due to the potential for weak planning due to insufficient capacity, lack of use of the procurement plan as a monitoring, evaluation and management tool, and delays in the procurement process due to delays in evaluation and clearance of bids.

Mitigation Measures. The most recent ISR rated procurement processes and compliance, record keeping and contract administration and performance as Moderate, noting that MLNR's PMU adheres to the general principles of procurement, the Bank's Guidelines and the Project Implementation Manual (PIM). Continued close engagement with the PMU procurement team are expected to manage risks appropriately. Procurement under the AF is likely to be for small items, such as field tools, seedlings, and the like.

VI. World Bank Grievance Redress

53. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

Annex 1: Revised Results Framework

Project Name:	Additional Financing for Ghana Forest Investment Program (FIP) - Enhancing Natural Forest and Agroforest Landscapes Project (P163745)	Project Stage:	Additional Financing	Status:	DRAFT
Team Leader(s) :	Timothy H. Brown	Requesting Unit:	AFCW1	Created by:	
Product Line:	Recipient Executed Activities	Responsible Unit:	GEN01	Modified by:	
Country:	Ghana	Approval FY:	2018		
Region:	AFRICA	Financing Instrument:	Investment Project Financing		
Parent Project ID:	P148183	Parent Project Name:	Ghana FIP - Enhancing Natural Forest and Agroforest Landscapes Project (P148183)		

Project Development Objectives

Original Project Development Objective - Parent:

The Project Development Objective is to improve forest and tree management practices by cocoa farmers, CREMA communities and forest reserve managers to reduce forest loss and degradation in selected landscapes in Ghana's High Forest Zone.

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.

Proposed Project Development Objective - Additional Financing (AF):

To improve forest and tree management practices by cocoa farmers, CREMA communities and forest reserve managers to reduce forest loss and degradation and demonstrate rehabilitation of mined-out sites in selected landscapes in Ghana's High Forest Zone (HFZ).

Results

Core sector indicators are considered: Yes

Results reporting level: Project Level

Project Development Objective Indicators							
Status	Indicator Name	Corporate	Unit of Measure		Baseline	Actual(Current)	End Target
No Change	People in forest & adjacent community with monetary/non-monetary benefit from forest	<input type="checkbox"/>	Number	Value	0.00	0.00	87500.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
No Change	People in forest & adj. community with benefit from forest-Ethnic minority/indigenous	<input type="checkbox"/>	Number Sub Type Breakdown	Value	0.00	0.00	0.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
No Change	People in forest and adjacent community with benefits from forest-female	<input type="checkbox"/>	Number Sub Type Breakdown	Value	0.00	0.00	45000.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
No Change	Area under improved CREMA management or climate smart cocoa management practices in targeted landscapes due to Project intervention	<input type="checkbox"/>	Hectare(Ha)	Value	0.00	0.00	50000.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
No Change	including under climate smart cocoa management practices	<input type="checkbox"/>	Hectare(Ha) Sub Type Breakdown	Value	0.00	0.00	30000.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
No Change	including under CREMA management	<input type="checkbox"/>	Hectare(Ha) Sub Type Breakdown	Value	0.00	0.00	50000.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
Revised	Area of forest in targeted landscapes	<input type="checkbox"/>	Hectare(Ha)	Value	303885.00	303885.00	417518.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2023
				Comment			

No Change	including closed forest	<input type="checkbox"/>	Hectare(Ha) Sub Type Supplemental	Value	132312.00	132312.00	139298.00
Revised	including open forest	<input type="checkbox"/>	Hectare(Ha) Sub Type Supplemental	Value	171573.00	171573.00	278,220.00
No Change	Total greenhouse gas emissions reductions plus enhancement of carbon stocks, estimated in million tons equivalent CO2e/year	<input type="checkbox"/>	Metric ton	Value	0.00	0.00	1038262.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
No Change	including greenhouse gas emission reductions - closed forest	<input type="checkbox"/>	Metric ton Sub Type Breakdown	Value	0.00	0.00	484454.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
No Change	including greenhouse gas emission reductions - open forest	<input type="checkbox"/>	Metric ton Sub Type Breakdown	Value	0.00	0.00	362189.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
No Change	including enhancement of carbon stock - closed forest	<input type="checkbox"/>	Metric ton Sub Type Breakdown	Value	0.00	0.00	50620.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
No Change	including enhancement of carbon stock - open forest	<input type="checkbox"/>	Metric ton Sub Type Breakdown	Value	0.00	0.00	141000.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
New indicator	Number of mining sites that have been rehabilitated ⁸		Number	Value	0.00	0.00	5

					15-May-2018	N/A	30-Jun-2023
No Change	Direct project beneficiaries	<input type="checkbox"/>	Number	Value	0.00	1650.00	9501.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
No Change	Female beneficiaries	<input type="checkbox"/>	Percentage Sub Type Supplemental	Value	0.00	33.00	49.00

Intermediate Results Indicators

Status	Indicator Name	Corporate	Unit of Measure		Baseline	Actual(Current)	End Target
No Change	Reforms in forest policy, legislation or other regulations supported	<input type="checkbox"/>	Yes/No	Value	No	Yes	Yes
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
No Change	Govt institutions provided w/ capacity building to improve management of forest resources	<input type="checkbox"/>	Number	Value	0.00	2.00	23.00
				Date	01-Nov-2014	22-May-2016	30-Jun-2020
				Comment			
No Change	Community based natural resources management institutions provided with access to improved management practices for sustainable landscape management	<input type="checkbox"/>	Number	Value	0.00	0.00	5.00
				Date	01-Nov-2014	31-Dec-2015	30-Jun-2020
				Comment			
No Change	Farmers / participants provided with capacity building support to improve management practices for tree planting or nurseries	<input type="checkbox"/>	Number	Value	0.00	80.00	2200.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			

No Change	including female	<input type="checkbox"/>	Number	Value	0.00	30.00	1283.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
Revised	Area restored or re/afforested	<input type="checkbox"/>	Hectare(Ha)	Value	0.00	10811.00	14000.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2023
				Comment			
No Change	Area restored	<input type="checkbox"/>	Hectare(Ha)	Value	0.00	1657.00	12500.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
Revised	Area re/afforested	<input type="checkbox"/>	Hectare(Ha)	Value	0.00	9154.00	1500.00
				Date	01-Nov-2014	31-Dec-2015	30-Jun-2023
				Comment			
No Change	Farmers / participants in targeted landscape corridors reporting satisfaction with service delivery or benefits received under the Project	<input type="checkbox"/>	Number	Value	0.00	0.00	1475.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
No Change	including female	<input type="checkbox"/>	Number	Value	0.00	0.00	840.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
No Change	New areas outside protected areas managed as biodiversity-friendly (ha)	<input type="checkbox"/>	Number	Value	0.00	0.00	50000.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			
No Change	Forest users trained	<input type="checkbox"/>	Number	Value	0.00	640.00	1600.00
				Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
				Comment			

No Change	Forest users trained - Ethnic minority/indigenous people	<input type="checkbox"/>	Number	Value	0.00	0.00	0.00
			Sub Type	Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
			Breakdown	Comment			
No Change	Forest users trained - Female	<input type="checkbox"/>	Number	Value	0.00	130.00	910.00
			Sub Type	Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
			Breakdown	Comment			
No Change	Government officials / extension agents and service providers trained	<input type="checkbox"/>	Number	Value	0.00	25.00	450.00
			Sub Type	Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
			Breakdown	Comment			
No Change	including agricultural / cocoa extension agents / service providers	<input type="checkbox"/>	Number	Value	0.00	3.00	135.00
			Sub Type	Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
			Breakdown	Comment			
No Change	including local government officials	<input type="checkbox"/>	Number	Value	0.00	12.00	45.00
			Sub Type	Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
			Breakdown	Comment			
No Change	including Forestry Commission staff	<input type="checkbox"/>	Number	Value	0.00	9.00	270.00
			Sub Type	Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
			Breakdown	Comment			
No Change	including female	<input type="checkbox"/>	Number	Value	0.00	1.00	171.00
			Sub Type	Date	01-Nov-2014	30-Jun-2016	30-Jun-2020
			Breakdown	Comment			

Annex 2: Project Cost and Financing Breakdown

GHANA FIP ENFAL Additional Financing (P163745) - US\$ 19.85 million Financing Breakdown with Original FIP ENFAL (P148183, TF18842)						
Proposed AF Activities	Existing ENFAL	GoG In Kind	Additional Finance from SCF Sources			TOTAL
			Grant for Mining Reclamation	Concessional Finance for Plantations	Grant for Plantation TA	
Component 1: Policy reforms and institutional strengthening	2,500,000	500,000	2,000,000			5,000,000
Comp. 2: Pilot Investments for Improved Forest and Landscape Management with Communities	20,935,000	2,000,000				22,935,000
Comp 2a. Pilot demonstration of clean up and reclamation practices with community livelihood support after forest and land degradation due to illegal ASM			6,000,000			6,000,000
Comp 2b. Pilot for incentivizing investment and local level job creation in timber plantations				7,000,000		7,000,000
Comp. 2c. Field Activity Monitoring and Technical Assistance					2,885,000	2,885,000
Comp 3: Innovation, capacity building, and communications	2,600,000	200,000	1,000,000			3,800,000
Comp 4: Project management, monitoring, and coordination	3,465,000	300,000	1,000,000			4,765,000
TOTAL	29,500,000	3,000,000	10,000,000	7,000,000	2,885,000	52,385,000

Annex 3: Lessons Learned

The following lessons or approaches have been demonstrated in the implementation of FIP ENFAL and Other Projects. These lessons inform the design of the AF activities.

Government ownership is important. The mainstreamed implementation model, used currently under the original project, will continue for the AF activities with expanded efforts to reach local government entities. This AF is further strengthened by the strong desire at the highest levels of the GoG to address the *galamsey* challenge. The lesson of ownership and leadership also emerges from the NREG TA, which concluded that use of existing institutional structures for project implementation is the way forward, not use of an independent PMU. This is particularly important for building institutional capacity, shared practical experience, and social capital for addressing cross sectoral challenges. The NREG process also recognized that strong leadership and institutional mandate is important – and this project has that in MLNR. In a related point, it is also important to recruit and retain key technical expertise and project managers for continuity of project implementation. This aspect has been reasonably achieved under FIP ENFAL, though there are inevitably changes in personnel at district field offices. Having training and manuals in place help to bring new staff up to speed quickly. The AF will also build on the trust and stability that the Bank and Government core teams have achieved during the past 2 years of implementation.

Community-level activities are essential to success, but require significant start up time and planning. ENFAL has demonstrated success in engaging communities in livelihood activities (snails, bees/honey, climate smart cocoa) but only after extensive consultations. Now that systems are set up for reaching communities with necessary goods and services (training, seedlings, field equipment), implementation is proceeding effectively. Sufficient time will be needed for good preparation and establishing of sound implementation plans at district level.

Engagement of all stakeholders is essential for successful implementation of project interventions on the ground. The AF will continue stakeholder engagement approaches developed under the original project and resources are provided in Components 2 and 3 for both activities and outreach. Galamsey represents and increased challenge because of the value of the resource and the illegal nature of the activity. However, activities have been designed to engage miners and the support structure (local administrations, investors), to provide information and training, and to engage them in the context of their surrounding communities. On the policy side, efforts to simplify licensing procedures and provide sites for legal ASGM stand to benefit workers currently engaged in illegal and destructive practices and provide an incentive for their engagement in project activities.

Ambitions and expectations need to conform to the project budget and time frame. The NREG TA was ambitious in the time and resources that were eventually to deliver good analytical products and action plans. Action plans also need to be connected to financing sources to ensure implementation. These lessons also related to the need for a results framework that captures the essential indicators to gauge success. This AF benefits by highlighting the nature of the pilots as demonstrations that point the way to larger solutions and notes that wider application plus greater resources will be required to address the *galamsey* challenge comprehensively.

The multi-sectoral approach – as adopted in FIP ENFAL and in NREG – is an effective means of managing natural resources. The wellbeing of the environment and natural resources is fundamental

to the long-term sustainability of many sectors. Hence, bringing practitioners from various sectors together, creating and enhancing synergies, promoting collective processes and encouraging adaptation to joint decision-making are bases for a good governance mechanism. Although recognized as important, this lesson was not very effectively applied under NREG. ENFAL benefits from a PMU based in the MLNR which oversees land, forests and minerals agencies, so has the higher-level convening power needed as a base for multi-sector coordination.

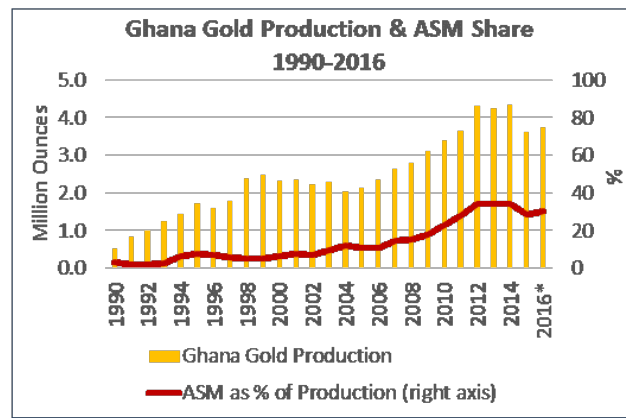
The multi-sector approach requires substantial institutional coordination and takes time to set up and smooth out. This issue is a challenge in all projects, but at least ENFAL has the benefit of a multi-sector institution in the lead. ENFAL also has the experience of including COCOBOD, MESTI, and FORIG in implementation of activities with shared budgets. This AF calls for including and coordinating more agencies, which should be smoothly accomplished given the existing track record. With the addition of district-level agencies and Minerals Commission (MC) as potential partners, systems for work planning and tracking funds will need to be expanded from the existing sound base.

Annex 4: ASGM and the Multilateral Mining Integration Project

Economic and Environmental Background

Gold mining is a major contributor to national economic wealth and to poverty reduction. In 2016 Ghana produced 110 tons of gold, and 31 percent of this came from artisanal and small scale miners (Minerals Commission, 2017). Mining contributes to the economy, foreign exchange, and jobs. *Galamsey* may account for over 1.1 million jobs, half of which are informal (UNECA, 2011). Indirect economic benefits accrue to 4.4 million people, including women who work in supporting services (World Bank, 2015). Small-scale gold mining is of three types: i) hard rock (lode), ii) deep alluvial mining, and iii) shallow alluvial mining. Though data are scarce, the first two types are mostly licensed and the third type is most unlicensed, and is referred to as *galamsey*. Small scale production increased substantially since 2010 (see Figure 1) both in overall volume and as a share of total gold production. This increase in ASGM in recent years was a response to high gold prices, high unemployment and a slump in agricultural production, and thus benefited the poor. However, there are also other drivers of the increase, particularly in the illegal alluvial mining operations, which are highly visible and destructive. Gold mining attracts not only poor local miners, but also entrepreneurial and politically connected Ghanaians, foreign investors and equipment providers, and itinerant, non-local (often immigrant), laborers.

Figure 1: Ghana Gold Production and ASM Share



Illegal ASGM threatens health, wealth, water, food, cocoa, and forests. Although ASGM is an important source of jobs and income for rural communities, the rural poor and smallholder farmers are also among those most affected by the adverse environmental effects of illegal mining. *Galamsey* has resulted in serious deforestation and land degradation. Illegal ASGM also undermines legal mining activity and cocoa production – both key economic sectors. Illegal ASGM is associated with a suite of destructive and polluting practices, including degradation of stream beds and riparian zones, and incursion into agricultural land, including high value cocoa plantations. Mining associated degradation, siltation and pollution affects 75 percent of water courses in various ways including: restricted stream flow, upstream flooding, and downstream loss of access to clean water. Use of toxic mercury in gold amalgamation threatens water supplies and the human food chain. Beyond these environmental and health impacts, *galamsey* represents a cross-sectoral, inter-disciplinary challenge with wide ranging social and economic impacts. Through loss and degradation of forested areas, uncontrolled mining practices negatively affect the people who depend on forests, habitat and biodiversity, and cocoa agroforestry, which are critical to rural jobs and the wider economy.

A political analysis⁹ of the galamsey issue, published by the University of Ghana Business School, provides important insights and guidance. UGBS notes that *galamsey* persists “because of political leniency and law enforcement corruption,” not because of poverty or weak state capacity. The authors note also that poverty, cumbersome administrative processes, prior displacements, and perceived injustices are contributing factors. The problem is exacerbated both by political interests and by the complex land tenure system in Ghana. It persists also because it serves the interests of local, political and business elites that finance operations outside the legal mining framework. For this reason, an integrated and committed approach is needed, not simply technocratic fixes that have been unsuccessful in the past, including: simplifying the licensing process, alternative livelihoods, demarcation of ASM allowable areas, and irregular crackdowns. Policies and technocratic interventions are needed, they conclude, “but their effectiveness would be enhanced if combined with tackling the political drivers of the problem.”

Multilateral Mining Integration Project

To tackle illegal ASGM, the GoG has initiated the Multilateral Mining Integration Project¹⁰ (MMIP). The MMIP is planned as a five-year long project to be conducted jointly with the Minerals Commission (MC). The MMIP proposes a holistic framework to tackle illegal mining and ensure that legal mining is done in a sustainable manner.¹¹ The holistic framework is based on a “Legislations Enforcement Civil Integration and Technical Approach,” which has three elements: legal reform, law enforcement, and the use of new technologies, to ensure transparency and sustainability in the mining sector. The first involves revision of Ghana’s mining laws, and will include stricter penalties for illegal mining activities to serve as a deterrent to future illegal mining. The second will couple increased law enforcement surveillance with the new legal reforms. The third seeks to leverage innovation in the monitoring of the small-scale mining sector and will feature the use of drones and tracking devices on heavy machinery to guarantee that such mining is carried out in accordance with the country’s laws and regulations.¹² The MMIP includes the following five key elements:

- Review and enforce the legal regulatory regime
- Reclaim degraded lands, dredge silted estuaries and free lands for agribusiness
- Implement social interventions to facilitate livelihoods in mining communities
- Adapt technology to ensure efficient mining, processing, environmental and monitoring activities
- Capacity building of ASMs, regulators and project management.

These include some ambitious targets, notably:

- Alternative livelihoods program – in particular establish 20,000 ha of oil palm plantation
- Train 1,000 miners in mining and processing
- Reclaim 2,380 km² of mined-out lands
- Reduce ASM license acquisition time by 40 percent.

⁹ UGBS Policy Brief No. 5. The Galamsey Menace in Ghana: A Political Problem Requiring Political Solutions? June 2017. www.ugbs.ug.edu.gh

¹⁰ GoG/MLNR, Project Appraisal & Implementation Document for the Multilateral Mining Integrated Project (MMIP). Accra, June 2017.

¹¹ <https://www.ghanabusinessnews.com/2017/03/09/government-proposes-to-tackle-illegal-mining-through-collaboration>

¹² <https://www.ghanabusinessnews.com/2017/04/17/ghana-government-rolls-out-programme-to-deal-with-galamsey-minister/>

One objective of the MMIP is to transition illegal small-scale miners to the legal side of the sector, through the GoG strategy of civil integration. To offset the job displacement occasioned by the GoG's hard line on *galamsey*, they GoG plans to provide employment to these illegal miners (*galamseyers*) through a two-step process. The first step is to provide jobs in land reclamation and tree planting projects.¹³ In balance, there would be an "aggressive approach" towards recalcitrant miners who attempt to return to illegal mining once *galamsey* mine site reclamation efforts have begun. The second step is for GoG to explore prospective small-scale mining sites and to resituate former *galamseyers* on artisanal mining concessions under state supervision. Some of the prospective areas will include parts of large-scale concessions that have been willingly let go by industrial mining companies. This plan could be accompanied by provision of a machinery pool to be shared by relocated small-scale miners and establishment of a processing facility, where the miners can process their ore for a fee.^{14 15}

Moratorium on ASM Gold Mining. As an early step, even before the announcement of the MMIP in June, the GoG implemented a moratorium on all small-scale mining in April 2017. The ban covers both licensed and unlicensed ASM, and includes all types of small-scale mining – hard rock, and both deep and shallow alluvial. Some regard the ban as over-broad because it covers not only unlicensed and environmentally destructive *galamsey*, but also legally operating hard rock mining that has much less impact on the environment and water bodies. The ban has also been enforced in military style by the Vanguard task force, reflecting the political mood of crisis around the issue. The GoG notes that the moratorium is an emergency response, not based on a full investigation or reliable data so could be described as a precautionary measure. The ban has been criticized by some (e.g., Hillson, 2017) for failure to consider the impact on rural poverty by depriving ASM miners and their families of a source of income.

A full review of the effectiveness of the 6-month moratorium has not been undertaken by the Bank. However, some early indications from stakeholder interviews and review of media accounts indicate mixed results¹⁶. The ban has not been entirely ineffective. The Forestry Commission (FC) notes that the moratorium and the Vanguard force has been effective in halting forest impacts. According to stakeholders interviewed, there has been a significant reduction in ASM activity, although few instances of complete cessation. Some miners have used the time to undertake processing of tailings heaps, either themselves or through sale to larger mining companies possessing cyanide equipment. The ban has also shown that the government is willing when necessary to exert authority. However, it also highlights the need to establish proper capability of monitoring compliance after the ban is lifted and in the longer term.

However, interviewees also report that the MLNR's country-wide evaluation mission concluded that the moratorium achieved only 15 percent of its objectives, with no visible signs of environmental improvement, for example, in water bodies. At least partly because it has not yet achieved its

¹³ <http://citifmonline.com/2017/04/25/illegal-miners-will-be-engaged-in-tree-planting-program-amewu/>

¹⁴ <http://citifmonline.com/2017/04/17/weve-suspended-issuance-of-mining-license-bawumia/>

¹⁵ <http://citifmonline.com/2017/04/24/alternative-livelihood-programme-for-illegal-miners-to-cost-10m/>

¹⁶ PROFOR and Levin Resources. "Forest Smart Mining – Identifying Good and Bad Practices of ASM in Forested Landscapes", Ghana Case Study. Preliminary Findings. October 2017.

objectives during the 6-month ban period, the GoG decided to extend the moratorium, but the end date is not yet precisely known.

The GoG acknowledges that a military style operation cannot provide a sustainable solution to the problem. Many now consider that the ban should have been phased, or that lifting the ban should be phased, allowing the least impactful forms of mining to resume on condition of legality. The ban has highlighted the need for local solutions to mining governance, empowering district mining committees and district assemblies.

This Annex describes the ASGM situation and the Government's MMIP, from direct sources and through media accounts. The proposed AF will not directly finance the implementation of the MMIP. It will focus on land rehabilitation activities with communities, in collaboration with MLNR, FC, MC and other key agencies and representatives of local government. The AF activities will need to be informed by MMIP lessons and integrated with follow on activities that aim to transition miners and communities to new forms of livelihoods and technical practices. The Bank will need to be cautious, for example, in positioning AF activities relative to GoG actions that propose aggressive enforcement or displacement of illegal miners, who are embedded in communities that are benefitting economically from ASGM.

Annex 5: Financial Management

A summary of the key finding of the financial management arrangements as assessed at the MLNR is presented as follows:

Budgeting Arrangements. The MLNR follows the budget preparation guidelines as per the per the **Public Financial Management Act (921) 2016** and the annual budget guidelines issued by the Ministry of Finance. Specifically, for this project (FIP), the budget and expenditure allocations have been agreed between the government and IDA and will form the basis of the annual work plans and budgets. The current budgetary control processes used mostly for the government's discretionary budget are capable of monitoring commitments and outstanding balances. The assessment indicates that budgeting processes are satisfactory and can be relied upon to reflect the various components of the project.

Accounting Arrangements. The Financial Controller at the MLNR will be responsible for overall fiduciary aspects of the Project. However, the specific accounting issues such as recording and processing of payment voucher will be delegated to the Project Accountant within the Unit. The accounting unit is staffed with an adequate number of staff with various levels of skills and competences. In terms of accounting systems, the MLNR will rely on the existing Sun Accounting software for processing and reporting on project funds.

Internal Control and Internal Auditing. Consistent with the decision to adopt some aspect of the use of country systems (UCS) for implementation, the project's internal controls will rely on the government established accounting and internal control guidelines as documented in the **Public Financial Management Act (921) 2016** and any subsequent regulations or amendments including aspects of the Financial Administration Act (2003) and the Financial Administration Regulation (2004), and informed by the Internal Audit Agency Act (2003). In addition, the expenditure initiation and related controls will follow the authorization and approval processes as pertains within the Ministry and complemented by additional guidelines in the Project Implementation Manual and the revised Accounting Procedures Manual. The Ministry has a functioning internal audit unit headed by the Chief Internal Auditor who is adequately qualified and experienced to help to ensure a sound control environment throughout implementation. Adequacy of internal controls in government has never been questioned except that the internal auditors have traditionally been focusing on pre-audits and compliance rather than on systemic issues. Our assessment indicated that the internal audit and control environment is adequate for project implementation; the role of the internal audit will be regularly assessed during supervision missions by reviewing their reports and management responsiveness to their findings. There will be the need for collaboration between the Internal Audit Unit of the MLNR and the other agencies e.g. FC, this is to ensure that the role is not limited to transactional reviews (pre-auditing) but adds value to the overall control environment through risk assessment and mitigation.

Funds Flow and Disbursement Arrangements. The FIP Project would be funded by US\$19.89 million grant. Proceeds of the credit will be used by the project for eligible expenditures as defined in the grant agreement and further detailed in the respective annual work plans and budgets. The proposed arrangement is to use a **single Designated Account (DA)** (denominated in US dollars) under the direct responsibility of the Chief Director but managed and operated by the Financial

Controller of the MLNR. This arrangement to use a central account is important to ensure that the MLNR has oversight responsibilities over transfers and payments related to the implementation of programme activities.

As part of fund flow design, it has been agreed that to facilitate payment of certain expenditures and to build the capacity of FM staff at the implementing agencies, the key beneficiary agencies will operate Project Accounts on an imprest system. The ceiling for the imprest will be based on the agreed work plans of these agencies. The use of these funds will be monitored through the imprest and reported upon by the accounts officer at these agencies.

An assessment of the financial management arrangement at the key implementing agency i.e. Forestry Commission has been carried out and found to be adequate for the operation of the Project Accounts.

In summary:

- i. There will be **only one designated account** opened and maintained by the MLNR on behalf of the Project.
- ii. In line with existing arrangements, funds will be transferred to Project Accounts denominated in local currency to support payments for operational cost including field visit and monitoring activities.
- iii. In addition, based on the approved AWP from the implementing agencies, periodic allocation (*not exceeding the aggregate of three months forecast expenditure*) will be transferred and subsequently replenished on an imprest basis subject to the submission of acceptable and satisfactory supporting documentation.
- iv. The MLNR will receive periodic reports (as agreed between it and these agencies) from these implementing agencies in time to enable the PIU consolidate these into the single IUFR that would be presented to the Bank within forty-five days of the end of the quarter.

Based on the assessment of financial management, the proceeds for grant will be disbursed to the project using **report based disbursement** procedures. Interim Unaudited Financial Reports. The IFRs (including the 'procurements subject to prior reviews' and 'designated account reconciliation statement') will also serve as the basis for withdrawals from the Bank. The initial disbursement will be based on the consolidated expenditure forecast for six months, subject to the Bank's approval of the estimates. Subsequent replenishments of the DA would be done quarterly based on the forecast of the net expenditures for the subsequent half-year period.

Disbursement arrangements and use of funds. Proceeds of the financing will follow the standard Bank procedures for Investment Lending, for use by the Borrower for eligible expenditures as defined in project financing agreements. Disbursement arrangements have been designed in consultation with the Borrower after taking into consideration the assessments of Borrower's financial management and procurement arrangements, the procurement plan, cash flow needs of the operation and the Borrower's prior disbursement experience. *Additional instructions for disbursements will be provided in a disbursement letter issued for this project.*

Table 1. Disbursement Categories

Category	Amount of the Credit Allocated (XDR)	Percentage of Expenditure to Be Financed (Inclusive of Taxes)
Goods, works, non-consulting service, consulting services, training, and operating cost under ALL parts except Part 4 of the project	TBD	100%
Goods, non-consulting service, consulting services, training, and operating cost under Parts 4 (Project Management) of the project	TBD	100%
TOTAL		

Financial Reporting Arrangements. The MLNR will be required to prepare and submit separate quarterly IFRs to account for activities funded and request for funding under this credit. Financial reporting under the program will be report based and it is expected that the unit will maintain adequate filing and archival system of all relevant supporting documents for review by the Bank’s FM team during supervision mission and for audit purposes. IFRs for the project are expected to be submitted not later than 45 days after the end of each quarter. The financial reports will be designed to provide relevant and timely information to the project management, implementing agencies, and various stakeholders monitoring the project’s performance. The formats and content of the quarterly IFRs have already been agreed with the Financial Controller and the Project Accountant.

These reports should show clearly as a minimum include:

- i. A statement of sources and uses of funds showing the use of funds by components as per the PAD (useful in monitoring implementation of the components)
- ii. A statement of sources and uses of funds showing the expenditure by category as per the Financing Agreement (for allocating expenditure as per the Financing Agreement)
- iii. A budget variance report comparing the utilization of approved budget against expenditure (useful to the TTL to monitor implementation and fund utilization)
- iv. A Designated Account reconciliation statement
- v. A list of payments (made in that quarter) made against contract subject to the World Bank’s prior review List of current commitments, that is, signed and ongoing contracts
- vi. A cash forecast for six months (to be the basis of requesting for additional funding)
- vii. Any other report that shall be required to provide further and better details on project expenditure

External audit and independent assurance: In line with its mandate as per the Ghana Audit Service Act (Act 584) the Auditor General is solely responsible for the auditing of all funds under the Consolidated Fund and all public funds as received by government ministries, departments and agencies. In general, the capacity of the GAS is considered satisfactory and historically has been undertaking the audit of MLNR. As is the practice, due to capacity constraints it is usual for the Auditor General to allow the audit of donor funded projects to private firms. During implementation if necessary, this arrangement will be followed subject to the Bank’s necessary procurement and

technical clearance of the terms of reference (TOR) for the engagement of the audit firm. This is to ensure that there are no delays in meeting the financial covenants for submission. External auditors must be recruited not later than six months after project effectiveness.

Conclusion. A description of the project's financial management arrangements at MLNR as documented in the preceding paragraphs indicates that they satisfy the Bank's minimum requirements under OP/BP10.02. MLNR has a fully functioning finance unit, and a dedicated project accounts team, and as such the overall financial management residual risk for the project is rated as **moderate**.

Supervision Plan. Based on the risk rating of the project and the current FM arrangement, it is expected that in the first year of implementation there will be quarterly onsite visits to ascertain adequacy of systems and how effective the country systems are being used to support implementation. The FM supervision mission's objectives will include ensuring that strong financial management systems are maintained throughout project tenure. In adopting a risk-based approach to FM supervision, the key areas of focus will include assessing the accuracy and reasonableness of budgets, their predictability and budget execution, review of compliance particularly at the FC, compliance with payment and fund disbursement arrangements, and the ability of the systems to generate reliable financial reports.

Annex 6: Procurement Management

Summary of the PPSD to Support the Preparation of the PAD by the Bank

New Procurement Framework. Because the Project Concept Note (PCN) dates after July 1, 2016, procurement will be carried out, per the New Procurement Framework, in accordance with the (a) WORLD BANK Procurement Regulations for IPF -Borrowers PROCUREMENT IN INVESTMENT PROJECT FINANCING Goods, Works, Non-Consulting and Consulting Services, dated July 2016; (b) the ‘Guidelines on Preventing and Combating Fraud and Corruption in Projects financed by IBRD Loans and IDA Credits and Grants’, dated October 15, 2006, revised in January 2011; and (c) the provisions stipulated in the Legal Agreement. The bid documents will be based on the Standard Procurement Document, recently enhanced with the Environment, Social Health and Safety.

Procurement implementation arrangement and capacity assessment. The implementation arrangements remain unchanged. The implementing agency will be the Ministry of Lands and Natural Resources (MLNR), will be responsible for the project’s coordination, procurement, contract management, financial management, and compliance with safeguards policies, in collaboration with the Forestry Commission (FC), Minerals Commission (MC) and other relevant agencies under the MLNR.

The procurement capacity assessment, in accordance with OCSPR guidelines and Procurement Risk Assessment and Management System (P-RAMS), the summary assessment of the procurement risk is SUBSTANTIAL for the project and the prior review thresholds have been set to reflect this rating. Procurement post-reviews and technical audits will be carried out annually by the Bank Procurement Specialist and Technical Specialist or independent auditors and based on the findings of the reviews the prior review thresholds will be reviewed. The main risks identified are the following:(i) the use of the PF (ii) inadequate monitoring; (iii) weak contract management; (iv) delays in processing procurement and payments; (v) some political interference; (vi) fraud and corruption. The proposed mitigation will include (i) WB to organize and deliver training session for MLNR, FC and MC, on the NPF during the appraisal and immediately after effectiveness, with hands-on support to the implementing agencies to ensure the proper use of the borrower regulations (ii) intensify training in Procurement and Contract Management by the Bank. Table 1 below depicts the thresholds and procurement methods to be used under the Project for a risk rating of Substantial.

Table 1: Thresholds and Procurement Methods

RISK RATING	Prior Review Threshold in (US\$ '000)					Procurement Methods Thresholds (in US\$'000)							
	Consultants					Works			Goods, IT and non-consulting services			Shortlist of National Consultants	
	Works	Goods, IT Systems+ Non Con. Serv	Firms	Individuals	Single Source & Direct Contract	Open International or ICB	Open National or NCB	Request for Quotation/ National Shopping	Open International or ICB	Open National or NCB	Request for Quotation/ National Shopping	Consulting services	Engineering & construction supervision
SUBSTANTIAL	≥\$10,000	≥\$2,000	≥\$1,000	≥\$300	≥\$100	≥15000	<15000	≤200	≥3000	<3000	≤100	<300	≤500

These thresholds are for the purposes of the initial procurement plan for the first 18 months. The thresholds will be revised periodically based on re-assessment of risks. All contracts not subject to prior review will be post-reviewed.

Procurement Plan. The Borrower prepared and the Bank cleared the Procurement Plan which covers the first 18 months of project implementation. The Procurement Plan will be updated in agreement with the World Bank Project team at least annually or, as required, to reflect the actual project implementation needs and improvement in institutional capacity.

Additional Notes:

- Based on Specific needs and circumstances, shopping thresholds for the purchase of vehicles and fuel may be increased up to US\$500,000 equivalent.
- Operating expenditures are neither subject to the Procurement Framework nor prior or post reviews mechanism. Operating expenditures are normally verified by TTLs and FM Specialists.
- Irrespective of the thresholds and category of risk, the selection of all consultants (firms or individuals) hired for legal work or for procurement activities are respectively cleared by the LEG VPU unit with the relevant expertise and the designated PS/PAS or RPM as required.
- Prior Review Contracts for the Hiring of Individual Consultants: Apart from legal work and procurement assignments, irrespective of the thresholds and category of risk, which shall respectively be reviewed by LEG VPU Unit with the relevant expertise and the designated PS/PAS or RPM as required, review of the selection process for all other individual consultants (Technical Experts) shall be solely by the TTL.
- Special cases beyond the defined thresholds are allowed based on applicable market conditions.
- Thresholds for which a shortlist may comprise only national consultants, the Borrower does not need to publish in UNDB online.

Procurement Planning. The Borrower prepared and the Bank agrees with the Procurement Plan which covers the first 18 months of project implementation (see Table 2 below). The Procurement Plan is available in the project's database and a summary of it will be disclosed on the World Bank's external website once the AF is approved by the Board. The Procurement Plan will be updated in agreement with the World Bank at least annually or, as required, to reflect the actual project implementation needs and improvement in institutional capacity.

Systematic Tracking of Exchanges in Procurement (STEP) will be the primary software or platform to be used to submit, review, and clear all Procurement Plans and prior review procurements. For each contract to be financed by the project, the different procurement methods, or consultant selection methods, the need for prequalification, estimated costs, prior review and methods requirements, and time frame will be agreed between the Government and the World Bank in the Procurement Plan. In preparing the Procurement Plan, the prior review and methods thresholds associated with the recommended/prevaling procurement risk rating are always applicable.

Table 2: Activities under the Procurement Plan

Contract Title, Description and Category	Estimated Cost US\$ and Risk Rating	Bank Oversight	Procurement Approach / Competition: <ul style="list-style-type: none"> • National • International • Open • Limited • Direct • Sole Source • QCBS/QBS etc. • Negotiation • BAFO 	Evaluation Method <ul style="list-style-type: none"> • Rated Criteria (VfM) • Lowest Evaluated Cost
Engagement of Civil Society Organizations (CSOs)	1,000,000.00/High	No	Open-National	Rated Criteria
Consultancy Service for the preparation of project completion report	250,000.00/Low	No	Open-National	Rated Criteria
Engagement of contractors for the reclamation of mined-out areas	6,000,000.00/High	No	Open-National	Lowest Evaluated
Procurement of machinery and equipment	500,000.00/Low	No	Limited/RFQ	Lowest Evaluated

Annex 7. Related Bank and Partner Projects that will Inform and Work with the FIP AF

This annex provides a brief overview of projects and organizations working in similar areas. These represent opportunities for learning, collaboration and synergy that will be pursued under the AF.

1. Reducing environmental health risks in artisanal gold mining and e-waste in Ghana (GEF Program ID: 9444)

The objective is to “Reduce Environmental health risks related to use of mercury and open burning of e-waste in Ghana through strengthened institutional partnership and capacity.” The FIP Additional Financing Project will also synergize with a concurrent GEF project focusing on mercury pollution. Under its CHEM-2 Program 4 dedicated to tackling the challenge of mercury the GEF is providing US\$ 4,587,156—with another US\$ 4,587,156 for persistent organic pollutants (POPs), which is now under preparation. Unplanned and unregulated ASGM has generally left a legacy of severe adverse (and irreversible) environmental, health, economic, and social impacts, often affecting disproportionately the poorest and most vulnerable communities. Studies have shown that the health of artisanal miners and other people living within areas prone to mercury contamination may be negatively affected through inhalation of mercury vapor or contaminated dusts, direct contact with mercury, eating of fish and other foods susceptible to bioaccumulation, and ingestion of mercury-contaminated waters and soils. While there is a recognition that the use of mercury has serious environmental and health consequences, there are limited resources to demonstrate cleaner alternative technologies and exhibit clean and feasible practices related to mine closure as mandated in the Mining policy.

This program provides the opportunity for supporting further policy enhancements in small-scale mining, while building capacity for improving monitoring and enforcement of the regulations. The project has three components addressing the challenge of mercury contamination: Component 1a: Institutional strengthening, knowledge and capacity building; Component 2a: Support for Policy dialogue and regulatory enhancements; and Component 3a: Demonstrating application of technological tools and economic approaches. Component 1a focuses on strengthening institutional systems and providing capacity building for EPA and MC to manage the artisanal and small scale gold mining sector, including through training at the national and local levels. It seeks to build the capacity of these institutions and support development of guidelines and monitoring systems in place for management of mercury usage and waste in ASGM. The Component incorporates three key lessons: (a) strengthening policy and regulatory aspects of mining to include provisions for recognition of legal import of mercury; (b) implementing a country level inventory and tracking of mercury import and use in the ASGM sector as part of a capacity building plan; (c) training artisanal miners to understand the cost-benefit analysis of mercury procured from illegal traders and its associated environmental health costs. Component 2a aims to support the EPA in strengthening the policy requirements targeted at ASGM. Finally, Component 3a seeks to pilot and demonstrate environmental improvements, based on cost-effective and environmentally sound technologies, on 2-3 abandoned mine sites, where there is a clear opportunity to partner with FIP in terms of criteria for site selection and approaches to be employed.

2. Ghana Artisanal Mining for sustainable development: Structurally Addressing the Galamsay Crisis (P166265) (ASA)

The aim of this analysis is to strengthen our understanding and deepen the dialogue with the key Ghanaian authorities and experts on the contribution of artisanal mining to sustainable development in Ghana, and explore next steps towards formalization of the sector. This is a small analytical project aimed at addressing an immediate need expressed by the government to look at international good practices for ASM formalization. Results will feed into the Ghana SCD, and could begin to define the scope and directions for larger operations that could follow in the future.

3. PMEH Contaminated and Toxic Land Pollution and Ghana – Rapid Screening Assessment

The Additional Financing project is also working with a PMEH trust funded program, which can help with a rapid assessment of the public health risks posed by mercury toxicity. The Pollution Management and Environmental Health (PMEH) Program was established in 2015 as a Multi-Donor Trust Fund (MDTF) under the Environment and Natural Resources Global Practice Group. The program aims to help client countries reduce air, land and waste pollution level and associated health risks. It establishes a systematic approach to enhance the government's environmental management capacity and promote data-driven decision-making and pollution control planning. The Contaminated and Toxic Sites (CTS) management project is one of the Program's three main components and supports countries' effort to strengthen political prioritization and action-taking related to contaminated and toxic sites. Under this project PMEH is providing resources to identify and characterize approximately 100 contaminated and toxic sites across Ghana. PMEH support will also carry out in-depth analysis/research of two or three sites to assess the health and related economic effects of toxic land pollution. This analysis aims to gather enough knowledge to extrapolate conclusions to a general level and contribute to decision making. The analytical activity aims to: inform the identification and costing of mitigation and clean-up solutions; develop locally-adapted decision-making tools and guidelines on toxic sites/ land pollution management; organize technical events and educational activities on protocols and guidelines to increase awareness and build capacity; and establish monitoring systems.

4. Learning from the Frugal Reclamation report from Mongolia

While large-scale mining operations often make headlines, there are an estimated 100,000 small-scale artisanal miners in Mongolia who work independently and make up nearly 20 percent of Mongolia's rural workforce. Due to perceptions around the negative impact that their mining activities have on the environment, however, they are marginalized from society, further preventing them from achieving full economic potential and, crucially, from developing more sustainable environmental practices. Recently, however, better government recognition of artisanal miners' large role in society, as well as an increase in public awareness, that perception is slowly changing. As a result, Mongolia's artisanal miners are gradually becoming more formalized and recognized as important contributors to the economy. To maintain and scale-up this progress toward greater formalization, the artisanal mining sector needs to better address its negative environmental impacts.

The Asia Foundation is working through the Engaging Stakeholders in Environmental Conservation Project (ESEC II) to address the environmental challenges of ASM by helping to mitigate the negative environmental impacts of past and present mining practices through the provision of environmental tools, capacity-building, and encouraging a collaborative planning approach to permitting and environmental management. By introducing responsible and sustainable ASM rehabilitation approaches that are economically affordable and socially acceptable, the Asia Foundation is working to increase formalization through the development of a frugal rehabilitation methodology – a practical tool that, through eventual formal endorsement by national stakeholders, can provide the sector and the government with an accepted industry standard. Frugal rehabilitation differs from more standard approaches to the rehabilitation of land in that it strives to be economically affordable to the artisanal and small-scale mining sector and to local government. It also needs to be socially acceptable, addressing the concerns and interests of the wider communities within which mining is occurring. Lastly and importantly, it needs to be ecologically viable so that the rehabilitated land can be used sustainably.

To develop a methodology that could win broad acceptance across both national and local stakeholders, the project incorporated practical approaches that met the above criteria at eight project sites across Mongolia. Sites were selected out of 12 areas of degraded and abandoned lands that had experienced informal artisanal mining of gold and fluor spar, two of the widespread forms of ASM in Mongolia. Most sites were areas where alluvial mining had occurred – the dominant form of gold mining in the country. However, both hard-rock gold and fluor spar mining areas were chosen to ensure that the resulting methodology was applicable to such situations. The eight pilot sites were spread across a range of ecological zones, from tall grass steppe in the east, to forest and forest steppe in the north, to mountain and desert steppe in the south and west.

The methodology is built on a toolkit that allows rehabilitation to be achieved in an economically affordable, socially acceptable and ecologically viable way. The Frugal Rehabilitation Manual emerged from the ESEC II's collaborative efforts to implement Frugal Rehabilitation Demonstration (FRD) projects across 17 locations within nine *aimags*. The toolkit is designed to help ASM NGOs demonstrate their environmental responsibility through best practice and provide support to the formalization process within the ASM sub-sector by improving such organizations' "license to operate" through encouraging and guiding positive engagement with stakeholders on social and environmental responsibility. (See <https://asiafoundation.org/resources/pdfs/MongoliaESECFactSheet.pdf>)

5. Forest Smart Mining – Identifying Good and Bad Practices of Artisanal and Small-Scale Mining (ASM) in Forested Landscapes. (PROFOR Financing)

Under the subject global analytical activity, the Bank commissioned a case study in Ghana to provide early background information that could inform the FIP AF design. Levin Sources and SRC Consulting undertook the study, paying particular attention to policy reforms, institutional strengthening, pilot investments, innovation, capacity building and communication and monitoring and coordination. The work is ongoing and based on a literature review, field visits and multiple informant interviews. The early study developed conclusions and recommendations in the topic areas of policy and coordination, the design and location of pilot sites (include forested sites, cocoa

agroforestry areas, CREMA sites, align with MMIP, etc), the promotion of improved rehabilitation technology (particularly valuable for influencing wider MMIP investments), and coordination issues (use of focal points, using external contractors for implementation).

6. Organizations and Projects Currently Rehabilitating Mined-Out Areas in Ghana

The following table briefly describes recent and ongoing activities of various organizations in Ghana that are conducting land rehabilitation exercises in mined-out areas.

Organization	Project and Operation
The Okyeman Foundation	Organized a tree planting exercise at a former <i>galamsey</i> site at Bronikrom, Kyebi, Eastern Region.
The Rebecca Akufo-Addo Foundation	Mobilizing 1,500+ women in each region across the country to support land reclamation efforts.
Kyebi Reclamation Project	Planning to rehabilitate 18 illegal mining sites in Kyebi, Eastern Region. The project is a collaboration between the Ministries of Lands and Natural Resources; Environment, Science, Technology and Innovation; Local Government and Rural Development; other Ministries involved in the fight against illegal mining; and the Okyehene Foundation, Rebecca Akufo-Addo Foundation, and Richie Foundation.
Newmont Ghana	<p>Conducts reclamation concurrent to operations and after mine closure.</p> <ul style="list-style-type: none"> • Reclaimed 22 hectares with native and exotic tree species between 2009-2012 (Ahafo, Brong Ahafo Region). • Constructed a 70,000 seedling greenhouse; established a four-hectare vetiver plantation; planted 1,600 ornamental plants in Yayaaso resettlement village; establishing a ½ hectare medicinal plant farm; pursuing reforestation offset program with FC (Akyem, Eastern Region)
Golden Star	<p>Conducts initiatives of progressive rehabilitation of pits and waste dumps; backfilling pits for future land use as agreed to with stakeholders; economic livelihood oil palm project for artisanal miners and community members (Bogoso and Prestea, Western Region).</p> <p>Golden Star Oil Palm Plantation (GSOPP) is a non-profit subsidiary of Golden Star whose objectives are to reduce poverty through employment generation and promote wealth creation through sustainable agribusiness. As of the end of 2016, GSOPP had 317 smallholder farmers and 350 contract workers cultivating 1,053 hectares of plantation.</p>
Proforest Limited	Aims to reclaim 5,000+ ha of mined-out land in 20 major communities in the Fanteakwa District and the East Akyem Municipality of the Eastern Region by year 2020. Includes use of demonstration plot, nursing and planting of at least 2.5 million suitable tree and crop species, development of income generating ventures for women and youth, and use of reclaimed sites as a learning facility for inter-cultural tourism and youth placement programs.

Annex 8: FIP ENFAL AF Alignment with Global FIP Purpose and Criteria

This Annex describes how the AF responds to the FIP’s overall purpose (Design Document, CIF/FIP, Paragraph 10, 2009). The overall purpose of FIP is to finance efforts to address the underlying causes of deforestation and degradation and overcome barriers that have hindered past efforts, to support REDD+ efforts, to provide up-front bridge financing for readiness reforms, and for public and private investments identified through national readiness strategies. Country FIP programs should take account of opportunities to help adapt to the impacts of climate change and contribute to multiple benefits such as biodiversity conservation, protection of the rights of indigenous peoples and local communities, poverty reduction and rural livelihoods. This table shows where key FIP criteria are addressed in this Project Document.

GHANA FIP AF Alignment with FIP Investment Criteria (Source: FIP: Investment Criteria and Financing Modalities. CIF. June 29, 2010)	
FIP Criteria	GHANA FIP AF
a. Climate change mitigation potential	Aims to rehabilitate selected mined-out areas and to promote timber plantations, which will ultimately contribute to enhancing carbon stocks in soils and vegetation. (Component 2).
b. Demonstration potential at scale	Interventions are designed as pilots for learning and wider dissemination. Component 2c aims at disseminating lessons learned for uptake and replication beyond pilot sites. Component 3 includes resources for communication and outreach.
c. Cost-effectiveness	Section IV provides an economic analysis of the projects benefits and costs, a financial management analysis to ensure monitoring of commitments, and a fiduciary risk analysis and mitigation plan to ensure cost effective utilization of funds.
d. Implementation potential	The AF fits into and builds upon existing, successful FIP ENFAL implementation structures, demonstration pilot approaches, community engagement efforts, land use planning and management processes, and outreach and communication tools (Introduction).
e. Integrating sustainable development (co-benefits)	Project Background and Rationale (Section II) shows how the FIP AF effort fits into Ghana’s sustainable development program, as in the GSGDA, and into the Bank’s overall Country Partnership Strategy. Co-benefits and beneficiaries are discussed in Section III.
f. Safeguards	Section IV explains the safeguard instruments that will be used to avoid and mitigate adverse environmental and social impacts.
Additional issues of interest to FIP	
Addressing drivers of deforestation and degradation	Focuses on addressing two key drivers of deforestation: illegal ASGM and unsustainable harvesting. Plantation activities aim to increase timber production and mine site rehabilitation demonstrations aim to reduce land and forest degradation. See Background and Rationale.
Capacity building	Components 2c and 3 provide resources for learning, capacity building, and technical assistance. Component 2a reinforces the work with CREMA’s, which has been established under the parent project.
Coordinating with other REDD+ efforts	Background and Rationale describes how the FIP AF integrates with REDD+ related activities of other development partners, and the FCPF. Basically, it will build upon the existing coordination and collaboration platforms developed under Ghana’s REDD+ initiative.
Forest-related governance	Component 1 continues to improve policy interpretation / implementation and strengthen institutional capacity advancements made under FIP ENFAL to protect natural resources from the impacts of illegal ASM.

Inclusiveness of process and participation of stakeholders	FIP AF improves stakeholder inclusion and engagement through a broader PCU (Section IV, Change in Institutional Arrangements) and increased stakeholder consultations (Components 1, 2). The multi-sectoral and integrated approach in implementing the project will continue and open the way for more stakeholders to participate.
Leveraging additional financing including private sector	Activities in Component 2b aim to further improve the enabling environment for private investment in timber plantations, which is a critical aspect of FIP ENFAL.
Measurable outcomes and results-based approach	Component 4 provides resources for the M&E system. Annex 1 provides the complete results framework.