

Document of  
The World Bank  
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Report No: PAD1008

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT  
FROM THE STRATEGIC CLIMATE FUND

IN THE AMOUNT OF US\$29.5 MILLION

TO THE

REPUBLIC OF GHANA

FOR A

GHANA FOREST INVESTMENT PROGRAM - ENHANCING NATURAL FOREST AND  
AGROFOREST LANDSCAPES PROJECT

February 5, 2015

ENVIRONMENT AND NATURAL RESOURCES (GENDR)  
*AFRICA*

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## CURRENCY EQUIVALENTS

(Exchange Rate Effective January 14, 2015)

Currency Unit	= Ghana Cedi
Ghana Cedi 3.2	= US\$1
SDR 1	= US\$1.42936

FISCAL YEAR  
January 1 – December 31

## ABBREVIATIONS AND ACRONYMS

AF	Additional Funding (under FCPF)
AfDB	African Development Bank
CBAG	Community Biodiversity Action Group
CBO	Community Based Organization
CFC	Community Forest Committee
CFMP	Community Forestry Management Project
CIF	Climate Investment Funds
COCOBOD	Ghana Cocoa Board
CORIP	Cocoa Rehabilitation and Intensification Programme for Ghana
CPS	Country Partnership Strategy
CREMA	Community Resource Management Area
CQS	Selection Based on Consultants' Qualifications
CRIG	Cocoa Research Institute of Ghana
CSO	Civil Society Organization
DA	Designated Account
DGM	Dedicated Grant Mechanism for Local Communities
DFID	Department of International Development
EA	Environmental Assessment
EOI	Expression of Interest
EPA	Environmental Protection Agency
ERPA	Emission Reduction Purchase Agreement
ER-PIN	Emissions Reductions Program Inception Note
ER-Program	Emissions Reductions Program
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
EU	European Union

FAO	Food and Agriculture Organization of the United Nations
FBS	Selections under Fixed Budget
FC	Forestry Commission
FCPF	Forest Carbon Partnership Facility
FIP	Forest Investment Program
FLEGT	Forest Law and Enforcement Governance and Trade
FM	Financial Management
FORIG	Forestry Research Institute of Ghana
FPP	Forest Preservation Programme
FSD	Forestry Services Division (of the Forestry Commission)
FY	Fiscal Year
GAS	Ghana Audit Service
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GoG	Government of Ghana
GSGDA	Ghana Sustainable Growth and Development Agenda
HFZ	High Forest Zone
HQ	Headquarters
IA	Implementing Agency
IBRD	International Bank for Reconstruction and Development
ICB	International Competitive Bidding
IDA	International Development Association
IFC	International Finance Corporation (part of World Bank Group)
IPM	Integrated Pest Management
IUFR	Interim Unaudited Financial Report
LAP	Land Administration Project
LBC	Licensed Buyer Company
LCS	Least Cost Selection
LEG-VPU	Legal Vice-Presidential Unit (of the World Bank)
MDAs	Ministries, Departments and Agencies
MDB	Multilateral Development Banks
M&E	Monitoring and Evaluation
MESTI	Ministry of Environment, Science, Technology and Innovation
MLNR	Ministry of Lands and Natural Resources
MoF	Ministry of Finance
MoFA	Ministry of Food and Agriculture
MoP	Manual of Practice
MoU	Memorandum of Understanding

MRV	Measurement, Reporting and Verification
MTS	Modified Taungya System
NCB	National Competitive Bidding
NDPC	National Development Planning Commission
NGO	Non-Governmental Organization
NRE	Natural Resources and Environment (sector)
NREG	Natural Resources and Environmental Governance
NTFP	Non-Timber Forest Product
OP	Operational Policy
PPA	Project Preparation Advance
PCU	Project Coordination Unit
PIM	Project Implementation Manual
PMP	Pest Management Plan
PMU	Project Management Unit
PPMED	Policy, Planning, Monitoring and Evaluation Department (of MLNR)
PPP	Public Private Partnership
PS	Procurement Specialist
QBS	Quality Based Selection
QCBS	Quality- and Cost-Based Selection
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
RMSC	Resource Management Support Centre
RPM	Regional Practice Manager
R-PP	Readiness Preparation Proposal
SBD	Standard Bidding Documents
SCF	Strategic Climate Fund
SECO	State Secretariat for Economic Affairs (Switzerland)
SESA	Strategic Environmental and Social Assessment
SLWMP	Sustainable Land and Water Management Project
SMART	Specific, Measurable, Attributable, Reliable, Time-bound/targeted
SMTDP	Sector Medium Term Development Plan
TCC+	Technical Coordination Committee +
tCO <sub>2</sub>	Tons of Carbon Dioxide
TOR	Terms of Reference
TTL	Task Team Leader
UNDB	United Nations Development Business
UNDP	United Nations Development Programme

UNFCCC	United Nations Framework Convention on Climate Change
UN-REDD Programme	United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
VPA	Voluntary Partnership Agreement
WBG	World Bank Group

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Senior Practice Director:	Paula Caballero
Practice Manager:	Magda Lovei
Task Team Leader:	Timothy H. Brown / Martin Fodor

**REPUBLIC OF GHANA**  
**GHANA FIP - ENHANCING NATURAL FOREST AND AGROFOREST LANDSCAPES**  
**PROJECT (P148183)**

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## PAD DATA SHEET

*Ghana*

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

### PROJECT APPRAISAL DOCUMENT

*AFRICA*

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Report No.: PAD1008

Basic Information			
Project ID P148183	EA Category B - Partial Assessment	Team Leader(s) Timothy H. Brown, Martin Fodor	
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ ]		
	Financial Intermediaries [ ]		
	Series of Projects [ ]		
Project Implementation Start Date 27-Feb-2015	Project Implementation End Date 30-Jun-2020		
Expected Effectiveness Date 01-May-2015	Expected Closing Date 30-Jun-2020		
Joint IFC No			
Practice Manager/Manager Magda Lovei	Senior Global Practice Director Paula Caballero	Country Director Yusupha B. Crookes	Regional Vice President Makhtar Diop
Approval Authority			
Approval Authority Board/AOB Decision			
Borrower: Republic of Ghana			
Responsible Agency: Ministry of Lands and Natural Resources			
Contact:	Musah Abu Juam	Title:	Technical Director for Forests

Telephone No.: 233-244362510

Email: abujuam@gmail.com

**Project Financing Data(in USD Million)**

<input type="checkbox"/> Loan	<input type="checkbox"/> IDA Grant	<input type="checkbox"/> Guarantee	
<input type="checkbox"/> Credit	<input checked="" type="checkbox"/> Grant	<input type="checkbox"/> Other	
Total Project Cost:	32.50	Total Bank Financing:	0.00
Financing Gap:	0.00		

Financing Source	Amount
Borrower	3.00
Strategic Climate Fund Grant	29.50
Total	32.50

**Expected Disbursements (in USD Million)**

Fiscal Year	2015	2016	2017	2018	2019	2020				
Annual	0.00	3.00	4.50	7.90	6.90	7.20				
Cumulative	0.00	3.00	7.50	15.40	22.30	29.50				

**Institutional Data****Practice Area (Lead)**

Environment &amp; Natural Resources

**Contributing Practice Areas****Cross Cutting Areas**

- Climate Change  
 Fragile, Conflict & Violence  
 Gender  
 Jobs  
 Public Private Partnership

**Sectors / Climate Change**

Sector (Maximum 5 and total % must equal 100)

Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Agriculture, fishing, and forestry	Forestry	60	100	100
Public Administration, Law, and Justice	Public administration-Agriculture, fishing and forestry	40	50	50
Total		100		

I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.

**Themes**

Theme (Maximum 5 and total % must equal 100)

Major theme	Theme	%
Environment and natural resources management	Climate change	50
Environment and natural resources management	Environmental policies and institutions	30
Rural development	Other rural development	20
Total		100

**Proposed Development Objective(s)**

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 the Forest Investment Program (FIP)-financed activities in Ghana is to reduce greenhouse gas (GHG) emissions from deforestation and forest degradation, while reducing poverty and conserving biodiversity.

**Components**

Component Name	Cost (USD Millions)
Component 1. Policy Reforms and Institutional Strengthening	3.00
Component 2. Pilot Investments for Improved Forest and Landscape Management with Communities	22.94
Component 3. Innovation, Capacity Building, and Communications	2.80
Component 4. Project Management, Monitoring, and Coordination	3.76

**Systematic Operations Risk- Rating Tool (SORT)**

Risk Category	Rating
1. Political and Governance	Substantial
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Low
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	Moderate
6. Fiduciary	Substantial
7. Environment and Social	Substantial
8. Stakeholders	Moderate

9. Other			
<b>OVERALL</b>		Moderate	
<b>Compliance</b>			
<b>Policy</b>			
Does the project depart from the CAS in content or in other significant respects?		Yes [ ]	No [ X ]
Does the project require any waivers of Bank policies?		Yes [ ]	No [ X ]
Have these been approved by Bank management?		Yes [ ]	No [ ]
Is approval for any policy waiver sought from the Board?		Yes [ ]	No [ X ]
Does the project meet the Regional criteria for readiness for implementation?		Yes [ X ]	No [ ]
<b>Safeguard Policies Triggered by the Project</b>		<b>Yes</b>	<b>No</b>
Environmental Assessment OP/BP 4.01		X	
Natural Habitats OP/BP 4.04		X	
Forests OP/BP 4.36		X	
Pest Management OP 4.09		X	
Physical Cultural Resources OP/BP 4.11		X	
Indigenous Peoples OP/BP 4.10			X
Involuntary Resettlement OP/BP 4.12		X	
Safety of Dams OP/BP 4.37			X
Projects on International Waterways OP/BP 7.50			X
Projects in Disputed Areas OP/BP 7.60			X
<b>Legal Covenants</b>			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Recruitment of External Auditor		30-Nov-2015	
<b>Description of Covenant</b>			
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 under terms of reference satisfactory to the World Bank, and in accordance with the provisions of Section III of Schedule 2 to the Grant Agreement.			
<b>Conditions</b>			
<b>Source Of Fund</b>	<b>Name</b>	<b>Type</b>	
CSCF	Project Implementation Manual	Effectiveness	
<b>Description of Condition</b>			

The Agreement shall not become effective until evidence satisfactory to the World Bank has been furnished, to the World Bank, that the Recipient has adopted and submitted to the World Bank, the Project Implementation Manual, in form and substance satisfactory to the World Bank.

<b>Team Composition</b>			
<b>Bank Staff</b>			
<b>Name</b>	<b>Role</b>	<b>Title</b>	<b>Unit</b>
Timothy H. Brown	Team Leader (ADM Responsible)	Sr Natural Resources Mgmt. Spec.	GENDR
Martin Fodor	Team Leader	Senior Environmental Specialist	GENDR
Charles John Aryee Ashong	Procurement Specialist	Procurement Specialist	GGODR
Robert Wallace DeGraft-Hanson	Financial Management Specialist	Sr Financial Management Specialist	GGODR
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Esther Awume	Team Member	Team Assistant	AFCW1
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Lesya Verheijen	Team Member	Consultant	GENDR
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Maiada Mahmoud Abdel Fattah Kassem	Team Member	Finance Officer	WFALA
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Paul Bennett Siegel	Team Member	Consultant	GENDR
Paula F. Lytle	Safeguards Specialist	Senior Social Development Specialist	GSURR
Shingira Samantha Masanzu	Team Member	Associate Counsel	LEGAM
Stig Gustaf Johansson	Team Member	Sr Forestry Spec.	GENDR
Yesmeana N. Butler	Team Member	Program Assistant	GENDR
<b>Extended Team</b>			
<b>Name</b>	<b>Title</b>	<b>Office Phone</b>	<b>Location</b>

<b>Locations</b>					
<b>Country</b>	<b>First Administrative Division</b>	<b>Location</b>	<b>Planned</b>	<b>Actual</b>	<b>Comments</b>
Ghana	Western	Western Region	<b>X</b>		
Ghana	Brong Ahafo	Brong Ahafo Region	<b>X</b>		

# **GHANA FIP - ENHANCING NATURAL FOREST AND AGROFOREST LANDSCAPES PROJECT (P148183)**

## **I. STRATEGIC CONTEXT**

### **A. Country Context**

1. Ghana is a country in West Africa with a land area of 238,535 square kilometers and estimated population of 26.2 million people in 2014.<sup>1</sup> Ghana's economy remains heavily reliant on renewable natural resources. Over 70 percent of Ghana's population depends directly on natural resources for food, water, and energy. In 2013, Ghana's Gross Domestic Product (GDP) was US\$47.7 billion, and GDP per capita was US\$1,730. The agriculture sector – which relies on well managed land and water resources – contributed 21.5 percent of GDP. Agriculture, forestry, and agroforestry account for more than 50 percent of land use and employ about 60 percent of the population, including 53 percent of women. Ghana's economy is dominated by small and medium enterprises, which are run mainly by women and are crucial to growth, employment and poverty reduction goals. Almost half the population lives in rural areas, and two-thirds of rural livelihoods rely on forest-related activities. Agriculture, dominated by cocoa, has been the backbone of the economy for decades, but gold and oil production have grown substantially in recent years.

2. Ghana's overall macroeconomic conditions have continued to deteriorate since the 2012 elections, with large twin-deficits lingering in 2014, fueling government debt and inflation, a sharp depreciation of its currency, and weaker economic growth. The fiscal deficit, which remains one of the biggest sources of vulnerability in the economy, reached 10.1 percent of GDP in 2013 and was projected to remain high at 9.5 percent by the end of 2014. The Ghana Cedi depreciated against the US dollar by 43 percent on the forex bureau market by July 2014. However, it stabilized in the last quarter of 2014 after the inflow of the Ghana Cocoa Board (COCOBOD) loan of US\$1.7 billion and of a US\$1 billion Eurobond. Meanwhile, headline inflation reached 16.9 percent in October 2014, driven mainly by depreciation of the Ghana Cedi and the pass-through effects of the fuel and utility prices on non-food items, and is trending upwards.

3. Macroeconomic challenges continue to weigh on economic growth. GDP growth slowed to 7.1 percent in 2013 and was expected to remain subdued around 6.0 percent in 2014. It is projected to decline further in 2015 but recover thereafter with the production of gas and new oil fields. Slower economic growth and higher inflation could easily erase recent gains in poverty reduction. Official data show the poverty rate decreased to 24 percent in 2013 from 31 percent in 2006, making it very likely that Ghana meets the goal of halving poverty rates by 2015. However, there is a great disparity in poverty levels, for example between rural areas (38 percent poor), urban areas (11 percent) and the Rural Savannah (55 percent poor). Poverty reduction in Ghana is linked to developments in the labor market, where the participation rates increased substantially and the share of agriculture employment (with the lowest wages in the economy) decreased. Overall, Ghana expects to meet the 2015 Millennium Development Goals for income, poverty reduction, ending hunger, primary education, gender equality, and access to clean water. Environmental sustainability is a continuing challenge, with rapid forest loss from land use change.

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<sup>1</sup> Data are from the World Bank Ghana Economic Update of October 2014. Dollar amounts are U.S. dollars unless otherwise indicated.

4. Natural resource wealth has a critical role in contributing to sustainable growth and continued poverty reduction efforts. Renewable resources, such as forests and fisheries, that could contribute to revenues and economic development sustainably, are being depleted. Forest resources are critically important for jobs, incomes and livelihoods, particularly for poor communities and women. However, Ghana faces challenges in natural resource governance, volatility in commodity prices, falling agricultural competitiveness and geographical disparities in the distribution of resources, people and water. Natural resource management institutions and practices need to be strengthened to improve efficiency, equity, and sustainability.

## **B. Sectoral and Institutional Context**

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

6. **Ghana's forest cover** has almost halved since 2000: only 4.6 million hectares remained in 2011 with 1.6 million hectares as forest reserves. Ghana's deforestation rate is about 2 percent per year, representing a loss of 135,000 hectares per year (FAO, 2010). Recent assessments indicate that rates may have been accelerating in Brong Ahafo and the Western Region. The major direct causes of deforestation as summarized in Ghana's Readiness Preparation Proposal (R-PP, 2010) are: (i) agricultural expansion, particularly for cocoa production; (ii) harvesting for fuel wood and charcoal, illegal logging, wildfires and biomass burning; (iii) population and development pressure; and (iv) mining and mineral exploitation. The domestic timber market is supplied mainly by informal sources using inefficient and unsustainable practices and absorbs about 85 percent of timber production, which exceeds the annual allowable cut. Although timber demand is high, there is limited investment in new production or plantations, because of weak enabling conditions.

7. **Community members** are both actors in and victims of forest decline. Agriculture, timber, and mining are critical economic activities. Agricultural expansion – led by the production of cocoa, but also including cassava, plantain, coco yam, oil palm, and rubber – accounts for about half of deforestation and degradation. Women and men use forest and landscape resources differently and play different roles in community-based institutions. Cocoa production occupies about 1.6 million hectares (7 percent of all land), and about 800,000 producers (mostly small farmers). Recent expansion has been greatest in the Western Region which now accounts for over half of the production. Increasingly, farmers are shifting from shaded cocoa to open cocoa cultivation, as well as encroaching forested lands. The complex tree tenure and benefit sharing regime fails to provide incentives to communities to protect trees.

8. **Cocoa** is Ghana's most important agricultural commodity; with sales of about US\$2 billion per year, it is important for both the economy and rural employment. Ghana is the world's second largest exporter. COCOBOD is the sole buyer (acting through licensed buying companies) and

exporter of the commodity. Although global demand for chocolate continues to increase, Ghana's cocoa production faces economic, environmental and sustainability challenges. The Ghana Sustainable Growth and Development Agenda (GSGDA) noted that for 2012, the volume of production was down 14 percent and value was down by 2.8 percent. Key challenges to competitiveness include low yields and returns to farmers, aging rootstock, limited access to technology, skills and modern inputs, and declining soil fertility coupled with wider environmental degradation. Area expansion sustains production, rather than investments in efficiency, productivity or intensification. Investments in cocoa cultivation are limited, particularly when compared to the investment in post-harvest processing and global distribution. Increasing global demand for sustainable cocoa is creating a positive incentive and common interest among cocoa producers, buyers and regulators to move to more sustainable and climate-friendly production practices. Several initiatives (funded both by the private sector and by Ghana's development partners) are working in the supply chain to increase dialogue, improve productivity and returns to farmers, and reduce environmental degradation.

9. **Sector Policy Improvements.** The GoG plans improvements in forest sector governance, incentives, benefit-sharing, tenure and institutional effectiveness. The GoG has prepared a new Forests and Wildlife Policy (2012) and a Strategy for Plantations (2013). The GoG is working to improve the complex tree tenure system to provide better incentives to maintain trees on farms. Ghana is working with the European Union (EU) on a Voluntary Partnership Agreement (VPA) process, which requires verification of legality for timber exports to the EU. The Bank-supported Natural Resources and Environmental Governance Technical Assistance Project (NREG TA) is addressing policy and institutional weaknesses, improving the enabling environment for investment and enhancing capacity to deliver forest management services. Ghana is engaged in efforts to achieve Reduced Emissions from Deforestation and Forest Degradation (REDD+)<sup>2</sup>, with support from the Forest Carbon Partnership Facility (FCPF) and the World Bank. REDD+ readiness aims to build the legal, institutional base as well as the awareness and constituency needed to participate in global performance based payment systems. Ghana's Emissions Reduction Program Idea Note (ER-PIN) was accepted into the pipeline of the FCPF Carbon Fund for further development. More information on these initiatives is in Annex 5.

10. **Ghana's Forest and Land Use Challenges.** The GSGDA notes that the key forest and natural resource management challenges are to: (i) improve the enabling environment and incentives for better stewardship and investment by local institutions, communities, and farmers; (ii) improve and diversify livelihoods for communities as an alternative to forest degrading activities; (iii) coordinate and harmonize incentives across multiple layers of institutions and stakeholders for improved livelihoods; and (iv) capitalize on climate change as a focal initiative and financing opportunity. The Government has introduced the concept of Community Resource Management Areas (CREMAs) to devolve some management rights and responsibilities to the local level, particularly for wildlife. This concept is sound but needs to be replicated and scaled up

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<sup>2</sup> REDD is an effort to create a financial incentive for developing countries to protect, better manage and wisely use their forest resources, contributing to the global effort to reduce emissions. REDD+ goes beyond deforestation and forest degradation, and includes the role of conservation, sustainable management of forests and enhancement of forest carbon stocks. REDD+ aims to establish a global mechanism through which developing countries can receive payments for sequestering carbon or keeping forests standing. REDD+ "readiness" relates to a country's efforts to build the legal, institutional and operational capacity to be prepared to engage in a global REDD+ mechanism. (<http://www.un-redd.org/FAQs/tabid/586/Default.aspx>).

to cover more types of resources. Additional background on the drivers of deforestation is provided in Annex 7. More information on land and tree tenure is provided in Annex 8.

11. **Civil society engagement and dialogue** on the natural resource sectors, climate change, and the REDD+ process has been increasing. In 2010, the Civil Society Review of the Natural Resources and Environment Sector was established to provide a forum for Civil Society Organizations' (CSO) inputs into the government's own review of the sector. The National Forest Forum is a platform to influence policy formulation, promote good governance and sustainable forest management. The forum engages with civil society organizations in Accra, but needs more active engagement with field-based organizations. The Dedicated Grant Mechanism (DGM) for Local Communities – a FIP-financed mechanism to promote dialogue, and capacity – aims to address that need.

12. **High Forest Zone.** All forest sector issues converge in Ghana's high forest zone (HFZ), where deforestation rates and carbon stocks are highest. The HFZ is also a core cocoa production area with significant degradation. There is good potential to move toward more sustainable forest and land management – with reduced emissions and more stored carbon – by enhancing policy implementation, incentives, and management practices for better stewardship and productivity. The Ministry of Food and Agriculture (MoFA), the COCOBOD, NGOs and cocoa supply chain agents are promoting certification of sustainable cocoa production, but 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 and bringing old cocoa fallows under more sustainable agroforestry-based cultivation.

13. **The Forest Investment Program (FIP)** provides an opportunity to finance Ghana's transformative efforts to improve forest and landscape management in the HFZ. The FIP is part of the Strategic Climate Fund (SCF), within the Climate Investment Funds (CIF), a global multi-donor trust fund. Globally, the FIP supports developing country efforts to reduce deforestation and forest degradation and promote sustainable forest management that leads to emissions reductions and enhancement of forest carbon stocks in the long term. Ghana developed its FIP Investment Plan through a consultative process and it was approved by the global FIP governing mechanism in November 2012. **The overall goal of the FIP-financed program in Ghana is to reduce GHG emissions from deforestation and forest degradation while reducing poverty and conserving biodiversity**<sup>3</sup>. The Investment Plan identified three inter-related projects in Ghana, implemented by the World Bank, the African Development Bank (AfDB) and the International Finance Corporation (WBG), respectively.<sup>4</sup>

14. FIP investments will focus on the High Forest Zone in the Western and the Brong Ahafo regions, where deforestation rates and carbon stocks are high. This FIP-financed set of projects

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<sup>3</sup> FIP's Results Framework (May 2011) recognizes that reductions in deforestation and emissions result from the combined synergies of FIP financed activities and other leveraged projects. It notes that transformation will be the result of multiple activities over a long time period and cannot be attributed to a single project or intervention.

<sup>4</sup> FIP financing is channeled through the Multilateral Development Banks (MDBs) as grants and near-zero interest credits. The FIP aims to help countries complement and leverage investments to promote forest mitigation; reduce pressures on forests (including from outside the sector); strengthen institutional capacity, forest governance, and knowledge sharing; mainstream climate resilience; and contribute to biodiversity conservation, protection of the rights of indigenous peoples and local communities, and poverty reduction through rural livelihoods.

collectively aim to (i) ensure the integrity, restoration, and sustainable management of forest reserves by introducing more inclusive management practices and benefit sharing models, financial incentives, and investments; (ii) restore forest cover in off-reserve areas by securing tree tenure and benefits, forest plantations and landscape restoration, and rehabilitation of degraded forest land; (iii) increase trees and enhance carbon stocks in the farming system by promoting sustainable cocoa and agriculture practices; and (iv) develop viable alternative livelihoods for local communities by addressing a broad range of technical, financial and market incentives, to reduce pressure on forests. Under Ghana's FIP program, this proposed World Bank project will support improvements in policy implementation, improvements in management practices, capacity building, and communication. The project will also pilot community-based planning and management and test alternative models for devolving more rights and responsibilities to communities and farmers. The FIP also funds the DGM in Ghana.

### **C. Higher Level Objectives to which the Project Contributes**

15. **Consistency with WBG Corporate Goals and CPS.** This proposed operation is fully consistent with the World Bank Group's corporate goals – to end extreme poverty and to promote shared prosperity with environmental, social, and fiscal sustainability – and with the Country Partnership Strategy (CPS) for FY13-FY16<sup>5</sup>, which aims to assist Ghana in the transition to middle-income status by the end of FY16. Under the CPS, the WBG will assist Ghana to diversify its economy, and generate jobs for its young labor force. 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.

16. **Consistency with Country Agenda.** The proposed project is also in line with Ghana's Medium Term National Development Policy Framework: "Ghana Shared Growth and Development Agenda" (GSGDA), 2011- 2013, which supports "Accelerated Agricultural Modernization and Sustainable Natural Resources Management." The GSGDA emphasizes improved cross-sectoral environmental management as well as the opportunity for reducing emission from deforestation and forest degradation, as a contribution to the country's climate change agenda. The FIP investment also builds on the GoG's efforts to accelerate growth in the agriculture sector by transforming the capacities of smallholder producers and processors, particularly women, and help them take advantage of larger scales and market opportunities.

17. **Gender Aspects.** Women producers and processors have benefited from micro finance and skills training to improve their economic activities and opportunities. In addition to farming and cocoa production, women regularly engage in animal husbandry, bee keeping, food processing, weaving, dyeing, and commodity processing (e.g., shea butter). GoG's programs are helping to create opportunities for the development of agro-processing enterprises largely owned by women to enhance production of value-added outputs for greater employment and market competitiveness.

18. The project will contribute to the overall objective of Ghana's FIP Program to "reduce GHG emissions from deforestation and forest degradation while reducing poverty and conserving

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<sup>5</sup> The World Bank Group's Country Partnership Strategy for the Republic of Ghana for the Period FY13-FY16 (Report #76369-GH) discussed by the Executive Directors on August 20, 2013.

biodiversity” (and the Global FIP aim of reducing greenhouse gas emissions from deforestation and forest degradation). The project will support interventions toward reducing deforestation through more sustainable management practices for forests, agroforests and cocoa landscapes. The project aims to target policy and landscape interventions relevant for reducing degradation in both forest reserves and off reserve areas, which will contribute to reducing emissions and enhance carbon stocks. This will improve upon past efforts by working to improve management practices and the incentive mechanisms needed to sustain the interventions for addressing underlying drivers of deforestation. Project investments will serve as a catalyst to leverage other longer term financing streams (such as results based financing, private sector investments, bilateral investments) to achieve the scale of financing needed to sustain changed practices that reduce the long term trends in deforestation. The project also aims to enhance and increase social benefits and community empowerment by focusing on groups that depend on natural resources. The community level institutional strengthening and pilot activities (related to devolution of management rights and responsibilities, benefit sharing and landscape planning) are expected to build social capital, and empower communities and their institutions, including for women. The project expects to contribute to economic benefits, and help to reduce poverty by creating opportunities for revenue generation and job creation through empowerment of community-based resource management institutions, improvements in the cocoa landscape, forest restoration, plantation and agroforestry development. Wider benefits will include contributions to global public goods, including enhancing agricultural biodiversity, soil conservation, habitat connectivity and ecosystem services, such as sustaining water supplies.

## **II. PROJECT DEVELOPMENT OBJECTIVES**

### **A. PDO**

19. **Project Development Objective:** 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.

### **B. Project Beneficiaries**

20. The ultimate beneficiaries of this operation are the rural communities (current and future generations) in the Western and Brong Ahafo Regions who manage agricultural landscapes and forests for their livelihoods, especially those involved in cocoa farming and members of CREMAs. These small scale farmers and tenant farmers, including women, will gain access to new skills, opportunities, and markets. Landowners and traditional authorities will gain from the greater productivity of their lands and the improved management practices and clearer policies put in place. The Ministry of Lands and Natural Resources (MLNR) and the Forestry Commission (FC), charged with forest and landscape management, will also benefit from improved policies, capacity development programs, and outreach and communication programs. Other stakeholders, including the private sector and civil society, will benefit through improved institutional norms and improved resource management practices in the High Forest Zone. Large and small investors and communities will gain from the clarification of rules and processes needed to promote investment in landscapes, trees and timber that will contribute to Ghana's development in the future. Staff of the Implementing Agencies and extension agents will benefit from the capacity building activities

under the project. The project will also have benefits at the global level through the contribution to climate change mitigation over the long term.

### C. PDO Level Results Indicators

21. Key PDO indicators include:

- (i) People in targeted forest and adjacent communities with increased monetary or non-monetary benefits from forests (number), of which female (number)
- (ii) Area under improved CREMA management and climate smart cocoa management practices in targeted landscapes due to project interventions (ha), disaggregated by CREMA management and climate smart cocoa management practices
- (iii) Area of forest in targeted landscapes (ha), disaggregated by closed forest, open forest, and crop land
- (iv) Total greenhouse gas emission reductions plus enhancement of carbon stocks, estimated in tons equivalent CO<sub>2</sub>e/year (relative to 2012 reference level based on Ghana's REDD+ MRV system)
- (v) Direct project beneficiaries (number), of which female (percentage)

22. The global FIP finances three inter-related projects in Ghana, implemented by the World Bank, the African Development Bank (AfDB) and the International Finance Corporation (IFC), respectively.

### III. PROJECT DESCRIPTION

23. **Ghana REDD+/FIP Overview.** Ghana's REDD+ program is supported by FIP and other financing mechanisms, through the Bank and other development partners, as shown in Figure 1 below. FIP is one part of an integrated financing package that aims to assist Ghana in reducing deforestation and forest degradation, while achieving livelihood and biodiversity co-benefits. FIP also assists Ghana to scale up successful efforts and prepare to access future climate finance, which may take the form of payments for performance. The Bank-financed elements of this program are described in Figure 2 and in more detail in Annex 5.

24. Ghana's FIP Program was designed in 2012 with three components implemented by World Bank, AfDB and IFC. These projects are designed to work together in a programmatic, landscape level approach, managed by the Ministry of Land and Natural Resources to reduce pressure on forests through an integrated landscape approach. The Multilateral Development Banks' (MDB) components are also geographically positioned on the ground to avoid overlap and duplication.

25. **The FIP Project.** The project is designed to address the sectoral and environmental challenges described above through improved policy implementation, improved management practices in targeted landscapes in one corridor of the HFZ and the associated Forest Reserves, targeted capacity building, and systematic outreach and communications efforts to improve understanding and practices and to prepare for wider replication. The design of the project is built on Ghana's overall FIP Investment Plan, approved in 2012, which was developed through analysis and consultation and adopted a programmatic approach. Annex 2 has a more detailed description.

**Figure 1. Ghana FIP Program**

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

**Figure 2. Elements of Ghana’s REDD+ Program**

<p><b>Elements of Integrated Financing Package for Ghana’s REDD+ Program (World Bank Supported)</b></p> <p><b>FCPF Readiness Fund.</b> The FCPF Readiness Grant (current grant ended in November 2014, with additional funding, under processing, for activities up to December 2017) supports: (i) REDD+ implementation arrangements; (ii) Reference Levels for deforestation and forest degradation and Monitoring, Reporting and Verification System; and (iii) a national REDD+ strategy. These components will contribute to the governance and operating environment for FIP investments and later phases of implementation or performance based payments. Additional Funding for readiness will support Ghana to develop a Readiness Package, which will document the country’s capacity to participate in future systems of positive incentives for REDD+.</p> <p><b>FIP Dedicated Grant Mechanism (DGM).</b> The Bank is assisting Ghana to gain access to DGM resources, a component of the global FIP, designed specifically to promote the inclusion of communities reliant on forests in policy formulation and initiatives that seek to reduce deforestation and degradation. The aim of the DGM in Ghana is to improve the capacity of local communities in Ghana, with focus on the High Forest Zone in the Western and Brong Ahafo Regions, to engage in FIP and other REDD+ activities. The proposed project will finance the demand-driven provision of grants to community organizations through a National Executing Agency, selected with input from involved communities. Identification of specific areas and communities will be based on the target zones selected for FIP interventions.</p> <p><b>Emissions Reduction Program.</b> Under the FCPF Carbon Fund, the Bank is providing technical assistance to Ghana for the preparation of an Emissions Reduction (ER) Program. In line with Ghana's emerging national strategy options and building on FIP piloting, the ER program targets long-term emission reductions primarily through sustainable production of cocoa in the High Forest Zone. If selected to sign an Emission Reduction Payment Agreement (ERPA), Ghana could potentially receive US\$50 to US\$60 million in performance-based payments.</p>
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**A. Project Components**

26. The project will have four components, as follows:

<b>Component Name</b>	<b>Cost<sup>6</sup>, in US\$</b>
Comp. 1: Policy Reforms and Institutional Strengthening	3,000,000
Comp. 2: Pilot Investments for Improved Forest and Landscape Management with Communities	22,935,000
Comp. 3: Innovation, Capacity Building, and Communications	2,800,000
Comp. 4: Project Management, Monitoring and Coordination	3,765,000
<b>TOTAL</b>	<b>32,500,000</b>

27. The organization and relations among the four components are illustrated below. The core of the project (Component 2) is a set of pilot activities implemented in a few target landscapes designed to address key drivers of deforestation (see Annex 7). The policy implementation, institutional strengthening, capacity building, and communications activities in Components 1 and 3 aim to support the field demonstration of improved management practices, and lay the ground work for later scale up. Component 4 covers management, monitoring, and coordination across the range of FIP-financed activities. Each of these is further described below.

28. **Location of Field Activities.** The map in Annex 2 shows all the proposed locations for field activities in the Western and Brong Ahafo Regions, as described in the text above, including work with communities on cocoa and agroforestry in the corridor. The total area of intervention is about 412,000 hectares, of which 273,000 hectares are open forest / cocoa landscape (off reserve area) linking the key forest reserves in the Western Region. This area borders around many communities, some of which are being selected for implementation of pilot activities.

## **B. Project Description**

29. **Component 1: Policy Reforms and Institutional Strengthening (US\$3.0 million, of which US\$2.5 SCF grant).** This component consists of efforts to advance implementation of reformed policies, improve the enabling environment, and strengthen the institutional means to achieve sustainable landscape and forest management. This will involve three main sets of activities: improvements to policy practice, improvements to the institutional guidance and procedures for implementation, and support for multi-stakeholder governance platforms and consultative processes.

30. The first set of activities will support analysis of options, review of legal frameworks, gathering and dissemination of evidence on the effectiveness of various options, and development of pilot testing approaches in collaboration with stakeholders. Improving policy “practice” means changing the translation and interpretation of the way policies are deployed on the ground – as well as incentives<sup>7</sup> to improve the enabling environment for sustainable landscape and forest

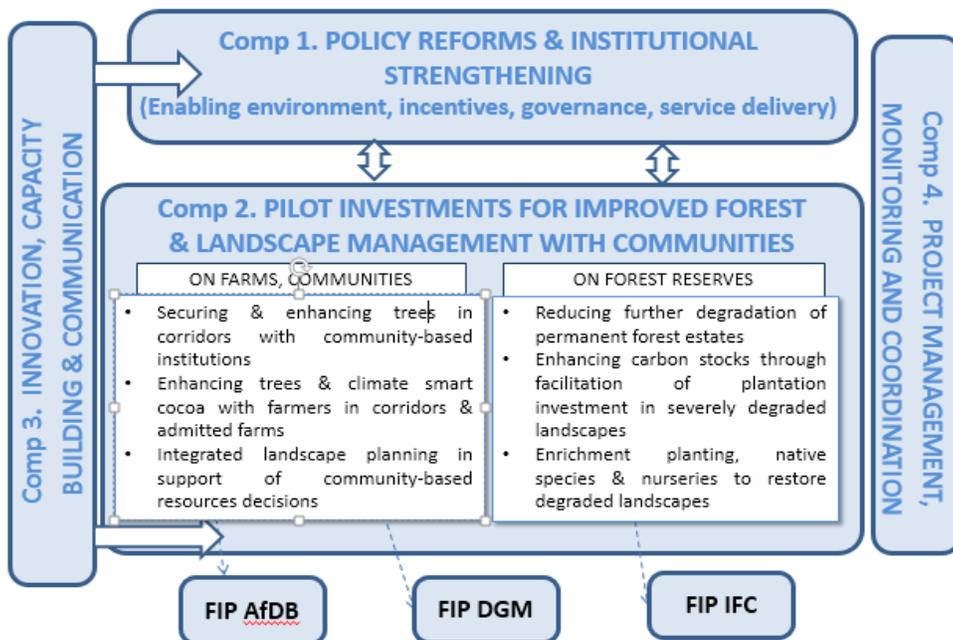
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<sup>6</sup> These figures include the Government’s contribution of staff time and in-kind services.

<sup>7</sup> “Incentives” describes a range of services, capacity, extension and information provided to farmers and communities. Under Component 2, the project will support provision of seedlings of locally desirable tree species and technical assistance on nurturing them. The project will facilitate COCOBOD’s efforts to provide improved varieties of cocoa seedlings. Improved coordination and scheduling by COCOBOD and FC to ensure delivery of services at the right

management. Changes in policy implementation practices will also have a positive and sustainable effect on people’s lives and land uses. For example, if farmers can register trees and have a stake in trees that they nurture on their farms, it will lead to more sustainable landscape management practices over time, beyond the life of the project.

### Ghana FIP: World Bank Project Enhancing forests & Agroforest Landscapes



31. The second set of activities will strengthen the institutional procedures, guidelines and institutional models to ensure that policy implementation improves on the ground. Changes in institutional practices, embedded in guidance documents and training, will influence the working norms of government officials in their approaches to and interactions with stakeholders (e.g., timely delivery of services and inputs should become a norm). The component will also support improvement of guidelines and operational manuals that aim to enhance service delivery by the Forestry Commission to support field implementation and extension activities at landscape level.

32. The third set of activities will provide support to sustain and expand consultation and governance platforms initiated under NREG and FCPF at both national and local level. The MLNR will support and enhance a Stakeholder Forum (Traditional Authorities, Civil society groups, local communities and public sector institutions) to consult and engage toward consensus around the issues that influence landscape management practices and tree/forest stewardship by communities.

33. **Component 2: Pilot Investments for Improved Forest and Landscape Management with Communities (US\$22.94 million, of which US\$20.94 SCF grant).** Field- and community-based investments are the core of the project. These will aim to establish and demonstrate improved forest and landscape management practices, while building the case for wider replication in terms

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time is also an incentive. Assistance with uptake and documentation of improved practices may also help some farmer groups to qualify for certification, which can lead to higher prices for cocoa delivered.

of results. These pilots represent up-front investments required to restore and protect forest cover and reduce deforestation, and thus build on the REDD+ Readiness Process. Pilots will be supported by efforts to consolidate lessons from implementation to improve policy implementation and institutional practices, as well as outreach efforts that encourage replication to landscapes beyond the target corridors. Demonstration activities will be implemented in two main landscapes: on farms and in communities in a specific landscape corridor and on Forest Reserves.

34. **Pilot 2.1: Enhancing Trees and Climate-Smart Practices in Agroforestry Corridors and Cocoa Landscapes on Farms with Communities.** This pilot will focus on drivers of deforestation and land degradation on community managed agroforestry and cocoa cultivation landscapes in a target corridor linking several Forest Reserves of the HFZ. Activities aim to secure and enhance trees in corridors with community-based institutions, enhance trees and climate smart cocoa with farmers both in corridor landscapes and on admitted farms<sup>8</sup>, and to deploy integrated landscape planning in support of community-based resource management decisions. These activities will enhance carbon stocks in the agroforestry and cocoa landscape by scaling up support (a combination of extension, inputs, certification, and incentives) to smallholder farmers to increase protection of existing trees, planting of new trees, practicing agroforestry and shade grown climate smart cocoa production. Activities aim to improve the care and maintenance of trees on private farmland, by devolving management responsibilities and improving incentives, coupled with extension and communication efforts. The DGM has an important role in providing information, training, and intermediate service providers who can assist communities with these choices. Pilot efforts will be developed in consultation with communities and land users in targeted zones within the corridor indicated on the map and table in Annex 2.

35. Activities to be financed will include: (i) securing and enhancing trees in key landscapes/corridors with communities, (ii) enhancing trees and smart cocoa practices in admitted farms within forest reserves, and (iii) supporting integrated landscape level planning in support of community-based resource use decisions. The project will also provide training in extension services for Forestry Services Division (FSD) Field Staff related to planting and maintenance of trees within the off-reserve landscape corridor and provide training to the Community-based Organizations (CBOs) on fire prevention, fire pre-suppression, and fire suppression strategies. This includes field equipment and logistical means for delivering goods and services to communities and farmers in remote landscapes and the fringes of forest reserves. This will also increase the presence of FC staff in the field for management and monitoring purposes.

36. The transformative nature of this activity involves giving community institutions and cocoa farmers the incentives, knowledge, and tools to improve farm level outcomes and gain benefits from managing trees and forest mosaics within the larger landscape. This field demonstration will build on two key entry points: (i) the current willingness of GoG to revise implementation practices and devolve key management responsibilities to community level; and (ii) the alignment of interests among cocoa producers, buyers and regulators toward a more sustainable and climate-friendly value chain. These efforts will be enhanced by innovative communication approaches for delivery of practical information to community institutions (see Component 3).

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<sup>8</sup> These are “farmers or cultivators who had their farms in forest reserve areas before their designation as reserves and they are entitled to continue to farm in designated areas” (Handbook for Paralegals in Ghana, CEPIL, 2009).

37. **Pilot 2.2: Pilot Investments on Forest Reserves for Reducing Degradation, Enrichment Planting, Nurseries, and Plantation Development for Restoring Degraded Forest Landscapes.** This pilot will aim to reduce further degradation of permanent forest estates; enhance habitat and carbon stocks through enrichment planting and nursery development with ecologically and commercially important native species to restore degraded landscapes, and facilitate the enabling conditions for plantation investment in severely degraded landscapes, with community involvement. This set of activities will help to address the imbalance in timber supply and demand, improve the enabling environment and investment climate for sustainable forest management and plantation development, particularly on severely degraded forest reserves. This activity will augment the supply of important native species within the high forest ecosystem, while also creating incentives and employment opportunities and markets for native tree seed stock, for communities and farmers to engage in the planting and preservation of native tree species, rather than encroachment into forests.<sup>9</sup>

38. Activities to be financed will include: (i) reducing further degradation of permanent forest estates (by engagement with admitted farms and CBOs), (ii) enhancing carbon stocks through facilitation of plantation investment in severely degraded landscapes, and (iii) enrichment planting, nurseries and native species for restoring degraded forest and agricultural landscapes.<sup>10</sup> The transformative nature of the pilot is to provide clear practices for enhancing commercial plantation investment, including clear designation of potential locations. Increased private sector investment in sustainable forest management can help to generate local employment opportunities in planting, maintenance, seedling production, service delivery, and out-grower arrangements. This activity will support and complement the procedures and land use demarcation to enable both small and large plantation investments, but it will not finance establishment of commercial plantations.

39. **Component 3: Innovation, Capacity Building and Communications (US\$2.8 million, of which US\$2.6 SCF grant).** This component will support communication, capacity building, and monitoring activities to support innovation, engage communities, and provide information relevant for improved landscape management practices. It will support the field demonstration activities described above by supplying information, improved approaches, and training materials needed to achieve improved outcomes.

40. Activities in support of innovation will involve consolidation of economic, environmental and social assessments to provide knowledge and specific cultivation techniques to improve the acceptability and uptake of native trees in landscapes and in plantations. For example, information campaigns for farmers can provide knowledge on successful agroforestry practices, procedures for registering planted trees, procedures for seeking compensation for damaged crops, and the roles and responsibilities of timber harvesting companies.

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<sup>9</sup> Experience in plantation establishment indicates that there is risk of fire and failure of establishment. The project provides training and support to Community Fire Volunteers, Community Forest Committees (CFCs), Community Biodiversity Action Groups (CBAGs) and other community groups to assist in fire prevention and suppression. The Government has tested and will apply the Modified Taungya System that engages communities in intercropping and maintenance of newly established plantations, with accepted benefit sharing approaches.

<sup>10</sup> Lessons and practices from the AfDB-financed Community Forest Management Project will be useful in planning and implementing community engagements and livelihood programs, building on the benefit sharing arrangements embodied in the Modified Taungya System (MTS). This is further described in Annex 5.

41. Communication, outreach and dissemination will be supported with development of strategic communication approaches, improving existing communication channels and capacities (in GoG), improving and targeting communication materials aimed at local institutions and stakeholder groups, using practical and efficient dissemination technologies (e.g., mobile phone, radio, etc.). Communication efforts will be supported by technical know-how developed for practical uptake by farmers and landscape managers at the local institutional level. Research and dissemination efforts will be informed through surveys and feedback from target groups, so that outreach, community relations and management practices can be constantly improved and aimed at the people who need to apply the information to effect change on the ground. This activity will also support development of information materials and campaigns and will aim to engage locally appropriate delivery agents. Links with DGM financed community engagement and outreach activities are being developed and defined.

42. The project will also undertake monitoring and reporting activities needed to ensure that FIP related information is recorded in Ghana’s National Monitoring, Reporting and Verification (MRV) system. The national MRV system is being developed and supported under Additional Funding for the REDD+ Readiness process, with FCPF financing. FIP will not support MRV activities that are already funded.

43. **Component 4: Project Management, Monitoring and Coordination (US\$3.76 million, of which US\$3.46 SCF grant).** This component will support project management and oversight, project monitoring and evaluation system, and wider coordination of the range of FIP-financed activities, including reporting at the international level. This component provides support to the GoG in regular communication and coordination among FIP-financed interventions and related activities, to promote synergies among all FIP projects (WB, AfDB, IFC, and DGM), as well as information and knowledge sharing with other FIP countries. The activities to be financed include project coordination, financial management, procurement management, contract management, operating costs, equipment and supplies, and monitoring and evaluation.

## B. Project Financing

### Project Cost and Financing (US\$)

Project Components	Project cost	Grant Financing	GoG Financing (in-kind)
Component 1	3,000,000	2,500,000	500,000
Component 2	22,935,000	20,935,000	2,000,000
Component 3	2,800,000	2,600,000	200,000
Component 4	3,765,000	3,465,000	300,000
<b>Total Costs</b>	<b>32,500,000</b>	<b>29,500,000</b>	<b>3,000,000</b>

44. **GoG Contribution.** The Government will be supplying in-kind office space and supplies, logistical support, management time and oversight, plus the staff time and resources for the staff positions defined here. This contribution is estimated at US\$3 million.

### C. Lessons Learned and Reflected in the Project Design

45. The following lessons have informed the design of this FIP-financed project for Ghana:

46. **Maximize Government Ownership.** The Government has learned that development investments, like the FIP, work best when embedded in and owned by existing institutional and administrative structures. Building separate project-based structures and staff, often with outside consultants, does not build capacity and influence institutional change effectively. The MLNR and FC intend to assign existing staff to key management, coordination, safeguards, and M&E roles, rather than hiring dedicated consultants using project funds. These roles will be supported with training and opportunities using project funds. The management approach, outlined in Component 4 and in the Institutional Arrangements (IV.A), reflects this lesson of experience.

47. **Build on Coordination Opportunities and Processes.** Many development partners and international finance vehicles are working actively on the REDD+/Forests/Cocoa set of issues in Ghana, including AfDB, IFC, FCPF, VPA, NREG, Cocoa Platform and others. (Annex 5 discusses these various initiatives.) There is a need to find synergies and opportunities for collaboration, while avoiding duplication. Opportunities for constructive collaboration may arise from the ground level, more than from formalized, top-down coordination frameworks. The World Bank's FIP project will use and support the existing coordination and communication systems in the forest and natural resources sectors, many of which were developed and supported under the NREG process<sup>11</sup>. The Technical Coordination Committee + (TCC+), as discussed under institutional arrangements, is a single coordination committee for a number of projects in the Natural Resources and Environment (NRE) sector. Use of the TCC+ as a project Steering Committee will maximize and enhance the synergies across different projects and funding sources. FIP has also designated resources for capacity building and support for coordination and dialogue processes.

48. **Address Complexity Realistically.** Forest, land, cocoa and REDD+ issues are complex in Ghana, as in any country. The institutional governance framework is complex as well, with different agencies having different responsibilities and at different levels. One project or program cannot realistically take on all challenges. The NREG process, for example, strived to harmonize both policy dialogue and financing across several natural resource sectors at the same time, as well as a wide range of partners. Working across multiple sectors, policy issues and partners, however, was too ambitious to attain desired results in a reasonable time frame. Now, Ghana hosts many initiatives proposing to address policy issues, equity issues, legality issues, capacity needs, and others (see Annex 5). Ghana's FIP, in contrast to NREG, works on a narrower set of forestry issues and assigns roles to different funding/partner agencies that work in parallel, under one coordination framework, and each works in distinct segments of the target HFZ landscapes and corridors (as illustrated in Annex 2). With MLNR in a lead coordinating role, there will be opportunities for these several initiatives to achieve their individual aims, share knowledge and learn from each other, and demonstrate new approaches that can become institutional norms. MLNR will involve

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<sup>11</sup> Although the harmonized budget support and policy target setting under NREG did not achieve full success, the NREG process did facilitate ownership and empowerment among the implementing MDAs, engendered more active dialogue across the sectors, and increased substantive engagement with both MoF and NDPC, and generally improved the understanding of environmental and climate change issues.

and inform COCOBOD, the Ministry of Environment, Science, Technology and Innovation (MESTI), MoFA, and other agencies as needed for smooth project implementation.

49. **Complexity Also Requires Time and Flexibility.** NREG demonstrated that the complex set of issues and challenges around natural resource could not be harnessed into an annual cycle of policy achievements and budget support. Much more technical assistance, capacity building, and coordination support would have been helpful, as well as a more focused agenda of priority policy reforms. Ghana's Country Environmental Analysis recognized the need to support "a reform *process* that is not linear, and engagement mechanisms must be flexible, responsive, and capable of being scaled up or down as appropriate."

50. **Long Term Perspective is Needed.** Land Administration Projects (LAP) I and II also provide some lessons on the difficult issue of land ownership and demarcation. The LAP projects made progress and achieved results, but slowly. LAP showed that sustainability of land reforms requires a longer term perspective and support from development partners and other social actors to help the Government overcome social and political inertia. Similarly, new institutional structures, information systems and capacity building require time to be accomplished – and then to have measurable impacts on the landscape. The global FIP documentation notes that reductions in deforestation and emissions result from the combined synergies of multiple interventions over a long time – and this is expected also in the case for Ghana's forests and cocoa landscapes.

51. **Service Delivery and Consultation Are Key.** LAP also reinforced some points about service delivery, stakeholder consultations and field implementation that are relevant for FIP. First, services (land administration, extension, training, etc.) are better provided when they are closer to the client and demand-driven. Second, the multiple stakeholders and interest groups around land use, forestry and cocoa (e.g., private/public, central/district, traditional/"modern", owners/tenants, growers/buyers; administrators/beneficiaries, etc.) require broad consultations and consensus building, coupled with outreach and awareness-raising. Finally, care must be taken with pilot demonstration activities to ensure that they are economically viable and can be scaled up cost effectively. These lessons are incorporated into the project designs and budget allocations.

52. **Local Community Engagement is Critical.** From the FIP investments and consultations in the Democratic Republic of Congo and Burkina Faso, as well as the Sustainable Land and Water Management Project (SLWMP) experience in Ghana, it is important to note that enhancing benefits at the local level is a more potent driver of change, than an appeal to global public goods. While enhancing contributions to global mitigation efforts is a clear opportunity, the project design focuses on local socio-economic incentives and benefits, which will contribute more to assuring the sustainability of outcomes. Ghana's Community Forestry Management Project and other forest and REDD+ activities note the importance of ensuring that local communities are part of benefit-sharing and decision processes, which are inclusive and transparent. Lessons from the Bank's experience with Community Driven Development and with Community Forest Management, including in Ghana's SLWMP and in Mexico, will also enhance approaches at the local level.

## IV. IMPLEMENTATION

### A. Institutional and Implementation Arrangements

53. **Project Steering Committee.** For coordination of policy, resources and priorities, the proposed FIP implementation arrangement will be integrated with the existing Natural Resources and Environmental Governance Technical Coordination Committee + (NREG TCC+), established in 2010 to facilitate the implementation of all natural resources and environment donor funded programs.<sup>12</sup> The TCC+ is also responsible for guiding Ghana's REDD+ agenda and includes representatives of key MDAs, plus the private sector, civil society and traditional authorities. For wider sharing and stakeholder engagement, the TCC+ can invite community-based organizations, women's groups, research institutions, etc. The DGM will be represented in the TCC+.

54. **Implementing Agency.** The Ministry of Lands and Natural Resources (MLNR) will be the lead Implementing Agency responsible for overall management, coordination and project reporting. MLNR has responsibility for policy and legislation formulation and for monitoring and evaluation for the forestry and natural resources sectors. The Ministry has a dedicated team of technical staff responsible for the implementation of the on-going program supporting the New Forest and Wildlife Policy and the Forest Development Master Plan.

55. **Project Management Unit.** The existing Forest Investment Program Management Unit (PMU) in the MLNR will coordinate the project under the Technical Director (Forestry) of MLNR. The FIP Management Unit in MLNR consists of a Project Coordinator (at Senior Director level), a Project Manager, a Project M&E unit, headed by the Director, Policy, Planning, Monitoring and Evaluation Division (PPMED), a Procurement Officer, a Planning/ Desk Officer FIP, a Financial Controller, and a Project Accountant. PMU staff resources may be supplemented from time to time as needed with short term consulting expertise for communications, reporting, and logistics.

56. A broader **Project Coordination Unit** will include the PMU and the dedicated project Focal Points from the FC, the Forestry Research Institute of Ghana (FORIG), and COCOBOD and may include representatives of other collaborating agencies as needed. The Resource Management Support Centre (RMSC) of the FC and the Climate Change Unit of the FC as well as the Carbon Stocks Monitoring Centre of FORIG will be involved in implementing Monitoring, Reporting and Verification (MRV) activities and supporting the Monitoring and Evaluation (M&E) system.

57. **Partner Ministries, Departments and Agencies (MDAs) for Implementation.** Sound implementation will require strong coordination and regular exchange of information with a number of MDAs beyond the MLNR. The **Forestry Commission (FC)**, which is the implementation arm of MLNR responsible for regulation, control and management of forest resources, will implement field activities and provide services to local committees (of CREMAs

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<sup>12</sup> The Technical Coordinating Committee (TCC), established in 2007 by GoG and Development Partners, was expanded (to TCC+) in 2010 to oversee the NREG reform program. The TCC+ is composed by Chief Director, MoF (Chair); Chief Director, MLNR (co-chair); Technical Directors for Forestry (MLNR), Mines (MLNR), and Environment (MESTI); Chief Executives of the Forestry Commission, the Minerals Commission, and EPA; Representatives include NREG Coordinator (MoF); NREG Policy Focal persons from MLNR, MC, MESTI, EPA; Representatives of the NDPC, MOFA, Ministry of Energy, Lands Commission; and Representatives of the Private sector, Civil Society, Forest Forum, Research Institutions and Traditional Authorities.

and other CBOs). The FC has appointed a Safeguards Officer to assess the impacts of FIP implementation, as well as all other programs and projects of the commission. The **FORIG**, which undertakes forestry research, will lead on activities related to selection of appropriate tree species and be a collaborating partner under Component 2.

58. District Assemblies in the pilot areas will be members of local implementation committees. The Ministry of Environment, Science, Technology and Innovation (MESTI), which has the broad mandate for developing climate change policies and reporting to the United Nations Framework Convention on Climate Change (UNFCCC), will be a collaborating partner for MLNR. The Ministry of Finance coordinates donor support in the country and implements the NREG TA. The MLNR will inform and involve the Lands Commission, Ministry of Food and Agriculture and other agents, as needed in specific circumstances.

59. The **Ghana Cocoa Board (COCOBOD)**, a state-owned enterprise, will implement field activities related to provision of extension services to farmers and members of local committees (CREMAs and other CBOs) to ensure that pilot activities in the cocoa landscape are well coordinated, incentive compatible and supported institutionally. A Memorandum of Understanding (MoU) will be signed within two months of project effectiveness between the MLNR and the COCOBOD to formalize these implementation arrangements. The MoU will clarify the roles and responsibilities for implementation (e.g., providing for arrangements and procedures on monitoring, evaluation, reporting, communication and exchange of information).

60. **Participation and Consultative Processes.** Ghana has been engaged in a REDD+ readiness process since before March 2010, when the R-PP was approved by the FCPF Participants' Committee, after extensive stakeholder consultations. The FIP consultation process continued over the period 2010-2012 and involved a scoping mission in September-October 2010, a Joint Mission in May-June 2011, and focus group meetings with stakeholders in March 2012. Stakeholder consultation processes included the private sector, civil society and community organizations. Additional consultations have been undertaken in the context of developing the arrangements for the FIP Dedicated Grant Mechanism (DGM), which will support further community engagement and participation in all the projects of Ghana's overall FIP Program. Additional consultations were held in the context of developing Ghana's Voluntary Partnership Agreement (VPA). Consultations will continue using the mechanisms identified in Component 1. The project has a specific focus on working closely with the communities through the CREMA work, dissemination of information, awareness raising and training, provision of extension services, and consultations and participation.

61. **Ghana's Strategic Environmental and Social Assessment** was conducted under the FCPF Readiness Preparation Grant and covers the entire country. The SESA preparation contributed to the understanding that informed the FIP project design. Community and stakeholder consultations held over the period 2013 to 2014 helped to confirm understanding on the drivers of deforestation, summarize societal perspectives on key challenges in the sector and needed interventions, and raise social and environmental issues from the perspective of different stakeholder groups, including women. Under the umbrella of the national SESA, the GoG prepared an Environmental and Social Management Framework (ESMF) that applies to the project intervention area. During its preparation, further specific consultations were held in the likely

intervention zones of the Western Region and Brong Ahafo during April and May 2014 (draft documents on file). In mid June 2014, MLNR and FC officials conducted further field scoping efforts and discussions with communities, local governments, cocoa sector agents and others. The preparation process for developing Ghana's Emission Reduction Program (ER-Program) also conducted consultations and workshops with stakeholders during the period 2013 and 2014. This design has benefited from these consultative processes and has provided resources to continue to support multi-stakeholder platforms for dialogue during the life of the project.

62. **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 in Western Region and Brong Ahafo, as well as other forms of CBOs where relevant. CREMAs and other CBOs could also benefit from DGM process/resources or could be targeted for communication, technical assistance and capacity building programs.
- Communities are not uniform and may include various types of farmers, hunters, land users, land owners, women and disadvantaged groups, all with different access to resources and information, as well as different expectations about the needs and results of the project.
- Traditional authorities and land owners are important in land use planning and establishment of revised management regimes. They will have an important stake in the incentives and the proposed sharing of benefits generated through the project interventions.
- District and Local Governments are important stakeholders in the realm of land use, land use planning, corridor management, etc.
- Cocoa Sector Agencies. The COCOBOD is both a regulatory and a promotion agency for cocoa, as well as several other commodity tree crops (e.g., shea nuts). The cocoa sector also includes Licensed Buying Companies and stakeholders in the supply chain.
- Local and International NGOs that provide advice, facilitation, access to resources and information, and engagement in policy dialogues, and needs assessments, including those collaborating in the cocoa sector with COCOBOD and buyers.
- The Ghana Investment Promotion Centre will be an important partner in improving the investment climate for plantation development and soliciting interest in developing Public-Private Partnerships (PPP) arrangements for the forest sector and in the forest reserves.
- Professional communication enterprises, plus other intermediate service providers that may bring skills in training, visual communication, survey design, and M&E approaches.
- Research organizations and traditional knowledge holders will be important for identifying and spreading propagation and nursery care procedures for locally important tree species.

## **B. Results Monitoring and Evaluation**

63. 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 M&E framework.

64. 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.

65. **Project level M&E** will be implemented under the current Ministry of Lands and Natural Resources 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 according to the guidelines "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. Details on M&E are in Annex 3.

### **C. Sustainability**

66. Three factors will contribute to sustaining the results and outcomes after the project period: changes in skills and practices at ground level, changes in management responsibilities and authorities for local institutions, and changes in policies and institutional norms.

67. For farmers and communities, improved climate smart cocoa production practices and other agroforestry management practices will help to improve yields and boost incomes, while also helping farms to become more resilient and adaptable. With evidence of tangible benefits and appropriate outreach, the adoption of alternative income generating activities is expected by farmers and communities. Improved practices should be taken up and shared more widely among farmers, contributing to financial sustainability. Improved communication products and links to knowledge and service providers should continue to allow farmers to access new knowledge, inputs, and markets after the project period. Institutional networks and cocoa supply chain players will be an integral part of efforts for further replication, dissemination, and sustenance of business models. To sustain this process of replication and expansion, Ghana is pursuing other climate finance sources that will foster sustainable cocoa supply chains beyond the project period.

68. Consultations with communities leading to improved CREMA / CBO engagement and resource management roles should contribute to more local ownership and responsibility for natural resource management and more ability to capture and share benefits from local control. These changes in management responsibilities should contribute to local interest in sound natural resource and forest management and improve outcomes on the ground beyond the project life. In addition, community consultations leading to better demarcation and more respect for the boundaries of forest reserves will last beyond the project life and continue serving to reduce encroachment and forest degradation in the future.

69. Policy reforms and implementation practices should also have a positive and sustainable effect on people's lives and land uses. For example, if farmers can register trees and have a stake in trees that they nurture on their farms, it will lead to more sustainable landscape management practices over time, beyond the life of project. Improved mechanisms for sharing the benefits of better landscape and forest management should also contribute to communities' well-being and participation. Changes in policy implementation and institutional practices, embedded in guidance documents and training, should last long after the project life. Improved guidance and practice documents will become the working norms within the FC and COCOBOD field teams and influence their interactions with stakeholders (e.g., timely delivery of services and inputs should become a norm). Also, capacity development will build skills and help to instill new organizational ways of working, including improving relations and outreach to local communities, which will be a long term sustainable change and benefit to local resource users.

70. Through these pathways, the project design and interventions should contribute to financial and social sustainability. The project design also contributes to the potential for institutional sustainability. The proposed project is aligned with the overarching goals of the GSGDA, as well as the aims and mandates of the implementing agencies, as codified in recently revised rules and policy documents. Project implementation is embedded in existing institutions, both at the national level (MLNR, FC, COCOBOD, and FORIG) and the ground level (CREMAs and other CBOs). The project builds on ongoing REDD+, forestry and governance initiatives financed by multiple partners and includes substantial capacity building elements to help the key agents perform their expected roles. These high level commitments and alignments should increase the likelihood of operational sustainability after the Bank's support ends.

## V. KEY RISKS AND IMPLEMENTATION MEASURES

### A. Overall Risk Rating and Explanation of Key Risks

71. The overall risk rating for the project is assessed as Moderate.

72. **Political and Governance.** 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 program will need to deliver tangible results to constituents, communities to sustain support for the overall change process. There is a risk that natural resource use and allocation are highly political and contested; changes in policies, practices and benefit sharing approaches will result in unequal gains among current power holders and stakeholders. Vested interests and distorted incentives over natural resource use and control appear at different levels. Ghana is one of the most stable democracies in West Africa, yet it suffers from budget deficit ballooning during electoral cycles. Macro-economic shocks, changing prices for cocoa or production inputs can affect the sector and incentives for forest management or clearing, as well as potentially the rural-urban movement of people. **Mitigation Built into Design.** The need to maintain focus and coordination is addressed through high level political commitments and by providing resources for coordination and governance bodies, with appropriate representation. The need to deliver tangible results to communities to sustain support for the overall change process is addressed through Component 2, which works directly with community-based institutions on activities that aim to improve productivity and livelihoods. The issues of governance, vested interests and distorted incentives are addressed by providing resources for dialogue platforms,

policy studies and stakeholder engagement processes. The Bank has noted that the political will to address long standing regulatory and practical implementation issues associated with forest management rights and responsibilities appears to be higher than in the past. Engaging citizens, civil society organizations and economic interests is a way to increase scrutiny and give a wider set of constituents a stake in positive outcomes. The project also builds on the increasing consensus that reforms and changed practices are needed to prevent further degradation and sustain the natural resource based agricultural and cocoa economy, by engaging directly with the cocoa sector.

73. **Macroeconomic:** The macroeconomic risk is substantial because the country has been running current account and fiscal deficits in excess of 10 percent of GDP for over 3 years. Consequently, international reserves have been exhausted and public debt level was projected to reach about 65 percent of GDP by end 2014. GoG has asked the International Monetary Fund for support and has begun negotiating an adjustment program. The Bank will continue the dialogue and offer flexible tools to adjust for changing conditions, in coordination with other development partners.

74. **Fiduciary.** The Bank's assessment noted that the overall procurement risk rating is Substantial. The key risks for procurement include: (i) Lack of sufficient capacity and experience to undertake and manage World Bank procurement; (ii) lack of use of the procurement plan as a monitoring, evaluation and management tool, therefore lacking updates to reflect procurement performance (iii) Delays in evaluation of bids and Technical Proposals and clearance process due to mainstreaming, contract monitoring and administration. **Mitigation.** These risks are mitigated through specific fiduciary controls that are outlined in detail in the Financial Management and Procurement Assessment in section VI.6 and Annex 3.

75. **Environment and Social.** Social and environmental effects are expected to be positive in terms of improving governance, participation and benefit sharing, and sustainability. Design follows on TA and policy work under NREG, and benefits from the consultative processes and SESA initiated under FCPF. However, issues of land use and access, as well as REDD+, raise concerns among civil society groups and communities, so scrutiny and criticism can be expected. **Social risks** may manifest in several areas: (i) entrenched interests may try to block reforms, so that results and wider benefits are not systematically achieved, (ii) interventions may have unequal impact on vulnerable groups or not achieve equitable benefits despite consultations and information sharing, and (iii) there may be misperceptions about the project's benefits or unrealistic expectations about benefits. The project incorporates consultative processes and a grievance redress mechanism to address these identified risks. **Gender.** The role of women in managing forests, trees, and agricultural landscapes was carefully considered in project design and needs to be continuously considered during implementation. Land tenure pilots, incentives and benefit sharing arrangements all need to consider the needs and potential vulnerabilities of women and disadvantaged groups. As findings have shown that there is gender differentiation in terms of managing forests, trees and agricultural landscapes and in terms of land tenure, the choice of pilot locations and the formulation of activities and interventions will require sustained attention to gender equity during implementation. Participatory consultation and planning processes will be designed to accommodate women's participation and to take account of women's concerns and potentially differential access to resources and information. Gender representation in FIP guiding and steering bodies will also be assessed. **Mitigation.** These risks and appropriate mitigations are

discussed in the safeguards instruments developed for the project. These include an Environmental and Social Management Framework (ESMF), a Pest Management Plan (PMP) and a Process Framework. These documents have been disclosed in Ghana on [www.fcghana.org](http://www.fcghana.org) and at each office of MLNR and Forestry commission regional and district offices in the Western and Brong Ahafo regions. The documents have also been disclosed at the Bank's InfoShop.

## **VI. APPRAISAL SUMMARY**

### **A. Economic Analysis**

76. Analysis conducted during preparation indicates that the project interventions are economically and financially feasible and will generate significant and positive benefits that outweigh the costs. Annex 9 provides additional detail on the economic analysis.

77. The project's primary areas of intervention are expected to yield multiple categories of benefits, some readily quantifiable (e.g., yield and emissions reductions) and others less tangible (e.g., strengthened institutions, habitat connectivity). Some categories of benefits are more readily quantifiable and are estimated in this analysis; the others are discussed qualitatively. Farmer incomes are an important category of direct benefits, measured through increased yield potential or more sustainable yields. Reduced emissions are another category of benefits, where potential values can be estimated.

78. **Estimate of the value of higher yields, better returns to land for farmers and owners.** The economic benefits of livelihood changes or cocoa quality and productivity improvements due to project interventions were estimated with similar positive results. The project interventions in two types of land uses are assumed to provide two main types of benefits to households: livelihood benefits through intercropping in plantation establishment areas and improved cocoa productivity through extension and delivery of inputs and know how. These are relatively poor households. Conservatively, we assumed household income was about US\$3,400 annually (compared to national per capita average of US\$1,730).

79. Project interventions were assumed to increase incomes by 10 percent (or US\$346 per year) in the plantation intervention and 25 percent in the cocoa intervention (or US\$865 per year). These income changes would result from a combination of higher yields, reduced costs of production, reduced losses, and higher prices of goods sold (e.g., certified products); opportunity costs are assumed to be covered within this set of assumptions. The Results Framework (Annex 1) targets 9500 heads of household as direct project beneficiaries, about 44 percent of the households in the target area. With these assumptions, incremental earnings for the affected households over 20 years (discounted at 7 percent) would be worth US\$12.2 million for the MTS / Plantation landscape and US\$56.9 million for the cocoa landscape. This totals US\$69 million for a benefit /cost ratio of 2.1 (relative to project combined costs with Government contributions), under conservative assumptions on level households reached and on potential yield increases.

80. **Estimate of the value of reduced emissions and enhanced carbon stocks in forest and cocoa landscapes.** Focusing on a readily quantifiable benefit stream, this analysis uses estimates based on project level data, where available, supplemented with market information and literature

values, where needed. We used conservative assumptions for interest rates and prices, and used ranges of values to address potential uncertainties. The analysis estimated benefits over 30 years 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.

81. Ghana's Emission Reduction Program Idea Note (May 2014) provides the data needed for estimating the value of potential emissions reductions associated with project interventions in the zone of intervention. The project area consists of Forest Reserve with various levels of carbon stock and mixed agroforestry and cocoa landscapes. The deforestation rate averages 1.4 percent/year in the forested portion of the landscape currently, or without project interventions. Research reported in the ER PIN coupled with further analysis by MLNR and FC, focused on areas targeted for intervention, found a deforestation rate of 1.3 percent and that the Closed Forest contained 415 tCO<sub>2e</sub>/ha, Open Forest contained 95 tCO<sub>2e</sub>/ha, and crop land contained 71 tCO<sub>2e</sub>/ha. For this analysis of emissions potential, it is assumed (conservatively) that through deforestation and degradation, closed forest with high carbon stock is gradually converted to open forest with a reduction in carbon stock associated with that land use. Emissions reductions are estimated for four types of actions and landscape types.

- In the Closed Forest area -- Forest Reserves linked by Corridor of 125.5 thousand ha -- demarcation and protection efforts are expected to reduce the rate of forest loss. Activities such as education, working with community groups and increased monitoring and protection activities are also assumed to help reduce and prevent further forest loss and degradation. Specifically, the project interventions are assumed to reduce the current deforestation rate of 1.3 percent per year (business as usual scenario) to 1.0 percent per year. This reduce emissions by about 484,000 tCO<sub>2e</sub> during the project and 2.9 million tCO<sub>2e</sub> over the following 30 years.
- Also, on Forest Reserves, rehabilitation and enrichment planting on 13.9 thousand ha will increase carbon stocking and restore some biodiversity values. This will result in 50,000 tons of tCO<sub>2e</sub> during the project, and 1.5 million tCO<sub>2e</sub> if growth continues for 30 more years.
- In the open forest area (Mixed Cocoa Landscape, off reserve), the project will affect about 208 thousand ha. Project actions (training and outreach to farmers, demonstration of improved practices, encouragement of trees on farms, and assistance with seedlings and other inputs) should contribute to preventing further degradation and increase the carbon content of this landscape relative to the business-as-usual scenario. This will capture 362,000 tons of tCO<sub>2e</sub> during the life of the project and 789 thousand tCO<sub>2e</sub> during the 30 years following.
- In Off-Reserve areas, intensive engagement on CREMAs and community lands, planting of trees in landscapes, critical watersheds and borders will increase carbon stocks and increase shade on cocoa farms. This will result in about 141,000 tCO<sub>2e</sub> of emissions reductions (or storage) and 4.2 million tCO<sub>2e</sub>, if average rates of sequestration continue for 30 years.

82. This set of interventions and assumptions results in emissions reductions of about 9.5 million tCO<sub>2e</sub> over the 30 years after the project. Valued at US\$5.5 per ton (a conservative market value, not a social or ecological value) and assumed to be delivered in even increments over time, this yields about US\$1.7 million per year. The Net Present Value of this stream of benefits (at 7 percent and 30 years) is US\$32 million, about equal to the investment costs. Sensitivity analysis

shows how the estimate varies with rate of forest loss (more impact implies more value), value of carbon (higher price implies higher value), and discount rate (lower rate implies higher value).

83. **Summary Estimate of Benefit vs Cost.** This analysis shows that even with conservative estimates, the project benefits match or exceed the costs when quantifying the values of just two the benefit streams. Combining the two estimates yields an overall benefit versus cost ratio of about 3.1.

84. **Benefits Not Quantified.** This summary estimate does not take into account the value of water retention, water quality, biodiversity, resilience building and risk reduction associated with more sustainable forest cover and agroforestry landscapes. Other benefits not quantified here include reduced costs, risks and uncertainty (to farmers and the wider society) due to poor/prior/weak land management regimes, conflict over resources and degradation due to poor incentive systems. Quantifying more of the benefits would, of course, raise the overall value of the project and the benefit-cost ratio. This raises the confidence that even at the low end of the quantified range, the project costs are justified by the benefits achieved.

85. **Development Impact in Terms of Expected Benefits.** The project will support interventions toward more sustainable forest and land management by enhancing policies, incentives and practices for better stewardship and reduced degradation in both forest reserves and off reserve areas, which will also enhance carbon stocks. The project also aims to enhance and increase social benefits and community empowerment by focusing on groups that depend on natural resources. The project will field test innovative and inclusive forest and agroforest management practices and models, which is expected to build social capital and empower communities, including for women. The project will help to reduce poverty by creating revenue and job opportunities through empowerment of CREMAs, improvements in the cocoa landscape, forest restoration, plantation, and agroforestry development. Wider benefits will include enhancing agricultural biodiversity, soil conservation, habitat connectivity and ecosystem services.

86. **Rationale for Public Sector Financing.** The project aims to improve environment, land and forest management to improve livelihoods, living conditions and reduce greenhouse gas emissions from land use change and deforestation. These results are mainly global public goods with substantial benefits accruing to Ghanaians. Public financing is justified for this purpose.

87. **Bank's Comparative Advantage and Value Added.** The World Bank has considerable experience working with the Government of Ghana on policy and regulatory issues, experience in project implementation, and long involvement in the natural resources sectors. The Bank has in the past supported the Forest Resources Management Project, the Natural Resources Management Project, the Community-Based Rural Development Project, and the Community-Based Natural Resources Management Project. Current Bank support includes the Forest Carbon Partnership Facility Readiness Preparation Project, the Land Administration Project (LAP), the Natural Resources and Environmental Governance (NREG) TA, the Sustainable Land and Water Management Project (SLWMP), and the Ghana Commercial Agriculture Project, as well as a strategic planning exercise for the cocoa sector. The Bank also assists Ghana to access sources of global climate finance and apply it toward key development challenges.

## **B. Technical**

88. 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 management and improvement. The project provides the means, capacity building and incentives to engage more effectively with communities and their local institutions to devolve planning and management responsibilities that will lead to improved outcomes in forest and agroforest landscapes. Communication efforts and capacity building efforts will be aimed at community level institutions, in addition to government officials. The components work together to change the incentives, practices, relations and communications about forest and land use. Local institutions like CREMAs, if scaled up can manage land better and create collective incentive not to encroach. Improved extension and service delivery also can help farmers achieve better yields on existing land. Better demarcation of land can also create visible, enforceable signals to potential encroachers. It is the combination of interventions that should lead to demonstrable effects in the target areas. If the demonstration value is high, replication should proceed in other cocoa/forest landscapes. Use of existing extension services structures under the COCOBOD will contribute to robustness of technical design. Involvement of COCOBOD and cocoa value chain players is important to ensure that a multi-sectoral approach that addresses the key issues affecting the landscape and the economic drivers originating in the cocoa sector. COCOBOD is the best-placed entity to implement cocoa extension activities, with extension agents on the ground. Annex 9 provides additional detail on the technical appraisal.

89. Component 1 (Policy Reforms and Institutional Strengthening) responds to the issue that current policy implementation practices create disincentives for rural communities for the care of existing trees in the landscape. The project provides resources to improve policy interpretation and implementation practices on the ground and to provide new skills, tools and models for FC staff to engage more effectively with resource users. These interventions should foster more collaborative approaches that can reduce conflict and lead to more beneficial future interactions.

90. Under Component 2, the first pilot activity (Enhancing Trees and Climate-Smart Practices in Agroforestry Corridors with Communities) responds to the need to address deforestation and land degradation on community lands and cocoa agroforestry areas caused by expansion of agriculture, misaligned incentives for the care of trees on private/ farm land, and weak extension and communication efforts. It builds on the desire to expand established institutional models of CREMAs and other CBOs that devolve management responsibilities and share benefits more widely. It also responds to the current weak spatial and land use planning processes, which do not support improved, informed, community-led decision making. The project provides resources to adapt and expand the CREMA approach to promote greater participation and benefits to communities from protecting and expanding trees and cover in key corridor landscapes. It will help to give communities the incentives, knowledge and tools to improve landscape management for their own benefit, while at the same time emphasizing the co-benefits of increased tree cover and carbon sequestration. Support, extension and inputs to cocoa farmers will be built into the supply chain through existing institutions. These interventions should result in improved soil productivity, increased tree cover, less frequent fire, and increased wildlife abundance, which will benefit both the targeted community of farmers and wider users of the landscape.

91. The second pilot activity (Investments on Forest Reserves for Reducing Degradation, Enrichment Planting, Nurseries, and Plantations) responds to the problem of high deforestation and degradation in forest reserves due to overharvesting, unauthorized encroachment, wild fire, illegal logging and inadequate enforcement, as well as weak investment climate for forest rehabilitation and plantations. It also addresses the issue of admitted farms that have expanded beyond legal limits and degraded reserves through cocoa and other plantings. It addresses the degradation issue in forest reserves that have an impoverished species mix due to over harvesting of high value species. This activity aims to enhance carbon stocks through restoration and sustainable forest management by improving the investment climate, demarcating admitted farms and plantation investment opportunities, and establishing nurseries and enrichment planting. Increased private sector investment in timber plantations has the potential to generate significant local economic opportunities through seedling production, out-grower arrangements and direct employment. Nurseries and enrichment planting with native species will also contribute to local employment and ecosystem restoration. Regularizing and demarcating the boundaries of admitted farms, engaging and educating farmers, and improving productivity on farm will help to reduce the incentive to encroach and provide more legal.

92. Component 3 (Innovation, Capacity Building and Communications) responds to the needs of communities and farmers for better information, access to know how, and good practices, as well as the need for FC and extension services need to embrace improved communication methods and community relations approaches. The project provides resources for identifying and responding to key communication needs, as well as training for FC staff in community engagement approaches. The expected result is that improved communication with communities will lead to better relations and reduced conflict over resource use and allocation, beyond forests.

93. Component 4 (Project Management, Monitoring and Coordination) responds to the needs of the complex institutional environment and the need for good coordination and communication, from field level to international level. This should smooth project implementation, regular reporting, and opportunities for sharing lessons with wider climate finance community.

### **C. Financial Management and Disbursement Arrangements**

94. 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 on the Ministry of Lands and Natural Resources (MLNR), the key implementing agency, and also the Forestry Commission (FC). The MLNR has in the past successfully implemented a series of IDA-funded projects and is presently managing the LAP II project for which the Financial Management arrangements are rated as Satisfactory (S). Likewise the Forestry Commission (FC) is also presently managing a number of Trust Funds and their ratings are moderately satisfactory.

95. A description of the project's financial management arrangements at MLNR as documented in the section below indicates that they satisfy the Bank's minimum requirements under OP/BP10.00. 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.

96. **MLNR.** The overall financial management responsibility throughout implementation will be handled by the Financial Controller at the MLNR. The responsibility of the Financial Controller 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 in the assessment the MLNR identified a dedicated staff (a Principal Accountant) who will be responsible for the operational and day to day transaction processing and collation of financial reports from implementing agencies. The Project Accountant will be the key focal person for fiduciary oversight and is expected to interact frequently with accountants at the various implementing agencies particularly the accounts team of the Forestry Commission and of the COCOBOD 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 (IUFs) to the Bank, maintaining internal controls over project expenditure and engaging external auditors.

97. **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. FC has systems in place to ensure that there will be adequate record keeping and documentation of project activities. The FC's Director of Finance is a qualified accountant with years of experience and supported by a team of accounts officers. A dedicated FIP Project Accountant will be assigned to ensure that there is more focus on project financial activities. In addition, the Forestry Commission will hire a full-time accountant, through a consultancy, to support the FIP and FCPF Additional Funding (AF) FM function - the cost of this consultancy will be equally shared by the two projects. The Project Accountant will be directly supervised and accountable to the Director of Finance.

98. **COCOBOD** has assigned a desk officer for COCOBOD for the FIP and this position is well linked to the PMU at MLNR. A Project Accountant will be appointed and given the necessary training to support the desk officer in the management funds (under the supervision of the management of COCOBOD). Funds will be released from MLNR through the normal Government of Ghana system based on annual work plans and quarterly financing requests submitted by COCOBOD and approved by the MLNR.

#### **D. Procurement**

99. To assess MLNR's capacities to implement all procurement under the project, procurement capacity assessments were conducted in September and November 2014. Procurement would be centered at the MLNR, irrespective of the agencies implementing particular components. The assessment concluded that MLNR is in compliance with the Ghana Public Procurement Act 663 and applies it in conjunction with the associated Procurement Manual. MLNR has also implemented Bank-funded projects, which includes LAP-1; and it is now implementing LAP-2, under a dedicated Project Coordination Unit with consultants, outside the organization. Because of the consultant arrangement, MLNR's Procurement Unit (headed by a Procurement Officer,

supported by three Procurement assistants) has not fully benefited from the experience of implementing the aforementioned projects, though the procurement unit exhibited good knowledge and experience in the execution of procurement under the GPP Act 663.

100. Procurement implementation will be mainstreamed in accordance with the implementation arrangements, with the Forest Investment Program Management Unit (PMU) of the MLNR coordinating. The assessment concluded that the overall procurement risk rating is substantial. The key risks for procurement include: (i) Lack of sufficient capacity, knowledge and experience to undertake and manage World Bank procurement; (ii) lack of use of the procurement plan as a monitoring, evaluation and management tool, therefore lacking updates to reflect procurement performance; and (iii) Delays in evaluation of bids and Technical Proposals and clearance process due to mainstreaming, contract monitoring and administration.

101. To mitigate the risk, it is recommended that:

- The MLNR procurement unit must be trained on Bank procurement processes and systems. However as short term mitigation, a proficient procurement specialist knowledgeable and experienced in Bank procurement is being recruited to support the present team.
- The preparation of Procurement Documentation would start immediately after Board approval.
- A Project Implementation Manual (PIM) that provides detailed instructions should be prepared and distributed to all project staff; the PIM should clarify that Bank Guidelines should be followed in case of conflict with the National Procurement Law.
- There would be close monitoring of procurement plans on a monthly basis and quality control on all aspects of the procurement process, including evaluation, selection, award, contract signing and implementation to completion.

Procurement will be carried out in accordance with World Bank's: (i) "Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011, revised July 2014; (ii) "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011, revised July 2014 and the provisions stipulated in the Grant Agreement; and (iii) "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006, as revised in January 2011 and the provisions stipulated in the Grant Agreement.

#### **E. Social and Environmental (including Safeguards)**

102. The project will have positive social and environmental benefits; possible negative impacts will be mitigated by instruments developed under the FIP and other associated REDD+ projects. The project is classified as Environmental Assessment (EA) Category B (partial assessment). Component 2 activities will be implemented in two main landscape areas: on farms and in communities in a specific landscape corridor and on forest reserves. Such activities may result in changes to land use which could potentially affect livelihoods. Consultations have been held during the preparation of the FIP and associated REDD+ Readiness activities to seek community feedback, and the implementation of the FIP will involve community consultation and decision-making. Field and community-based pilot activities and learning from pilots are at the core of

project. The FIP project is incorporating various pre-existing forms of representation and community-based organizations, including community biodiversity action groups, community forestry committees, and traditional leadership, among others. A public consultation manual is under preparation under NREG TA.

103. The specific locations of interventions are still being identified as part of the continued stakeholder dialogues and consultations but are generally indicated on the maps in Annex 2. This project is also benefiting from parallel environmental and social assessments and due diligence being 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 FCPF has also supported preparation of an Environmental and Social Management Framework (ESMF) and a Resettlement Policy Framework. These processes and documents have provided significant inputs to the preparation of the FIP ESMF, Pest Management Plan (PMP) and Process Framework. The ESMF, PMP, and Process Framework identified specific safeguard activities, roles and responsibilities, capacity building and budget requirements, which have been incorporated into the project management framework as discussed under Implementation Arrangements (IV.A.)

104. The following safeguard policies apply.

- Environmental Assessment OP/ BP 4.01. The project will engage in a number of activities that use forest resources in selected sites and potentially impact other environmental areas. These activities may have environmental impacts on a limited scale. An Environmental and Social Management Framework (ESMF) has been prepared, consulted upon, and disclosed in-country and cleared and disclosed by the Bank on November 24, 2014.
- Natural Habitats OP/BP 4.04. Some of the forest and woodlands to be targeted will contain critical ecosystems; the project will enhance the quality of the management of these critical ecosystems and reduce risks associated with cocoa and other agroforestry practices. The ESMF provides 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 shift of the existing cocoa farming practices towards climate-smart and resilient 'shade' cocoa, and set up of small scale, model plantations to pilot test and demonstrate production of mixed native species. The project-specific Pest Management Plan has been prepared with this in mind, 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.
- It is also noted that the key environmental and social issues and risks associated with chemical applications in cocoa are part of the analysis undertaken as part of the ESMF prepared for this project. The ESMF also provides identification of IPM activities linked to the cocoa enhancement activities that are considered important to be supported. A Pest

Management Plan has been prepared, consulted upon, and disclosed in-country and cleared and disclosed by the Bank on December 2, 2014.

- 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 part of the World Bank financed activities. However, as part of the plans for ensuring that forest reserves are protected and well managed, there will be efforts to reduce encroachment due to expansion of cultivated areas around farms that were historically “admitted”, within the forest reserves. 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 within the historical boundaries of admitted farms. 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. 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 was consulted on, disclosed in-country and disclosed by the Bank on December 9, 2014.

105. **Recipient’s Institutional Capacity.** The Government of Ghana has gained significant experience in implementing projects that are similar to this project and using, in a satisfactory manner, the World Bank safeguards instruments. Since the thematic areas under the proposed project are relatively similar to past projects, the team is confident that the Government has the appropriate capacities to properly prepare and enforce safeguards policies. The project will build upon efforts under the REDD+ FCPF Readiness Program and the NREG Technical Assistance. The Bank will provide training on safeguards policies and procedures to key project staff.

**Annex 1: Results Framework and Monitoring**

**Country: Ghana**

**Project Name: Ghana FIP - Enhancing Natural Forest and Agroforest Landscapes (P148183)**

**Results Framework**

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**Project Development Objectives**

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PDO Statement

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.

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<b>These results are at</b>	Project Level						
<b>Project Development Objective Indicators</b>							
Indicator Name	Baseline	Cumulative Target Values					
		Year 1 (June 2016)	Year 2 (June 2017)	Year 3 (June 2018)	Year 4 (June 2019)	Year 5 (June 2020)	End Target
<b>Indicator One (Core):</b> People in targeted forest and adjacent communities with monetary/non-monetary benefits from forest (Number)	0	n/a	n/a	45,000	n/a	87,500	87,500
• People in forest and adjacent community with benefits from forest-female (Number)	0	n/a	n/a	27,000	n/a	45,000	45,000
<b>Indicator Two:</b> Area under improved CREMA management or climate smart cocoa management practices in targeted landscapes due to project intervention (ha)	0	0	10,000	40,000	50,000	50,000	50,000
• including under CREMA management (Hectare (ha))	0	0	10,000	40,000	50,000	50,000	50,000
• including under climate smart cocoa management practices (Hectare (ha))	0	0	10,000	20,000	30,000	30,000	30,000
<b>Indicator Three:</b> Area of forest in targeted landscapes (Hectare (ha))	303,885	n/a	n/a	374,121	n/a	412,064	412,064
• including closed forest	132,312	n/a	n/a	135,818	n/a	139,298	139,298
• including open forest	171,573	n/a	n/a	238,303	n/a	272,765	272,765
<b>Indicator Four:</b> Total greenhouse gas emissions reductions plus enhancement of carbon stocks, estimated in tons equivalent CO <sub>2</sub> e/year	0	n/a	n/a	483,349	n/a	1,038,262	1,038,262
• including greenhouse gas emission reductions – Closed Forest	0	n/a	n/a	247,937	n/a	484,454	484,454
– Open Forest		n/a	n/a		n/a		362,189

	0			112,262		362,189	
• including enhancement of carbon stock							
– Closed forest	0	n/a	n/a	34,150	n/a	50,620	50,620
– Open Forest	0			89,000		141,000	141,000
<b>Indicator Five (Core):</b> Direct project beneficiaries (Number)	0	2,110	4,352	6,711	9,180	9,501	9,501
• Female beneficiaries (Percentage)	0	45	46	47	49	49	49

### Intermediate Results Indicators

Indicator Name	Baseline	Cumulative Target Values					
		Year 1 (June 2016)	Year 2 (June 2017)	Year 3 (June 2018)	Year 4 (June 2019)	Year 5 (June 2020)	End Target
<b>Component 1. Policy Reforms and Institutional Strengthening</b>							
<b>Indicator One ( Core):</b> Reforms in forest policy, legislation or other regulations supported (Yes/No)	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>Indicator Two (Core):</b> Government institutions provided with capacity building to improve management of forest resources (Number)	0	23	23	23	23	23	23
<b>Component 2. Pilot Investments for Improved Forest and Landscape Management with Communities</b>							
<b>Indicator Three:</b> Community-based natural resources management institutions provided with access to improved management practices for sustainable landscape management (Number)	0	0	1	3	5	5	5
<b>Indicator Four:</b> Farmers / participants provided with capacity building support to improve management practices for tree planting or nurseries (Number)	0	50	450	1,050	1,650	2,200	2,200
• including female (Number)	0	33	283	633	983	1,283	1,283

<b>Indicator Five (Core):</b> Area restored or re/afforested (ha)	0	2,550	5,250	8,000	10,750	13,500	13,500
• Area restored (ha) [through enrichment planting]	0	2,500	5,000	7,500	10,000	12,500	12,500
• Area re/afforested (ha)	0	50	250	500	750	1,000	1,000
<b>Indicator Six:</b> Farmers / participants in targeted landscapes reporting satisfaction with service delivery or benefits received under the project (Number)	0	25	325	725	1,125	1,475	1475.00
• Including Female (Number)	0	15	190	415	640	840	840
<b>Indicator Seven (Core):</b> New areas outside protected areas managed as biodiversity-friendly (ha)	0	0	10,000	40,000	50,000	50,000	50,000
<b><i>Component 3. Innovation, Capacity Building and Communications</i></b>							
<b>Indicator Eight (Core):</b> Forest users trained (Number)	0	100	500	1,000	1,500	1,600	1,600
• Forest users trained – Female	0	60	310	580	850	910	910
<b>Indicator Nine:</b> Government officials / extension agents and service providers trained (Number)	0	60	150	250	350	450	450
• including female	0	18	48	85	126	171	171
• including agricultural / cocoa extension agents / service providers	0	18	45	75	105	135	135
• including local government officials	0	6	15	25	35	45	45
• including Forestry Commission staff	0	36	90	150	210	270	270

### Indicator Description

#### Project Development Objective Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
<p><b>Indicator One:</b> People in forest &amp; adjacent community with monetary/non-monetary benefit from forest</p>	<p>This indicator measures the extent to which local people have seen improved livelihood as a result of the intervention. This may cover both monetary income and non-monetary benefits like improved and easier access to fuelwood as well as cultural and spiritual services. The baseline value is expected to be zero.</p>	<p>Project Mid Term and Completion</p>	<p>National M&amp;E system and Project reports</p>	<p>MLNR</p>
<ul style="list-style-type: none"> <li>• People in targeted forest and adjacent community with benefits from forest-female</li> </ul>				
<p><b>Indicator Two:</b> Area under improved CREMA management or climate smart cocoa management practices in targeted landscape corridors due to project intervention</p>	<p>Measures the area which, as a result of Bank project, has been brought under management by CREMA to protect and enhance forests and trees in the landscape. Includes area for which certified cocoa management schemes have been prepared, endorsed and are also in the process of implementation.</p>	<p>Annual</p>	<p>Project activity reports, field assessments</p>	<p>FC</p>
<ul style="list-style-type: none"> <li>• including under CREMA management</li> </ul>				
<ul style="list-style-type: none"> <li>• including under climate smart cocoa management practices</li> </ul>				
<p><b>Indicator Three:</b> Area of forest in targeted landscapes</p>	<p>Measures total area of forest in targeted landscapes including closed and open forest. The baseline is established based on the FPP data provided by the RMSC. The forest cover is expected to decrease</p>	<p>Project Mid Term and Completion</p>	<p>National MRV system</p>	<p>FC</p>

	during the Project period but to a lesser degree than in the without-project scenario. Ghana's definition of forest is: as an area of land greater than or equal to 1.0 hectare, with more than 15% tree canopy cover and a minimum tree height of 5 meters at maturity.			
• including closed forest	Closed forest is defined as an area of land greater than or equal to 1.0 ha with a minimum tree height of 5 meters at maturity and a canopy cover exceeding 60%			
• including open forest	Open forest is defined as an area of land greater than or equal to 1.0 ha with a minimum tree height of 5 meters at maturity and a canopy cover between 15% and 60%			
<b>Indicator Four:</b> Total greenhouse gas emissions reductions plus enhancement of carbon stocks, estimated in tons equivalent CO <sub>2</sub> e/year	Calculated from forest area change, relative to 2012 reference level based on Ghana's REDD+ MRV system	Project Mid Term and Completion	National MRV system	FC
• including greenhouse gas emission reductions				
– Closed Forest				
- Open Forest				
• including enhancement of carbon stock				
– Open forest				
– in CREMA areas				
<b>Indicator Five (Core):</b> Direct project beneficiaries	Direct beneficiaries are people or groups who directly derive benefits from an intervention	Annual	National M&E system, project activity reports, field assessments	MLNR

• Female beneficiaries	Based on the assessment and definition of direct project beneficiaries, specify what percentage of the beneficiaries are female.			
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### Intermediate Results Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
<b>Component 1. Policy Reforms and Institutional Strengthening</b>				
<b>Indicator One:</b> Reforms in forest policy, legislation or other regulations supported	Based on the policy reforms supported under Component 1 aimed at changing the interpretation of the way policies are deployed on the ground and incentives (including delivery of services, capacity, inputs, and information) to improve the enabling environment for sustainable landscape and forest management	Annual	National M&E system, project activity reports	MLNR
<b>Indicator Two:</b> Government institutions provided with capacity building to improve management of forest resources	The Government institutions targeted include: MLNR, FC, FORIG, COCOBOD, MESTI, EPA, MOFA, MOF, MOLRG, 6 District Assemblies in Western Region and 8 District Assemblies in Brong-Ahafo Region	Annual	Project activity reports	MLNR
<b>Component 2. Pilot Investments for Improved Forest and Landscape Management with Communities</b>				
<b>Indicator Three:</b> Community-based natural resources management institutions provided with access to improved management practices for sustainable landscape management	Measures number of institutions (CREMAs, CBOs, Farmer Groups) receiving specific information, training, and outreach products.	Annual	Project activity reports, field assessments	FC
<b>Indicator Four:</b> Farmers / participants provided with capacity building support to	Measures capacity building efforts aimed at improving skills in plantation development, tree establishment and nursery supply and management.	Annual	Project activity reports, field assessments	FC

improve management practices for tree planting or nurseries	Training needs to be targeted to specific audiences, not general awareness campaigns. Do not double count same individuals participating in a series of training events.			
• including female				
<b>Indicator Five (Core):</b> Area restored or re/afforested	This indicator measures the land area targeted by the Bank intervention that has been restored or reforested/ afforested. The baseline value is expected to be zero.	Annual	Project activity reports, field assessments	FC
• Area restored	Measures area restored through enrichment planting			
• Area re/afforested	Target value includes 300 ha in model plantations and 700 ha in CREMA areas			
<b>Indicator Six:</b> Farmers / participants in targeted landscape corridors reporting satisfaction with service delivery or benefits received under the project	Indicates the result of changed behaviors and practices of MLNR / FC officials in interactions with communities and landscape users. Surveys would be designed and implemented regularly among affected people	At Project Mid Term and Completion	Periodic community level surveys	MLNR
• Including Female				
<b>Indicator Seven (Core):</b> New areas outside protected areas managed as biodiversity-friendly	This indicator measures the number of terrestrial hectares outside protected areas where, as a result of the World Bank operation, the site is managed at least in part to obtain biodiversity gains	Annual	Project activity reports, field assessments	FC
<b>Component 3. Innovation, Capacity Building and Communications</b>				
<b>Indicator Eight (Core):</b> Forest users trained	This measures the number of forest users and community members that have received capacity building through training as a result of the project. The baseline value is expected to be zero.	Annual	Training Activity Completion Reports	FC
Forest users trained - Female				
<b>Indicator Nine:</b>	Measures capacity building efforts aimed at strengthening government officials and extension	Annual	Training activity completion reports	MLNR, FC and COCOBOD

Government officials / extension agents and service providers trained	agents to improve service provision and community relations / responsiveness. Training needs to be targeted to specific audiences, not general awareness campaigns.			
• including female				
• including agricultural / cocoa extension agents / service providers				
• including local government officials				
• including Forestry Commission staff				

## Annex 2: Detailed Project Description

### GHANA: World Bank Enhancing Natural Forest and Agroforest Landscapes

1. The Bank's Enhancing Natural Forests and Agroforest Landscapes Project is designed to address the sectoral and environmental challenges described above through improved policy implementation, improved management practices in targeted landscapes in one corridor of the HFZ and the associated Forest Reserves, targeted capacity building, and systematic outreach and communications efforts to improve understanding and practices and to prepare for wider replication.

#### A. Project Components

2. The project will have four components, as follows:

Component Name	Cost <sup>13</sup> , in US\$
Comp. 1: Policy Reforms and Institutional Strengthening	3,000,000
Comp. 2: Pilot Investments for Improved Forest and Landscape Management with Communities	22,935,000
Comp. 3: Innovation, Capacity Building, and Communications	2,800,000
Comp. 4: Project Management, Monitoring and Coordination	3,765,000
<b>TOTAL</b>	<b>32,500,000</b>

3. The organization and relations among the four components are illustrated in Figure A2-1 below. The core of the project (Component 2) is a set of pilot activities implemented in a few target landscapes (indicated on a map in the next section), designed to address key drivers of deforestation (see Annex 7). The policy implementation, institutional strengthening, capacity building, and communications activities in Components 1 and 3 aim to support the field demonstration of improved management practices, and lay the ground work for later scale up. Component 4 covers management, monitoring, and coordination across the range of FIP-financed activities. Each of the components is further described below.

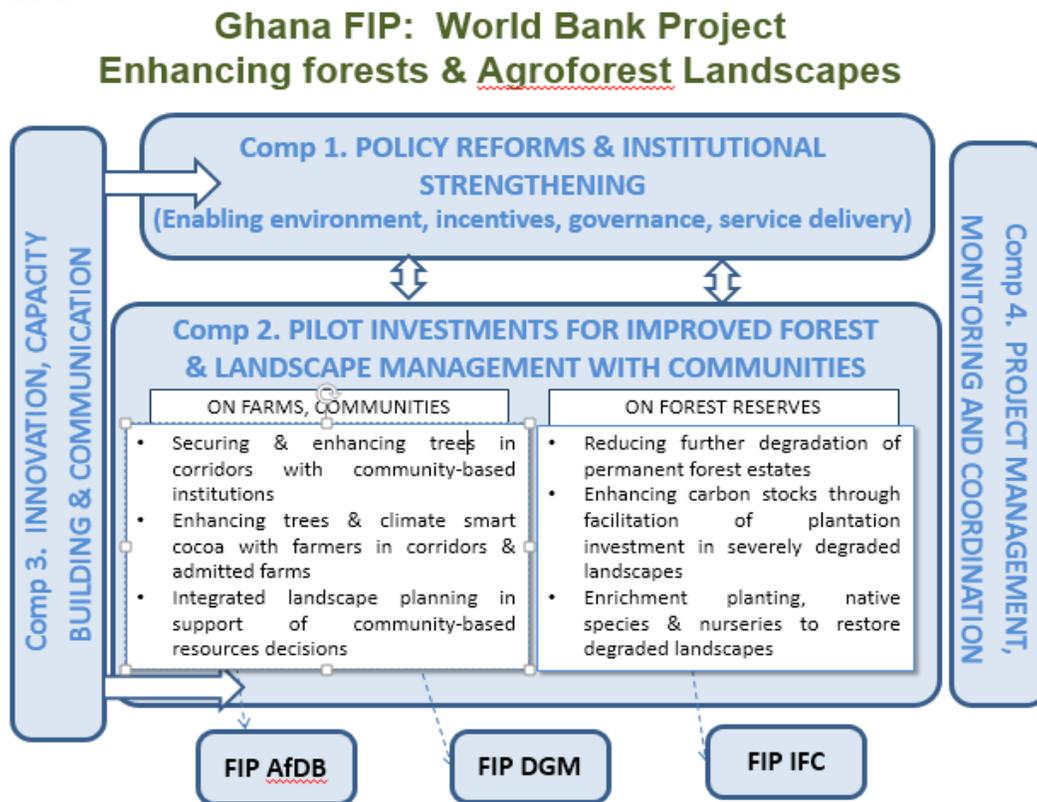
4. **Location of Field Activities.** The map in Figure A2-2 shows all the proposed locations for field activities in the Western and Brong Ahafo Regions, as described above, including work with communities on cocoa and agroforestry in the corridor. The total area of intervention is about 412,000 hectares, of which 273,000 hectares are open forest / cocoa landscape (off reserve area) linking the key forest reserves in the Western Region. This area borders around many communities, some of which are being selected for implementation of pilot activities. These target communities are tentatively indicated in Table A2-1 at the end of this Annex. The project will also support enrichment planting in specific forest reserves and establishment of model plantation sites. The map also shows targeted forest reserves in Brong Ahafo and Western regions, which have both admitted farms and areas expected to be demarcated for plantation development (through public private partnerships not financed under this project) as well as areas for enrichment planting under the project. Demarcation and preparation work for model plantations (e.g., Bosomua Forest Reserve) and for rehabilitation and enrichment planting (e.g., Tain II Forest Reserve) will be done

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<sup>13</sup> These figures include the Government's contribution of staff time and in-kind services.

in collaboration with the communities surrounding the reserve. The second map (Figure A2-3 at the end of this annex) shows project sites for both the World Bank and the African Development Bank components of the Ghana FIP Program. This illustrates the geographic separation of the activities in the landscape, though the projects remain conceptually linked.

**Figure A2-1**



## B. Project Description

5. **Component 1: Policy Reforms and Institutional Strengthening.** This component consists of efforts to advance implementation of reformed policies, improve the enabling environment, and strengthen the institutional means to achieve sustainable landscape and forest management. This will involve three main sets of activities: improvements to policy practice and incentives, improvements to the institutional guidance and procedures for implementation, and support for multi-stakeholder governance platforms and consultative processes.

6. The first set of activities will support analysis of options, review of legal frameworks, gathering and dissemination of evidence on the effectiveness of various options, and development of pilot testing approaches in collaboration with stakeholders. Improving policy “practice” means changing the translation and interpretation of the way policies are deployed on the ground – as well as incentives (including delivery of services, capacity, inputs, and information) to improve the enabling environment for sustainable landscape and forest management. Changes in policy implementation practices will also have a positive and sustainable effect on people’s lives and land uses. For example, if farmers can register trees and have a stake in trees that they nurture on their

farms, it will lead to more sustainable landscape management practices over time, beyond the life of project. This work will build on the FCPF-financed readiness work, the NREG TA policy and analytical activities and prior assessments to identify practical approaches to improve farmers' tree registration and security, devolve resources management rights to communities, grant timber licenses in a more transparent and participatory manner, provide compensation for crop damage during timbering, institute more equitable benefit sharing arrangements, and simplify the investment climate for timber plantation development.

7. The second set of activities will strengthen the institutional procedures, guidelines and institutional models to ensure that policy implementation improves on the ground. Changes in institutional practices, embedded in guidance documents and training, will influence the working norms of government officials in their approaches to and interactions with stakeholders (e.g., timely delivery of services and inputs should become a norm). The MLNR also intends to develop policy guidelines for operationalizing the National Plantation Strategy (when finalized with NREG TA support); to conduct extensive education, awareness creation and dissemination of the new Wildlife Bill (which gives legal backing to CREMAs, etc.) after Parliamentary ratification; and support the implementation of components of the Forest and Wildlife Policy (2011) through development of manuals and dissemination workshops. The MLNR will also develop guidelines for the implementation and dissemination of the Domestic Wood Supply Policy and the Wood Procurement Policy. This activity will also support review and documentation of the effectiveness of changes in institutional practices and field management practices supported by the project so that those with good potential can be replicated and scaled up.

8. The third set of activities will provide support to sustain, refine and expand consultation and governance platforms initiated under NREG and FCPF at both national and local level. The MLNR will support and enhance a Stakeholder Forum (Traditional Authorities, Civil society groups, local communities and public sector institutions) to consult and engage toward consensus around the issues and incentives that influence landscape management practices and tree/forest stewardship by communities. Stakeholders will be engaged in participatory analysis of institutional roles in landscape and forest management and the review of lessons learned from field demonstrations.

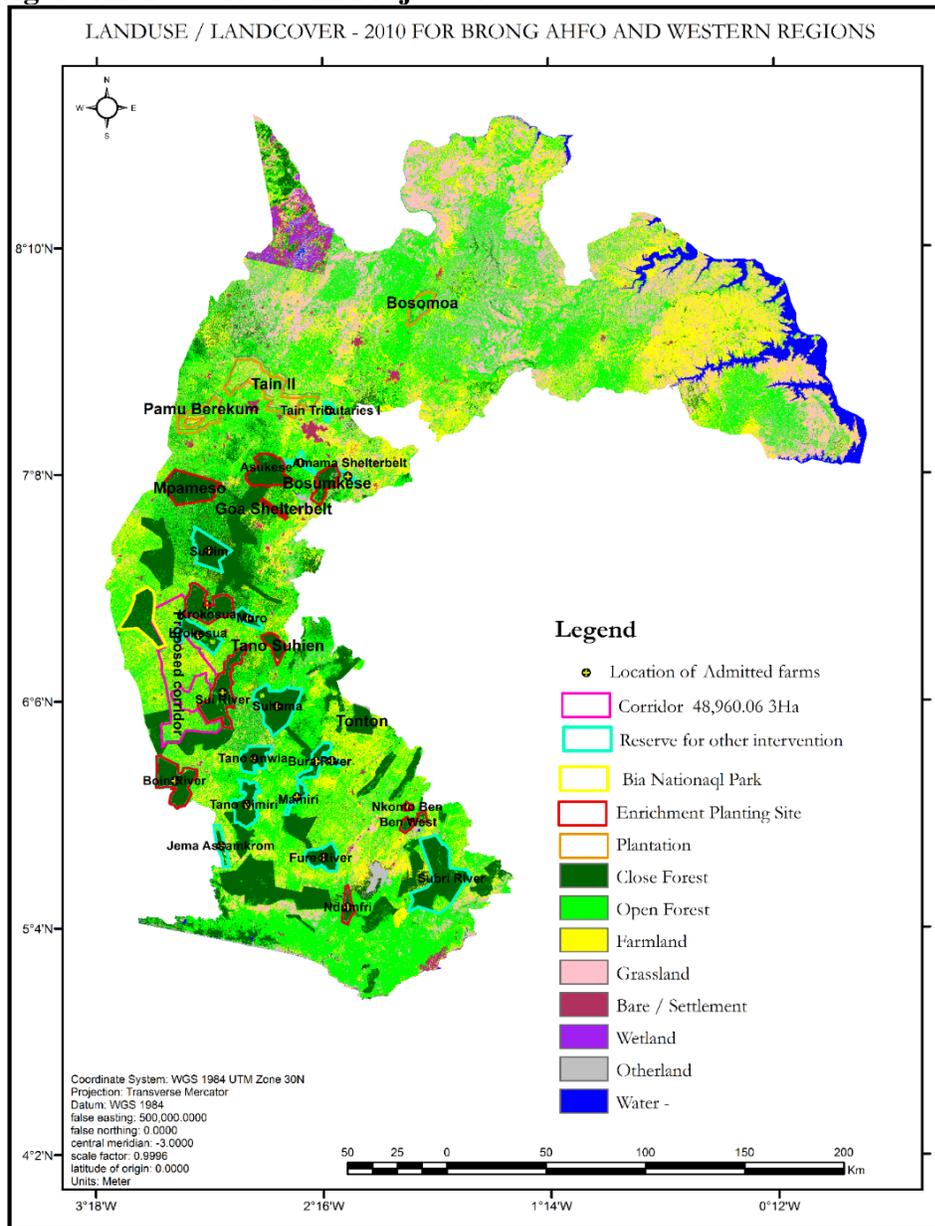
9. **Component 2: Pilot Investments for Improved Forest and Landscape Management with Communities.** As noted, field- and community-based investments are the core of this project. These will aim to establish and demonstrate improved forest and landscape management practices, while building the case for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

10. **Pilot 2.1: Enhancing Trees and Climate-Smart Practices in Agroforestry Corridors and Cocoa Landscapes on Farms with Communities.** This pilot will focus on drivers of deforestation and land degradation on community managed agroforestry and cocoa cultivation landscapes in a target corridor linking several Forest Reserves of the HFZ. It aims to secure and

enhance trees in corridors with community-based institutions, enhance trees and climate smart cocoa with farmers both in corridor landscapes and on admitted farms, and to deploy integrated landscape planning in support of community-based resource decisions. These activities will enhance carbon stocks in the agroforestry and cocoa landscape by scaling up support (a combination of extension, inputs, certification, and incentives) to smallholder cocoa farmers to increase protection of existing trees, planting of new trees, practicing agroforestry and shade grown climate smart cocoa production. It will aim to improve the care and maintenance of trees on private farmland, by devolving management responsibilities and improving incentives, coupled with extension and communication efforts. Pilot efforts will be developed in consultation with communities and land users in targeted zones within the corridor indicated on the map below.

11.

**Figure A2-2. World Bank Project Sites**



12. Activities to be financed will include:

- **Securing and enhancing trees in key landscapes/corridors with communities.** Key activities will include: assist communities to establish CREMAs and inaugurate CREMA Resource Management Committees (CRMCs); provide training and logistical support to CREMAs, together with an implementation field guide; sensitize and create awareness on management practices for planting trees on farm, small scale plantation development, and reporting of forest offences by CRMCs; facilitate distribution of inputs/incentives (including tree seedlings) to CREMA users/members; survey, map and pillar forests within the target corridor; undertake boundary planting and enrichment planting within the ecological corridor; develop implementation program and database for registration and documentation of planted trees on farms; provide training in extension services for FSD Field Staff related to planting and maintenance of trees within the off-reserve landscape corridor; provide training to the CBOs on fire prevention, fire pre-suppression, and fire suppression strategies; and facilitate the provision of farmer support services on climate smart cocoa production/ innovative extension support.
- **Enhancing trees and smart cocoa practices in admitted farms within forest reserves.** Key activities will include: carry out boundary planting along admitted farm boundaries; facilitate the establishment/planting of trees on farm; train admitted farm owners in the planting and maintenance of trees on farm; provide improved varieties of cocoa seedlings to cocoa farmers; facilitate the supply of key inputs to cocoa farmers; facilitate the coordination between cocoa farmers and LBCs in certification and climate smart cocoa production.
- **Support integrated landscape level planning in support of community-based resource use decisions.** Key activities include: establish platforms at the community level to undertake participatory land use planning; provide training and resource support to local platforms and key stakeholder institutions for effective engagement and planning. Participatory planning will help to engage and inform communities and local institutions (CREMAs, CBOs) about the nature of their resource base, the priority management issues, the competing interests and needs for livelihoods, production and protection. District level authorities, traditional authorities, community representative, local institutions, and vulnerable groups will be engaged in the process so that local plans are adopted / nested within larger district level plans. Low-cost geo-referenced mapping technologies will be employed to assist stakeholders to identify and delineate local land uses and important landscape features. There is strong potential here for coordination with the DGM-financed effort at community and landscape level; these links will be developed during implementation.
- This component also includes field equipment and logistical means for delivering goods and services to communities and farmers in remote landscapes and the fringes of forest reserves. This will also increase the presence of FC staff in the field for management and monitoring purposes.

13. The transformative nature of this activity will come from giving community level institutions and cocoa farmers the incentives, knowledge, and tools to improve farm level outcomes and gain local benefits from managing trees and forest mosaics within the larger landscape, while also enhancing co-benefits associated with increased tree cover and carbon sequestration. This field demonstration will build on two key entry points: (i) the current willingness of GoG to revise implementation practices and devolve key management

responsibilities to community level, particularly through CREMAs; and (ii) the alignment of interests among cocoa producers, buyers and regulators to ensure a more sustainable and climate-friendly supply / value chain. These efforts will be enhanced by innovative communication approaches to facilitate the delivery of practical, timely and useful information to farmers and community level institutions (see Component 3).

14. Activities under this Pilot will be led by the Forestry Commission under the management umbrella of MLNR. The Forestry Commission will work with partners with skills in communication, community engagement, landscape management practices, etc. Likely partners are those NGOs, CSOs and CBOs already engaging with CREMA development and scaling up in Western and Brong Ahafo Regions, as well as professional communication enterprises, plus other intermediate service providers that may bring skills in training, visual communication, survey design, and M&E approaches. This will also involve work with stakeholders in the cocoa supply chain (COCOBOD, Licensed Buying Companies, other private agents, extension agents and service providers), research institutions (FORIG and CRIG) and existing extension/ service providers (e.g., Solidaridad, Nature Conservation Research Center, International Union for Conservation of Nature, and others). This can also lay the groundwork for future piloting of performance-based payments under REDD+.

15. Activities related to provision of innovative extension services on climate smart cocoa, cocoa seedlings and inputs to cocoa farmers will be implemented by COCOBOD in cooperation with MLNR and FC. Arrangements for implementation these activities will be governed by a Memorandum of Understanding (MoU) to be signed between the MLNR and COCOBOD at the start of implementation.

16. **Pilot 2.2: Pilot Investments on Forest Reserves for Reducing Degradation, Enrichment Planting, Nurseries, and Plantation Development for Restoring Degraded Forest Landscapes.** This pilot will aim to reduce further degradation of permanent forest estates; enhance habitat and carbon stocks through enrichment planting and nursery development with ecologically and commercially important native species to restore degraded landscapes, and facilitate the enabling conditions for plantation investment in severely degraded landscapes, with community involvement. This set of activities will help to address the imbalance in timber supply and demand, improve the enabling environment and investment climate for sustainable forest management and plantation development, particularly on severely degraded forest reserves. This activity will augment the supply of important native species within the high forest ecosystem, while also creating incentives and employment opportunities and markets for native tree seed stock, for communities and farmers to engage in the planting and preservation of native tree species, rather than encroachment into forests.<sup>14</sup>

17. Activities to be financed will include:

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<sup>14</sup> Experience in plantation establishment indicates that there is risk of fire and failure of establishment. The project provides training and support to Community Fire Volunteers, Community Forest Committees (CFCs), Community Biodiversity Action Groups (CBAGs) and other community groups to assist in fire prevention and suppression. The Government has tested and will apply the Modified Taungya System that engages communities in intercropping and maintenance of newly established plantations, with accepted benefit sharing approaches.

- **Reducing further degradation of permanent forest estates (by engagement with admitted farms and CBOs).** Key activities will include: sensitize and create awareness on forest protection and management of admitted farms and forest fringe communities; using a consultative process with Admitted Farm Owners, collate and review information, register and document ownership and boundaries of Admitted Farms; pillar admitted farm boundaries; survey and replace missing, broken and defaced Forest Reserve Boundary Pillars; carry out, through community engagement, planting of Forest Reserve boundaries; facilitate the development and institution of District by-laws for the operation of CBOs involved in forest resource management; train CBOs, Community Forest Committees (CFCs), Community Biodiversity Action Groups (CBAGs), and Fire Volunteers, etc.) and provide logistical support on fire prevention, pre-suppression and suppression strategies; provide support for alternative livelihood options to fringe communities; resource and equip for FC Field Teams for effective protection and monitoring of Forest Reserves; review and publish the existing FC Harvesting Manual of Practice (MoP).
- **Enhancing carbon stocks through facilitation of plantation investment in severely degraded landscapes.** Key activities will include: identify, survey and map suitable lands within forest reserves for commercial plantation development; work with the Lands Commission, traditional authorities and other landowners to identify, survey and map suitable off-reserve areas for commercial plantation development; develop and maintain (for the FC) a registry on degraded lands available for plantation development (on and off-reserve); review and publish existing Plantation MoPs A, B, and C and consolidate into one user friendly document; develop 300 hectares model mixed plantations and maintain these to demonstrate best practices (on use of native species, propagation, etc.) through private sector and community partnership; facilitate certification of forest plantation management and chain of custody certification (Forest Stewardship Council, Programme for the Endorsement of Forest Certification, etc.); develop and publish Forest Plantation Investor Handbook; facilitate the establishment of a specialized market for the trading of forest plantation stands; design and implement capacity-building and specialized certificate programs for private sector plantation contractors to upgrade skills and knowledge to maintain high operational standards within industry; develop and publish standardized field guides for forest plantation extension services (including establishment and management of trees on-farm); and facilitate a regular platform/forum for information exchange and dissemination among plantation developers.
- **Enrichment planting, nurseries and native species for restoring degraded forest and agricultural landscapes.** Key activities will include: select sites for establishment of two model native tree species nurseries (each with a 500,000 seedling capacity) with mass vegetative propagation capabilities to supply seedlings for the planting and rehabilitation activities under this Component. The project will procure and install necessary infrastructure and input materials for two nurseries to serve as regional centers; raise seedlings of desired native tree species; undertake field verification and develop database of Seed Trees/Plus Trees<sup>15</sup> within Forest Reserves and community forests; collect and distribute seeds from plus trees; develop protocols for mass production of genetically superior planting material; train community and private nursery operators; procure locally useful and valuable tree seedlings from selected private/community nurseries; develop and

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<sup>15</sup> A “plus tree” is a phenotype judged to be unusually superior in some quality, such as growth rate, growth habit, wood density, or disease and insect resistance (Nieuwenhuis, M. Terminology of Forest Management. IUFRO World Series 9-en. Vienna, 2000).

publish a Manual of Practice for Enrichment Planting; carry out ground-truthing to identify areas within Forest Reserves in the Western and Brong-Ahafo regions requiring enrichment planting; undertake enrichment planting (including transport of seedlings) in poorly stocked Forest Reserves with native species and maintain the enrichment planting sites.

18. The transformative nature of the pilot is to provide clear models and management practices for enhancing commercial plantation investment (beyond the project scope), including clear designation of potential locations. Increased private sector investment in sustainable forest management can help to generate local employment opportunities in planting, maintenance, seedling production, service delivery and out-grower arrangements. The Forestry Commission will implement this activity, in collaboration with the Ghana Investment Promotion Centre, with engagement of private sector interests, local government units, and local communities and CBOs interested in improved benefit sharing approaches, improved forest protection and clearer guidelines for plantation establishment. Enrichment planting in forest reserves will be implemented by the Forestry Commission, including provision of inputs, training, and extension where communities are engaged in implementation.

19. Close collaboration will be fostered with forest-fringe communities, especially through training and support to CBOs (e.g., Community Fire Volunteers, CFCs, CBAGs, and other recognizable community groups) to assist in increasing public awareness on the need to protect the forest reserves, enrichment areas and plantations. Communities near plantation zones and enrichment areas will also gain access to employment in site preparation, planting, maintenance of planted seedlings, and monitoring of forest reserve areas against encroachment and illegal logging. To this end, Forestry Commission will use a preference scheme sourcing labor (non-consulting services, e.g. clearing, planting, weeding, etc.) mainly from the communities adjacent to the target forest reserves<sup>16</sup>. Also, all contracts with contractors will have a clause encouraging use of local labor, thus further promoting cash revenue generation for the communities. Such preferential employment of the neighboring communities is essential to securing community cooperation, generating additional goodwill for forest and biodiversity conservation, preventing and combatting wild fires, and promoting sustainable use of non-timber forest products.

20. This activity will support the procedures and land use demarcation to enable both small and large plantation investments, but it will not finance establishment of commercial plantations.

21. **Component 3: Innovation, Capacity Building and Communications.** This component will support communication, capacity building, and monitoring activities to support innovation, engage communities, and provide information relevant for improved landscape management practices. It will support and complement the field demonstration activities described above by supplying information, improved approaches, and training materials needed to achieve improved outcomes. Activities in support of innovation will involve consolidation of economic, environmental and social assessments to provide knowledge and specific cultivation techniques to improve the acceptability and uptake of native trees in landscapes and in plantations. Communication, outreach and dissemination will be supported with development of strategic communication approaches, improving existing communication channels and capacities (in GoG), improving and targeting communication materials aimed at local institutions and stakeholder groups, using practical and efficient dissemination technologies (e.g., mobile phone, radio, etc.).

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<sup>16</sup> The recruitment of local labor must be transparent, fair, economical, and efficient to get value for money.

Communication efforts will be supplemented by technical know-how developed for practical uptake by farmers and landscape managers at the local institutional level. Research and dissemination efforts will be informed through surveys and feedback from target groups, so that outreach, community relations and management practices can be constantly improved and aimed at the people who need to apply the information to effect change on the ground. This activity will also support development of information materials and campaigns and will aim to engage locally appropriate delivery agents. Links with DGM-financed activities and related institutions are being developed and defined.

22. The activities to be financed under this component include training, communication, development of innovations, and collection of project-related data for the national MRV system.

- **Training activities** will be implemented through both short courses and academic programs in selected fields. A training needs assessment will also be conducted for the Forest Commission Training Center for training to improve efficiency in timber processing. Periodic seminars and symposiums will be organized on lessons learned in the implementation of the FIP (and related programs) and allow a focus on issues such as gender empowerment, implementation effectiveness, etc. This activity will also support implementation and mainstreaming of safeguards in the project activities. Procurement management training for key project agencies will also be supported.
- **Communication activities** will include a review of existing communication capacities and needs within MLNR, FC and relevant institutions at all levels. Communications approaches and materials will be upgraded to ensure that REDD+, FCPF and FIP are all part of a strategic communications approach. This will also provide an opportunity to develop links to the DGM funded initiatives, including training programs, information and educational material aimed at communities/CREMAs/cocoa farmers, and outreach to subnational and traditional authorities. The activity will also develop and implement appropriate and targeted communication materials for knowledge exchanges and dissemination appropriate to reach within project areas and to provide documentation for sharing more generally with FIP countries and international partners. This component will also finance strengthening of collaboration and communication with COCOBOD and related key stakeholders (coordinating with and building on the efforts of the Cocoa Platform). Regular consultation workshops will also be supported with project beneficiaries and affected communities.
- **Innovation activities** will include conducting economic, biological, ecological and social assessments to select for introduction of farmer preferred tree species to enrich existing portfolio of tree species, conducting field investigations of superior varieties of indigenous tree species for enrichment, nurseries, trees on farms and plantations and using the results to establish a wider Planting Stock Improvement program.
- The project will also undertake monitoring and reporting activities needed to ensure that FIP related information is recorded in Ghana's National MRV system. The national MRV system is being developed and supported under Additional Funding for the REDD+ Readiness process, with FCPF financing. FIP will not support MRV activities that are already funded.

23. **Component 4: Project Management, Monitoring and Coordination.** This component will support project management and oversight, project monitoring and evaluation system, and

wider coordination of the range of FIP-financed activities, including reporting at the international level. It provides support to the GoG in regular communication and coordination among FIP-financed interventions and related activities, to promote synergies among all FIP projects (WB, AfDB, IFC, and DGM), as well as information and knowledge sharing with other FIP countries. The activities to be financed include the following:

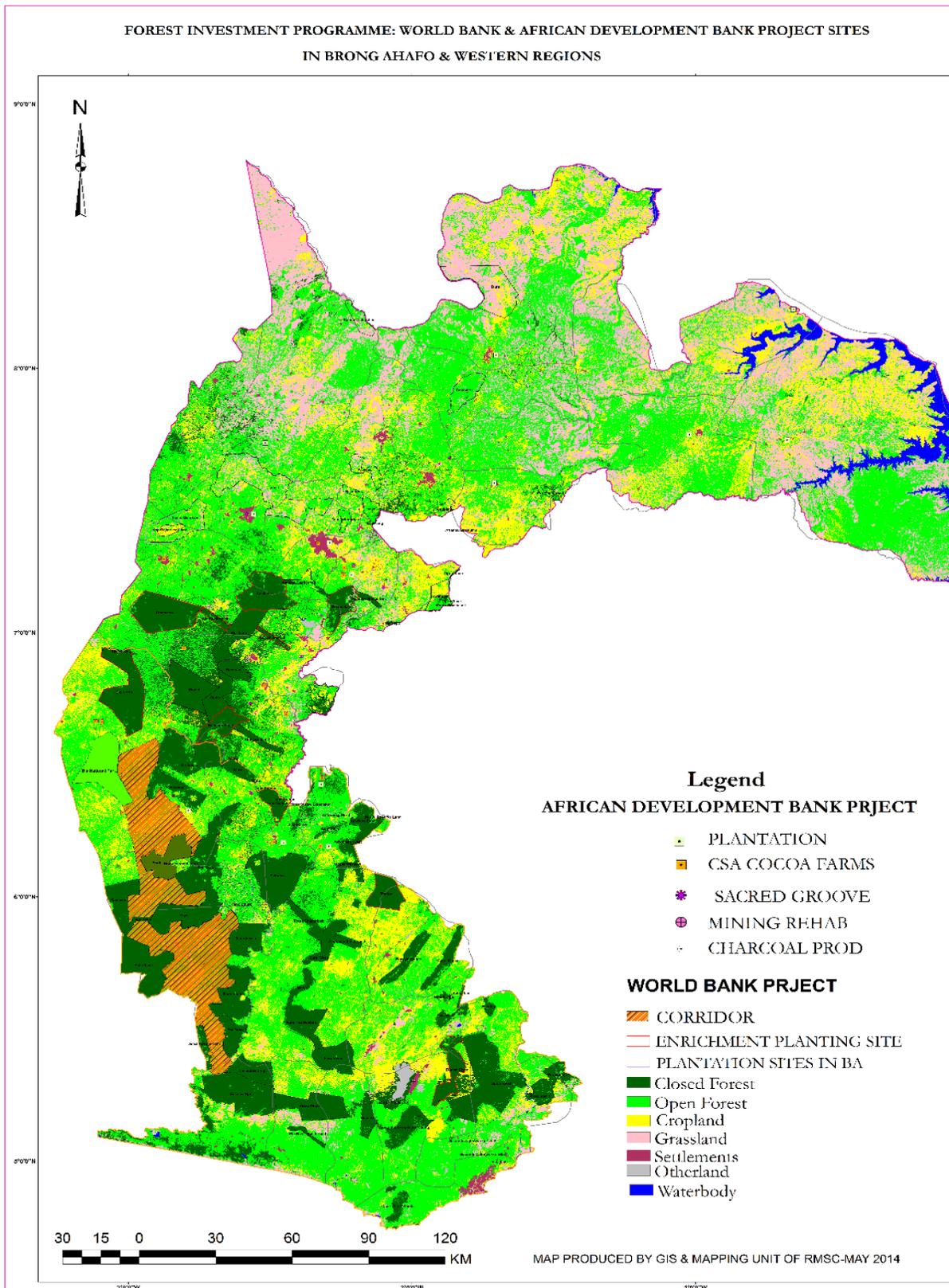
- **Project coordination activities will include** monthly PCU Meetings, Project Steering Committee meetings, GoG/MDBs Coordination meetings, as well as preparation of regular reports, a midterm review, and a project completion report. This activity will also include logistical support for Ghana officials to participate in regional and international meetings and conferences.
- **Financial and procurement management** activities include financial monitoring of other agencies by the PMU accountant and the MLNR financial controllers; external audits; upgrading of the accounting system; and design and printing of the accounting manuals. This also includes incremental costs associated with publication of procurement notices, preparation and evaluation of TORs and Tenders; associated approval processes; and contract management
- **Operating Costs** of the PMU (incremental) will also be financed by the project, including hiring of the PMU support consultants on an as-needed basis and financing a cost of a part-time accountant consultancy at the FC.
- **Equipment and supplies** are needed to upgrade the capacities of the implementing agencies, including MLNR and the district offices of the FC and improve their flexibility and mobility to engage with communities in the target corridor landscapes. (e.g., targeted placement of vehicles, computers, audio visual devices and communications equipment)
- **Project Monitoring and Evaluation System** will include review of the M&E systems of MLNR and other agencies in view of FIP requirements and the National Development Planning Commission reporting system. Monitoring and evaluation activities will support project aims but also be integrated into existing M&E activities and systems carried out by the MLNR and subsidiary agencies in line with requirements under FCPF, NREG, and partner FIP projects. Collection of baseline data and regular updates will be supported. The MLNR will also conduct periodic monitoring of project activities/results and data analysis in response to management and reporting needs. The MLNR also plans to engage in participatory impact assessment as an input to the final report.

24. The following Table A2-1 indicates the communities in targeted landscapes and corridors which will be a focus of FIP field engagements. The map in Figure A2-3 on the following page illustrates the geographic separation of the World Bank financed and AfDB financed activities.

**Table A2-1. WB FIP – Enhancing Forest and Agroforest Landscapes Communities / Field Sites**

<b><u>BRONG AHAFO REGION</u></b>		<b><u>WESTERN REGION</u></b>	
<b><u>Plantation Promotion (Pilot 2)</u></b>		<b><u>Corridor / Landscape Activities (Pilot 1)</u></b>	
<b><u>Bosomoa community</u></b>	<b><u>Pamu – Berekum</u></b>	<b><u>Krokrosua</u></b>	<b><u>Bodi – Sui</u></b>
Anyima	Asenso No 1	Bodi	Asafo
Hyereso	Asenso No 2	Juabeso	Kankyiabo
Ampoma	Koradaso	Juabeso Nkyanta	Suiso
Krabonso	Abrikaso	Benchenma	
	Twumkrom	Nkatieso	
<b><u>Tain II Community</u></b>	<b><u>Nkyenkyemamu</u></b>	<b><u>Bia</u></b>	<b><u>Enchi</u></b>
Odumase	Botokrom	Kunkunso	Beseakaso
Nsuatre		Akatiso	Asantekrom
Kotaa		Adabokrom	Damoakrom
Namasua		Camp 15	Mpeasem
		Elluokrom	Gyomura
<b><u>Off Reserve/Landscape Activities (Pilot 1)</u></b>		Asempaneye	Datano
<b><u>Kintampo</u></b>	<b><u>Atebubu – Amansen</u></b>	Obengkrom	Enchi
Nante	Patuda	Adwumamu	Jema Assamkrom
Anyima	Komfia		
Attakuraa	Praprabon		
Babator	Beposo		
Bawa Akura			
Dawadawa	<b><u>Sene</u></b>		
<b><u>Atebubu</u></b>	Krenkuase		
Kojoboffour	Bodinka		
Kamampa	Kyeamekrom		
Abease			

**Figure A2-3. World Bank and AfDB Project Sites**



## **Annex 3: Implementation Arrangements**

### **GHANA: World Bank Enhancing Natural Forest and Agroforest Landscapes**

#### **Project Institutional and Implementation Arrangements**

1. **Project Steering Committee.** For coordination of policy, resources and priorities, the proposed FIP implementation arrangement will be integrated with the existing Natural Resources and Environmental Governance Technical Coordination Committee (NREG TCC+), established in 2010 to facilitate the implementation of all natural resources and environment donor funded programs.<sup>17</sup> The TCC+ is also responsible for guiding Ghana's REDD+ agenda and includes representatives of key MDAs, plus the private sector, civil society and traditional authorities. For wider information sharing and stakeholder engagement, the TCC+ can invite wider groups, including community-based organizations, women's groups, research institutions, etc. The DGM will be represented in the TCC+.
2. **Implementing Agency.** The Ministry of Lands and Natural Resources (MLNR) will be the lead Implementing Agency of the project responsible for overall management, coordination and project reporting. MLNR has responsibility for policy and legislation formulation and for monitoring and evaluation for the forestry and natural resources sectors. The Ministry has a dedicated team of technical staff responsible for the implementation of the on-going program supporting the New Forest and Wildlife Policy and the Forest Development Master Plan.
3. **Project Management Unit.** The existing Forest Investment Program Management Unit 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 from time to time as needed with short term consulting expertise for communications, reporting, logistics.
4. A broader **Project Coordination Unit** will include the PMU and the dedicated Project Focal Points from the FC, FORIG, and COCOBOD and may include representatives of other collaborating agencies as needed.
5. The Resource Management Support Centre (RMSC) of the FC and the Climate Change Unit of the FC as well as the Carbon Stocks Monitoring Centre of FoRIG will be involved in implementing Monitoring, Reporting and Verification (MRV) activities and supporting the Monitoring and Evaluation (M&E) system.

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<sup>17</sup> The Technical Coordinating Committee (TCC), established in 2007 by GoG and Development Partners, was expanded (to TCC+) in 2010 to oversee the NREG reform program. The TCC+ is composed by Chief Director, MoF (Chair); Chief Director, MLNR (co-chair); Technical Directors for Forestry (MLNR), Mines (MLNR), and Environment (MESTI); Chief Executives of the Forestry Commission, the Minerals Commission, and EPA; Representatives include NREG Coordinator (MoF); NREG Policy Focal persons from MLNR, MC, MESTI, EPA; Representatives of the NDPC, MOFA, Ministry of Energy, Lands Commission; and Representatives of the Private sector, Civil Society, Forest Forum, Research Institutions and Traditional Authorities.

6. **Partner Ministries, Departments and Agencies (MDAs) for Implementation.** Sound implementation will require strong coordination and regular exchange of information with a number of MDAs beyond the MLNR. **The Forestry Commission (FC)**, which is the implementation arm of MLNR responsible for regulation, control and management of forest resources, will implement field activities and provide services to local committees (of CREMAs and other CBOs). The FC has appointed a Safeguards Officer to assess the impacts of FIP implementation, as well as all other programs and projects of the commission. **The Forestry Research Institute of Ghana (FoRIG)**, which undertakes forestry research, will lead on activities related to selection of appropriate tree species and be a collaborating partner for the FC-led activities under Component 2.

7. District Assemblies in the pilot areas will be members of local implementation committees. The Ministry of Environment, Science, Technology and Innovation (MESTI), which has the broad mandate for developing climate change policies and reporting to the UNFCCC, will be a collaborating partner for MLNR. The Ministry of Finance coordinates donor support in the country and implements the NREG TA. The MLNR will inform and involve the Lands Commission, Ministry of Food and Agriculture and other agents, as needed in specific circumstances.

8. **The Ghana Cocoa Board (COCOBOD)**, a state-owned enterprise, will implement field activities related to provision of extension services to farmers and members of local committees (CREMAs and other CBOs) to ensure that pilot activities in the cocoa landscape are well coordinated, incentive compatible and supported institutionally. A Memorandum of Understanding (MoU) will be signed within two months after project effectiveness between the MLNR and the COCOBOD to formalize these implementation arrangements. The MoU will clarify the roles and responsibilities for implementation (e.g., providing for arrangements and procedures on monitoring, evaluation, reporting, communication and exchange of information).

9. **Participation and Consultative Processes.** Ghana has been engaged in a REDD+ readiness process since before March 2010, when the R-PP was approved by the FCPF Participants' Committee, after extensive stakeholder consultations. The FIP consultation process continued over a period 2010-2012 and involved a scoping mission in September-October 2010, a Joint Mission in May-June 2011, and focus group meetings with stakeholders in March 2012. Stakeholder consultation processes included the private sector, civil society and community organizations. Additional consultations have been undertaken in the context of developing the arrangements for the FIP Dedicated Grant Mechanism (DGM), which will support further community engagement and participation in all the projects of Ghana's overall FIP Program. Additional consultations were held in the context of developing Ghana's Voluntary Partnership Agreement (VPA). Consultations will continue using the mechanisms identified in Component 1. The project has a specific focus on working closely with the communities through the CREMA work, dissemination of information, awareness raising and training, provision of extension services, and consultations and participation.

10. Ghana's **Strategic Environmental and Social Assessment** was conducted under the FCPF Readiness Preparation Grant and covers the entire country. The SESA preparation contributed to the understanding that informed the FIP project design. Community and stakeholder consultations held over the period 2013 to 2014 helped to confirm understanding on the drivers of deforestation, summarize societal perspectives on key challenges in the sector and needed

interventions, and raise social and environmental issues from the perspective of different stakeholder groups, including women. Under the umbrella of the national SESA, the GoG prepared an Environmental and Social Management Framework (ESMF) that applies to the project intervention area. During its preparation, further specific consultations were held in the likely project intervention zones of the Western Region and Brong Ahafo during April and May 2014 (draft documents on file). In mid June 2014, MLNR and FC officials conducted further field scoping efforts and discussions with communities, local governments, cocoa sector agents and others. The preparation process for developing Ghana's Emission Reduction Program (ER-Program) also conducted consultations and workshops with stakeholders during the period 2013 and 2014. This project design has benefited from these broad consultative processes and has provided resources to continue them and to support multi-stakeholder platforms for dialogue during the life of the project.

11. **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 in Western Region and Brong Ahafo, as well as other forms of Community-based Organizations (CBOs) where relevant. CREMAs and other CBOs could also benefit from DGM process/resources or could be targeted for communication, technical assistance and capacity building programs.
- Communities are not uniform and may include various types of farmers, hunters, land users, land owners, women and disadvantaged groups, all with different access to resources and information, as well as different expectations about the needs and results of the project.
- Traditional authorities and land owners are important in the process of land use planning and establishment of revised management regimes. They will have an important stake in the nature of incentives and the proposed sharing of benefits generated through the project interventions.
- District and Local Governments are important stakeholders in the realm of land use, land use planning, corridor management, etc.
- Cocoa Sector Agencies. The COCOBOD is both a regulatory and a promotion agency for cocoa, as well as several other commodity tree crops (e.g., shea nuts). The cocoa sector also includes Licensed Buying Companies and stakeholders in the supply chain
- Local and International NGOs that provide advice, facilitation, access to resources and information, and engagement in policy dialogues, development of standards, needs assessments, etc. NGOs providing advice and services in the cocoa sector in collaboration with COCOBOD and private sector buyers.
- The Ghana Investment Promotion Centre will be an important partner in improving the investment climate for plantation development and soliciting interest in developing PPP arrangements for the forest sector and in the forest reserves
- Professional communication enterprises, plus other intermediate service providers that may bring skills in training, visual communication, survey design, and M&E approaches;
- Research organizations and traditional knowledge holders will be important in the effort to identify and disseminate appropriate propagation and nursery care procedures for locally important tree species.

## **Project administration mechanisms**

### ***Financial Management and Disbursements***

12. A description of the project's financial management arrangements at MLNR as documented in the section below indicates that they satisfy the Bank's minimum requirements under OP/BP10.00. 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**.

13. **MLNR.** The overall financial management responsibility throughout implementation will be handled by the Financial Controller 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 in the assessment the MLNR identified a dedicated staff (a Principal Accountant) who will be responsible for the operational and day to day transaction processing and collation of financial reports from implementing agencies. The Project Accountant will be the key focal person for fiduciary oversight and is expected to interact frequently with accountants at the various implementing agencies particularly the accounts team of the Forestry Commission and of the COCOBOD 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 (IUFs) to the Bank, maintaining internal controls over project expenditure and engaging external auditors.

14. **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 FC Project Accountant will be assigned the role of managing the FIP project to ensure that there is more focus on project financial activities. In addition, the Forestry Commission will hire a full-time accountant, through a consultancy, to support the FIP and FCPF AF FM function – the cost of this consultancy will be equally shared by the two projects. It is expected that the Project Accountant will be directly supervised and accountable to the Director of Finance.

15. **Strengths and Weaknesses of the FM 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 accounting unit with established processes and procedures as complemented by adequate staffing who are already conversant with IDA-financed projects is the key advantage of the finance and accounting team within the MLNR. However, given the challenges of work load and the demands for project implementation it is proposed that a dedicated Project Accountant be competitively recruited to support the Financial Controller of the MLNR. In addition, the Forestry Commission will hire a

full-time accountant, through a consultancy, to support FCPF AF FM function; it is expected that this consultant will also provide support to the FIP. This arrangement has worked well in other projects in the experience of the Bank and MLNR and works within the existing management system and personnel policies of the Ministry.

16. 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. Specifically for Financial Management this could result in delays in preparing and approving consolidated budgets, delays in releasing of funds and challenges in providing appropriate supporting documentation. This risk is primarily being mitigated by relying on the MLNR to be the central point for all fiduciary matters and also for managing the operations of the designated accounts.

17. In general, however, both agencies have in depth prior experience with 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.

18. **Summary Financial Management Assessment.** A summary of the key finding of the financial management arrangements as assessed at the MLNR is presented as follows:

19. **Budgeting Arrangements.** The MLNR follows the budget preparation guidelines as per the Financial Administration Act (2003), the Financial Administration Regulation (2004) and also 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.

20. **Accounting Arrangements.** The Financial Controller at the MLNR will be responsible for overall fiduciary aspects of the project. Specific accounting issues such as recording and processing of payment vouchers will be handled by the Project Accounts 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. Specifically for this project, the daily transactional issues will be handled by the Project Accountant, who may either be assigned by the Controller and Accountant-General's Department or competitively recruited under the project and will work with the support of the accounts officers with different levels of accounting qualifications and experience.

21. **Internal Control and Internal Auditing.** The project's internal controls will to a large extent rely on the government established accounting and internal control guidelines as documented in the Financial Administration Act (2003), the Financial Administration Regulation (2004), Public Procurement Act (Act 663) and in line with the internal audit manual of the Ministry of Finance & Economic Planning. In addition, the internal audit functions of all MDA are informed by the Internal Audit Agency Act (2003). The credibility of the project's internal controls

and general control environment including processes for recording and safeguarding of assets will be in line with the GoG guidelines. 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 implementation support missions by reviewing the reports and management responses to the audit findings. There will be the need for collaboration between the Internal Audit Unit of the MLNR and the other agencies e.g. FC, 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.

22. **Funds Flow.** The FIP project will be funded by a US\$29.5 million grant from the Strategic Climate Fund and a US\$3 million GoG in-kind contribution. Proceeds of the grant 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.

23. **Imprests for Beneficiary Agencies.** As part of fund flow design it has been agreed that in order 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 and will be recorded in the PIM. 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 has been carried out and found to be adequate for the operation of the Project Accounts.

24. **In summary for FM assessment:**

- 1) There will be only one designated account opened and maintained by the MLNR on behalf of the project.
- 2) In line with existing arrangements, funds will be transferred to the Project Accounts denominated in local currency to support payments for operational costs including field visits and monitoring activities.
- 3) In addition, based on the approved Annual Work Plan from the key beneficiary agencies periodic allocations (not exceeding the aggregate of three months forecast expenditure) will be made equivalent to a three months forecast of projected expenses and subsequently replenished on an imprest basis upon provision of satisfactory returns.
- 4) The MLNR will receive periodic reports (as agreed between it and these agencies) from these implementing agencies in time to enable the center to consolidate these into the single IUFR that would be presented to the Bank within forty five days of the end of the quarter.

**Disbursement arrangements and use of funds**

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

26. **Designated Account.** 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. The DA established for the Project Preparatory Advance (PPA, TF014224) will be used for the Grant proceeds once the arrangement has been formalized through a request for such use of the PPA DA from the MOF to the Bank. The initial disbursement and ceiling will be based on the expenditure forecast for the first six months as approved by the Bank. Minimum value of applications will be set at US\$200,000. This arrangement to use a central account is important to ensure that the MNLR has oversight responsibilities over transfers and payments related to the implementation of program activities.

27. Based on the financial management assessment, the proceeds of the grant will be disbursed to the project using report based disbursement procedures. Interim Unaudited Financial Reports (comprising at the minimum, the 'sources and uses of funds according to components and sub-components', 'use of funds according to detailed project disbursement sub-categories - goods, works, services', and 'use of funds according to project activities') will constitute the reporting requirements under the component. The IUFs (including the 'procurements subject to prior reviews' and 'designated account reconciliation statement') will also serve as the basis for withdrawals from the Bank. Subsequent replenishments of the DA would be done semi-annually based on the forecast of the net expenditures for the subsequent half-year period (on the basis of the approved annual work plan).

28. **Disbursement categories.** The following table specifies the categories of eligible expenditures that may be financed out of the proceeds of the Grant (“Category”), the allocations of the amounts of the Grant to each Category, and the percentage of expenditures to be financed for Eligible Expenditures in each Category:

<b>Category</b>	<b>Amount of the Grant Allocated (expressed in US\$)</b>	<b>Percentage of Expenditures to be Financed (inclusive of Taxes)</b>
(1) Non-consulting services, consultants’ services, Operating Costs, and Workshops and Training under Part 1of the project	2,500,000	[100%]
(2) Goods, works, non-consulting services, consultants’ services, Operating Costs, and Workshops and Training under Part 2 of the project	20,935,000	[100%]
(3) Non-consulting services, consultants’ services, Operating Costs, and Workshops and Training under Part 3of the project	2,600,000	[100%]
(4) Goods, non-consulting services, consultants’ services, Operating Costs, and Workshops and Training under Part 4 of the project	3,465,000	[100%]
<b>TOTAL AMOUNT</b>	<b>29,500,000</b>	

29. **Financial Reporting Arrangements.** The MLNR will be required to prepare and submit separate quarterly IUFs to account for activities funded and also to request for funding under this grant. Financial reporting under the program will be report-based and it is expected that the unit will maintain an adequate filing and archival system of all relevant supporting documents for review by the Bank's FM team during implementation support missions and for audit purposes. IUFs 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 IUFs have already been agreed with the Financial Controller and the Project Accountant.

30. **External audit and independent assurance.** In line with its mandate as per the Ghana Audit Service (GAS) 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 by 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.

### ***Procurement***

31. **The procurement assessment rated the overall risk as Substantial.**

32. **Applicable Guidelines:** Procurement will be carried out in accordance with World Bank's: (i) "Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011, revised July 2014; (ii) "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011, revised July 2014, and the provisions stipulated in the Grant Agreement; and (iii) "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006, as revised in January 2011 and the provisions stipulated in the Grant Agreement. For each contract to be financed by the Grant, the different procurement methods, or consultant selection methods, the need for pre-qualification, estimated costs, prior review and methods requirements, and time frame are agreed between the Client and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. In preparing the Procurement plan, the prior review and methods threshold associated with a risk rating of Substantial is applicable.

33. **Procurement of Works.** The procurement will be done using the Bank's Standard Bidding Documents (SBD) for all International Competitive Bidding (ICB) and National SBD under National Competitive Bidding agreed with or satisfactory to the Bank. Relevant NCB works

contracts, which are deemed complex and/or have significant risk levels, will be prior-reviewed. Such contracts will be identified in the procurement plan. While using the NCB, the project must ensure that: (i) foreign bidders shall be allowed to participate in NCB procedures without any restrictions; (ii) bidders shall be given at least one month to submit bids from the date of the invitation to bid or the date of availability of bidding documents, whichever is later; (iii) no domestic preference shall be given for domestic bidders; and (iv) in accordance with paragraph 1.16(e) of the Procurement Guidelines, each bidding document and contract financed out of the proceeds of the Financing shall provide that: (a) the bidders, suppliers, contractors, and subcontractors shall permit the Association, at its request, to inspect their accounts and records relating to the bid submission and performance of the contract, and to have said accounts and records audited by auditors appointed by the Association; and (b) the deliberate and material violation by the bidder, supplier, contractor, or subcontractor of such provision may account to an obstructive practice as defined in paragraph 1.16(a)(v) of the Procurement Guidelines. Contracts would be procured using shopping procedures based on a model request for quotations satisfactory to the Bank. Direct contracting may be used where necessary, but it will be subject to Bank's no objection.

34. **Procurement of Goods.** The procurement will be done using the Bank's SBD for all ICB and National SBD agreed with or satisfactory to the Bank. Procurement may be done under NCB and Shopping depending on the thresholds. However, relevant NCB goods contracts, which are deemed complex and/or have significant risk levels, will be prior-reviewed. Such contracts will be identified in the procurement plans. Again, under the NCB, the project must ensure that: (i) foreign bidders shall be allowed to participate in NCB procedures without any restrictions; (ii) bidders shall be given at least one month to submit bids from the date of the invitation to bid or the date of availability of bidding documents, whichever is later; (iii) no domestic preference shall be given for domestic bidders; and (iv) in accordance with paragraph 1.16(e) of the Procurement Guidelines, each bidding document and contract financed out of the proceeds of the Financing shall provide that: (a) the bidders, suppliers, contractors, and subcontractors shall permit the Association, at its request, to inspect their accounts and records relating to the bid submission and performance of the contract, and to have said accounts and records audited by auditors appointed by the Association; and (b) the deliberate and material violation by the bidder, supplier, contractor, or subcontractor of such provision may account to an obstructive practice as defined in paragraph 1.16(a)(v) of the Procurement Guidelines. Contracts would be procured using shopping procedures based on a model request for quotations satisfactory to the Bank. Direct contracting may be used where necessary, but it will be subject to Bank's no objection.

35. **Procurement of Non-Consulting Services.** Procurement of non-consulting services will follow procurement procedures similar to those stipulated for the procurement of goods, depending on their nature.

36. **Selection of Consultants.** Consultancy services would be provided under the project. In accordance with the thresholds, methods of procurement will include Quality and Cost-Based Selection (QCBS); Selection Based on Consultants' Qualifications (CQS); while selection under Quality Based (QBS); Selections under Fixed Budget (FBS) and Least Cost Selection (LCS) methods will be applied in the circumstances as respectively described under paragraphs 3.5 and 3.6 of the Consultants Guidelines. For all contracts to be awarded following QCBS, LCS, and FBS the Bank's Standard Request for Proposals will be used. Procedures of Selection of Individual

Consultants would be followed for assignments that meet the requirements of paragraph 5.1 and 5.3 of the Consultant Guidelines. LCS procedures would be used for assignments for selecting the financial auditors. Single-Source Selection procedures would be followed for assignments that meet the requirements of paragraphs 3.10-3.12 of the Consultant Guidelines and will always require the Bank's prior review regardless of the amount.

37. **Assignments Estimated to cost the equivalent of US\$300,000 or more** would be advertised for expressions of interest (EOI) in Development Business (UNDB), in DgMarket, and in at least one newspaper of wide national circulation. In addition, EOI for specialized assignments may be advertised in an international newspaper or magazine. Foreign consultants who wish to participate in national selection should not be excluded from consideration.

38. **Capacity Building and Training Programs, Conferences, Workshops, etc.** All training and workshops will be carried out on the basis of the project's Annual Work Plans and Budget which will have been approved by the Bank on a yearly basis, and which will identify: (i) the envisaged training and workshops; (ii) the personnel to be trained; (iii) the institutions which will conduct the training; and (iv) duration of the proposed training.

39. **Operating Cost Procedures.** Project operating costs would be procured using the implementing agency's administrative procedures, which have been reviewed and found acceptable to the Bank. The procurement procedures and SBDs to be used for each procurement method, as well as model contracts for works and goods procured will be presented in the Project Implementation Manual (PIM).

40. **Procurement Capacity Assessment:** As part of the Bank's fiduciary requirements to ensure that implementing agencies have and continue to have adequate systems, structures and capacity to administer procurement in compliance with the Bank's Procurement and Consultants' Guidelines under the project, a procurement capacity re-assessment was conducted MLNR, the main responsible implementing agency for the project. This was a result of the meetings held with the Client during the pre-appraisal mission, where MLNR, indicated that it wants procurement to be centered at the MLNR, irrespective of the agencies implementing particular components of the project. The re-assessment built on the assessment conducted on 11 September, 2014, in accordance with the Procurement Services Policy Group guidelines and the Procurement Risk Assessment & Management System, where the risks (institutional, political, organizational, procedural, etc.) that may negatively affect the ability of the agency to carry out procurement were assessed, so as to develop an action plan to address the deficiencies detected by the capacity analysis and to minimize the risks identified by the risk analysis; and propose a suitable Bank procurement supervision plan for the project compatible with the relative strengths, weaknesses and risks revealed by the assessment.

41. **MLNR:** The assessment concludes that MLNR is in compliance with the procurement law; has experience in implementing World Bank-financed projects, and gained particular experience from LAP1 and the currently ongoing World Bank funded project (LAP-2), having run it since 2011. It continues to have an entity tender committee and seeks concurrent approvals from the appropriate review boards, as final decision making authorities in addition to adequate internal technical and administrative controls and anticorruption procedures. The review also notes the existence of satisfactory appeals mechanisms for bidders. It is also noted that procurements

undertaken are always in the approved procurement plans, although the procurement plans are not regularly updated. It was also noted that record-keeping and procurement filing need attention and improvement to reflect the entire procurement process and cycle. The Procurement unit has four procurement staff. The Procurement Officer who heads the Procurement Unit has Bachelor of Science degree (Natural Resources), Master of Science degree (Policy) and a Certificate awarded by Public Procurement Authority of Ghana, and has been undertaking procurement for the Ministry since 2008, and was made head in 2012. The three Procurement Assistants have various degrees, ranging from Bachelor of Science (Natural Resources), Master of Science (Supply Chain Management), a 6-months course in Procurement Management, and have been with the unit since 2009. The assessment noted that staff of the Procurement Unit have some experience and knowledge in executing procurement under Ghana Public Procurement Act 663, although small values, low volumes and less complex. These staff, whose main background is Natural Resources, have not gained much experience in procurement under Bank rules, partly because the Bank projects (LAP 1 & 2) were implemented by the MLNR, but using an external Project Management Unit. Thus the staff of the MLNR lack experience in Bank procurement procedures and processes.

42. The entire procurement under the project will be executed under MLNR with the adequate and appropriate input and support from all the beneficiary / implementing agencies / divisions. Thus the value, nature, volume and complexity of the procurements will pose some challenges to the existing staff of the Procurement Unit, thus the **procurement risk assessment** is rated **Substantial**. The key risks for procurement are (i) lack of adequate capacity to manage procurement under World Bank guidelines; (ii) possible delays in preparation of quality technical inputs to procurement documents, TOR/Specifications, Bidding Documents/ Requests for Proposals (RFP), evaluation of bids and technical proposals, award and contract signing (iii) Possible weakness in ensuring contract management (supervision)/administration (monitoring) during contract implementation to completion; and (iv) lack of use of Procurement plans as a planning and management tool.

43. To address and mitigate the above risks and bring the level of the procurement risk to moderate, the following actions are proposed in the Table below:

#### Key Risks and Mitigation Actions

No	Key risks	Mitigation Actions	By whom	By when
i	Lack of adequate procurement capacity and knowledge of World Bank procurement procedures	Procure proficient procurement specialist knowledgeable and experienced in Bank procurement to support and also offer hand on training to the present team. Provide focused training for existing staff of the MLRN procurement unit at recognized procurement training institution such as Ghana Institute of Management And Public Administration, to sharpen the skills of staff in the use of Bank procurement procedures, guidelines and rules.	MLNR  MLNR  WB	Immediately after project effectiveness  Throughout project life

		Continuous refresher courses for staff, attendance of Bank monthly procurement Clinic and hands-on training		
ii	Lack of comprehensive information on procurement delivery in respect of Bank funded Project.	Prepare project implementation manual for the general project with clear procurement procedures and responsibilities. Organize orientation/project launch workshops for all key personnel.	MLNR MLNR	Before Effectiveness After Effectiveness
iii	Possible delays in preparation of quality technical inputs to procurement documents; evaluation of bids and technical proposals, etc.	Appoint focal persons in the various Implementing Agencies & Use of qualified personnel to assist the project in preparation of Procurement Documentation. Start preparation of Procurement Documentation including preparation of TOR, Specifications, Bidding Documents, RFP, etc. Set up standard processing times	MLNR, & all IAs MLNR & all IAs	Just after project effectiveness Just after Board Approval Throughout project life
iv	Possible weakness in ensuring contract management (supervision)/administration (monitoring) during contract implementation to completion	Formation of Contract management and monitoring team, led by the project Coordinator and Focal persons, including the technical and the procurement teams, and beneficiaries; Close monitoring to ensure adherence to stipulates of the sections in the respective Contract Documents.	MLNR & all IAs MLNR & FC	Just before Contracts are signed During Contracts Implementation
v	Lack of use of Procurement plans as a planning and management tool	Prepare Procurement Plan for the project covering at least the first 18 months (if not the entire project) of the project life. Review and Clear procurement plan Continuous updating of Procurement Plan to reflect actual procurement activities. Close monitoring of procurement plans on a monthly basis and closely monitor and exercise quality control on all aspects of the procurement process, including evaluation, selection, award, contract signing and implementation to completion.	MLNR & all IAs World Bank MLNR MLNR & All IAs	Before project negotiation (done) Throughout project life

44. **Training, workshops, conference attendance, and study tours** will be carried out on the basis of approved annual work programs. The programs will identify the general framework of training and similar activities for the year, including the nature of training/study tours/workshops, the number of participants and cost estimates, however this should not be presented in the Procurement plan.

**Threshold for Procurement Methods and Prior Review for SUBSTANTIAL risk rating**

	Prior Review Threshold					Procurement Method Threshold						All-National Shortlist of Consultants
				Consultants		ICB		NCB		Shopping		
RISK RATING	Works	Goods	IT Systems+ Non Con. Serv	Firms	Individuals	Works	Goods + Non Con. Serv	Works	Goods + Non Con. Serv	Works	Goods + Non Con. Serv	
<b>SUBSTANTIAL</b>	≥\$10 Mil	≥\$1 Mil	≥\$1 Mil	≥\$0.5 Mil	≥\$0.2 Mil	≥\$15 Mil	≥\$3 Mil	<\$15 Mil	<\$3 Mil	<\$0.2 Mil	<\$0.1 Mil	≤\$0.3 Mil (All) ≤\$0.5 Mil (Engr+ Contract Spn)

45. These thresholds are for the purposes of the initial Procurement Plan. The thresholds will be revised periodically based on reassessment of the project procurement risks during implementation.

46. **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.
- The threshold for shopping is defined under paragraph. 3.5 of the Guidelines and should normally not exceed US\$100,000 equivalent for off-the-shelf goods and commodities; and US\$200,000 equivalent for simple civil works.
- CQS Threshold: The threshold for the use of CQS is determined on a case by case basis taking into account the nature and complexity of the assignment but shall not exceed US\$300,000 equivalent other than in exceptional situations in accordance with paragraph 3.7 of the Guidelines: Selection and Employment of Consultants.
- Operating expenditures are neither subject to the Procurement and Consultant Guidelines nor prior or post reviews. Operating expenditures are normally verified by the Task Team Leader (TTL) and Financial Management 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 Legal Vice-Presidential Unit (LEG-VPU) of the World Bank with the relevant expertise and the designated Procurement Specialist (PS) or Regional Practice Manager (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 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 by the TTL.
- Contracts below the threshold but falling within an exception as defined in clause 5.4 of the Guidelines: Selection and Employment of Consultants are also subject to prior review or require the Bank’s prior no objection.

- Special cases beyond the defined thresholds are allowed based on applicable market conditions.
- For thresholds for which a shortlist may comprise only national consultants, the Client does not need to publish/advertise in UNDB online.
- For procurement value less or equal to US\$0.3 million, the Shortlists of Consultants can all be Nationals (of Ghana); The value can increase up to US\$0.5 million in case of consultancy assignments for Engineering Design and Contract Supervision

47. **Frequency of Procurement Implementation Support:** In addition to the prior reviews which will be carried out by the Bank, the procurement capacity assessment has recommended one mission each year to visit the field to carry out post-review of procurement actions and technical review. The procurement post-reviews and technical reviews should cover at least 15 percent of contracts subject to post-review, as the risk rating is **Substantial**. In addition, post-reviews of in-country training will be conducted from time-to-time to review the selection of institutions/facilitators/course contents of training, and justifications thereof and costs incurred. Post review consist of reviewing technical, financial and procurement reports carried out by the Client's executing agencies and/or consultants selected and hired under the Bank project according to procedures acceptable to the Bank.

48. **Fraud and Corruption.** All procuring entities as well as bidders and service providers, that is, suppliers, contractors, and consultants shall observe the highest standard of ethics during the procurement and execution of contracts financed under the project in accordance with paragraphs 1.16 of the Procurement Guidelines and paragraphs 1.23 of the Consultants Guidelines. "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006 and revised in January 2011 shall apply to the project.

### **Environmental and Social (including safeguards)**

49. The key World Bank FIP sub projects requiring the design and implementation of mitigation actions as discussed in the ESMF comprise the following:

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

50. Projects concerning capacity building and extension and communication are deemed to be 'soft projects' which will not be associated with any physical infrastructural development. The discussions in the ESMF cover biodiversity, soils and social issues and concerns.

51. **Impacts on Biodiversity.** The establishment of plantation schemes in on reserve or in off reserve areas may have both negative and positive impacts on the associated environment and ecosystem. This project will establish only small demonstration plantations, but expects to improve the enabling conditions for future plantation investment by communities and commercial interests. These impacts can be a result of converting diverse mixed forest tree species to monoculture stands or creating plantation growth in existing degraded lands. The conversion of natural habitats to tree plantations may reduce the abundance and diversity of mammals, birds, reptiles, amphibians, insects and other forms of life. Most African Acacias are nitrogen-fixing species which actually enrich the soil with organic nitrogen and improve soil fertility. It is therefore expected that the native tree species will be used for recovering a degraded native forests as well as in agroforestry. When planning tree plantations, the use of diverse agroforestry systems can provide positive benefits in terms of productive outputs (timber, fruits, leaves, resins, etc.) as well as other beneficial ecosystem services (nutrient recycling, shelter for various symbiotic species and shade, etc.) Selection of tree species that will fulfill both functions is therefore, key to the success of the agroforestry component. The selection of native species and the determination of how to increase biodiversity with spatial planting will also guarantee minimum impact on biodiversity, including wildlife and birds.

52. **Social Issues with Plantation Plantings.** The objective is to support local communities to restore and protect their forest lands while ensuring livelihoods. A key concern is to balance commercial activities with maintenance of access to resources by rural households and communities (e.g., fuel sources). Alternatives include supporting communities in efforts to develop small-scale, biologically diverse agroforestry systems, forest gardens and tree plantations. These activities provide a diversity of goods and services, including fuelwood, medicinal plants, soil fertility, wildlife, and construction materials.

53. The Government has tested alternative means of providing this type of support to communities and enhanced access to forest resources through the Community Forestry Management Project (CFMP), further described in Annex 5. The Modified Taungya System (MTS) is used to rehabilitate degraded forest reserves while increasing production of agricultural, wood and non-wood forestry products and improving household incomes of participating forest fringe communities. The approach has been evaluated and was widely accepted among beneficiaries; it provided lessons about community participation in on-reserve forests that the Government is applying in FIP interventions. The Modified Taungya System is a method of forest plantation establishment where farmers are given parcels of land to produce food crops (in the short run), plant and maintain timber trees in exchange for a share of the value of the trees (in the long run). The MTS method was successful, but could be further improved by reviewing the incentive mechanism, delivery of infrastructure support, training and technical support, and by clarifying financial arrangements. Careful planning and analysis are needed to ensure sustainability in the long term, so that beneficiary livelihoods can be sustained after project technical and financial support come to an end, and after the canopy closes and inter-cropping is no longer possible.

54. A generic overview of some significant potential social and environmental impact issues from the implementation of the various sub-project activities is listed below.

## Potential Impact Issues/ Concerns

### **ENVIRONMENTAL**

#### **Biodiversity**

- ✓ Mono specific exotic tree plantings may alter natural vegetation;
- ✓ Plantation tree seedlings may invade adjacent forest
- ✓ Biodiversity conservation (changes in flora and fauna)
- ✓ Uniform age as clear felling may prevent succession processes

#### **Water Resources**

- ✓ Alterations in local natural water cycles/ hydrology

#### **Soils**

- ✓ Changes in soil nutrient cycles (fertility and carbon storage capacity)
- ✓ Increased soil erosion due to repeated disturbance
- ✓ Poor plantation management leading to physical impacts to soil structure and surface layers

#### **Air quality**

- ✓ deterioration from burning of biomass from clearing
- ✓ reverse gains from carbon sequestration – adding carbon into atmosphere
- ✓ dust emissions from milling operations

#### **Pesticides**

- ✓ improper application of pesticide amounts
- ✓ application in rainy season resulting in ineffective targeting and increased runoff and uptake by soils and water bodies
- ✓ use of highly toxic chemicals to plants, animals and humans
- ✓ improper use, contamination by high exposure, no precautionary measures leading to health impacts

### **SOCIAL**

#### **Land tenure and ownership**

- ✓ Lack of adequate documentation
- ✓ Lack of clear understanding of land use and occupancy
- ✓ Conflicts in land claims
- ✓ increased values in land prices leading to economic displacement of poor land tenants
- ✓ Transparent rules for benefit sharing of carbon payments between land owner and farmer tenants
- ✓ Rules and agreements in place for traditional chiefs' revenue sharing with locals and other stakeholders
- ✓ Land acquisition and compensation issues
- ✓ Discrimination, lack of grievance mechanisms for all land users and tenants

#### **Maintaining Livelihoods**

- ✓ Enhance food security through improved agriculture production on farmed lands to reduce forest pressures
- ✓ Potential expansion of negative activities by admitted settlements and farms that result in biodiversity loss, ecosystem changes, depletion of natural resources

### **Potential Impact Issues/ Concerns**

- ✓ Increasing demand for forest lands for farming/ settlements by fringe communities because productive lands not available;
- ✓ Adequate, documented and transparent compensation for admitted farmers in order to vacate unauthorised sections of forest

#### **Farmer Rights**

- ✓ Farmers have little say in the harvesting of matured shade trees
- ✓ Little or no compensation for farmers for destroyed cocoa trees during harvesting of shade trees;
- ✓ Higher income from improved yields;
- ✓ No financial benefit to farmers for planting and nurturing shade trees;
- ✓ Difficulties in registering shade trees
- ✓ Unreliable supply of seedlings
- ✓ Long gestation period of native species.

#### **Forest Management**

- ✓ Fire prevention and control
- ✓ Plantation security
- ✓ Community inclusion in management decisions
- ✓ Community participation in surveillance and enforcement
- ✓ Protection of rights to use forest resources
- ✓ Alternative uses for forest waste – charcoal and biogas

#### **Security and Safety**

- ✓ Safety and security of community informants/ whistle blowers
- ✓ Safety and security of FSD field staff
- ✓ Delayed court processes and low fines which do not create proper structures to punish/deter violations
- ✓ Low motivation of FSD field staff – not proper incentive structure

#### **Occupational health and Safety**

- ✓ Lack of awareness creation programs on health and safety including chemical handling.
- ✓ Unavailability and poor use of personal protective equipment and limited/ no enforcement process

#### **Cultural Heritage**

- ✓ Limited access to shrines
- ✓ Preservation of local cultural identity and heritage

#### **Resource Access and Possible Restriction**

- ✓ Rights to question and have individual considerations addressed
- ✓ Possible alternative options
- ✓ Established grievance redress options

55. Mitigation guidelines are given in the ESMF to address the significant impacts. The responsibilities for implementing these measures are described in the Environmental and Social

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

56. The ESMP will be included in the Project Implementation Manual. The ESMP outlines mechanisms for:

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

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

58. Those projects requiring EPA clearance will only commence when an environmental permit has been procured from the EPA. The Agency has provided the list of projects for which an environmental and social impact assessment is mandatory and these are detailed in the ESMF and are consistent with the World Bank categorization of projects.

59. **Safeguards Implementation.** The project will be executed by the Ministry of Lands and Natural Resources and implemented by the Forestry Commission in collaboration with other partners such as COCOBOD and FORIG. A National FIP PMU at the MLNR will coordinate activities of the project and has the main responsibility for implementing the ESMF and the Process Framework. In addition, the FC will have a safeguards focal point for environmental and social due diligence across all Ghana FIP projects (e. g. World Bank, AfDB, IFC). Environmental and social experts who will be recruited by the project as needed. The FSD regional managers will oversee the implementation of all actions to mitigate adverse environmental and social impacts within their respective operational regions, and also supervise their district managers to ensure sound management practices at the community level.

60. **Institutional Strengthening and Capacity Building.** The FC will establish a coordination and implementation group to address environmental and social due diligence across the FIP and other forest related programs (REDD+, FCPF, DGM, and FCPF Carbon Fund) designated the Forestry Commission Environmental and Social Safeguard Focal Point. The FC ESS focal point will be responsible for:

- Coordination of environmental and social safeguards across all programs
- Leadership across the national regional and district levels for the implementation of safeguards
- Providing guidance and project level info and tools on safeguards for all stakeholders
- Managing the environmental and social safeguard experts (consultants)
- Responsible for coordinating all safeguard activities with donors, implementing agencies and other potential investors
- Oversee all environmental and social safeguard training and capacity building.

61. As necessary, the FC ESS focal points will be supported by technical specialists through consultancies; capacity-building activities will be designed to allow staff to incorporate safeguards into standard monitoring. Regional environmental and social focal points will be designated.

62. The competence of the MLNR/FC to carry out their respective design, planning, approval, permitting, monitoring and implementation roles will, to a large extent, determine the success and sustainability or otherwise of the Program. Capacity building will include training workshops and production of guidance reports and tools.

### ***Monitoring & Evaluation***

63. 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 M&E framework.

64. Under this system, the **Minister of MLNR** 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 will support work on improving 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.

65. Within this system, **the Forestry Commission has the following M&E role:**
- Provide guidance to its Divisions, offices and Units at headquarters and offices at the district level on how to implement their sector M&E Plans
  - Collate and validate sector data from the Divisions, Units and districts offices through site Inspections and regional workshops
  - Harmonize and forward the collated district M&E reports to the PPMED.

66. **FIP Program Country Level Reporting.** The project M&E system will feed into the country FIP Program reporting according to the guidelines "Result monitoring and reporting in the FIP" approved by the FIP Sub-Committee on October 30, 2013. The Project Management Unit will be responsible for data collection and upstream reporting of progress towards achieving results

(for the entire FIP program, including this project) 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 cost of implementing the activities.

67. **Project level M&E** 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). It has been developed as a tool for results-based project management and to ensure that information on progress towards achievement of outcomes feeds into management so that timely corrective measures can be taken. It also provides a framework for accountability and a platform for communication of results to beneficiaries. The M&E framework also responds to World Bank reporting requirements, which include twice yearly progress reports, information requirements for a mid-term review and a final completion report.

68. **Results Framework.** Fulfillment of these objectives has been translated into the Results Framework (Annex 1). The M&E system, by collecting data on the Results Framework indicators, will feed into the country FIP Program reporting<sup>18</sup>. The Results Framework is the main instrument for M&E and consists of the PDO statement and a set of SMART<sup>19</sup> results indicators related directly to that objective, and SMART intermediate indicators, i.e. indicators at the component level. Core indicators of the World Bank are included for direct project beneficiaries and for the forestry sector. Some of the indicators are disaggregated as necessary to fulfill certain requirements as regards detail of reporting. While the project's impact on biodiversity is expected to be significant, it will not be reported as an objective in the Result Framework. The changes in biodiversity will be assessed through the co-benefits monitoring system established at the national level for REDD+-related activities. This monitoring system will feed the FIP Program annual report which includes: (i) ex-ante estimations of GHG emission reductions / enhancement of carbon stocks based on the activities being implemented; (ii) livelihood co-benefits; and (iii) other relevant co-benefit themes as they apply to the country investment plan. Most indicators have baselines and targets listed as well as frequency for data collection, data sources and methodology for calculation of baseline and progress values of indicators and responsibilities for data collections. Baseline and target values are included in the Results Framework in Annex 1. Detailed M&E notes for the project indicators will form part of the PIM.

69. **Other Elements of M&E System** will include: (a) technical, procurement and financial assessments; (b) analysis of project intermediate effects and local implementation; (c) surveys of communities and beneficiaries; and (d) other special studies as needed. Ghana is in the process of developing and implementing a national Forest Monitoring System under the REDD+ process. This system will provide information on the emission reductions on the national and sub-national scale, providing the net result from the all the different policies and interventions being implemented in Ghana. This monitoring system will feed into the FIP Program annual report which includes: (i) ex-ante estimations of GHG emission reductions / enhancement of carbon stocks based on the activities being implemented; (ii) livelihood co-benefits; and (iii) other relevant co-benefit themes as they apply to the country investment plan.

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<sup>18</sup> According to the guidelines "Result monitoring and reporting in the FIP" approved by the FIP Sub-Committee on October 30, 2013

<sup>19</sup> SMART = Specific, Measurable, Attributable, Reliable, Time-bound/target.

70. **Data Sources for M&E.** The data sources include various instruments for regular collection of data on the PDO and intermediate indicators. The baseline data for the socio-economic indicators was collected through a survey of 1,500 respondents in all the 55 target communities in the project area, conducting three focus groups, and conducting key informant interviews in all communities. Baseline values for the forest cover and carbon indicators were derived from the 2010 data produced by the Forest Preservation Project (FPP) as provided by the RMSC. The MRV system (designed and to be made operational with REDD+ Readiness funds) will be used to monitor and report on spatial and temporal changes of Ghana's forest resources as well as assessing the dynamics of land use change as input for the Project Results Framework. Other data sources include (1) routine data collection by national M&E system with project records as confirmed through field assessments, and (2) periodic community level surveys at mid-term and completion of the project.

71. **M&E arrangements:** Implementation of the project level M&E will be the responsibility of the M&E function of the MLNR, i.e. the PPMED. The PPMED will also ensure compliance with national, i.e. NDPC, guidelines and reporting requirements for the sector. The FIP PMU will be responsible for data collection, including from the data submitted by the project beneficiary agencies, and upstream reporting of progress towards achieving results to the World Bank and the FIP Steering Committee annually. Each beneficiary agency will have a nominated M&E focal person. Cost for collection of monitoring data and information is included in the project budget.

72. **Independent Evaluation at Project Mid-Term and Completion.** In addition, the project will contract an external independent evaluator at the Mid-Term and Completion stages. These evaluations will serve as inputs for the Mid-Term Review and Completion Reports.

## Annex 4: Implementation Support Plan

### Strategy and Approach for Implementation Support

1. The strategy for Implementation Support has been developed based on the nature of the project and its risk profile. The aim is to provide timely and efficient implementation support to the client to ensure smooth implementation and achievement of the PDO.
2. **Coordination with other Development Partners, including other FIP Implementing Agencies in Ghana and especially FCPF and REDD+ related initiatives.** Implementation support will include: (i) strong coordination with other two FIP implementing partners in Ghana, AfDB and IFC; (ii) coordination of activities with other elements of Ghana's REDD+ program, including those under the FCPF and DGM, and with preparation and potential future implementation of the ER Program; and (iii) alignment of the Environmental and Social Safeguard instruments with the national REDD+ safeguards instruments.
3. **Safeguards.** Safeguards implementation support will be part of the regular implementation support. Specifically, implementation support will include: (i) advisory support on application of safeguards instruments, including ESMF, PMP and Process Framework, and (ii) review of detailed implementation of activities to ensure their compliance with the Bank safeguards policies.
4. **Procurement.** In addition to the prior reviews which will be carried out by the Bank, the procurement capacity assessment has recommended one field mission each year to carry out post-review of procurement actions and technical review. The procurement post-reviews and technical reviews should cover at least 15 percent of contracts subject to post-review, as the risk rating is Substantial. In addition, post-reviews of in-country training will be conducted from time-to-time to review the selection of institutions/facilitators/course contents of training, and justifications thereof and costs incurred. Post review consist of reviewing technical, financial and procurement reports carried out by the Client executing agencies and/or consultants selected and hired under the Bank project according to procedures acceptable to the Bank.
5. **Financial management.** 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 two onsite visits to ascertain adequacy of systems and how effectively the country systems are being used to support implementation. The FM implementation support 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.
6. **Legal support.** Implementation support will include verification that legal conditions have been met, to the extent that these are included.

## Implementation Support Plan

7. **Technical inputs.** The Technical Specialists and the TTL are based in Headquarters (HQ). The co-TTL is based in the Ghana Country Office. The fiduciary team is based in the Ghana Country Office and in the region. The Environmental and Social Safeguards Specialists and the M&E Specialist have been based in HQ during preparation, but country office safeguards staff will be involved in implementation support. Technical specialists on the following aspects, both HQ- and Country Office-based, will be part of the team: forestry, carbon, and environment. The team will also include an Operations Officer (HQ-based). Technical specialists will be part of formal implementation support and field visits, to be carried out twice annually.

8. **Fiduciary requirements and inputs.** Training will be provided regularly by the World Bank's financial management specialist and procurement specialist to enhance project implementation. The team will also help stakeholders to identify capacity building needs to strengthen their financial management capacity and to improve procurement management efficiency. Formal financial management and procurement supervision will be carried out semi-annually, while fiduciary ad-hoc advice and review of IUFs and No Objection requests will be provided on a timely basis as required by the Client and the TTL. Post-procurement reviews will be carried out annually.

9. **Safeguards.** Due to the nature of the investments, the project will require close safeguards implementation support due to the high visibility of environmental and social aspects of REDD+. As such, the project will require support from two senior safeguards specialists with experience in the implementation of similar projects.

Time	Focus	Skills Needed	Resource Estimate	Partner Role
<b>First twelve months</b>	Guidance on institutional arrangements and project supervision	Task Team Leader	8 staff weeks	n/a
	Guidance on institutional arrangements and project supervision	Co-Task Team Leader / Environmental Specialist	8 staff weeks	n/a
	FM Training and Supervision	FM Specialist	2 staff weeks	n/a
	Procurement Training and Supervision	Procurement Specialist	2 staff weeks	n/a
	Disbursement arrangements	Finance Officer	1 staff week	n/a
	M&E arrangements	M&E Specialist	2 staff weeks	Technical input
	Safeguards supervision / environmental safeguards	Environmental Safeguards Specialist	4 staff weeks	Technical input
	Safeguards supervision / social safeguards	Social Safeguards Specialist	4 staff weeks	Technical input
	Technical supervision: technical aspects / carbon	Carbon Finance / Forestry Specialist	2 staff weeks	Technical input

	Technical supervision: technical aspects / environment	Environmental Specialist	4 staff weeks	Technical input
	Technical supervision: institutional and implementation arrangements	Operations Officer	4 staff weeks	Technical input
<b>12-48 months</b>	Project implementation supervision	Task Team Leader	12 staff weeks	n/a
	Project implementation supervision	Co-Task Team Leader / Environmental Specialist	12 staff weeks	n/a
	Financial Management supervision	FM Specialist	6 staff weeks	n/a
	Procurement supervision	Procurement Specialist	6 staff weeks	n/a
	Disbursement monitoring	Finance Analyst	3 staff weeks	n/a
	M&E implementation support	M&E Specialist	3 staff weeks	Technical input
	Safeguards monitoring / environmental safeguards	Environmental Safeguards Specialist	8 staff weeks	n/a
	Safeguards monitoring / social safeguards	Social Safeguards Specialist	8 staff weeks	n/a
	Technical supervision: technical aspects / carbon	Carbon Finance / Forestry Specialist	6 staff weeks	Technical input
	Technical supervision: technical aspects / environment	Environmental Specialist	6 staff weeks	Technical input
	Technical supervision: institutional and implementation arrangements	Operations Officer	6 staff weeks	Technical input

## II. Skills Mix Required:

### Bank team:

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Task Team Leader	8 staff weeks annually	Two missions per year	HQ-based
Co-Task Team Leader / Environmental Specialist	8 staff weeks annually	Site visits as needed	CO-based
FM Specialist	2-4 staff weeks annually	Site visits as needed	CO-based

Finance Analyst (Disbursements)	2-4 staff weeks annually	n/a	Based in the region
Procurement Specialist	2-4 staff weeks annually	Site visits as needed	CO-based
Environmental Safeguards Specialist	2-4 staff weeks annually	At least one mission per year	HQ-based
Social Safeguards Specialist	2-4 staff weeks annually	At least one mission per year	HQ-based
Technical aspects / forestry	2-4 staff weeks annually	At least one mission per year	HQ-based
Technical aspects / carbon	2-4 staff weeks annually	At least one mission per year	HQ-based
Technical aspects / environment	2-4 staff weeks annually	Site visits as needed	CO-based
Technical aspects / operations	2-4 staff weeks annually	At least one mission per year	HQ-based

**Partners:**

<b>Name</b>	<b>Institution/Country</b>	<b>Role</b>
Thomas LeGrand, Siham Mohamed Ahmed, Tabi Karikari	African Development Bank	MDB partner of FIP Program
Joyita M. Mukherjee, Laura Gaensly	IFC	MDB partner of FIP Program
Bart Missinne	EU Delegation / Chair of NRE Development Partner Group, Ghana	Sector donor coordination

## **Annex 5: Ghana FIP Programmatic Links and Development Partner Coordination**

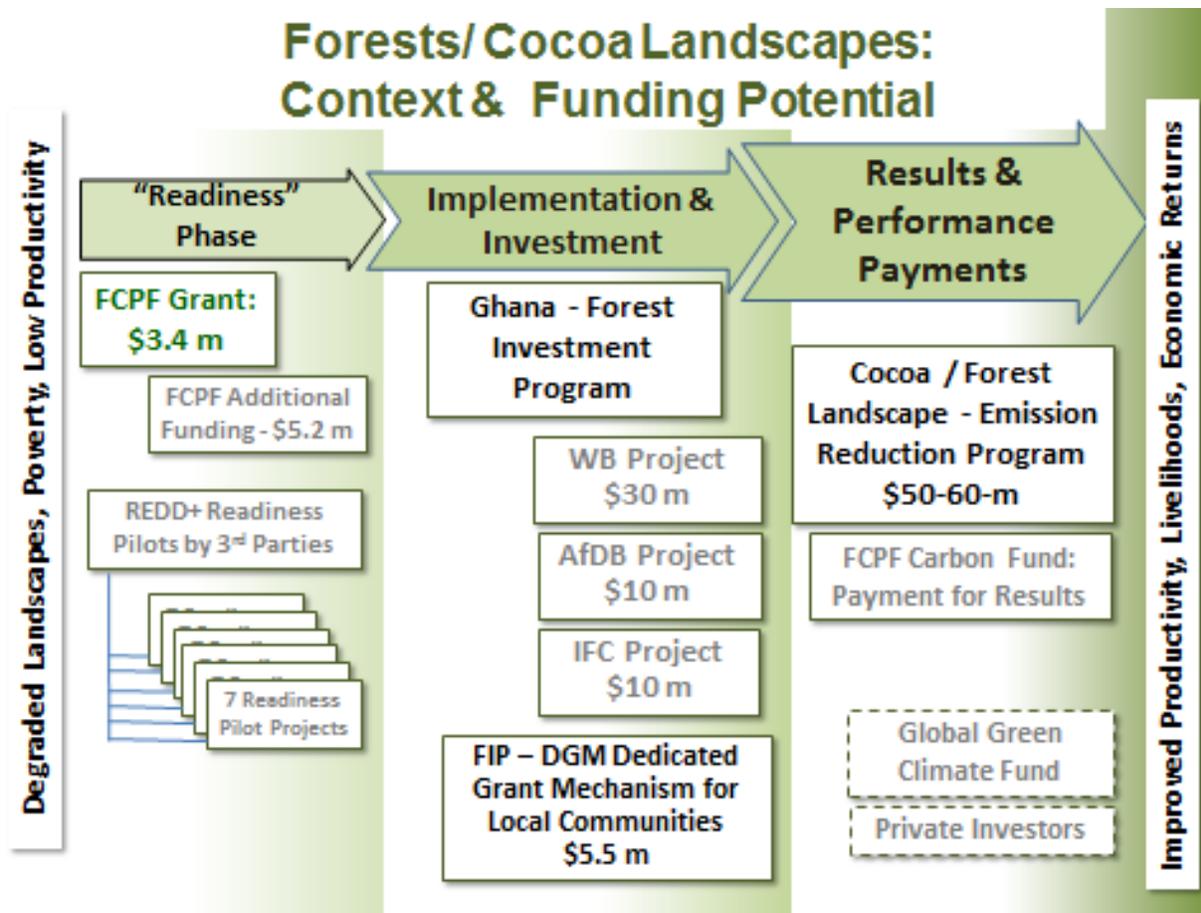
1. This Annex provides additional background on Ghana's agenda for promoting Reduced Emissions from Deforestation and Degradation (REDD+)<sup>20</sup> and the several programs that support it. The FIP set of investments build on prior readiness activities financed by the Forest Carbon Partnership Facility (FCPF) and other efforts financed by development partners. These include the FLEGT Voluntary Partnership Agreement (VPA) of the European Union (EU), the Natural Resource and Environmental Governance program (jointly financed by the Bank, the EU, the Royal Netherlands Embassy, the French Development Agency, and the Department for International Development of the UK (DfID), as well as current investments in improving dialogue, certification, service delivery and extension in the cocoa sector. FIP also assists Ghana to replicate and scale up successful efforts and prepare to access future climate finance, which may take the form of payments for performance.

### **Ghana FIP / REDD+ / Forest Initiatives: Context and Financing Landscape**

2. Development of a national REDD+ program is a three phase process: readiness preparation, investment and implementation, and results-based payments, as illustrated below. In Ghana, the overall program aims to move the nation from a condition of degraded landscapes, rural poverty and low productivity land uses to a condition of improved productivity, livelihoods and returns. This transformation is being supported by policy and governance improvement under readiness; by investments, pilot activities, and community engagement; and by the potential represented by payments for performance that recognize improvements in the landscape. The major elements and financing sources that support Ghana's REDD+, Forest and Cocoa Landscape initiative to improve management practices are shown here:

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<sup>20</sup> REDD+ means reducing emissions from deforestation and forest degradation, conservation of forest carbon stocks, the sustainable management of forests, and enhancement of forest carbon stocks. REDD+ is an effort to create a system of financial incentives for developing countries to reduce emissions from forest lands.



3. Ghana’s REDD+ agenda is supported by the World Bank through several important climate financing instruments, including the FCPF Readiness Fund, the FIP and the DGM, and potentially by payments for performance under the FCPF Carbon Fund. Each of these is described briefly below.

- FCPF Readiness Fund.** The FCPF Readiness Grant (P124060, US\$3.4 million) became effective in October 2011. The Grant aims to support Ghana in preparing to engage in an international REDD+ mechanism and to improve governance and build consensus on actions needed to reduce emissions. The Grant supports REDD+ readiness and has the following key components: (i) REDD+ implementation arrangements; (ii) Reference Levels for deforestation and forest degradation and Monitoring, Reporting and Verification System; and (iii) a socially and environmentally sound national REDD+ strategy. These components will contribute to the governance and operating environment for FIP investments and later phases of implementation or performance based payments. Ghana is among the most advanced FCPF country participants. In May 2014 Ghana submitted its Mid-Term Progress Report to the FCPF Participants’ Committee and implementation is rated moderately satisfactory. Ghana is on track to complete the activities under the Readiness Preparation Grant (closed in November 2014).<sup>21</sup>

<sup>21</sup> Ghana joined UN-REDD Programme as a Partner Country in 2011, but does not receive direct support from UN-REDD for its national program (UN-REDD Newsletter, [www.unredd.net](http://www.unredd.net)).

- **FCPF Readiness – Additional Funding.** The Government has requested an additional US\$5.2 million from the FCPF to finance additional activities needed to achieve more complete readiness.<sup>22</sup> The first Readiness Grant (as noted above) financed preparation of implementation arrangements, reference levels, an MRV design, a national strategy, and a strategic environmental and social assessment. The additional funds will support Ghana to develop a Readiness Package, which will document the country’s capacity to participate in future systems of positive incentives for REDD+. An endorsed Readiness Package is a requirement for Emission Reduction Programs to be selected by the FCPF Carbon Fund (discussed further below). As a basis for the Mid-Term Review of April 2014, Ghana conducted a readiness self-assessment<sup>23</sup> and identified the remaining gaps and associated funding needs to advance toward readiness for later phases by November 2015. Ghana’s Additional Funding request was approved by the FCPF Participants Committee in July 2014. This funding is a foundational step to improving governance and strategy that will enable Ghana later to access much larger sources of climate finance that promote investment and livelihood improvements.
- **Forest Investment Program.** The Forest Investment Program, one of the Climate Investment Funds, finances three inter-related projects in Ghana. These are implemented by the World Bank, the African Development Bank and the International Finance Corporation under one program coordination framework. The overall goal of FIP-financed activities in Ghana is to reduce GHG emissions from deforestation and forest degradation, while reducing poverty and conserving biodiversity. The World Bank component of Ghana’s FIP program (subject of this PAD) is for “Enhancing Natural Forests and Agroforest Landscapes” (P148183, US\$29.5 million). The GoG is executing a Project Preparation Grant of US\$0.5 million for design and baseline activities.
- **FIP Dedicated Grant Mechanism (DGM).** The Bank is assisting Ghana to gain access to resources under the Dedicated Grant Mechanism (DGM) for Local Communities (P145316, US\$5.5 million). The DGM is a component of the global FIP, which was designed specifically to promote the inclusion of communities reliant on forests in policy formulation and initiatives that seek to reduce deforestation and degradation. The aim of the DGM in Ghana is to improve the capacity of local communities in Ghana, with focus on the High Forest Zone in the Western and Brong Ahafo Regions, to engage in FIP and other REDD+ activities. Key results will be to develop Forest Management Plans/Landscape plans in Western and Brong Ahafo Regions in an inclusive and participatory way; provide training and awareness raising activities; and support pilot activities with the intention to reach key beneficiary groups. The proposed project will finance the demand-driven provision of grants to community organizations through a National Executing Agency, which remains to be selected with input from representatives of involved communities. This approach complements and contributes to Ghana’s ongoing efforts to engage non-state actors and local communities in sustainable natural resource management. The DGM Ghana follows these principles: (a) ownership and joint decision-making by local communities; (b) transparency and accountability in selection of implementing partners, members of governing bodies and beneficiaries; (c) flexibility, efficiency and administrative simplicity to enable easy and streamlined access of grants by

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<sup>22</sup> A formal request to the FCPF was made with the Mid-Term Progress Report, submitted April 2014, endorsed by Ghana’s National REDD Working Group (NRWG), chaired by the Deputy Minister of MLNR.

<sup>23</sup> The Readiness Package Assessment Framework provides a common tool to measure countries’ progress on core readiness activities. A Readiness Assessment is undertaken when activities proposed in the R-PP are well-advanced.

local communities; and, (d) social inclusion and equity to ensure the participation and the protection of women, children, elders, and others vulnerable to exclusion. DGM may include communication efforts and grant windows targeted at women and youth. Identification of specific areas and communities for participation in DGM will be based on the target zones selected for FIP interventions.

- **Emissions Reduction Programme (ER-PIN).** Under the FCPF Carbon Fund, the Bank is providing technical assistance to Ghana for the preparation of an Emissions Reduction (ER) Program. In line with Ghana's emerging national strategy options and building on FIP piloting, the ER program targets long-term emission reductions primarily through sustainable production of cocoa in the High Forest Zone. The ER Program was selected in April 2014 into the pipeline of the FCPF Carbon Fund, and allocated US\$650,000 for preparation of a full program document. As part of this effort, a Letter of Intent has been signed and the ER Program will be processed through Bank and FCPF systems. If selected to sign an Emission Reduction Payment Agreement (ERPA), Ghana could potentially receive US\$50 to US\$60 million in performance-based payments.

4. **Integrated Climate Finance Package.** As shown in the figure above, this set of climate and REDD+ investments and financing opportunities represents about US\$100 million, which aims to assist Ghana in reducing deforestation and forest degradation. The FIP is one part of a structured financing package that includes technical assistance for readiness under FCPF, investments under FIP and, eventually, results based financing under an Emissions Reduction Program (Carbon Finance) to create the conditions and incentives to sustain emission reductions in the long term. The challenge is to address drivers of deforestation associated with cocoa expansion – a sector with \$2 billion in annual revenue. Climate finance opportunities cannot replace this revenue, but can act as a catalyst and an incentive that helps to shift the sector toward more sustainable practices. Climate finance can also help to mobilize or leverage other forms of financing (as envisioned in the FIP design document) that can sustain changes throughout cocoa supply chain. In this case the licensed buying companies, forest sector, COCOBOD and cocoa companies are key stakeholders who will drive and sustain change for greening cocoa supply chain, including positive mitigation impacts. Due to synergies across readiness, governance, policy, and investment in implementation from the several financing instruments, attribution of mitigation and other benefits to one single mechanism is not possible. Ghana will report measured, verified emission reductions through its national accounting framework which is being designed through FCPF support, and the monitored, verified emission reductions at jurisdictional. Ghana is also setting up a national registry and information system for tracking emission reductions, which will ensure that emissions reductions are reported consistently and appropriately.

5. In addition to these related investments of the World Bank, FIP project development also involves the AfDB and the International Finance Corporation. These two efforts are summarized briefly here and in the following table.

- The **African Development Bank** is supporting the FIP-financed project on Engaging Local Communities in REDD+ for Increasing carbon stocks and poverty reduction in the off reserve areas of the High Forest Zones by engaging communities in land management approaches that generate direct financial and environmental benefits. This project is implemented by the MLNR through 2019 and is financed with US\$9.75 m from the FIP,

US\$5.33 m from the African Development Fund and a US\$0.75 m contribution from the GoG. The launching workshop for this project was held in Sunyani in September 2014.

- The **International Finance Corporation** is supporting the FIP-financed project that aims to build private sector engagement in REDD+ and support climate compatible projects/investments. The project will strive to promote sustainable agriculture, forestry and related industries resulting in economic growth and the reduction of greenhouse gas (GHG) emissions.

6. The table below shows how the MDB components of the Ghana FIP Program are linked into achieving broader goals across the landscape. The MDB components are also geographically separated in terms of activities on the ground to avoid overlap and duplication. The institutional arrangement for managing and coordinating this program of investments is discussed in PAD Section IV A.

<b>Ghana FIP Program:</b> <i>Aiming to reduce GHG emissions from deforestation and forest degradation, while reducing poverty and conserving biodiversity</i>		
<b>IN FORESTED LANDSCAPE CORRIDORS</b>	<b>AGRIC &amp; COCOA LANDSCAPES (Off Reserve, Outside Corridors)</b>	<b>ON &amp; OFF FOREST RESERVES</b>
<b>World Bank: Project 1 Enhancing Natural Forests and Agroforest Landscapes</b>	<b>AfDB: Project 2 Engaging Local Communities in REDD+</b>	<b>IFC: Project 3 Building Private Sector Engagement in REDD+</b>
<b>2.1. On Farms, with Communities</b> <ul style="list-style-type: none"> <li>• Enhancing trees w CREMA institutions</li> <li>• Enhancing climate smart cocoa practices</li> <li>• Integrated landscape planning</li> </ul> <b>2.2 In Corridor, On Reserve</b> <ul style="list-style-type: none"> <li>• Reducing further degradation due to drivers of deforestation</li> <li>• Facilitating enabling conditions for plantation investment</li> <li>• Enrichment planting &amp; nursery development</li> </ul>	<ol style="list-style-type: none"> <li>1. Community Restoration of Degraded forests &amp; agricultural Landscapes (forests outside of the Forest Reserves, sacred groves, wildfire management, seeds &amp; incentives)</li> <li>2. Promoting Climate Smart Cocoa &amp; Agroforestry outside corridors with communities, in degraded cocoa areas</li> <li>3. Community alternative livelihoods for fuel wood &amp; charcoal; capacity building in NTFPs, Carbon, Climate Smart Agriculture</li> </ol>	Working with Timber & Cocoa Enterprises to: <ul style="list-style-type: none"> <li>• Improve financing &amp; incentives for timber and/or cocoa production</li> <li>• Improve quality &amp; certification systems, coverage</li> <li>• Improve smallholder opportunities and supply chains</li> </ul>
<b><u>Cross cutting activities:</u></b> policy & incentive reforms, benefit sharing models, land use planning, capacity building & outreach <b><u>FIP Dedicated Grant Mechanism for Local Communities:</u></b> Working with Communities, CBOs, NGOs, Cocoa Agents on outreach, access, participation, equity		

## Coordination with Related Programs and Development Partners

7. Ghana's development partners convene a Development Partners' Group as part of the Sector Working Group on Environment, Natural Resources and Climate; similar working groups exist for all sectors. The group could meet more regularly, but serves as a useful venue for exchanging information, discussing issues and gaps in current programs and harmonizing dialogue with the Government. Bank staff and missions participate in these discussions and provide information on activities and investments, noting that many Bank-financed activities are supported through global trust funds, including FCPF, FIP, GEF and others. The partners summarize information about their programs in a coordination matrix, which informs this section (from the update in June 2014).

8. The FIP preparation process and selection of activities and field locations is also building on national dialogue processes, technical assessments and stakeholder engagements initiated and supported under other initiatives and programs supported by development partners, including the Natural Resource and Environmental Governance set of investments and technical assistance, the Forest Law Enforcement, Governance and Trade process and associated Voluntary Partnership Agreement (VPA), Cocoa sector engagements and certification processes.

- **Ghana-European Union Voluntary Partnership Agreement on Forest Law Enforcement Governance and Trade (Ghana-EU VPA FLEGT).** In November 2009, Ghana signed a FLEGT VPA with the EU. A principle aim is to develop a Timber Legality Assurance System that would pave the way for issuing licenses for export to the EU. The Timber Legality Assurance System consists of a definition of legally produced timber, a chain of custody system that tracks timber from harvest to point of export, verification procedures that assure that legality requirements have been met, FLEGT licenses that validate the results of verification and allow for customs clearance of the timber products in the EU, and an independent audit, which guarantees the credibility of the functioning of the system. The VPA process has contributed to some achievements that help Ghana improve legality, monitoring and verification systems. Ghana has established governance structures like the Multi-Stakeholder Implementation Committee to oversee implementation and a Joint Monitoring and Review Mechanism with EU participation. The Forestry Commission has set up a Timber Validation Department which will serve as an internal auditor in the forestry sector responsible for the verification of compliance with the supply chain controls. A multi-stakeholder Timber Validation Committee also oversees compliance verification and processing of licenses by the Timber Industry Development Division. Policy and legal reforms have been put in place (e.g., new Domestic Market Policy and the Public Procurement Policy), as well as the FLEGT Legislative Instrument (LI 2184) which allows for the issuance of FLEGT license and establishment of the Timber Validation Department. The VPA process has also supported training, development of procedures, field testing of protocols, development of an electronic Wood Tracking System, appointment of an Independent Monitor and joint evaluations. Although there are some issues still to work through (conversion of old leases and concessions, addressing imported and transit timber, revision of forest management plans and logging manuals, acceleration of deployment of the Wood Tracking System, etc.), the hard work in the last year should result in issuance of the first FLEGT licenses by mid-2015. This program works in Ghana with GoG, FAO, International NGOs and domestic CSOs to contribute to

implementation of the FLEGT licensing process at community level for both domestic and export markets. The program runs to 2015 with support from the EU and DfID. These systems, procedures and legal instruments will help Ghana to address illegal logging and associated incentives which contribute to deforestation and degradation.

- **Ghana - Natural Resource and Environmental Governance (NREG)** is implemented by the Ministry of Finance with financing from the EU through 2015. The aim is to contribute to the implementation of the sector strategy and address issues in the inter-related sub-sectors of forestry and wildlife, mining and environmental protection.
- **Natural Resources and Environmental Governance Technical Assistance (P129769)** is supported by a grant from World Bank (IDA), runs through 2016 and is implemented by the Ministry of Finance. The project aims to improve institutional capacity of key ministries, departments and agencies in natural resource and environmental management. Intended as support for coordination and foundational policy studies, the project has only become effective in 2014.
- **Netherlands Cocoa Rehabilitation and Intensification Programme for Ghana (2013-2017) (CORIP)**. Funded both by the Netherlands through a Euro 7 million grant and by the private sector through an expected co-funding of up to 14 million Euros, CORIP aims to develop the economic, social and environmental sustainability of cocoa farming in Ghana. It addresses the institutional challenges of the cocoa supply chain in finding efficient ways of providing support services to cocoa growers. Most of Ghana's cocoa and cocoa products are exported to the Netherlands. The program aims to address challenges to Ghana's cocoa sector competitiveness, including declining soil fertility, low yields and returns to farmers, aging rootstock, access to technology, skills and modern inputs, and environmental challenges, leading to an uncompetitive sector. Under this funding, Solidaridad is working with farmers, cocoa and chocolate companies, service providers, consumers and government to achieve market transformation toward long term environmental sustainability, economic viability, and with good returns to farmers. CORIP will help Ghanaian cocoa farmers to implement best agronomic and farm management practices through the establishment and operation of Rural Service Centers, privately run hubs for knowledge, information and inputs in cocoa farming communities. The program aims to establish 20 Rural Service Centers over four years, each catering for 2,000 farmers. Six initial private sector cocoa companies are participating in CORIP, including Cargill, Olam, Mondelez, Armajaro, Touton, and Archer Daniels Midland. Other collaborating partners include the International Fertilizer Development Center, Ghana COCOBOD/Cocoa Research Institute of Ghana and The Dutch Sustainable Trade Initiative.
- **Forest Preservation Programme (FPP)**, funded by Japan. To assist Ghana in developing a Reference Emission Level/Reference Level the Japanese Government, through the Forest Preservation Programme, provided US\$7.8million to procure satellite imagery and remote sensing hardware and complete a carbon estimation study. Under the FPP high-resolution imagery (Lidar imagery, Landsat/ Disaster Monitoring Constellation and Advanced Land Observing Satellite imagery) were procured. After ground verification, the satellite imagery were analyzed and processed into wall-to wall- land use land use, change and forestry maps for Ghana for three dates: 1990, 2000 and 2010. Remote sensing hardware (such as servers, workstations and printers), software (such as ArcGIS and ERDAS) and survey equipment (Global Positioning System devices, tree measurement tools, etc.) were procured and installed primarily at the Resource Support Management Centre (RMSC) of

the Forestry Commission. Two weeks of training in Geographic Information System /image processing and Lidar/forest inventory and biomass estimation was also undertaken for 38 staff of the Forestry Commission in April, 2012. The project was completed in April 2013.

- The EU is also supporting “**Strengthening Civil Society Informal and Private Sector Participation in Forest Law Enforcement and Governance,**” implemented by the National Working Group on Forest Certification and Friends of the Earth Ghana. This intervention will help improve forest governance over 3 years in 20 forest fringe communities in Ashanti, Eastern, Western and Brong-Ahafo regions. The aim is to improve forest governance by reducing illegal forest harvesting and corrupt practices in the forestry sector. In addition to training and engagement with harvesters, the project will engage media organizations and provide training on permitting processes and the organization of anti-corruption forums. The project will also support 20 dialogue platforms at district level.
- **Ghana Cocoa Platform.** The United Nations Development Programme (UNDP) also provides support for development and operation of COCOBOD’s Ghana Cocoa Platform, a US\$1.2 million project through 2015. The Platform aims to enhance public-private dialogue and joint action planning to support the scale up of sustainable production in the sector. The Platform consists of long term facilitated dialogues for stakeholders involved with the Ghanaian cocoa supply chain, with support from private sector interests. The Cocoa platform includes as partners MLNR, FC, MOF, and private enterprises. The Platform aims to address root issues, such as land tenure system, policy and institutional capacity for national technical support, access to crop inputs, access to finance and markets. It will enhance exchange and coordination among stakeholders. The platform will also contribute to technical papers and committees, organized around specific intervention areas, including productivity, extension, access to finance, labor, deforestation and land tenure.
- **Environmental Sustainability and Policy for Cocoa Production in Ghana.** UNDP also supports this initiative implemented with COCOBOD (US\$1.7 million) through 2015. This activity aims to create institutional systems, tools and policies to rehabilitate cocoa landscapes; conserve and expand forests, forest buffer zones and corridors; and incentivize cocoa farmers to adopt environmentally friendly best practices.
- **The Community Forestry Management Project (CFMP)** was initiated by the GoG, with AfDB support, to test the effectiveness of trees in farming systems within forest reserves using the Modified Taungya System (MTS). The objective was to rehabilitate degraded forest reserves while increasing production of agricultural, wood and non-wood forestry products and strengthening the capacity of relevant institutions. It also aimed to improve household incomes of the participating forest fringe communities. The project closed in 2010, but remains relevant for its acceptance among beneficiaries and lessons learned about community participation in on-reserve forests.<sup>24</sup> The Modified Taungya System is a method of forest plantation establishment where farmers are given parcels of land to produce food crops (in the short run), plant and maintain timber trees in exchange for a share of the value of the trees (in the long run). The project provided access and technical assistance that facilitated community engagement, which created incentives to care for tree seedlings at establishment and created a long term benefit sharing arrangement for when the trees are harvested after 20 years. Communities also got benefits from the visible short

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<sup>24</sup> Lessons were highlighted at the 1<sup>st</sup> National Forestry Conference, by FORIG in September 2014.

run improvements in vegetation cover. The project provided training in integrated forest management and sustainable livelihoods, as well as infrastructure support such as foot tracks, feeder roads, and storage facilities, and inputs such as verified and approved seeds and seedlings. Communities also participated in establishment of seedling nurseries. The project resulted in over 13,000 hectares of plantations established, and associated carbon sequestration benefits. Some lessons include that involved community groups should have a constitution, leadership, commitment and functions clearly spelled out; achievements should be well documented; target areas should be degraded, available and mapped before allocation; with nearby communities willing to participate/provide labor. The plantations were established under supervision of FSD staff and trained community leaders, adhering to professional plantation establishment standards. Communities also engaged in establishing plantations off-reserve, with input and guidance from FSD. The MTS method was successful, but could be further improved by reviewing the incentive mechanism, delivery of infrastructure support, training and technical support, and by clarifying financial arrangements. Careful planning and analysis are needed to ensure sustainability in the long term, so that beneficiary livelihoods can be sustained after project technical and financial support come to an end, and after the canopy closes and inter-cropping is no longer possible. Beekeeping, livestock rearing, non-timber forest products (NTFPs) and engaging women are practical alternatives to explore.

- **Switzerland’s State Secretariat for Economic Affairs (SECO)** aims to strengthen competitiveness and inclusiveness with efforts to develop sustainable, integrated value chains mainly in agricultural and forestry products, including support to REDD+ strategy development and implementation. SECO also has a substantial program to promote good economic governance and strong institutions, which supports public financial management reforms, including improved natural resource taxation. SECO intends to support seven REDD+ pilots selected by the National REDD+ Secretariat from 17 submitted proposals. SECO also financed a study on economic viability of REDD+ pilots that will inform future decisions for the REDD+ program.
- **The Coastal Sustainable Landscapes Project**, launched in 2013, promotes coastal landscape conservation in Ghana’s Western Region and is supported by the US Forest Service (USFS) and the United States Agency for International Development working with the GoG in the six coastal Districts of the Western Region. The project will contribute to strengthening the enabling environment, awareness and coordination capacity; reinforcing applied research for improved ecosystem services delivery reinforced, and improving livelihoods through enhanced natural resources management in targeted areas.

9. In addition to forestry and REDD+ related efforts, development partners are also supporting other relevant environment and natural resource related projects, including:

- In the broader climate change realm, UNDP works with MESTI to support several programs including a Low Emission Capacity Building Programme with MESTI/EPA, a Green Economy Transition in Developing Countries, and a Green Economy Initiative. These initiatives are supported by the EU, Australia, the Netherlands and others. UNEP is also engaged with MESTI on Green Economy work and helping Ghana to prepare a Climate Change Adaptation and Development Strategy, with funding from Denmark.
- Canada (Department of Foreign Affairs, Trade and Development) is supporting the Ghana Environmental Management Project, US\$8 million in the Northern, Upper West and

Upper East Regions, implemented through MESTI – EPA for the period to 2015. The aim of the project is to strengthen institutions and rural communities in order to enable them to reverse land degradation and desertification trends in three regions of northern Ghana. The project also aims to adopt sustainable land and water management systems to improve food security and reduce poverty.

- Denmark's Development Cooperation is supporting research projects through universities, which aim to contribute to new knowledge-based solutions in developing countries.
- DFID, Denmark, Finland, Austria are supporting an Adaptation Learning Programme managed by CARE international through the International Climate Fund.

### **Related Projects in the World Bank Portfolio**

10. The FIP process can also learn from and collaborate with other Bank investments in the agriculture, environmental and natural resources sectors, including the Sustainable Land and Water Management Project, the Land Administration Project, the Commercial Agriculture Project and others.

- **Land Administration Project - 2** (P120636, US\$55.0 million equivalent) runs to 2016 and aims to consolidate and strengthen land administration and management systems for efficient and transparent land services delivery.
- **Ghana Commercial Agriculture Project** (P114264, US\$100.0 million) runs to 2017 and is implemented by the Ministry of Food and Agriculture. The project aims to increase access to land, private sector finance, input- and output-markets by smallholder farms from private-public partnerships in commercial agriculture in Accra Plains and Northern Savannah Ecological Zone.
- **Sustainable Land and Water Management** (P098538) runs to 2016 and is implemented by MESTI. The project aims to expand the area under sustainable land and water management practices in selected watersheds.

## Annex 6: Ghana FIP Alignment with Global FIP Purpose and Criteria

This Annex describes how the design and activities respond to the Forest Investment Program’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 Appraisal Document. The tables on following pages outline the issues addressed by each components, transformational aspects, and expected co-benefits.

<b>GHANA FIP Alignment with FIP Investment Criteria</b> <i>(Source: FIP: Investment Criteria and Financing Modalities. CIF. June 29, 2010)</i>	
<b>FIP Criteria</b>	<b>GHANA FIP Response</b>
a. Climate change mitigation potential	Aims to reduce deforestation and encroachment, the major source of Ghana’s GHG emissions (see PAD introduction)
b. Demonstration potential at scale	Component 4 provides resources for uptake and replication beyond the FIP corridors and landscapes.
c. Cost-effectiveness	Sections VI A and B provide a technical and economic analysis of the project positive benefit cost ratio. Sections VI C and D describe the fiduciary controls put in place to ensure cost effective utilization of funds.
d. Implementation potential	Ghana FIP is an integral part of Ghana’s REDD+ initiative and builds on readiness preparation activities and consultations funded by other programs and partners (Project Overview, Annex 5)
e. Integrating sustainable development (co-benefits)	Introduction shows how the FIP effort fits into Ghana’s sustainable development program, as in the GSGDA, and fits into the Bank’s overall Country Partnership Strategy.
f. Safeguards	Component 2 aims to secure forest reserve boundaries and reduce encroachment by working with communities and cocoa farmers.
<b>Additional issues of interest to FIP</b>	
Addressing drivers of deforestation and degradation	Aims to address drivers of deforestation from agricultural encroachment, weak policy incentives and enabling environment, and inadequate knowledge of good practices. See Introduction.
Capacity building	Component 3 provides resources for learning and capacity building.
Coordinating with other REDD+ efforts	Annex 5 above illustrates how the FIP integrates with REDD+ related activities of other development partners, and the FCPF.
Forest-related governance	Aims to improve policy interpretation and implementation to improve community engagement and responsibility for natural resources management (See Comp 1)
Inclusiveness of process and participation of stakeholders	FIP builds on a multi-year REDD+ readiness engagement of stakeholders financed by FCPF, and FLEGT VPA. Consultative processes are outlined in the ESMF document, filed separately.

Leveraging additional financing including private sector	Activities in Component 2 aim to improve the enabling environment for private investment in timber plantations and to improve engagement of cocoa sector players in more sustainable and climate friendly agriculture management practices.
Measurable outcomes and results-based approach	Component 3 builds on the FCPF Readiness MRV program and Component 4 provides resources for the M&E system.

<b>FIP Components Alignment with Transformation and Co Benefits</b>			
<b>Component</b>	<b>Problem Statement</b>	<b>Main Aims / Transformational Impact</b>	<b>Expected Benefits / Co-Benefits</b>
<b>Component 1: Policy Reforms and Institutional Strengthening</b>			
<ul style="list-style-type: none"> <li>• Pursue changes in policy “practice” and incentives to improve enabling environment for SLFM</li> <li>• Develop/ improve institutional models, procedures, guidelines to enhance quality of FC service delivery</li> </ul>	<p>Current policy implementation practices create disincentives for rural communities for the care of existing trees in the landscape. Approaches to allocation of timber harvesting rights, documentation for newly planted trees, and compensation for damage done to agricultural investments during forest harvesting disadvantage farmers and communities. Under these conditions, farmers remove natural trees (illegally with some financial benefit) to reduce risk. Communication barriers (and mistrust) between communities and the FC compounds the situation.</p>	<p>This activity aims to revise policy interpretation and implementation practices (drawing on workable approaches and lessons from the field, while avoiding legalistic “debate trap”). Revising the approach on the ground will improve the incentives faced by farmers for sustaining trees in landscapes. Providing new skills, tools and models will enable FC staff to engage more collaboratively with communities, farmers, CREMA organizations, and cocoa sector players.</p>	<p>Improved policy implementation will improve a range of outcomes on the ground, but will also foster new and more collaborative approaches that can improve natural resource governance more generally. Improved relationships between communities and government agencies over land and resource management will reduce conflict and lead to more beneficial future interactions.</p>
<b>Component 2: Pilot Investments for Improved Forest and Landscape Management with Communities</b>			
<b>Pilot 2.1: Enhancing Trees and Climate-Smart Practices in Agroforestry Corridors and Cocoa Landscapes on Farms with Communities</b>			
<ul style="list-style-type: none"> <li>• Securing and enhancing trees in key landscapes/ corridors with communities</li> </ul>	<p>Deforestation and land degradation on community lands and agricultural areas are caused by expansion of agriculture, misaligned incentives for the care of trees on private/ farm land, weak extension and communication efforts, and low value on natural habitat relative to livelihood activities. Current landscape degradation processes result in reduced soil fertility, encroachment into forested areas, reduction of native trees on farms, reduced wildlife presence, and more common wildfire – which produce negative effects felt by farmers, rural communities, and Ghanaian society generally. Community Resource Management Areas (CREMAs) and Community-based</p>	<p>This activity aims to adapt and expand the CREMA approach to promote greater participation and benefits to communities from protecting and expanding trees and cover in key corridor landscapes. It will also promote and demonstrate new practices for devolved forest and tree management that benefit both communities and environmental outcomes. The transformative impact of this activity lies in giving communities the incentives, knowledge and tools to improve landscape management for their own benefit, while at the same</p>	<p>Devolving management responsibility, improving enabling conditions and providing training and inputs to local resource users is expected to result in improved soil productivity, increased tree cover, less frequent fire, and increased wildlife abundance, which will benefit both the targeted community of farmers and wider users of the landscape. Carbon retention/ reduced emissions may be able to be converted to tangible financial benefits to communities at some</p>

	Organizations are established institutional models that devolve management responsibilities and share benefits more widely. Government, community, and NGOs would like to expand these models beyond wildlife management and wildfire control to include broader natural resource management responsibilities.	time emphasizing the co-benefits of increased tree cover and carbon sequestration.	point, but the project is not dependent on this. Wildlife benefits are expected through greater habitat complexity and connectivity between more protected areas in Ghana's High Forest Zone, a globally recognized biodiversity area.
<ul style="list-style-type: none"> <li>• <b>Enhancing trees and smart cocoa practices in admitted farms within forest reserves.</b></li> </ul>	<p>Cocoa farming is the most important agricultural livelihood activity and revenue earner, yet expansive practices also contribute to deforestation and forest degradation. Average yields are low (&lt;400 kg/ha) relative to potential (&gt;1000 kg/ha) and most production increases have come from expanding area, rather than intensification with modern inputs. Extension services and access to inputs have been weak and inconsistent. Cocoa expansion may cause direct loss of forest cover through encroachment and conversion or more gradual loss of trees in the agricultural landscape in a transition from shaded cocoa to open grown cocoa. Shaded cultivation preserves carbon stocks comparable to degraded forest, while open cultivation reduces stocks by half.<sup>25</sup></p> <p>This dynamic of cocoa cultivation, encroachment and forest loss is particularly destructive when it occurs within forest reserves. "Admitted farms" were legally allowed and demarcated when forest reserves were established. Currently there are 598 legal admitted farms (80 percent cocoa) covering about 12,000 hectares in 47 forest reserves in WR and BA regions. However, some admitted farms have expanded beyond their</p>	<p>This activity aims to reduce forest encroachment associated with admitted farms and to enhance carbon stocks in admitted cocoa farms by scaling up support (a combination of extension, inputs, certification, and incentives) to small holder admitted farmers to increase protection of existing trees, planting of new trees, agro-forestry and shade grown climate smart cocoa. The transformative impact comes from demonstrating and scaling up best practices for raising cocoa yields while reducing environmental impact, and by providing cocoa producers with the incentives, knowledge and tools to improve farm level outcomes, which will also yield wider benefits from managing trees and forest mosaics within the cocoa landscape. The provision of support, extension and inputs to farmers will be built into the supply chain through existing institutions. The activity builds on the alignment of incentives among the Government, cocoa regulators, cocoa buyers, and cocoa farmers who are now striving to ensure sustainable and</p>	<p>Beyond the productivity and economic benefits to farmers, the increase of trees and shade in cocoa landscapes will improve soil quality and fertility and promote other environmental services, such as pollination and moisture retention. Improving yields on farms and raising awareness about forest boundaries will reduce encroachment and increase habitat quality for biodiversity and ecosystem services in forest reserves (which will be linked through landscape corridors to other reserves). Communication and extension will help to raise awareness and provide technical information that will benefit farmers more generally, e.g., increasing yields, reducing fire. Benefits and lessons learned will extend to cocoa farmers in wider landscapes beyond forest reserves.</p>

<sup>25</sup> Carbon stocks in forest reserves in the High Forest Zone (HFZ) can be over 400 tCO<sub>2</sub>e/ha while the stock in degraded reserves can less that in the surrounding cocoa landscape (about 200 tCO<sub>2</sub>e/ha).

	original boundaries and degraded the forest reserve through cocoa and other plantings.	climate friendly supply chains and production methods.	
<ul style="list-style-type: none"> <li>• <b>Support integrated landscape level planning in support of community-based resource use decisions</b></li> </ul>	Weak spatial and land use planning do not support improved, informed and sustainable decision making. Top down decisions at times have not respected the existing land uses and production activities at community level. From the bottom up, individual agents often make land use decisions (e.g., clearing trees, burning for land preparation) that are incompatible with long term sustainable management aims. Enforcement of rules becomes easier when all parties recognize and acknowledge the rationale and mutual agreement behind the rules. Improved management of forests and trees in reserves and in agricultural landscapes depends on mutual agreement on a set of practices, use and non-use zones, etc. Within CREMAs, and as part of the establishment process, participatory land use management is required to ensure that all community members understand and agree on the designated uses, zones, etc.	This activity aims to enhance the participation of farmers and communities in planning and management of forests, trees and natural resources within key target landscape corridors. Improved knowledge and participation is expected to contribute to decisions that lead to more sustainable outcomes.	This activity is expected to produce increased understanding of landscape processes, priorities, and potential threats and agreed upon practices. It will contribute to increased trust between Government Agencies and communities/user groups. This will also increase information flows and feedback mechanisms to improve practices and procedures in other components or in replication / scale up efforts.
<b>Pilot 2.2: Pilot Investments on Forest Reserves for Reducing Degradation, Enrichment Planting, Nurseries, and Plantation Development for Restoring Degraded Forest Landscapes</b>			
<ul style="list-style-type: none"> <li>• Reducing further degradation of permanent forest estates (by engagement with admitted farms and CBOs).</li> </ul>	As noted above, some admitted farms in forest reserves have expanded beyond legal limits degraded the forest reserve through cocoa and other plantings. Though supply chain players want to promote sustainable and climate friendly production methods, these cocoa farmers cannot join certification systems and benefit from other kinds of cocoa extension services. At the same time, they are illegally and inequitably gaining access to land and soil fertility services that are not available to neighboring farmers who do not encroach, causing some conflict and resentment within forest fringe communities. Regularizing and demarcating the boundaries of admitted	<p>This activity aims to secure the extent, condition, structure and composition of forest reserves and reducing further degradation and forest loss through illegal logging, wildfire and encroachment associated with illegal expansion of admitted farms and settlements in forest reserves in the target area WR and BA.</p> <p>The transformative aspect is the facilitation of close collaboration with forest-fringe communities and CBOs, as well as enhanced communication and</p>	Reducing encroachment and degradation will enhance the quality of forest reserves, including biodiversity, carbon stocks, and environmental services. Engagement of communities will improve relations, build awareness and capacity, and strengthen local management institutions (CBOs). Admitted farmers will gain legal boundaries which may enable them to access additional extension and certification

	<p>farms, engaging and educating farmers, and improving productivity on farm will help to reduce the incentive to encroach and provide more legal stability to the farmers – and to the forest reserve managers. There is also an opportunity to enhance the capacity of FSD field staff through targeted training and logistical support to undertake more effective monitoring, outreach and extension and to improve community relations.</p>	<p>engagement with communities. CBOs will be supported to assist in increasing public awareness and community involvement in monitoring and protecting forest reserves. The activity will offer training and support to Community Fire Volunteers, Community Forest Committees (CFCs), Community Biodiversity Action Groups (CBAGs) and other community groups.</p>	<p>services, enabling them to intensify production and make their legal crop more valuable.</p>
<ul style="list-style-type: none"> <li>Enhancing carbon stocks through facilitation of plantation investment in severely degraded landscapes.</li> </ul>	<p>Ghana suffers from high deforestation and degradation, particularly in forest reserves, due to overharvesting, unauthorized encroachment, wild fire, illegal logging and inadequate enforcement. Some reserves are so degraded that they have become almost grasslands, so natural regeneration to a forested state is unlikely. Estimates from 1996 note that almost 30 percent of FR in HFZ were in very bad status, and almost 400,000 hectares were proposed for conversion to forest plantations. The imbalance between growing domestic timber demand and the limited/declining supply of sustainably harvested timber (mainly exported) is a key factor in this causal chain. Under the VPA/FLEGT process, Ghana has made commitments and is making efforts to improve governance and contain the illegal logging practices. Monitoring and enforcement efforts have been increased, but have yet to show impressive results on the ground.</p> <p>At the same time, the Government has plans to augment the legal, sustainable supply of timber through a plantation development program, under a Forest Plantation Strategy that is being prepared, which aims to enhance and promote private sector investments. Several successful</p>	<p>This activity aims to enhance carbon stocks through restoration and sustainable forest management in severely degraded forest reserves by improving investment promotion and developing procedures for public-private partnerships and other investments in forest plantation development.</p> <p>The transformative aspect of this activity is to learn from the negative experience of government driven plantation efforts and shifting to a private sector led model. This activity aims to enhance the investment climate by providing clear models and national procedures for investment (on reserve and off-reserve) and clearly designated areas (in degraded forest reserve) for forestry investment and plantation development.</p> <p>Increased private sector investment in forestry and plantation development has the potential to generate significant local economic opportunities through seedling production and service</p>	<p>Local communities will benefit from employment and opportunities for service delivery and out-grower and other business opportunities, such as seedling production for plantation development</p> <p>Local government, traditional authorities and the state will benefit from increased revenue, as well as increased economic activity and business opportunities.</p> <p>Ecosystem services will be enhanced by supporting existing natural forest remnants and mosaic as well as through enrichment planting and planting of indigenous species</p>

	<p>models / pilot efforts show that Public-Private Partnerships (PPP) have the potential to restore timber production in severely degraded areas, ultimately helping to close the supply-demand imbalance. There appear to be willing firms, good market opportunities, and sufficient degraded public sector land areas for expansion. However, private investment in plantations has been constrained by a weak investment climate, unclear demarcation of available lands, and a complex regulatory/approval chain for such investments.</p>	<p>delivery or out-grower arrangements in addition to direct employment. In the medium term, this activity will contribute to increasing the supply to the domestic timber and wood markets and providing significant carbon benefits by restoring forests in currently severely degraded forest reserves.</p>	
<ul style="list-style-type: none"> <li>• Enrichment planting, nurseries and native species for restoring degraded forest and agricultural landscapes.</li> </ul>	<p>Though some forest reserve areas are heavily degraded (as noted above), many reserves still retain a good forest structure, but with an impoverished species mix due to over harvesting of high value species, leaving behind a less ecological diverse and valuable stand. Natural regeneration in these areas is occurring, but only with seedlings of the few remaining species. Some high value species may remain, but in small numbers and with reduced ability to reproduce due to lack of pollination or dissemination agents. To correct this, FC has initiated a program for enrichment planting (and assisted natural regeneration) by planting seedlings/saplings of indigenous species to enrich the species diversity in selected forest reserve areas.<sup>26</sup> This effort draws on learning and experience with cultivation practices from several small pilot sites. Communities near enrichment areas gain access to employment in site preparation, maintenance of plantings, and monitoring against encroachment. Communities and farmers can also participate by providing seed stock from valuable remnant trees or</p>	<p>This activity aims to enhance habitat, ecology, carbon benefits and livelihoods through production and enrichment planting of ecologically and commercially valuable native tree species in selected forest reserves, with community involvement, and potential replication on farms and cocoa landscapes.</p> <p>This activity will augment the supply of important native species within the high forest ecosystem. Incentives will be created, through direct employment and markets for native seed stock, for communities and farmers to engage in the planting and preservation of native tree species, rather than encroachment into forests. Getting farmers involved in producing native trees and responding to their needs and interests about native trees, the activity can help to improve relations with communities</p>	<p>Communities will receive benefits from engaging in seedling care and maintenance activities, as well as the production of seedlings in innovative out-grower arrangements. Enrichment planting will enhance both biodiversity and carbon stocks. Increasing numbers and quality of native trees on farms (through communication campaigns and supply of seed stock) offers the potential to extend these types of benefits beyond the forest reserves to the wider agricultural landscape.</p>

<sup>26</sup> Efforts under the EC supported Voluntary Partnership Agreement will work in parallel to improve forest law enforcement and governance approaches to reduce encroachment and illegal logging in the future.

	producing native tree seedlings in small nursery conditions, with some training and incentives. Seedlings of desirable trees can be sold to the FC, to neighboring farmers or CREMAs wishing to increase shade and invest in timber production.	and foster partnerships based on mutual interests.	
<b>Comp 3: Innovation, Capacity Building and Communications</b>			
<ul style="list-style-type: none"> <li>• Training activities</li> <li>• Communication activities</li> <li>• Innovation activities</li> <li>• MRV activities</li> </ul>	Communities and farmers need better information, access to know how, means to learn from successes. At the same time, FC and other official extension services need to embrace improved communication methods and technologies and adopt a more service oriented approach to collaborative management with communities and resource users in the landscape.	The project provides resources for identifying and responding to key communication needs, as well as training for FC staff in community engagement approaches.	Better trained staff will perform better in all their functions. Improved communication with communities will lead to better relations and reduced conflict over resource use and allocation, beyond forests.
<b>Comp 4: Project Management, Monitoring and Coordination</b>			
<ul style="list-style-type: none"> <li>• Coordination and reporting</li> <li>• Fiduciary mgmt.</li> <li>• Supplies, key staff</li> <li>• Project M&amp;E System</li> </ul>	The project has complex institutional relationships, horizontal and vertical coordination needs in an operating environment where coordination and communication have not always been prioritized.	The activity will support and build upon existing institutional governance structures for interdepartmental coordination. The project provides resources to build skills and facilitate regular exchanges and build networks.	Smoother project implementation, regular reporting, opportunities for sharing lessons with wider climate finance community.

## Annex 7: Background on Drivers of Deforestation and Potential Solution Paths

This annex summarizes the key drivers of deforestation in Ghana and outlines appropriate intervention opportunities. The World Bank FIP project design is based on this understanding and prioritization of issues, which has emerged from analysis and consultation over several years, supported by several international development partners and financing mechanisms, including the FCPF Readiness Fund.

### Drivers of Deforestation

- **Agricultural Expansion.** Deforestation related to expansion of agricultural lands, is due to misaligned incentives and weak management practices for the care and maintenance of trees on private/farm land (unclear ownership and benefit assignment), weak extension and communication efforts, and low value placed on habitat and natural environment relative to commercial and livelihood activities. In corridors between forest reserves and protected areas, this degradation has a further detrimental effect on ecosystem services, such as water and the capacity of the habitat to sustain wildlife populations and their movements between relatively more protected areas. Increasing trees on farms augments shade, moisture and soil fertility that benefit certain crops, notably cocoa. Yet, farmers and rural communities historically have faced disincentives for the care of existing trees in the landscape. These disincentives include: lack of control over or benefit from pre-existing, natural trees in the agricultural landscape; onerous requirements for documentation of ownership of newly planted trees; [inequitable] government timber harvesting practices that allow harvesting of “publicly owned” trees on privately owned land; and difficulty in recovering compensation for damage done to agricultural investments during forest harvesting.
- **Cocoa Expansion** is the most important form of agricultural expansion and thus a major driver of deforestation and degradation, particularly in the high forest zone (6 percent deforestation rate over the past 10 years). Ghana is the world’s second largest cocoa producer and the sector provides livelihood to about 800,000 producers, mostly smallholders, cultivating over 1.6 million hectares. Yet average productivity is low (<400 kg/ha) relative to potential yields (>1000 kg/ha). Historically, production increases have come from expanding cultivated area, rather than from intensification with use of modern inputs. Access to modern inputs and extension services has been weak, such that traditional beliefs influence cultivation practices more than evidence (e.g., many believe that cocoa grows best on newly cleared forest). Cocoa influences forest cover both through direct encroachment into forested areas and through gradual removal of trees in the agricultural landscape in a transition from shaded cocoa to open grown cocoa. The shift from shaded to open cocoa cultivation is driven mainly by higher short-term profit, increasing competition for land combined and other factors. Shaded cocoa farming accounts for only 21 percent in the Western Region and 47 percent in Brong Ahafo Region. Shaded cultivation represents carbon stock almost equal to off-reserve forest areas; in contrast, open cultivation represents a loss of about half the carbon stocks.
- **Timber Harvesting and Forest Reserve Depletion.** Unsustainable wood harvesting practices are the second most important driver of Ghana’s deforestation and degradation, due to the imbalance between growing domestic timber demand and the limited supply of sustainably harvested timber. Informal sources supply 84 percent of the domestic market, with a large portion from chain saw milling, which is widespread, though now formally

illegal. Many of Ghana's forest reserves have become degraded over time due to overharvesting, unauthorized encroachment, wild fire, illegal logging and inadequate enforcement. Some reserves are so degraded that they have become almost grasslands, so natural regeneration to a forested state is unlikely.<sup>27</sup> The GoG has implemented the Voluntary Partnership Agreement (responding to EU regulation) as a means of improving law enforcement and governance to reduce encroachment and illegal logging. Monitoring and enforcement have increased, yet, results on the ground are slow to materialize. Annex 5 provides more information on this program.

- **Weak Land Use Planning:** All reviews of forest and natural resource issues in Ghana highlight the weakness of spatial and land use planning as a basis for improved, informed and sustainable decision making. Top down decisions at times have not respected the existing land uses and production activities at community level. Small scale and individual agents often make land use decisions (e.g., clearing trees, burning for land preparation) that are incompatible with long term sustainable management aims.

#### **Potential Solution Paths:**

- **Community Management Institutions.** Community Resource Management Areas (CREMAs, and several other types of community-based organizations) are an institutional model that offers potential for devolving management and benefit rights to communities through an established legal and administrative structure. The model originated as a wildlife conservation approach and has been promoted by the Forest Commission and partner NGOs for more than a decade, though these efforts are fragmented and may benefit from systematic scaling up. Communities are now demanding more involvement and support to establish CREMAs, based on perceived benefits and desire for greater control, though the process is time consuming and administratively complex. Government, communities, and NGOs are now interested to expand the model beyond wildlife to include management rights for other natural resources and environmental services, including trees in landscapes. These new approaches may include management of trees and forest resources, new forms of service delivery and new models of benefit sharing for timber harvesting and processing. This offers potential for greater uptake by communities and wider application in key landscapes, especially if accompanied by tree tenure reforms.
- **Participatory land use planning** is required to ensure that all community members understand and agree on the designated uses, zones, etc. Enforcement of rules becomes easier when all parties recognize and acknowledge the rationale and mutual agreement behind the rules.
- **Climate Smart Cocoa.** At the global level, international cocoa buyers, reflecting growing consumer demand, are striving to ensure that supply chains are based on sustainable and climate friendly production methods, demonstrated through certification and standards, and supported with premiums paid to farmers. The government and COCOBOD recognize the need for environmentally sustainable production and ensuring economic benefits to farmers, if Ghana's cocoa industry is to remain a top producer of high quality. Several governmental and non-governmental entities are supporting different initiatives to promote sustainable production and various certification schemes, but these are currently fragmented, and need scaling up to be more transformative. There are opportunities to

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<sup>27</sup> Carbon stocks in forest reserves in the High Forest Zone (HFZ) can be over 400 tCO<sub>2</sub>e/ha while the stock in degraded reserves can be less than that in the surrounding cocoa landscape (about 200 tCO<sub>2</sub>e/ha).

harmonize certification systems and extension approaches, as well as opportunities to promote climate smart cocoa through landscape level planning, promotion of shaded agroforestry techniques, and improved incentives and communications aimed at farmers. This would also yield substantial biodiversity and environmental benefits, in addition to carbon sequestration and climate benefits.

- **Plantation Investment Strategy.** A new Forest and Wildlife Policy (FWP, 2012) provides the basis for improved law enforcement, management practices, community engagement, and incentives. Based on the FWP, the Government is preparing a Ghana Forest Plantation Strategy, which will lay out plans to augment the legal, sustainable supply of timber. The strategy envisages accelerated plantation development particularly through enhancement and promotion of private sector investments. In recent years, pilot investments in Ghana and experience from elsewhere show that Public-Private Partnerships have the potential to restore timber production in severely degraded areas, ultimately helping to close the supply-demand imbalance. There appear to be willing firms, good market opportunities, and sufficient degraded public sector land areas for plantation development. However, private investment has been constrained by a weak investment climate, unclear demarcation of available lands, and a complex regulatory/approval chain for such investments.
- **Enrichment of Viable Reserves:** Though some Forest Reserve areas are heavily degraded, many still retain a good forest structure, but with an impoverished species mix due to over harvesting of high value species, leaving behind a less ecological diverse and valuable stand. Natural regeneration in these areas is occurring, but only with seedlings of the few remaining species. Some high value species may remain, but in small numbers and with reduced ability to reproduce due to lack of pollination or dissemination agents. The Forestry Commission has initiated a program for enrichment planting (and assisted natural regeneration) by planting seedlings/saplings of indigenous species to enrich the species diversity in selected forest reserve areas. Based on experience with the necessary germination and growing conditions for a range of desirable and under-represented native species, this approach is now ready to be scaled up. This forest enrichment program can benefit farmers and communities by providing employment in site preparation, maintenance of planted seedlings, and monitoring of forest reserve areas against encroachment and illegal logging. Community members can produce or protect seedlings for purchase and planting elsewhere, including small scale plantations, with some training and incentives. This will enhance carbon stocks and biodiversity at the same time, by producing more complex and natural habitat.

**The CREMA mechanism** has been studied for its use in REDD+ Programs by Ghana's Forestry Commission, the Ecosystem Alliance, the Nature Conservation Research Center and other organizations. Strategic Environmental and Social Assessment undertaken during REDD+ readiness (2014), financed by FCPF, also examined benefit sharing mechanisms and the opportunities represented by the CREMA approach. GHANA's SESA is an important foundational document for the FIP. The World Bank FIP project builds on these assessments by placing CREMAs at the center of the community engagement approach employed in Pilot Activity 2.1, described in detail in Annex 2.

These assessments resulted in several widely regarded publications (e.g., Asare, R.A., Kyei, A., and Mason, J.J. 2013. The community resource management area mechanism: A strategy to manage African forest resources for REDD+. *Philosophical Transactions of the Royal Society B*, 368, 2012 0311). The overall finding of these assessments is that the CREMA mechanism is an innovative landscape-level planning and management tool for community initiatives on off-reserve lands. Over 30 CREMAs are officially approved or under development, with approved constitutions, management boards, community committees, and regulations backed by local government by-laws. As such, CREMAs are an approved institutional structure for landscape planning, democratic decision-making by local leadership and benefit sharing with its stakeholders. A CREMA is officially inaugurated when the Ministry is sufficiently satisfied to issue an official certificate of devolution of rights over natural resources management to the local CREMA institution. In terms of benefit sharing approaches, particularly with in-migration, CREMAs have important advantages: constitution developed through an extensive participatory process; institutional structures for day-to-day governance of the CREMA resulting in strong social cohesion; clear pathway to incorporate as legal entity permitted to enter into contracts on behalf of its membership; plans for generating revenue and agreeing benefit-sharing formulas responsive to the CREMA stakeholders. The role and strengths of the CREMA combine to significantly increase the likelihood of effecting changes in how land is used and managed (resulting in emissions reductions) and sustaining these changes over the long-term.

## Annex 8: Land and Tree Tenure in Ghana

1. This annex provides an overview of the complex issue of land and tree tenure in Ghana<sup>28</sup>.
2. **Land Tenure.** Ghana includes many distinct traditional communities, with 13 major linguistic groups and over a hundred different dialects and cultural groups, clans and states. In many of these communities, land ownership patterns are closely linked to the nature of traditional systems. The land administration system in Ghana has operated in a pluralistic environment, with statutes and customary laws, public and indigenous institutions, traditional values and corporate norms operating side by side. This has been compounded by the importation of British tenurial systems, concepts and principles such as freeholds and leaseholds with variations in interpretation in different localities.
3. Ghana has four categories of land ownership governed by customary practices and formal legislation. These are: (i) state lands, compulsorily acquired by the government through the invocation of appropriate legislation and held in trust for the entire people of Ghana; (ii) vested lands, belonging to customary authorities (stools and skins) but vested in the state in trust for the people of the stool or skin or family from which it was vested; (iii) private lands belonging to stools, skins or family communities and held in trust on their behalf by traditional authorities (chiefs or *tendana*) or family heads; and (iv) private lands given or sold as freeholds by stools, skins and families to individuals, corporations and institutions.
4. The Ministry of Lands and Natural Resources (MLNR) has overall responsibility for land issues as well as mines and forestry. Customary authorities are the allodial title holders for more than 80 percent of the land in the country and are responsible for the allocation, administration and management of these lands. The Traditional Authorities hold the land in trust for the community and its future generations and are expected to dispose of lands in the interest of and with the consent of the community. State and Vested lands are under the management of the Lands Commission which was established by the Constitution.
5. **Tree Tenure.** The Off-Reserve areas (4.5 million ha) include scattered trees and fragmented forest patches in agricultural fields and secondary forests regenerating from agricultural farming, riparian forest strips, sacred groves, etc. These lands are owned by stools/skins, clans and individuals.
6. Under current legislation, while farmers and land owners have legal rights to planted trees, it is illegal for farmers and other users of Off-Reserve lands to harvest any naturally growing trees for commercial or domestic purposes, even if it is growing on their land. The Forestry Commission has commercial rights over the trees in the Off-Reserve areas but the exercise of such rights - in the form of granting timber rights permits can only be concluded with the permission of the land owner. While logging without authorization from concerned groups is prohibited, in practice this arrangement creates tensions and distorts incentives.

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<sup>28</sup> Source: Ghana Commercial Agriculture Project, Project Appraisal Document (2011); Ghana Forest Investment Project Document (2012).

7. Holders of Timber Utilization Contracts (granted by FC) are obliged to engage in a Social Responsibility Agreement with the concerned communities. Part of the stumpage fees goes to communities as compensation for damaged crops; the rest is divided among traditional authorities, district government, and central government. However, these agreements have not been effective in rewarding land users (farmers and communities) for trees on their land. Lax enforcement of compensation to farmers when their crops are destroyed during logging operations creates a negative perception and incentive among farmers regarding stewardship of naturally occurring trees on farms.

8. Complexity is compounded when land users and land owners are not the same people, as in many customary arrangements. Under this system, land owners, farmers and tenants may not feel that they are getting a fair share of benefits accruing from the harvest of trees. In the search for more equitable arrangements, some land users engage chain saw millers to remove timber (outside the timber utilization contract) so they can get a larger share of the proceeds, although this practice is illegal. This sets up and perpetuates an illegal system with substandard and unsustainable practices. In fact, virtually all domestic demand is supplied through the chain-saw milling sector which allows for payments to farmers. Government has been engaged in consultations at the national and community levels over recent years; however no agreement has been reached on the most appropriate tree tenure and benefit-sharing arrangements to create more sound incentives that promote sustainable management of forest resources.

### **Related Project Interventions**

9. This Annex and related information in Annex 7 describe enabling conditions and disincentives for care of trees on farm land, including insecure rights to benefit from trees on farms, lack of knowledge on the benefits of trees on farms (e.g., in terms of cocoa productivity), and lack of alignment of stakeholder interests in trees on farms (e.g., land owner vs. land user vs. traditional authorities).

10. The project aims to address these issues by:

- Expanding the use of CREMAs to devolve management rights to communities, so that they have more authority to decide on the use or status of trees in landscapes. The Government will also be developing a system to register trees on farms, so that there is official recognition of the status of these trees.
- Expanding extension, communication and knowledge delivery services so that, for example, cocoa farmers understand the productivity benefits of trees in landscapes. The project will also improve access of farmers to good quality seedlings of locally demanded tree species.
- Using participatory planning processes to engage all segments of local society to align and balance different interests to be documented in local landscape management plans, recognized through district assemblies and local CREMA constitutions.
- Revising the guidelines and providing training to Forestry Commission staff to change the dynamic of community interactions in the field.

11. Farmers also face barriers in implementing better practices, obtaining tree seedlings, and establishing nurseries that would increase access to trees for planting as shade and for other uses

in the farm landscape. Barriers include lack of know-how and capacity, the remote locations of many of these forest fringe communities, lack of reliable sources of good quality tree seedlings (of useful native species in high local demand), lack of extension services on the care and management of these trees.

12. The project aims to address these issues by providing seedlings of useful native trees together with extension information about their care and management, increasing demand for good quality tree stock by increasing knowledge and incentives for farmers and CREMA members and establishing model nurseries as learning and demonstration sites. The project will support systems through which Forestry Commission will purchase seedlings from farmer or community managed local nurseries for rehabilitation efforts on Forest Reserves. These market relations will extend beyond the project life to serve additional forest rehabilitation needs into the future. The project will provide training and technical assistance to farmers or communities interested to establish tree seedling nurseries and will aim to increase the quality and diversity of native species that can be produced from these locally managed nurseries. The model nursery developed by the Forestry Commission will provide learning and demonstration, but will not have the capacity to supply all seedlings needed for forest reserve rehabilitation and for promotion of trees on farms in cocoa landscapes. These activities are described more fully in Annex 2.

## Annex 9: Detailed Economic Analysis and Technical Appraisal

### Economic Analysis

1. Analysis conducted during preparation indicates that the project interventions are economically and financially feasible and will generate significant and positive benefits that outweigh the costs.

2. The project's primary areas of intervention are expected to yield multiple categories of benefits, some readily quantifiable (e.g., yield and emissions reductions) and others less tangible (e.g., strengthened institutions, habitat connectivity). The expected benefits may accrue to different groups of beneficiaries, at the farm or community level, at the level of land owners and traditional authorities, at the level of the Republic of Ghana, and as global public goods. This scheme of benefits and beneficiaries are summarized in the table below. Some categories of benefits are more readily quantifiable and are estimated in this analysis; the others are discussed qualitatively. Farmer incomes are an important category of direct benefits, measured through increased yield potential or more sustainable yields. Reduced emissions are another category of benefits, where potential values can be estimated. The economic analysis aims to indicate the potential range of positive outcomes associated with the project, measured in monetary terms. It is based on a number of simplifying assumptions; sensitivity analysis illustrates how results vary with the assumptions.

Project Intervention	Economic Benefit	Beneficiaries	Quantified/ Estimated?
1. More sustainable forest management practices, reduced forest degradation & reduced encroachment	Greater forest cover, habitat for wildlife & biodiversity (on site)	Ghana Global	No
	Enhanced habitat connectivity and ecosystem services (beyond site)		
	Reduced emissions and enhanced carbon stocks in forest landscapes (Estimated)	Global	Yes
2. More sustainable management practices for agroforests and cocoa landscapes	Higher yields, better returns to land for farmers and owners	Communities Landowners, Traditional authorities	Yes
	Reduced emissions and enhance carbon stocks in cocoa landscapes.	Global	Yes
	Enhanced biodiversity in agricultural landscapes	Ghana Global	No
3. Strengthened community level institutions	Higher social capital, and empowered communities, including for women.	Communities	No
4. Access to new skills, markets; opportunities for revenue generation and job creation	Employment, earnings	Communities	No
5. Improved institutional norms, clarified rules & procedures	Less conflict over application of rules Less waste on bureaucratic procedures, more investment	Farmers Landowners Traditional authorities	No

3. **Estimate of the value of higher yields, better returns to land for farmers and owners.**

The economic benefits of livelihood changes or cocoa quality and productivity improvements due to project interventions were estimated with similar positive results. The project is assumed to provide two main types of benefits to households. In the Brong Ahafo Region, interventions would focus on providing livelihood benefits through intercropping (Modified Taungya System, MTS) in plantation establishment areas. These communities would have improved access to land and farming inputs and would have access to some long run benefits from the timber. The table in Annex 2 shows that for Brong Ahafo, about 7,600 households are near the intervention area. In the Western Region, project interventions would mainly focus on improving cocoa productivity through extension and delivery of inputs and know how. About 14,000 households are near the intervention area. These are relatively poor households. Conservatively, we assumed household income was about US\$3,400 annually (compared to national per capita average of US\$1,730).

4. Project interventions were assumed to increase incomes by 10 percent (or US\$346 per year) in the MTS/Plantation intervention and 25 percent in the cocoa intervention (or US\$865 per year). These income changes would result from a combination of higher yields, reduced costs of production, reduced losses, and higher prices of goods sold (e.g., certified products); opportunity costs are assumed to be covered within this set of assumptions. The Cocoa Research Institute of Ghana reports that, with proper inputs and extension, cocoa yields can be increased by 50 percent or more, so these are modest assumptions. The results framework (Annex 1) targets 9,500 heads of household as direct project beneficiaries, about 44 percent of the households in the target area. With these assumptions, incremental earnings for the affected households over 20 years (discounted at 7 percent) would be worth US\$12.2 million for the MTS / Plantation landscape and US\$56.9 million for the cocoa landscape. This totals US\$69 million for a benefit /cost ratio of 2.1 (relative to project combined costs with Government contributions), under conservative assumptions on level households reached and on potential yield increases. (Sensitivity analysis of the assumptions shows that the project benefits exceed costs even when the period is reduced to 6 years or the discount rate is increased to 20 percent.)

5. **Estimate of the value of reduced emissions and enhanced carbon stocks in forest and cocoa landscapes.** Focusing on a readily quantifiable benefit stream, this analysis uses estimates based on project level data, where available, supplemented with market information and literature values, where needed. We used conservative assumptions for interest rates and prices, and used ranges of values to address potential uncertainties. The analysis estimated benefits over 30 years 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.

6. Ghana's ER-PIN (May 2014) provides the data needed for estimating the value of potential emissions reductions associated with project interventions in the zone of intervention. The project area (described above) consists of Forest Reserve with various levels of carbon stock and mixed agroforestry and cocoa landscapes. The deforestation rate averages 1.4 percent/year in the forested portion of the landscape currently, or without project interventions. Research reported in the ER PIN indicates that the average tons of CO<sub>2</sub> (tCO<sub>2e</sub>) equivalent/ha in the HFZ is 568 tCO<sub>2e</sub> for Closed Forest. Further analysis by MLNR and FC, focusing on reserves and landscapes targeted by the project, found slightly lower values than for the HFZ as a whole. This analysis found a deforestation rate of 1.3 percent and that the Closed Forest contained 415 tCO<sub>2e</sub>/ha, Open Forest

contained 95 tCO<sub>2e</sub>/ha, and crop land contained 71 tCO<sub>2e</sub>/ha (weighted averages for specific reserves and areas). For this analysis of emissions potential, it is assumed (conservatively) that through deforestation and degradation, closed forest with high carbon stock is gradually converted to open forest with a reduction in carbon stock associated with that land use.

7. Emissions reductions are estimated for four types of actions and landscape types.

- Closed forests on reserve, demarcation and protection (prevents emissions)
- Closed forests on reserve, rehabilitation and enrichment (sequesters carbon)
- Open forest off reserve, climate smart cocoa practices and outreach (sequesters carbon)
- Open forest off reserve, planting trees in landscapes and borders (sequesters carbon)

8. In the Closed Forest area -- Forest Reserves linked by Corridor of 125,500 ha -- demarcation and protection efforts are expected to reduce the rate of forest loss. Activities such as education, working with community groups and increased monitoring and protection activities are also assumed to help reduce and prevent further forest loss and degradation. Specifically, the project interventions are assumed to reduce the current deforestation rate of 1.3 percent per year (business as usual scenario) to 1.0 percent per year. This will result in preventing the loss of 1,500 ha of good quality forest within the 5 year life of the project and an additional 9,000 ha, if continued over 30 years. This means that the carbon content will remain at 415 tCO<sub>2e</sub>/ha for those hectares, rather than being reduced to the level of a cocoa landscape at about 95 tCO<sub>2e</sub>/ha. This will result in reduced emissions of about 484 thousand tCO<sub>2e</sub> during the project and 2.9 million tCO<sub>2e</sub> over the following 30 years.

9. Also, on Forest Reserves, rehabilitation and enrichment planting on 13,900 ha will increase carbon stocking and restore some biodiversity values. Activities including enrichment and boundary planting, development of a small model plantation, and restoration of some degraded parts of forest reserves will result in CO<sub>2e</sub> accumulation of about 3.65 tons/ha/year (weighted average across interventions). This will result in 50 thousand tons of tCO<sub>2e</sub> during the 5 year life of the project, and 1.5 million tCO<sub>2e</sub> if growth continues for 30 years after the project closes.

10. In the open forest area (Mixed Cocoa Landscape, off reserve), the project will affect about 208,000 ha. Project actions (training and outreach to farmers, demonstration of improved practices, encouragement of trees on farms, and assistance with seedlings and other inputs) should contribute to preventing further degradation and increase the carbon content of this landscape relative to the business-as-usual scenario. This will prevent the reduction of carbon content from 95 to 71 tCO<sub>2e</sub>/ha on 208,000 ha affected by the interventions. This analysis assumes that normal growth in the landscape results in 2.5 percent/year increase in vegetation and that project interventions will double this rate. This will capture an additional 362,000 tons of tCO<sub>2e</sub> during the life of the project and 789,000 tCO<sub>2e</sub> during the following 30 years.

11. In Off-Reserve areas, intensive engagement on CREMAs and community lands, planting of trees in landscapes, critical watersheds and borders will increase carbon stocks and increase shade on cocoa farms. These activities on 64,500 ha, which will accumulate CO<sub>2e</sub> at an average rate of 2.2 tons/ha. Over the life of the project, this will result in about 141,000 tCO<sub>2e</sub> of emissions reductions (or storage) and 4.2 million tCO<sub>2e</sub>, if average rates of sequestration continue for 30 years.

12. The interventions and assumptions mentioned above result in emissions reductions of about 9.5 million tCO<sub>2</sub>e over the 30 years after the project. Valued at US\$5.5 per ton (note that this is a market value, not a social or ecological value, and conservative for the life of the project) and assumed to be delivered in even increments over the 30 year period, this benefit has a value of about US\$1.7 million per year. The Net Present Value of this stream of benefits (at 7 percent and 30 years) is US\$32 million, so the benefits are about equal to the investment costs, with this set of assumptions, under conservative assumptions. Sensitivity analysis shows how the estimate varies with the assumed change in forest loss rate (more impact implies more value), value of carbon (higher price implies higher value), and discount rate (lower rate implies higher value).

13. **Summary Estimate of Benefit vs Cost.** This analysis shows that even with conservative estimates, the project benefits match or exceed the costs when quantifying the values of just two the benefit streams. Combining the two estimates yields an overall benefit versus cost ratio of about 2.1.

14. **Benefits Not Quantified.** This summary estimate does not take into account the value of water retention, water quality, biodiversity, resilience building and risk reduction associated with more sustainable forest cover and agroforestry landscapes. Benefits from improved forest and landscape management include increased soil moisture and water quality and quantity, as well as increased availability of pollination services, more shade and microclimate improvements leading to more wildlife and more varied biodiversity. Other benefits not quantified here include reduced costs, risks and uncertainty (to farmers and the wider society) due to poor/prior/weak land management regimes, conflict over resources and degradation due to poor incentive systems. Quantifying more of the benefits would, of course, raise the overall value of the project and the benefit-cost ratio. This raises the confidence that even at the low end of the quantified range, the project costs are justified by the benefits achieved.

15. **Development Impact in Terms of Expected Benefits.** The project will support interventions toward more sustainable forest and land management by enhancing policies, incentives and practices for better stewardship and reduced degradation in both forest reserves and off reserve areas, which will also enhance carbon stocks. The project also aims to enhance and increase social benefits and community empowerment by focusing on groups that depend on natural resources, as well as food, water and energy. The project will field test innovative and inclusive forest and agroforest management practices and models (related to local responsibilities, benefit sharing and landscape planning), which is expected to build social capital and empower communities and their institutions, including for women. The project expects to contribute economic benefits and help to reduce poverty by creating opportunity for revenue generation and job creation through empowerment of community-based resource management institutions, improvements in the cocoa landscape, forest restoration, plantation and agroforestry development in off reserve areas. Wider benefits will include enhancing agricultural biodiversity, soil conservation, habitat connectivity and ecosystem services, such as sustaining water supplies. Costs in terms of expected environmental or social impacts will be minimal.

16. **Rationale for Public Sector Financing.** The project aims to improve environment, land and forest management to improve livelihoods, living conditions and reduce greenhouse gas emissions from land use change and deforestation. These results are primarily global public goods

with substantial benefits accruing to Ghana and its citizens. Public financing is justified for this purpose.

17. **Bank's Comparative Advantage and Value Added.** The World Bank has considerable experience working with the Government of Ghana on policy and regulatory issues, experience in project implementation, and long involvement in the natural resources sectors. The Bank has in the past supported the Forest Resources Management Project, the Natural Resources Management Project, the Community-Based Rural Development Project, and the Community-Based Natural Resources Management Project. Current Bank support includes the Forest Carbon Partnership Facility Readiness Preparation Project, the Land Administration Project (LAP), the Natural Resources and Environmental Governance (NREG) TA, and the Sustainable Land and Water Management Project (SLWMP) in the Northern Savannah region. The Bank also finances the Ghana Commercial Agriculture Project and a strategic planning exercise for Ghana's cocoa sector, where there are potential synergies. The Bank also adds value by assisting the Government to access sources of global climate finance and in the coordination and application of that financing toward key development challenges. The Bank's and development partners' related programs are described in Annex 5.

### **Technical Appraisal**

18. 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 management and improvement. The project provides the means, capacity building and incentives to engage more effectively with communities and their local institutions to devolve planning and management responsibilities that will lead to improved outcomes in forest and agroforest landscapes. Communication efforts and capacity building efforts will be aimed at community level institutions, in addition to government officials. The components work together to change the incentives, practices, relations and communications about forest and land use. Local institutions like CREMAs, if scaled up can manage land better and create collective incentive not to encroach. Improved extension and service delivery also can help farmers achieve better yields on existing land. Better demarcation of land can also create visible, enforceable signals to potential encroachers. It is the combination of interventions that should lead to demonstrable effects in the target areas. If the demonstration value is high, replication should proceed in other cocoa/forest landscapes.

19. Use of existing extension services structures under the COCOBOD will contribute to robustness of technical design. Involvement of COCOBOD and cocoa value chain players is important to ensure that a multi-sectoral approach that addresses the key issues affecting the landscape and the economic drivers originating in the cocoa sector. COCOBOD is the best-placed entity to implement cocoa extension activities, with extension agents on the ground. Technical aspects of each component are assessed here.

20. Component 1 (Policy Reforms and Institutional Strengthening) responds to the issue that current policy implementation practices create disincentives for rural communities for the care of existing trees in the landscape. Communication barriers between communities and the FC compound the situation. The project provides resources to improve policy interpretation and implementation practices on the ground (drawing on workable approaches and lessons from the

field, while avoiding legalistic debate). Providing new skills, tools and models will enable FC staff to engage more collaboratively with communities, farmers, CREMA organizations, and cocoa sector players. These interventions should help to foster new and more collaborative approaches that can improve natural resource governance, reduce conflict and lead to more beneficial future interactions.

21. Under Component 2, the first pilot activity (Enhancing Trees and Climate-Smart Practices in Agroforestry Corridors with Communities) responds to the need to address deforestation and land degradation on community lands and cocoa agroforestry areas caused by expansion of agriculture, misaligned incentives for the care of trees on private/ farm land, and weak extension and communication efforts. It builds on the desire to expand established institutional models of Community Resource Management Areas and other Community-based Organizations that devolve management responsibilities and share benefits more widely. It also responds to the current weak spatial and land use planning processes, which do not support improved, informed, community-led decision making. Within CREMAs, participatory land use management is required to ensure that all community members understand and agree on the designated uses, zones, etc.

22. The project provides resources to adapt and expand the CREMA approach to promote greater participation and benefits to communities from protecting and expanding trees and cover in key corridor landscapes. It will help to give communities the incentives, knowledge and tools to improve landscape management for their own benefit, while at the same time emphasizing the co-benefits of increased tree cover and carbon sequestration. Support, extension and inputs to cocoa farmers will be built into the supply chain through existing institutions. The activity also builds on the alignment of incentives among the Government, cocoa regulators, cocoa buyers, and cocoa farmers who are now striving to ensure sustainable and climate friendly supply chains and production methods. It also provides resources to enhance the participation of farmers and communities in planning and management of forests, trees and natural resources within key target landscape corridors. These interventions should result in improved soil productivity, increased tree cover, less frequent fire, and increased wildlife abundance, which will benefit both the targeted community of farmers and wider users of the landscape. This should contribute to increased understanding of landscape processes, priorities, potential threats and agreed upon practices that together lead to more sustainable outcomes. This will also increase information flows and feedback mechanisms to improve practices and procedures in other components or in replication / scale up efforts. Carbon retention/ reduced emissions may be able to be converted to tangible financial benefits to communities at some point, but the project is not dependent on this. Wildlife benefits are expected through greater habitat complexity and connectivity between more protected areas in Ghana's High Forest Zone, a globally recognized biodiversity area.

23. The second pilot activity (Investments on Forest Reserves for Reducing Degradation, Enrichment Planting, Nurseries, and Plantations) responds to the problem of high deforestation and degradation in forest reserves due to overharvesting, unauthorized encroachment, wild fire, illegal logging and inadequate enforcement, as well as weak investment climate for forest rehabilitation and plantations. It also addresses the issue of admitted farms that have expanded beyond legal limits and degraded reserves through cocoa and other plantings. It addresses the degradation issue in forest reserves that have an impoverished species mix due to over harvesting of high value species.

24. This activity aims to enhance carbon stocks through restoration and sustainable forest management by improving the investment climate, demarcating admitted farms and plantation investment opportunities, and establishing nurseries and enrichment planting. Increased private sector investment in timber plantations has the potential to generate significant local economic opportunities through seedling production, out-grower arrangements and direct employment. In the medium term, this will contribute to balancing the supply to wood markets. Nurseries and enrichment planting with native species will also contribute to local employment and ecosystem restoration. Regularizing and demarcating the boundaries of admitted farms, engaging and educating farmers, and improving productivity on farm will help to reduce the incentive to encroach and provide more legal stability to farmers – and to forest reserve managers.

25. The transformative aspect of the project approach is to facilitate close collaboration with forest-fringe communities and CBOs, as well as enhanced communication and engagement with communities. CBOs will be supported to assist in increasing public awareness and community involvement in monitoring and protecting forest reserves. The activity will offer training and support to Community Fire Volunteers, Community Forest Committees (CFCs), Community Biodiversity Action Groups (CBAGs) and other community groups. Reducing encroachment, rehabilitation and enrichment planting will enhance the quality of forest reserves, including biodiversity, carbon stocks, and environmental services. Local communities should also benefit from employment and opportunities for service delivery and out-grower and other business opportunities, such as seedling production for nurseries, enrichment planting and plantations. Admitted farmers will gain legal boundaries which may enable them to access additional extension and certification services, enabling them to intensify production and make their legal crop more valuable. Ecosystem services will be enhanced by supporting existing natural forest remnants and mosaic as well as through enrichment planting and planting of indigenous species.

26. Component 3 (Innovation, Capacity Building and Communications) responds to the needs of communities and farmers for better information, access to know how, and good practices, as well as the need for FC and extension services need to embrace improved communication methods and community relations approaches. The project provides resources for identifying and responding to key communication needs, as well as training for FC staff in community engagement approaches. The expected result is that improved communication with communities will lead to better relations and reduced conflict over resource use and allocation, beyond forests. Better trained FC staff should perform better in all their functions.

27. Component 4 (Project Management, Monitoring and Coordination) responds to the needs of the complex institutional environment and the need for good coordination and communication, from field level to international level. The activity will support and build upon existing institutional governance structures for inter-departmental coordination. The project provides resources to build skills and facilitate regular exchanges and build networks. This should smooth project implementation, regular reporting, and opportunities for sharing lessons with wider climate finance community.

