Climate Investment Funds

FIP/SC.9/5
October 9, 2012

Meeting of the FIP Sub-Committee
Istanbul, Turkey
November 5, 2012

Agenda Item 5

INVESTMENT PLAN FOR GHANA

PROPOSED DECISION

The FIP Sub-Committee, having reviewed the Document FIP/SC.9/5, *Investment Plan for Ghana*

a) endorses the Investment Plan as a basis for the further development of the projects foreseen in the plan and takes note of the total requested funding of USD 50 million (USD 42 million in grant funding and USD 8 million in loan financing).

b) approves a total of USD 1 million in FIP funding as preparation grants for the following projects,

   i. USD 250,000 for the project "*Engaging Local Communities in REDD+/ Enhancing Carbon Stocks*", (AfDB);

   ii. USD 250,000 for the project "*Engaging the Private Sector in REDD+",* (IFC); and

   iii. USD 500,000 for the project *"Reducing Pressure on Natural Forests Through an Integrated Landscape Approach",* (IBRD)

   to be developed under the investment plan.

c) takes note of the estimated budget for project preparation and supervision services for the projects referenced above and approves a first tranche of funding for MDB preparation and supervision services as follows:

   i. USD 200,000 for the project "*Engaging Local Communities in REDD+/ Enhancing Carbon Stocks*", (AfDB); and

   ii. USD 250,000 for the project "*Reducing Pressure on Natural Forests Through an Integrated Landscape Approach*", (IBRD)

d) requests the Government of Ghana and the MDBs to take into account all written comments submitted by Sub-Committee members by November 20, 2012, in the further development of the projects.

Climate Investment Funds

Forest Investment Program

MINISTRY OF LANDS AND NATURAL RESOURCES

GHANA INVESTMENT PLAN

Version 3.6

October 2012

This document is built on previous drafts. It has been revised after consideration of the observations and recommendations raised during the Technical Quality Review and the Sub-Committee Meeting on the 4th of May and the Expert External Review of 14th September 2012.

<table>
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Summary of Ghana Forest Investment Plan</th></tr>
<tr><td>1. Country/Region:</td><td colspan="2">Ghana / West Africa</td></tr>
<tr><td>2. FIP Funding Request (in US$ million):</td><td>Loan: US$ 8 million</td><td>Grant: US$ 42 million</td></tr>
<tr><td>3. National FIP Focal Point:</td><td colspan="2">HON. MIKE HAMMAH
MINISTER
MINISTRY OF LANDS AND NATURAL RESOURCES
P.O. BOX M212
ACCRA
GHANA
Tel. (233) 302-672336
Fax (233) 302-666801
E-mail: Hammah_mike@yahoo.com</td></tr>
<tr><td>4. National Implementing Agency (Coordination of Investment Plan):</td><td colspan="2">Ministry of Lands and Natural Resources (MLNR)</td></tr>
<tr><td>5. Involved MDBs</td><td colspan="2">African Development Bank (AfDB);

International Bank for Reconstruction and Development (World Bank)

International Finance Corporation (IFC)</td></tr>
<tr><td>6. MDB FIP Focal Point and Project/Program Task Team Leader (TTL):</td><td>Headquarters

Gerhard DIETERLE

Forests Adviser, FIP Focal Point
World Bank
gdieterle@worldbank.org

Mafalda DUARTE

Chief Climate Change Specialist, African Development Bank

m.duarte@afdb.org

Joyita M. MUKHERJEE

Senior Operations Officer, IFC

JMukherjee1@ifc.org</td><td>Country Level

Flávio CHAVES

Natural Resources Management Specialist, World Bank

fchaves@worldbank.org

Albert MWANGI

Senior Forestry Officer, African Development Bank

a.mwangi@afdb.org

Miriam VAN GOOL

Sustainable Business Advisory, IFC Africa

MVangool@ifc.org</td></tr>
</table>

Description of investment plan:

The forest resources in Ghana are being depleted at an alarming rate. From the country's original forest cover of 8.2 million hectares at the beginning of the 20th Century only an estimated 1.6 million hectares remain. The deforestation rate is 2.0% leading to an annual loss of around 135,000 ha. In addition to forest loss, the problem in Ghana is a gradual degradation, which is incremental rather than dramatic. Emission data up to around 2000 indicates that Ghana was a net sink due largely to high levels of carbon sequestration in the land use and forestry (LULUCF) sector. Since then deforestation, degradation and conversion of forest to other land uses is the major cause for increases in emissions in the LULUCF sector.

The REDD+ Readiness Proposal for Ghana (2010) identifies the principal drivers of deforestation and degradation broadly as: (1) Agricultural expansion (50%); (2) Wood harvesting (35%); (3) Urban sprawl and infrastructure development (10%); and (4) Mining and mineral exploitation (5%). Especially the importance of cocoa in the national economy and the rapid expansion of the cultivated area, especially in the forested Western Region, including shifting from traditional shaded to open cultivation, has resulted in loss of forest cover and decline in carbon stocks in the agricultural landscape.

The underlying causes involve a complex of demographic, economic and policy factors. The immediate drivers include, among others: policy and market failures in the timber sector; growing population in rural and urban areas, which increases local demand for agricultural and wood products; high demand for wood and forest products on the international market; heavy dependence on charcoal and wood fuel for rural and urban energy; limited technology development in farming systems; continued reliance on cyclical 'slash and burn' methods to maintain soil fertility; and limited access to affordable credit for investments.

The Government of Ghana (GoG) is committed to tackling deforestation and forest degradation, especially as part of Ghana's REDD+ strategy to deal with climate change. This is also the emphasis of the revised Forest and Wildlife Policy (2011), and other on-going processes, such as the VPA/FLEGT and the UNFF-NLBI.

The aim of the Forest Investment Plan (FIP) for Ghana is to address the underlying drivers of deforestation and catalyse transformational change by providing upfront investment to support the implementation of the REDD+ strategy, and generate information and experience for policy and regulatory changes.

Considering the amount of available resources, the carbon sequestration potential, the need to undertake additional and transformational actions, on-going support from other sources, and the necessity to have a coherent programmatic approach, the Government of Ghana will focus the investment in the High Forest Zone (HFZ) in the Western and Brong Ahafo Regions.

The High Forest Zone is the geographical area with the largest potential for emission reductions and carbon sequestration through landscape restoration, by interventions in the forest reserves, and improving connectivity in the landscape. It is also the area where the main driver, agricultural expansion, particularly cocoa farming, has caused major deforestation and degradation, and where inter-sectoral dialogue is the most challenging. The FIP will seek to promote sustainable land use in the HFZ by contributing to reducing emissions, conserving and enhancing carbon stocks and bringing forests under sustainable management.

(a) Key challenges related to REDD+ implementation

The following main challenges have been identified:

(i) Illegal harvesting, degradation and poor management of forest reserves;
(ii) Insufficient incentives to conserve or plant trees in off-reserve (disincentive of current tree tenure and benefit-sharing regimes);
(iii) Imbalance in domestic timber demand and supply, and illegal chain saw milling;
(iv) Expansio of cocoa farms, and a shift from shaded to open cocoa farming; and
(v) Poor inter-sectoral coordination to address these cross-sectoral challenges.

(b) Areas of intervention – Sector and themes

The FIP in Ghana targets three FIP investment areas: (1) Mitigation actions related to forests; (2) Investments outside the forest sector, primarily agriculture and cocoa sector, necessary to reduce the pressure on forests; and (3) Institutional capacity including forest management and information.

Through coordinated actions by four ministries (Ministry of Lands and Natural Resources; Ministry of Environment, Science and Technology; Ministry of Food and Agriculture, Ministry of Finance and Economic Planning) and the Cocoa Board, including engagement of Traditional Authorities, private sector and communities, the investment plan aims at:

1. Ensure the integrity and sustainable forest management of forest reserves;
2. Restore forest cover in off-reserve areas through forest plantation and rehabilitation of degraded forest land;
3. Promote sustainable climate smart cocoa and agriculture farming; and
4. Develop viable alternative livelihoods to local communities to reduce pressure on forests.

To achieve these goals, some major transformations are needed:

1. Improvement of coordination between ministries, agencies, stakeholders, both at national as well as sub-national and local level;
2. A change in policies on tree tenure and benefits, especially regarding naturally occurring trees in off-reserve areas;
3. Improved management and benefit sharing arrangements between stakeholders (GoG, Traditional Authorities, private sector, civil society) in the management of FRs; and
4. Engaging the private sector in REDD+ and sustainable investments.

FIP will invest in four major intervention areas within a coherent programmatic framework with a focus on the HFZ:

1. Coordinating activities: Landscape planning, inter-agency dialogue and enforcement;
2. Enabling activities: Policy and legal reform on tree tenure and on private investment in the forestry sector, capacity building;
3. Piloting activities: Testing alternative, inclusive models of forest reserves management, benefit-sharing schemes, and incentives to retain trees on farm; and
4. Direct investments: Investments in the private sector in sustainable forest and agriculture, through a REDD+ investment program and technical assistance program to scale up impact.

The aim of this mix of interventions is to catalyze long-term, transformational change and reforms, which will allow scaling up of activities and can be replicated both within the public as well as private sector, with the ultimate aim of reducing the emissions of GHG within the LULUCF sector in Ghana.

7. **Expected Key Results from the Implementation of the Investment Plan (consistent with FIP Results Framework)[1]:**	
Result	**Success Indicator(s)**
Reduced pressure on forest ecosystems	a) Change in deforestation rate in HFZ; b) Change in the forest degradation rate in HFZ; c) Increase (ha) of plantation area; d) tCO_2 sequestered/$ in HFZ; e) New investments in climate smart cocoa and agriculture.
Sustainable management of forests	a) Conservation of natural forests through integrated land use planning; b) Evidence that laws and regulations are enforced in the HFZ; c) Decline in illegal logging: d) Evidence of implication of the private sector in sustainable forest management and plantation.
An institutional and legal/ regulatory framework that supports sustainable management of forests and protects the rights of local communities	a) Evidence that the legal framework (laws, regulations, guidelines) and implementation practices provide inclusive land tenure rights and land use systems and protect the rights of local communities (women and men); b) Evidence that land use plans and management models exists for the HFZ, and progress is made to secure the tenure and territorial rights to land and resources of forest-dependant stakeholders, including local and forest dependent communities.

[1] The results framework will be revised providing explicit indicators to reflect the concrete investment in Ghana, once the overall FIP program framework is available and the detailed preparation for implementation of the investment program, including project preparation is done.

New and additional resources for climate- and forest-friendly projects	a) Leverage factor of FIP funding; $ financing from other sources; b) Scale up investments by private sector.
Integration of learning by development actors active in REDD+	a) Number and type of knowledge assets created and shared.

8. **Project and Program Concepts under the Investment Plan:**						
Project/Program Concept Title	MDB	Requested FIP Amount[2]			Expected co-financing	Preparation grant request
		TOTAL	Grant	Loan		
Project 1: Reducing pressure on natural forests through an integrated landscape approach.	IBRD	US$ 30 million	US$ 29,5 million	-	US$ 15million	US$ 500,000
Project 2: Engaging local communities in REDD+ / Enhancing Carbon Stocks	AfDB	US$ 10 million	US$ 9,75 million	-	US$ 5 million	US$ 250,000
Project 3: Engaging the private sector in REDD+	IFC	US$ 10 million	US$ 2,75 million	US$ 7 million	US$ 16 million	US$ 250,000
TOTAL		US$ 50 million	US$ 42 million	US$ 7million	US$36 million	US$ 1 million

9. **Timeframe (tentative) – Approval Milestones:**		
	FIP Sub-Committee Approval	MDB Board Approval
Project 1:	November 2012	November 2013
Project 2:	November 2012	November 2013
Project 3:	November 2012	March 2014

10. **Link with FCPF and UN-REDD program activity**

Ghana joined the REDD+ readiness process as a pilot country in the Forest Carbon Partnership Facility (FCPF). The Readiness Preparation Proposal (R-PP) was completed based on extensive analysis and consultation processes in 2010. Ghana is also one of the pilot countries for the Forest Investment Program (FIP), which aims at piloting and providing up front investments for countries to test and initiate the REDD+ activities. In 2012, Ghana was also included in the UN-REDD program. The FIP investment plan has been prepared built on and to support the strategies identified in the R-PP. It has also relied on the analysis and consultation platforms established during in the REDD+ process.

[2] Includes preparation grant and project/program amount.

11. **Other partners involved in design and implementation of the investment plan**:
The Ministry of Finance and Economic Planning (MoFEP); Ministry of Food and Agriculture (MoFA); Ministry of Environment, Science and Technology (MEST); Ministry of Local Government and Rural Development (MLGRD); the Forestry Commission (FC); Forestry Research Institute of Ghana (FORIG); Cocoa Board (COCOBOD); Cocoa Research Institute of Ghana (CRIG); Traditional Authorities, Private Sector and Civil Society institutions. In addition main development partners; Netherlands Government; Agence Française de Développement (AFD); U.K Government (DFID), and European Union, have been involved in the preparation of the investment plan.

12. **Consultations with stakeholders, including indigenous peoples and local communities:**
The preparation of the R-PP and the process of REDD+ readiness preparation was based on an extensive consultation process. The R-PP process benefitted from the extensive consultations of the earlier VPA/FLEGT process. The preparation of the investment plan has built on these processes when conducting its own consultations during the investment plan preparation.

13. **Private sector involvement:**
Engaging the private sector has been identified as one of the major transformations that should occur in order to address the mix of public, private sector and civil society drivers of deforestation in Ghana. The private sector engagement has been an important part of the FIP preparation phase. Private sector involvement will be done through two types of activities: (1) Activities that are intended to support a broader set of policies and instruments that will contribute to enabling environment for removing barriers and creating new investment opportunities leveraging private sector investments; (2) Transformational private sector investments that will contribute to reduce illegal and unsustainable activities and promote sustainable agriculture and forestry resulting in reduction of forest related GHG emissions, GHG abatement as well as support to economic growth in the country.

14. **Other relevant information:**

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ACRONYMS

AAC	Annual Allowable Cut
AfDB	African Development Bank
AFD	French Development Agency (Agence Française de Développement)
AIS	Alien Invasive species
CBRDP	Community-based rural development project
CERGIS	Centre for Remote Sensing and Geographic Information Systems
CF	Concessional Financing
CHP	Combined Heat and Power
CL	Concessional Loan
CREMA	Community Resource Management Area
CRIG	Cocoa Research Institute of Ghana
CSM	Chain saw milling
DFID	Department for International Development (UK)
DGM	Dedicated Grant Mechanism for Indigenous People (FIP)
ENRAC	Environmental and Natural Resources Advisory Council
EPA	Environmental Protection Agency
EU	European Union
FAO	Food and Agriculture Organisation
FASDEP	Food and Agricultural Sector Development Policy
FC	Forestry Commission
FCPF	Forest Carbon Partnership Facility
FDMP	Forestry Development Master Plan (1996)
FIP	Forest Investment Programme
FLEGT	Forest Law Enforcement Governance and Trade
FORIG	Forestry Research Institute of Ghana
FR(s)	Forest Reserve(s)
FRMP	Forest Resources Management Program
FWP	Forest Wildfire Policy (1994/2011)
GDP	Gross Domestic Product
GEF	Global Environment Facility
GFTN	Global Forest and Trade Network (WB/WWF)
GHG	Green House Gas
GIZ	German Development Agency
GoG	Government of Ghana
GR	Grant
GWCL	Ghana Water Company Limited
HFBCP	High Forest Biodiversity Conservation Project
HFZ	High Forest Zone
HQ	Headquarters
IBRD	International Bank for Reconstruction and Development (the World Bank)

IDA	International Development Association
IFC	International Finance Corporation (of the World Bank Group)
IPCC	Intergovernmental Panel on Climate Change
ITTO	International Timber Trade Organization
IUCN	International Union for Conservation of Nature
LAP	Land Administration Project (World Bank)
LULUCF	Land use, Land Use Change and Forestry
M&E	Monitoring and Evaluation
MEST	Ministry of Environment, Science and Technology
MoFA	Ministry of Food and Agriculture
MoFEP	Ministry of Finance and Economic Planning
MLGRD	Ministry of Local Government and Rural Development
MLNR	Ministry of Lands and Natural Resources
MDB	Multilateral Development Banks
MRV	Monitoring, Reporting and Verification (REDD+)
NCCPF	Natural Climate Change Policy Framework
NDPC	National Development Planning Commission
NGO	Non-Governmental Organisation
NI	National Interpretation (of RSPO)
NLBI	Non-Legally Binding Instrument (of UNFF)
NLP	National Lands Policy
NPDP	Natural Plantation Development Programme
NREG	Natural Resources and Environment Management Program
NRMP	Natural Resources Management Project
NTFPs	Non Timber Forest Products
PES	Payment of Environmental Services
PCN	Project Concept Note
PROFOR	Programme on Forests (of World Bank)
RAP	Rapid Assessment Programme
REDD	Reduced Emission from Deforestation and Degradation (of UNFCCC)
REDD+	REDD plus conservation and enhancement of carbon stock and sustainable forest management
RoG	Republic of Ghana
R-PIN	Readiness Plan Idea Note (of FCPF; REDD+)
R-PP	Readiness Preparation Proposal (of FCPF; REDD+)
RSPO	Roundtable for Sustainable Palm Oil
SEA	Strategic Environmental Assessment
SESA	Strategic Environmental and Social Assessment
SRA	Social Responsibility Agreement
TA	Technical Assistance
TCC	Technical Coordinating Committee
TTL	Task Team Leader
UNCBD	United Nations Convention on Biodiversity
UNCCD	United Nations Convention to Combat Desertification

UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
UN-REDD	United Nations Initiative on REDD
VPA	Voluntary Partnership Agreement (of EU)
WB	World Bank
WRC	Water Resources Commission
WRI	World Resources Institute
WWF	World Wildlife Foundation

1 SECTION-1 DESCRIPTION OF THE COUNTRY AND SECTOR CONTEXT

1.1 COUNTRY CONTEXT (GEOGRAPHY, DEMOGRAPHY AND ECONOMY)

1. The Republic of Ghana has a land area of 238,500 km^2, made up of two broad ecological zones - a high forest zone (HFZ) covering much of the southern third of the country, and a savannah zone covering two thirds of the considerably drier northern Ghana.

2. Ghana's population reached 24 million in 2010, an increase of 28% from 2000. The average annual growth rate is about 2.4% and population is projected to reach 31 million by 2025. Over the past ten years, population density increased from 79 to 102 persons per km². Urban population is about 40%, growing by 4.4%, and expected to reach almost 65% by 2020. Especially population increase but also urbanization increase demand for natural resources by expansion of agricultural areas and increasing demand for construction wood and for charcoal, especially in urban settings.

3. Gross National Income per capita was around US$ 1,283 in 2010 and government policies aim to increase this to US$3,000 by 2020 (RoG 2010a, World Bank 2011a). Cocoa, timber processing, mining and oil are the main economic activities in Ghana. The agriculture sector, which includes forestry, is the largest contributor (about 40% in 2000 - 2004) to GDP, while forestry alone contributes an estimated 4% (World Bank 2005). Over 70% of the population depend on natural resources for their basic food, water, and energy requirements.

4. The mining industry, primarily gold, provided the largest share (38%) of the export value in 2011. Cocoa contributed 22% of the export earnings but as the world's second largest producer (21%), after Ivory Coast (38%), the role of the cocoa is significant in the Ghanaian economy. The timber industry export has provided around 10% of the foreign exchange between 1990 and 2000 but there has been a considerable decline since 2005 from 8.1% to only an estimated 1.3% in 2011.

5. Ghana made significant progress in addressing poverty between 1992 and 2006. Poverty decreased from affecting 51.7% of the population in 1992 to 28.5% in 2006[3]. Increase in wealth was most pronounced in the southern part of the country. Poverty has become concentrated in the three northern regions with 25% of the population but half of the poor (World Bank 2010).

[3] Poverty rates are computed using the national poverty criteria. Using the international poverty criteria of US$1.25 the degree poverty was 30% in 2006, down from 39% in 1999.

6. Ghana has made good progress towards the Millennium Development Goals (MDG). Targets on income, poverty reduction, ending hunger, completion of primary education, gender equality and access to clean water are well on track to be met by 2015. Other MDGs, such as sanitation, child and maternal mortality require more effort. The MDB target on environmental sustainability continues to be a challenge, especially the loss of forest area and increasing CO_2 emissions, primarily from land use change and loss of carbon stocks.

7. The recent discovery of oil, though providing potential for economic growth, increasing wealth, and for financing development, may also increase pressure on forests and natural resources through increasing economic activity, urbanization, building and demand for energy. It may also exacerbate a number of already existing challenges related to natural resources and environmental governance, volatility, agricultural competitiveness and geographical disparities.

1.2 FORESTS AND LAND USE IN GHANA

8. Ghana's forests make up part of the Guineo-Congolean phytoecological region. Forests broadly fall into two vegetation zones, each with different vegetation and forest types (cf. Figure 1): the High Forest Zone covering 34% and the Savannah Zone covering 66% of the land area. Biodiversity is high and the High Forest Zone falls within the West African Biodiversity Hotspot (Myers *et al.* 2000).

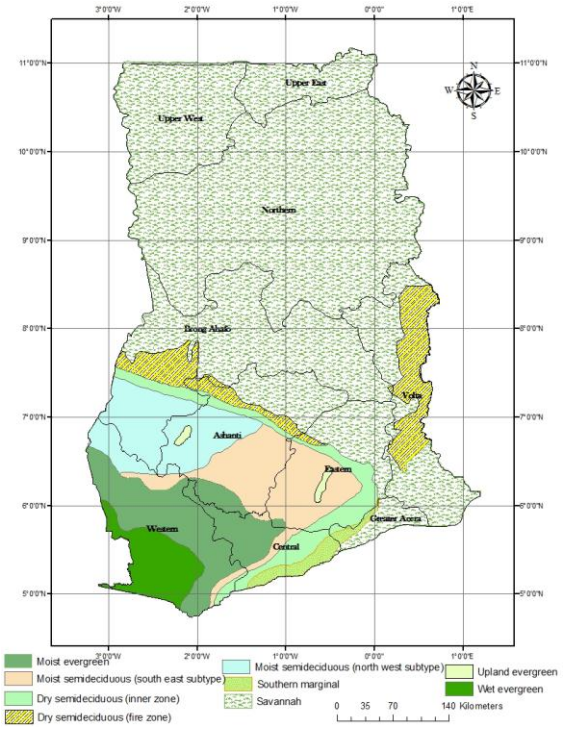


Figure 1: Vegetation Cover Map of Ghana.

9. There is no accurate and up to date information on the extent and distribution of forests. Total reserved forest area is about 2.5 million ha in 266 gazetted Forest Reserves (FRs). Forests and lands outside of designated FRs (including protected areas) are commonly referred to as off reserve areas. In the HFZ there is about 1.6 million ha in 216 forest reserves (FR). About 0.35 million ha are protected areas for biodiversity and other protective functions, while the rest are assigned productive functions. The Savannah Zone covers 14.7 million ha of woodlands and includes some 0.88 million ha of reserves, of which Mole NP alone is about 0.5 million ha (Table 1).

Table 1: Land types in Ghana[4].

Land type	High Forest Zone	Savannah Zone	Total
Forest Reserves	1,678,800	880,600	2,559,400
protected	*350,000*		
degraded	*390,000*		
Suitable for timber production	*938,800*		
Off reserve forests	6,547,100	14,747,500	21,294,600
Off reserve forests, farmlands	*46,600*	*6,576,100*	*6,622,700*
Other lands (cocoa, food farms, fallows)	*6,500,500*	*8,171,400*	*14,671,900*
Total	**8,225,900**	**15,628,100**	**23,854,000**

10. It is even more difficult to find accurate data on the distribution and status off-reserve land use. Within the HFZ, cocoa farms, subsistence crops and fallow lands are dominant land use types. Off-reserve forests are found over roughly 6.5 million ha distributed as trees and forest patches in agricultural lands, forest fallows, riparian forests, sacred groves etc. Hansen *et al.* (2009) provided the following estimates for land use classification of the HFZ: Natural forest (664,000 ha); Secondary forests (184,000 ha); Fallow (1,441,000 ha); Cleared (recently) farms (439,000 ha); Cocoa farms (1,001,000 ha); Food crops (1,236,000 ha); Grasslands (439,000 ha); and other land (102,000 ha).

11. Since 2002 about over 135,000 ha of plantations have been established under the National Forest Plantations Development Program (NFPDP). A forest plantation strategy is under preparation according to which there is about 1 million ha of land available for

[4] Davies & Awudi. 2001.

the establishment of forest plantations; 157,000 ha in FRs in the HFZ, 300,000 ha in the Savannah Zone FRs, and 600,000 ha in the off-reserve areas.

1.3 ECONOMIC IMPORTANCE OF FORESTRY SECTOR AND THOSE SECTORS AFFECTING FORESTS

1.3.1 Forestry sector

12. The formal forestry and wildlife sector employs about 120.000 Ghanaians, with employment predominantly in log processing industry. The timber industry is the fourth largest foreign exchange earner after minerals, cocoa and oil exports. Primary wood and processed products account for 89% and 11% of timber exports, respectively.

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

14. The formal forestry sector consisting of around 200 timber processing mills is export-oriented. In 2008 wood products export volume was 586,865 m^3 valued more than US$300 million, which has since declined to around US$ 180 million in 2009 and 2010. Only around 15% of the domestic market was supplied by the formal sector.

15. The informal forestry sector, mainly chain saw milling (CSM), is almost equal in size of formal sector in terms of employment and production. CSM, though illegal since 1998, provides the bulk of the supply (84%) for the domestic market, with estimated volume of around 0.5 million m^3 and market value of around 280 million GHC. It is also the main source of (illegal) overland export lumber to neighbouring countries with an estimated volume of around 260,000 m^3. It provides employment for around 130,000 people and livelihood for 650,000 people, and is the source of considerable revenue, to the mostly urban financers of the operations (Marfo 2010). The disconnect between a growing domestic demand and sustainable wood harvest creates huge pressure on forests, particularly in off reserve areas.

16. In addition to timber, forests provide the main source of domestic energy in the form of fuelwood and charcoal. The average annual per capita wood energy consumption estimate is 1.3 m^3. This would give a total estimated wood removal of more than 30 million m^3 for fuelwood and charcoal, or about 85% of the total wood removal in Ghana.

17. Non-timber forest products (NTFPs) are also very important, especially for women, but much of their value is not formally recorded and remains inadequately represented in policy analysis. An estimate of some NTFPs give annual market values around 35 million GHC, while the estimated value of bushmeat is in the range of US$275 million (World Bank 2005). However, the economic value of NTFPs, for both commercial and household purposes, may locally outweigh that of timber. According to IIED (2008) forest products

account for 1/3 of the total household's livelihoods in rural areas, of which 2/3 comes from non-cash income.

1.3.2 Agriculture and Cocoa sector

18. Agricultural crops, both subsistence (e.g. maize, cassava, millet), and cash crops, (e.g. as cocoa, cashew, oil palm and coffee) make up 64% of the natural capital of Ghana. There has been reasonable growth in the agriculture sector, with crops and livestock growth at 4.3% (2000 – 2004) and cocoa growing 10.2% in the same period.

19. Agricultural land use accounts for more than 50% of all land use, and though decreasing, still provides employment for an estimated 60% of the population, particularly women (53% of whom are employed in agriculture). It is primarily small holder farming though it is important to note that certain crops such as cocoa have been intensively commercialized already for at least a century (RoG 2005).

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

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

22. Productivity in Ghana is among the lowest in the world with average yields of 330 kg per ha, compared to 580 kg in Ivory Coast and up 770 kg in Indonesia. Production increase has come from expanding area under cultivation, which has also been a disincentive for improving productivity (World Bank 2011b). Thus the sector is a major contributor to deforestation and conversion to farming systems with continuously declining carbon stocks.

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

24. The organic cocoa and fair trade market is still small but growing rapidly (20% per year 2003 – 2008). In 2003 Ghana accounted for 45% of the market, and though South America currently is the leading producer region, there would be considerable opportunities for branding organic and fair trade cocoa in Ghana. The *Kuapa Kokoo* experience provides an arrangement, where the premium from the niche market is

passed onwards to the *Kuapaa Kokoo* farmer association. Further, in late August 2012 the COCOBOD signed an agreement with private sector companies to ensure the traceability of UTZ Certified[5] cocoa beans in Ghana providing premiums which will be used by the communities for priority development projects. There have also been initiatives to introduce carbon payments for shaded cocoa, such as in the Ghana Cocoa Carbon Initiative by NCRC and the Forest Trends (Katoomba Group *et al.* 2011). Based on this experience there appears to be potential for more environmentally sustainable cocoa production based on market incentives or carbon payments.

25. Tree crops such as Oil Palm, Rubber Trees, Cashew etc. are envisaged to play an important role in agricultural development in Ghana (RoG 2011c). Especially the plans for and establishment of palm oil plantations has huge economic potential but are also the cause of major controversies in relation to clearing forests in West Africa (e.g. Liberia, Sierra Leone). The palm oil sector (300 – 350,000 ha) is largely small holder driven but may also become an area for large-scale investment and development in Ghana with current economic drivers persist, which potentially could impact on the HFZ.

1.3.3 Oil, gas and mining sectors

26. The oil and gas sector has rapidly grown to become the third most important export sector (2011). The immediate impact of Ghana's largely off-shore oil extraction is localized and may cause small-scale forest removals mainly for infrastructure development. If on-shore explorations intensify these impacts will be greater. However, the indirect effects through macroeconomic changes, some positive, some negative, not yet fully assessed, can have significant impact on GHG emissions and the environment.

27. However, increases in national income and employment can sometimes relieve pressure on forests, and if government use most of the oil income to upgrade urban infrastructure a more rapid urbanization could be reducing pressure on forests. For example, in Gabon higher levels of remuneration for urban labour led to a reduction in incentives for rural forest and land dependent activities. Secondly, investments leading to urbanization may shift emphasis from agriculture to other sectors, which could lead to a decline in cocoa exports and reduced forest conversion pressure such as in Nigeria in the 1970s. Alternatively, if oil revenue is used to finance large infrastructural developments such as large road construction and resettlement programmes in forested areas and provide cheap agriculture credit, deforestation and forest degradation could accelerate.

[5] UTZ Certified is a foundation for the worldwide implementation of a standard for responsible coffee, cocoa, tea and rooibos.

1.4 STATUS AND TRENDS CONCERNING FOREST AND WOODLAND RESOURCES

28. Comprehensive, consistent and quantitative assessments of deforestation and forest degradation are not readily available for Ghana, especially for the savannah zone. In 1900 the area of high forest was estimated to be between 8 and 9 million ha. By 1946 forest had been reduced by 50%, and by the early 1950s the unreserved forest area had halved to about 1.5 million ha, roughly similar to the area of reserved forest.

29. The official reported deforestation-rate has been around 2 – 2.1% per year since 1990 up to 2010 (FAO 2010). Ghana is losing annually approximately 135,000 ha, of which 65,000 ha per year is thought to relate to intact closed forest (see Figure 2). A more recent assessment of land use and land use change across a landscape encompassing forest reserves and cocoa farms in five districts spanning the southern Brong Ahafo Region and northern portion of the Western Region found that deforestation rates may have been accelerating. Within this area, both primary and secondary forest was lost at a combined annual rate of 1.9% over 25 years (1986 – 2011), whereas forests were lost at a rate of 2.3% over the last 11 years[6].

30. The degree of forest degradation is more difficult to assess. There are different estimates on the status of the forest reserves generally pointing to various degrees of degradation and an overall decline of their integrity. Some estimates on status of FRs in the HFZ note that 14% have no forest, 15% as classified as in very bad status, 20% as mostly and 35% as partly degraded, while only 14% are in good and 2% in excellent state (FORIG, *in prep.*). While recent unpublished analysis of basal area indicates a continuing decline in stocking of forest reserves over the period 1955 – 1995. The overall average basal area has declined by 25% but with significant differences between reserves and regions[7]. The status of forests in the off-reserve areas is even more problematic to assess. Estimates for closed canopy forest vary from 374,000 ha (1992) to as low as 20,000 ha (World Bank 2005).

1986 **2000** **2007**

[6] Tutu, D.B. *Personal communication.* March 2011.

[7] Wong J. *Unpublished data*.

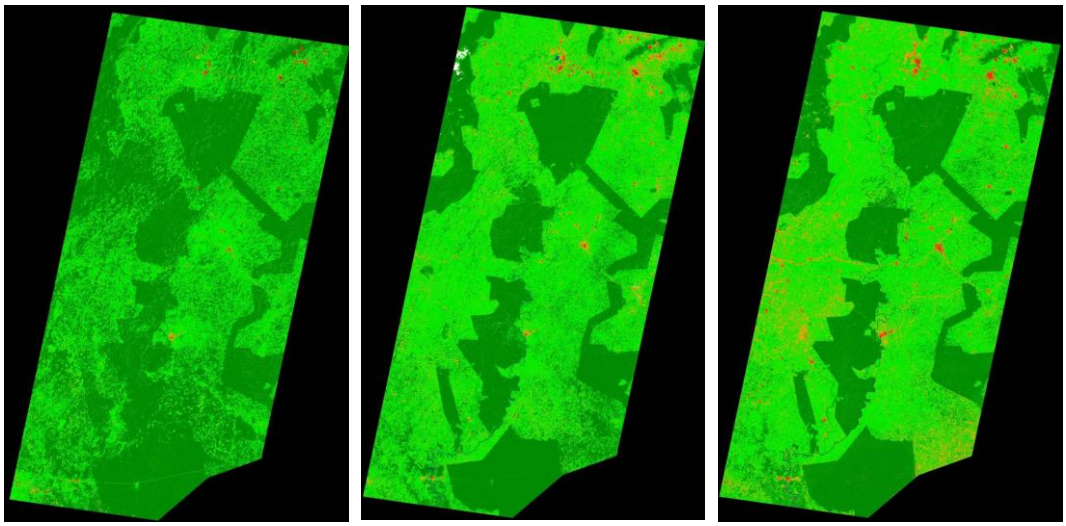


Figure 2: Deforestation (1986, 2007, 2007) around Suhuma FR (upper center),Tano Anwia, Tano Nimiri, Boi Tano (center middle) FRs, and Ankasa NP (lower right) in Western Region.

31. The current unsustainable use of the forest resources can be seen from the imbalance of demand and supply of timber in Ghana. The challenge is compounded by the fact that there is some 5 million m^3 of installed log processing capacity, although it is decreasing. According to the adjusted forestry master plan the annual allowable cut (AAC) is around 2 million m^3. The current wood harvesting from the formal forestry enterprise sector is in the range of the AAC, i.e. around 2 million m^3.

32. According to recent studies, virtually the entire (84%) domestic demand (around 0.5 million m^3) is supplied through the illegal informal chain saw milling (CSM). CSM also supplies around 0.25 million m^3 for overland export to neighbouring countries. The CSM activity adds another 2.5 million m^3 per year to the wood harvest of the formal sector. Though there is no precise data the bulk comes from the off-reserve areas but there is also considerable illegal harvesting in the FRs.

33. Forest degradation can also be assessed from the perspective of loss of wildlife and biodiversity. Long term decline in key indicator species, such as elephant, buffalo and chimpanzee, has been noted. The same decline has been observed in smaller species hunted for bush meat. Based on the Forest and Wildlife Policy of 1994, the Wildlife Division of the Forestry Commission developed a Collaborative Wildlife Management Policy as the foundation for testing the Community Resource Management Area (CREMA) approach.

34. It builds on the Community Based Natural Resource Management work elsewhere in Africa, specifically in Zimbabwe and Namibia. CREMAs are defined geographical areas consisting of one or more communities that have formed an association and agreed to manage natural resources sustainably by devolving management right and right to benefits to the communities. So far focus has been primarily on wildlife resources, though it could easily be extended to include also forests and trees.

35. Agricultural land expansion, especially cocoa has been a major driver of land use change, and the growth rates have been over 4% and 10% (2000 – 2004) respectively. In 1999 cocoa farms covered approximately 1 million ha expanding to 1.45 million ha in 2002 and 1.66 million ha in 2009/10 (Hansen *et al.* 2009). Since the end of the 1980's the expansion has been greatest in the Western Region, which now accounts for over 56% of the production (Figure 3). The cocoa frontier has expanded much at the expense of forests mainly outside but also inside reserves. Using the share of production as a proxy, half of the cocoa area, roughly 800,000 ha, would also be in the Western Region and brought under cultivation since around the end of 1980's.

36. Over the years expanding cocoa farming has also contributed to considerable internal migration and share cropping, resulting in a situation, where in some areas 40 – 50% of the population in an area is from other parts of the country complicating land tenure and benefit sharing arrangements.

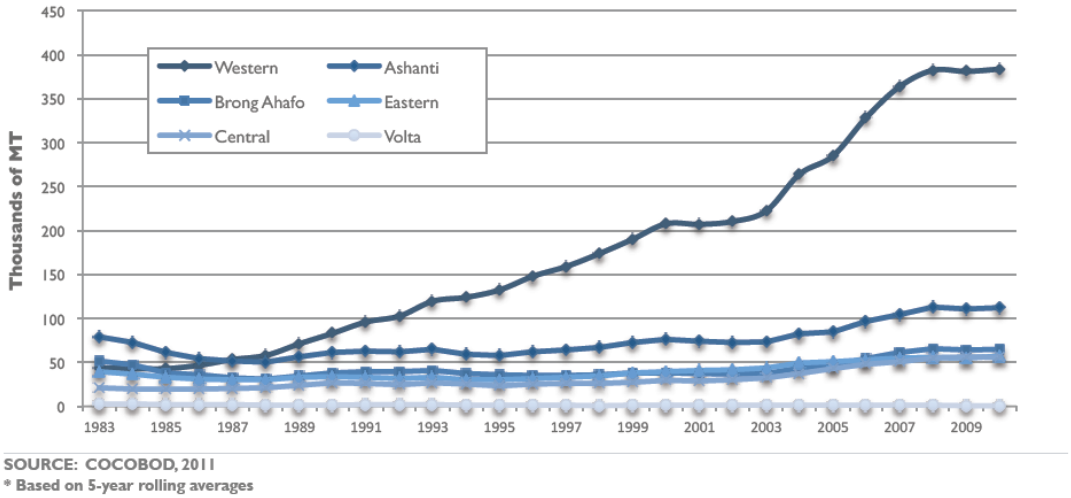


Figure 3: Cocoa production by region in Ghana 1983 – 2010[8].

1.5 Analysis of Carbon Stock distribution

37. Ghana's terrestrial carbon stocks are estimated to total 7.46 $GtCO_2e$, comprised of 6.22 $GtCO_2e$, in above- and below-ground biomass and about 1.24 $GtCO_2e$ in soil carbon to 1 m depth (Katoomba Group *et al.* 2011a). Reflecting rainfall and vegetation zones, biomass and soil carbon are distributed unevenly over the country (Figure 4). Areas of high biomass carbon density contain 6% of Ghana's biomass carbon but cover only 2% of the country's land area. High carbon density areas are associated with intact natural

[8] Describing the rapid increase of cocoa production in the Western Region compared to other regions since the end of the 1990s (World Bank. 2012a).

forest in the moist forest zone and contain over 730 tCO_2e/ha in above and below-ground biomass, and soil carbon (Katoomba Group *et al.* 2011a). Although the total area is small, mangroves also contain substantial carbon stocks per unit area (*cf.* Table 2).

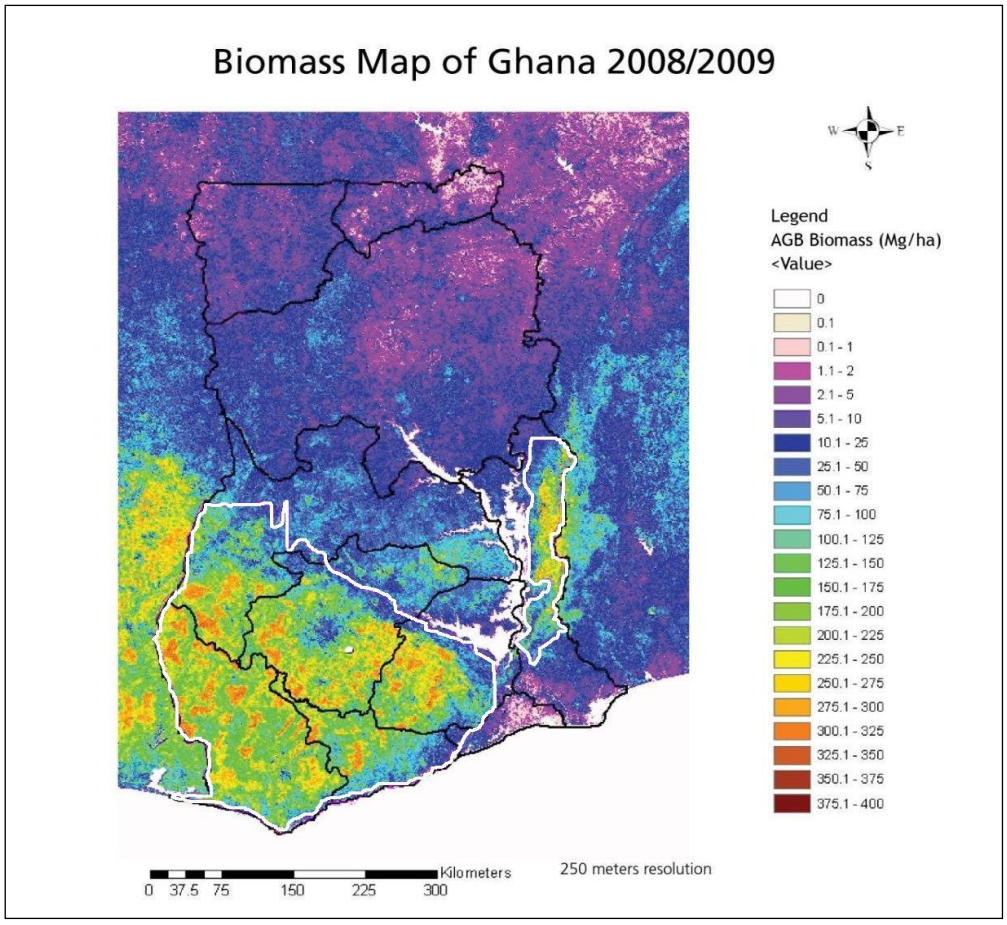


Figure 4: Above ground biomass in Ghana with approximate borders of HFZ (white) and the regions (black)[9].

38. Land-use and land-use change has added significant heterogeneity and variation in carbon stocks. Broadly carbon stocks decline from southwest to northeast, and moving from intact forest to increasingly open farming landscapes. The national biomass map shows that the highest biomass is in the HFZ, with carbon stocks (above and below-ground biomass, and soil carbon) ranging from 180 to more than 700 tCO_2e/ha. In the entire savannah and the transitional zone, i.e. the northern two-thirds of the country carbon stocks are on the average below 140 tCO_2e/ha. Table 2 provides estimates of

[9] Katoomba Group *et al.* 2011.

above ground carbon in different land use and vegetation types based on sampling and remote sensing analysis (Katoomba Group *et al.* 2011b).

39. Data on soil carbon stocks is limited. Conservative estimates based on IPCC default values estimate Ghana's soil carbon stocks to be about 260 tCO_2e/ha (RoG 2010b). Soil carbon stocks in the high forest zone and savannah zone would range from 110 – 340 tCO_2e/ha and from 100 – 125 tCO_2e/ha respectively. In the cultivated areas within the high forest zone soil carbon stocks range from about 100 – 260 tCO_2e/ha, while the respective estimates in the savannah zone would be 70 – 160 tCO_2e/ha (Abu-Bredu *et al.* 2010, Katoomba Group *et al.* 2011b).

Table 2: Carbon stocks (in CO_2e) in different land use types in Ghana[10].

Ecological strata	Sub-strata	Percentage of total land area	Land area (000 ha)	Average Above-ground Carbon stock (tCO2 e/ha)	Estimated root Carbon stock (tCO2e/ha)	Estimated biomass and soil Carbon stock (tCO2e/ha)
High Forest zone		34%	8,189			
	Reserves		1,200	420	91	731
	Off-Reserve forest remnants		600	240	54	474
	Cocoa		1,800	200	46	426
	Agriculture lands- food crops		1,200	55	14	249
	Fallow		1,400	37	10	227
	Grassland		600	22	6	208
Savannah		66%	15,700	0		
	Woodland			140	33	286
	Agriculture			44	11	168
	Grassland			15	4	132
Mangrove		0.5%	11	0		
	Undisturbed			3,400	n.a.	1400
	Disturbed			1,600	n.a.	1400
Total		**100%**	**23,900**			

1.6 CARBON EMISSIONS

40. According to Ghana's second national communication to the UNFCCC, Ghana's total emission in 2006 was about 24 $MtCO_2e$, amounting to around 1.1 tCO_2e per capita. Ghana's emissions were still low by global standard (0.05%) and ranked 108 in the

[10] The above ground estimates for mangroves are probably too high in light of recent research, which give an average of 933 tCO_2/ha, ranging between 373 – 1,492 tCO_2/ha (Pendleton *et al.* 2012). The value of 1,400 tCO_2/ha is considered appropriate for the purpose of the comparison. In any case the mangrove area at the HFZ coastline is small.

Source: Hansen, C.P. *et al.* 2009; Katoomba Group *et al.* 2011.

world. However, the rapidly growing oil and gas sector (already third in export earnings in 2011) is changing Ghana's overall emissions profile. Consequently Ghana's position in the world ranking for overall emissions is expected to change dramatically in next few years.

41. Emission data for the period 1990 – 1996 indicates that the country was a net sink due largely to high levels of carbon sequestration in the LULUCF sector (66%) in 1990. However, Ghana's Second National Communication to UNFCCC estimated a 96% decrease of the net greenhouse gas removals within the LULUCF sector from around from -26.1 $MtCO_2e$ in 1990 to -1.04 $MtCO_2e$ in 2000, and 5.6 $MtCO_2e$ in 2006 (cf. Figure 5). Since 2001 the sub-sector has become a net emitter, contributing 25%, of total emissions in 2006.

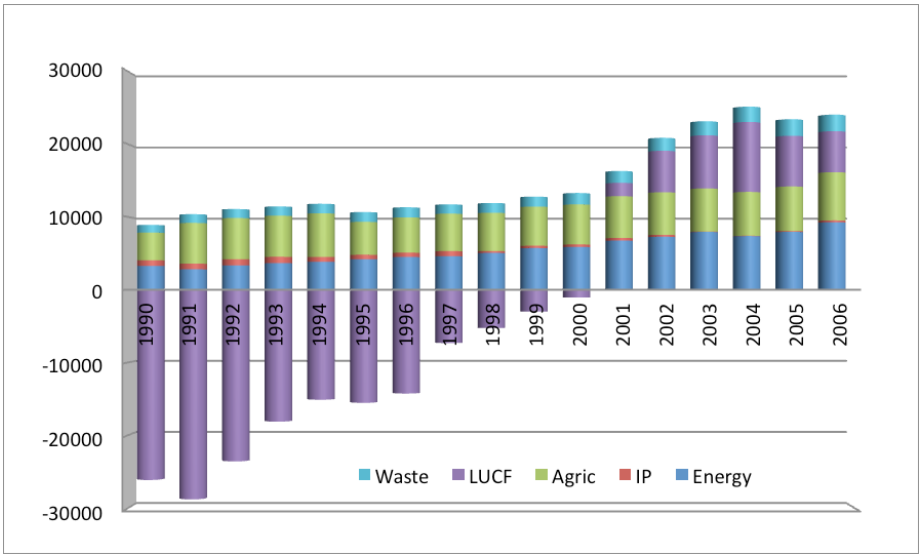


Figure 5: Trend of total emissions ($GgCO_2e$) by sectors[11].

42. Deforestation and conversion of forests and grasslands was the major reason for this change accounting for 20% share of total LULUCF emissions in 1990 to 50% in 2006. This together with changes in forest and woody biomass accounted for 95% of the LULUCF emissions in 2006. Ghana's low carbon growth plan estimates that 65% of baseline emissions come from land use changes, whilst a further 10% comes from the burning of biomass. Combined, these are estimated to produce 42.3 $MtCO_2e$ emissions. Nevertheless, the importance of baseline emissions from land use changes will have to be reviewed as Ghana's low carbon growth plan has not adequately incorporated the emissions from the rapidly growing oil and gas sector in the overall emissions.

[11] RoG. 2011b.

1.7 KEY DRIVERS OF DEFORESTATION AND DEGRADATION

43. The current understanding, based on three decades of interventions in the sector, is that deforestation in Ghana is largely a process of progressive degradation driven by a mix of forces from within and particularly from outside the forest sector. The Land Use, Land Use Change and Forestry (LULUCF) sector in Ghana has rapidly changed from sink to a considerable source (25%) of total GHG emissions.

44. The Readiness Proposal (R-PP) identifies the principal drivers of deforestation and degradation as[12]:

    a. Agricultural expansion, e.g. permanent cultivation, cattle ranching, shifting cultivation/traditional slash and burn (about 50%);

    b. Harvesting for fuelwood and charcoal, illegal logging, wildfires and biomass burning (about 35%);

    c. Population and development pressure, e.g. expanding urbanization, settlements and new infrastructure (10%); and

    d. Mining and mineral exploitation (5%).

45. The underlying drivers and factors contributing to deforestation and forest degradation in Ghana have been well documented, e.g. in the REDD+ readiness proposal. Table 3, building on the readiness and the FIP preparation processes, describe immediate and underlying causes of deforestation and proposals to reverse the trends.

46. **Agricultural expansion** at the expense of land covered by forests is primarily driven by population growth, dependency on agriculture and natural resources, including the relatively fast growth of cocoa production. Increasing agricultural yields have been achieved by expanding the area under cultivation and maintenance of soil fertility primarily by farm fallowing. However, as population is growing there is increasing competition for land, restricting mobility resulting in increasing intensification per land unit with decline in soil fertility but also increasing removal of trees and carbon from the farming system.

47. There has been a rapid transition from traditional shaded cocoa cultivation (under primary or secondary forests) to progressively open cocoa cultivation, driven mainly by higher short-term profit, increasing competition for land combined with other factors. Currently shaded cocoa farming only accounts for less that 30% in Ghana (21% in the Western Region and 47% in Brong Ahafo Region), while the rest is primarily open cocoa farming with little or no shade trees. From a carbon management perspective, the

[12] It is unclear on what data these estimates, which appear as such in the R-PIN in 2008, are based.

shaded cultivation represents carbon stock almost equal to off-reserve forest areas or degraded forest reserves (cf. Table 2), while transition to open cultivation represents a loss of about 50% of the carbon stocks.

48. **The existing tree tenure regime and rights to benefits** from naturally growing, especially commercial trees on farms have exacerbated the loss of trees on farms and forests in the agricultural landscape. The current benefit sharing regime on trees, enshrined in Ghanaian Constitution, posits benefit sharing arrangements under which stakeholders such as land owners, farmers and tenants may feel that they are not getting a fair share of the benefits accruing from trees harvest. This is a major disincentive in the off-reserve areas but also influence perceptions and attitudes towards trees and forests within reserves.

49. **The unsustainable wood harvesting** is driven by the tenure and benefit sharing regimes both within and outside reserves; the obvious demand – supply imbalance in the domestic market; overcapacity in processing and inappropriate technology to process the current wood supply; access to credit and financing; and policy and institutional failures to deal with the sector challenges. Despite efforts to improve on governance and contain illegal logging, and despite Ghana's pilot role in and commitments to the VPA/FLEGT process there appears not to have been significant reductions in illegal logging in recent years. There is need for considerable improvement of timber tracking, information management and application of best practice in forest governance and law enforcement. The most pronounced feature of the situation with illegal logging is the supply of timber from the chain saw milling sector.

50. The GoG recognizes the governance challenges. According to the revised draft forest and wildlife policy (RoG 2011a), there is poor accountability in resource exploitation and lack of cost-effectiveness in the use of resources and creation of appropriate benefits in a transparent and accountable manner. It is further noted, that more than 1.7m^3 of the Annual Allowable Cut (AAC) harvested is not accounted for in the national accounts leading to considerable loss of revenue to the landowners, District Assemblies and the State.

51. Presently virtually all domestic demand is supplied by the CSM sector. Though illegal since 1998, in practise CSM provides the only "fair benefit sharing arrangement", which also reward the farmers for trees retained and harvested on farms. About 38% of the informal payments (estimated total of around 33 million per year) made for the sale of the timber goes as compensations to the farmers (while about 50% goes to public agencies) (Marfo 2010). This coupled with the fact, that CSM supplies most of the domestic market and that most CSM operators and actors are connected to the local communities make it difficult to enforce the ban.

52. **There is a growing demand for wood fuels** driven by a growing population and increasing urbanization. Charcoal production plays an important role specifically in the urban context but production largely concentrated to specific areas. According to the Energy Commission the transition and savannah zones are the main source of wood fuel

and charcoal. The long-term impact of charcoal production has not been assessed and whilst in some areas heavy degradation is reported, in others exploitation may be closer to a sustainable yield. In the savannah zone fire and overgrazing by livestock are also more significant drivers of degradation than in the high forest zone.

53. **Further, access to credit** is a limiting factor for investments in production and new more sustainable technologies and productions systems both in the agriculture and forestry sector. Local financial institutions offer little support for private sector projects that aim to reduce deforestation and forest degradation, as well as to promote sustainable forest management. Both the private sector and the financial institutions have limited knowledge on the opportunities provided by REDD+. In addition to this the relative small size of projects at this stage of development of REDD+ in Ghana translate into higher investment risks.

54. The potential of "green standards and criteria" as an incentive for sustainable and more climate friendly investments is also not very well established within the national financial institutions, though there are growing platforms (VPA, commodity roundtables) for sustainable and certified forest, agricultural and especially cocoa production.

55. In summary, the major underlying drivers of GHG emissions that the FIP investment should address are: (1) Agricultural expansion, especially the drivers behind the expansion and transition of cocoa farming; (2) The tenure and benefit sharing regimes that current represent a disincentive to retaining trees and forests especially in the off-reserve areas; (3) The financial incentives and market mechanisms, including REDD+, that may change the way business in forestry and the agricultural sector is conducted within the private sector and society in Ghana.

Table 3: Causes of deforestation and proposed actions to reverse trends[13].

Location	Direct Causes	Underlying Causes	Potential Interventions to Reverse Trends
High Forest	Wood Industry overcapacity and inefficiency	• Log export ban • Undervalued timber prices and low stumpage fees • Low milling recovery • Steady supply of illegal chainsaw lumber • Limited access to finance for technology upgrade	• Rationalize capacity in timber industry and promote higher efficiency • Lifting of log export ban • Decommissioning of mills • Review of timber prices and forest fees • Technology upgrade and skills improvement
	Illegal logging and chainsaw activities	• Weak harvest and regulatory mechanism • Weak enforcement of forest laws • High international demand for wood products • High local demand that is not being met by the legal production • Lack of access to finance and conducive investments	• Increase capacity for enforcement of forest laws • Implement effective log tracking and legality assurance scheme • Strengthen FC capacity and improve incentive to staff • Rehabilitate degraded forest and promote favorable climate to attract private investment in industrial plantations
	Ineffective forest management practices	• Insufficient involvement of local people in management • Ineffective mechanism for timber rights allocation • Disincentive of current tree tenure regime	• Reinforce local community involvement in resource management. Applying CREMA concept in off-reserve areas • Implement reserve by reserve management

[13] The table is based on analyses and assessments made during the preparation and consultation process.

		• Inequitable benefit sharing arrangements	plans • Reform tree tenure and access rights • Design robust and transparent financial structures for equitable distribution of benefits
	Agriculture expansion (tree crop expansion e.g. cocoa)	• Extensive farming practices and low yields • Perception that cocoa does not need shade • Perverse incentives (cocoa input subsidies/lowering of input tariffs • Limited access to finance for sustainable agriculture activities	• Promote intensification and increased productivity linked to community land use planning to curb further expansion into forests • Increase farmer access to financial and risk reduction mechanisms • Facilitate community based land use planning to avoid deforestation and degradation • Increase access to information and technical information • Removal of financial incentives that encourage forest land conversion
	Food and other crops	• Limited technology in farming systems • Slash and burn farming practices • Shifting cultivation to maintain soil fertility • Increasing population, rural poverty and the need to secure livelihoods • Lack of access to finance for sustainable practices	• Support applied research aimed at increasing crop yields per ha • Increase farmer access to financial and risk reduction mechanisms • Facilitate community based land use planning to avoid deforestation and degradation • Integrate agroforestry trees into farming systems to increase economic revenue • Promote agriculture intensification practices
	Mining	• Increasing legal and illegal surface mining activities • Increasing demand and encroachment by industrial, artisanal (“Galamsey”) and small-scale miners (ASM) on forest lands	• Vegetation restoration of degraded mined sites after closure of mines • Measures to reduce forest degradation as a result of unregulated (sometimes illegal) small

		• Voluntary /involuntary resettlement of communities/villages • Increasing population in mining areas • Limited long term livelihood opportunities in the mining areas	scale mining implemented
Savanna	Fuel wood and charcoal production	• High rural and urban demand • Open access nature of resource • Inefficient production system • Insufficient supply of alternatives • Limited access to finance for technology upgrade	• Establishment of community/ family woodlots • Improve efficiency in fuel wood use and carbonization methods
	Wildfires	• Fire as a tool for land preparation • Low capacity to control fire • Dry vegetation in low rainfall zones	• Increase awareness of impact of forest fires • Increase capacity and promote networking of communities for prevention and control of fire • Design forest fire forecast system in collaboration with communities
	Agriculture expansion	• Limited technology in farming system • Overgrazing and soil compaction • Low soil fertility • Limited access to finance for sustainable agriculture activities	• Improve productivity through technology transfer • Promote agriculture intensification • Integrate trees into farming systems • Planting trees to combat desertification
	Overgrazing	• Increasing livestock population • Degradation of pasturelands • Depletion of fodder plants • Sedentarisation of livestock raisers	• Development of new pasturelands • Cultivation of fodder plants

1.8 REDD+ PROCESS AND STAKEHOLDER ENGAGEMENT IN GHANA

56. Ghana's economy is heavily dependent on climate-sensitive sectors such as agriculture, forestry and water resources (RoG 2011b). The National Climate Change Policy Framework (NCCPF) has been developed through a consultative process, and the policy framework has three main objectives:

    1. Adaptation and reduced vulnerability to impact of climate change;
    2. Mitigating the impact of climate change; and
    3. Low carbon growth.

57. Presently, the Government of Ghana is in the process of preparing a National Climate Change Policy, which will define the vision, guiding principles and the strategic focus for addressing climate change in Ghana (RoG 2012; first draft).

58. Ghana joined the international REDD+ readiness process through the World Bank's Forest Carbon Partnership Facility (FCPF). The readiness process aims at creating capacity to fully engage in and utilize the REDD+ mechanism to address climate change adaptation and mitigation. Ghana was also included as one of the pilot countries for the Forest Investment Program (FIP), which aims at piloting and providing up front investments for the pilot countries to test and initiate the REDD+ activities. In 2012, Ghana was also included in the UN-REDD program, though no financial support has yet been allocated to Ghana.

59. Ghana initially completed the Project Idea Note (R-PIN) in 2008, and in 2010 received approval of the Readiness Preparation Proposal (R-PP). The R-PP presents a strategy and implementation framework for REDD+ in Ghana, aiming to incorporate and build on synergies of existing and anticipated programs and mechanisms. The REDD+ strategy focus is on reducing emissions from deforestation and degradation, but also on conservation, enhancement of carbon stocks, and sustainable forest management. Ghana has recently transitioned from the first phase (analysis, preparation, consultation) to the second phase (piloting and consultation) of readiness implementation.

60. The FIP funding in Ghana, will be aligned with and build on the REDD+ readiness process to provide transformational and additional investments to directly address some of the key drivers, and to facilitate and test approaches, which support decision-making and policy along the national REDD+ strategy.

61. Ghana has received a US$ 3.4 million grant from the FCPF in support of its R-PP and REDD+ activities for capacity building and supporting key steps in the process, including the preparation of the national REDD+ strategy. The FCPF grant, while important, is not adequate to cover estimated costs, nor can these funds be used to support national piloting activities. Additional funding for the pilots has been provided e.g. from the Governments of Japan and Germany to assist with the development of national reference levels and a national Monitoring, Reporting and Verification (MRV) system.

62. A number of other relevant processes over recent years have provided the foundation for stakeholder engagement and participation in land-use related policy development and decision-making. Amongst these were major stakeholder consultations undertaken to guide the revision of Ghana Forest and Wildlife Policy (FWP), Ghana's Voluntary Partnership Agreement (VPA), Non-legally Binding Instrument (NLBI), and the REDD+/R-PP processes. These have been strategically interlinked, building on each other by using similar structures for engagement. One key modality of engagement and participation of forest dependent communities in the processes described above is through the Forest Forums. Lessons learnt from these processes have led to the articulation of a number of principles for REDD+ process consultation, as well as implementation strategies.

63. Annex 3 provides a more detailed overview of the stakeholder consultation process.

2 SECTION 2: OPPORTUNITIES FOR GREENHOUSE GAS ABATEMENT

2.1 GHG ABATEMENT OPPORTUNITIES

64. Though the LULUCF sector has changed from a significant sink to becoming a net emitter, there are considerable opportunities to address the underlying causes, which have been driving this change in the role of the sub-sector with respect to GHG emissions in Ghana. However, unless deforestation and forest degradation is addressed, emissions are predicted to grow and the abatement potential of the LULUCF sector in the climate strategy of Ghana remains underutilized.

65. Preliminary analyses of recent studies on forest landscape restoration potential in Ghana supported by PROFOR at the World Bank, point to considerable potential within the forestry and agriculture sectors for GHG abatement (CERGIS *et al.* unpublished)[14]. Among other aspects, the study assessed the potential and relative carbon abatement impact of different landscape restoration interventions for Ghana (Figure 6).

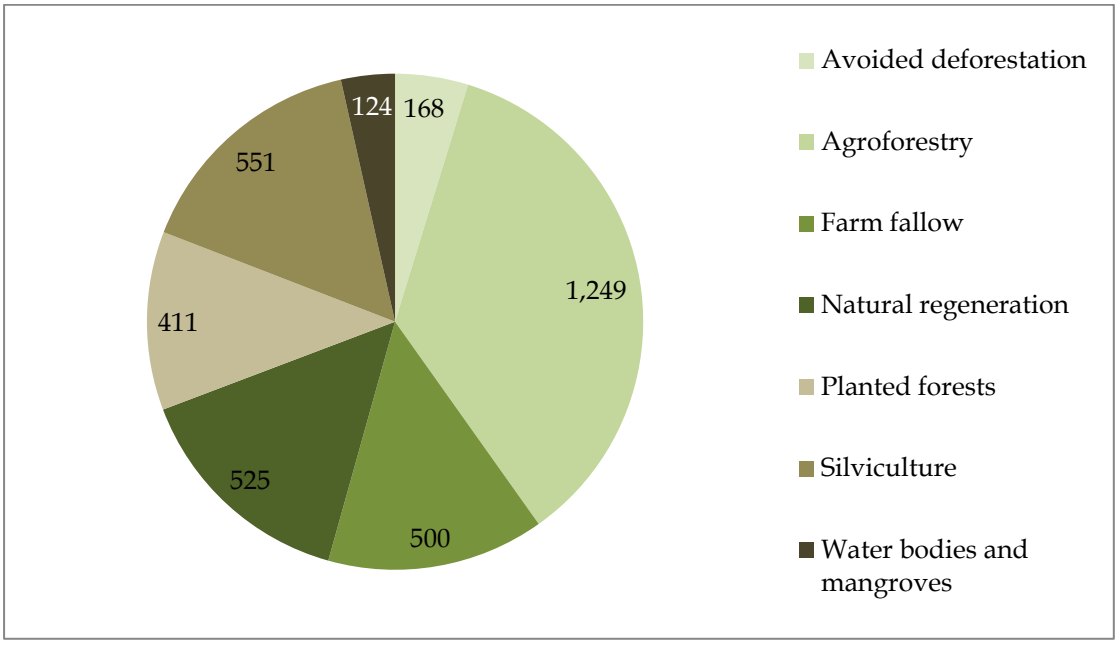


Figure 6: Emission reduction potential ($MtCO_2e$) over 20 years by intervention[15].

[14] The assumptions, methods and results of the study were reviewed during the FIP preparation process (Kapp 2012).

[15] CERGIS, IUCN, University of Maryland and WRI. *Unpublished data.*

66. Especially interventions in farming systems (agroforestry and farm fallows), and forest regeneration and management can provide important emission reductions through carbon sequestration. There is significant available area and potential for agroforestry and restoration interventions in farm fallows, especially in the off-reserve areas. Potential areas for natural regeneration and planted forests are found both within FRs but with greater potential still in the off reserve setting, while the potential for silvicultural interventions is largely confined to the FRs.

67. The study also presents a comparison of the emission reduction potential ($MtCO_2e$) over a 20 year period across the different regions. It shows that opportunities for biome-based carbon sequestration and storage can be found in all regions in Ghana, but that the Western and Brong Ahafo regions (including the main part of the HFZ) have the greatest opportunities. (Figure 7).

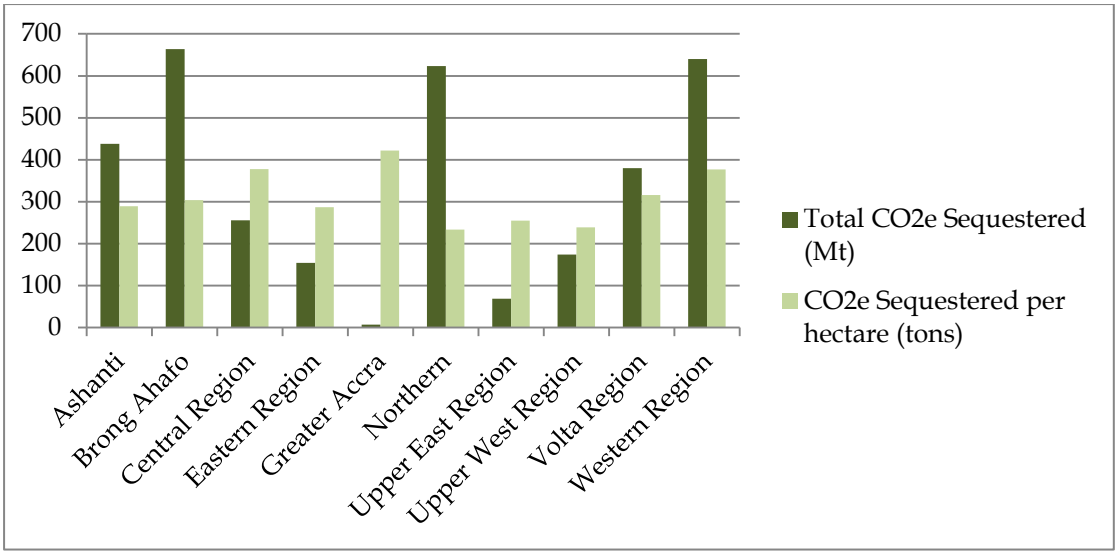


Figure 7: Emission reduction potential ($MtCO_2e$) in landscape restoration by region[16].

68. As these are still preliminary results a detailed analysis of the relative significance of different landscape interventions, including an opportunity cost analyses, should be conducted in connection with the preparation and detailed planning of the interventions. A preliminary assessment of the emission reduction potential of various landscape restoration interventions, based on the study by CERGIS *et al.*, is presented in figures 8 and 9. Regarding Brong Ahafo it should be noted that only part of the region is

[16] CERGIS, IUCN, University of Maryland and WRI. *Unpublished data.*

in the HFZ and most is transition zone or savannah. A land use change matrix[17] with a regional opportunity cost curve could be generated for the investment zone as a basis to guide investments to the most appropriate locations.

69. Further during the FIP preparation process, as an example, the rehabilitation of degraded natural forests through enrichment planting was estimated to have a GHG emission reduction potential of 4 million tCO_2e, calculated in a hypothetical 30,000 ha reserve over a period of 20 years at a 2% deforestation rate. The establishment of forestry plantations, building on the NFPDP and the plantation strategy currently under preparation, could yield a sequestered carbon value of around 500 tCO_2e/ha, based on a 20 year felling cycle, and with 20% of basal area removed at each felling. This could maintain continuous forest cover and lead to recovery of the original high forest vegetation through natural regeneration. Alternately, a teak plantation managed on an 18 years clear felling basis, could yield 200 tCO_2e/ha.

70. Though difficult to assess in direct GHG abatement terms, access to credit and associated technical expertise to the private sector could promote transformation in the way that they do business. Steering investments towards sustainable and climate responsive procedures and technologies, e.g. by introduction of "green investment standards and criteria" in financial institutions and using of existing market mechanisms such as commodity roundtables, certification, chain of custody procedures has the potential to initiate a transformation in the way business is conducted. This could in the long term pave way for increasing carbon stocks in cocoa farming systems, more efficient use of forest resources, and establishment of forest plantations as well as steering the consumption towards sustainably managed plantation forests as the main source to satisfy the timber demand.

[17] Data for this could be found at the Forestry Commission Climate Change Unit, where in the course of the REDD Readiness Preparation a reference scenario shall be developed until 2013 (FCPF 2010).

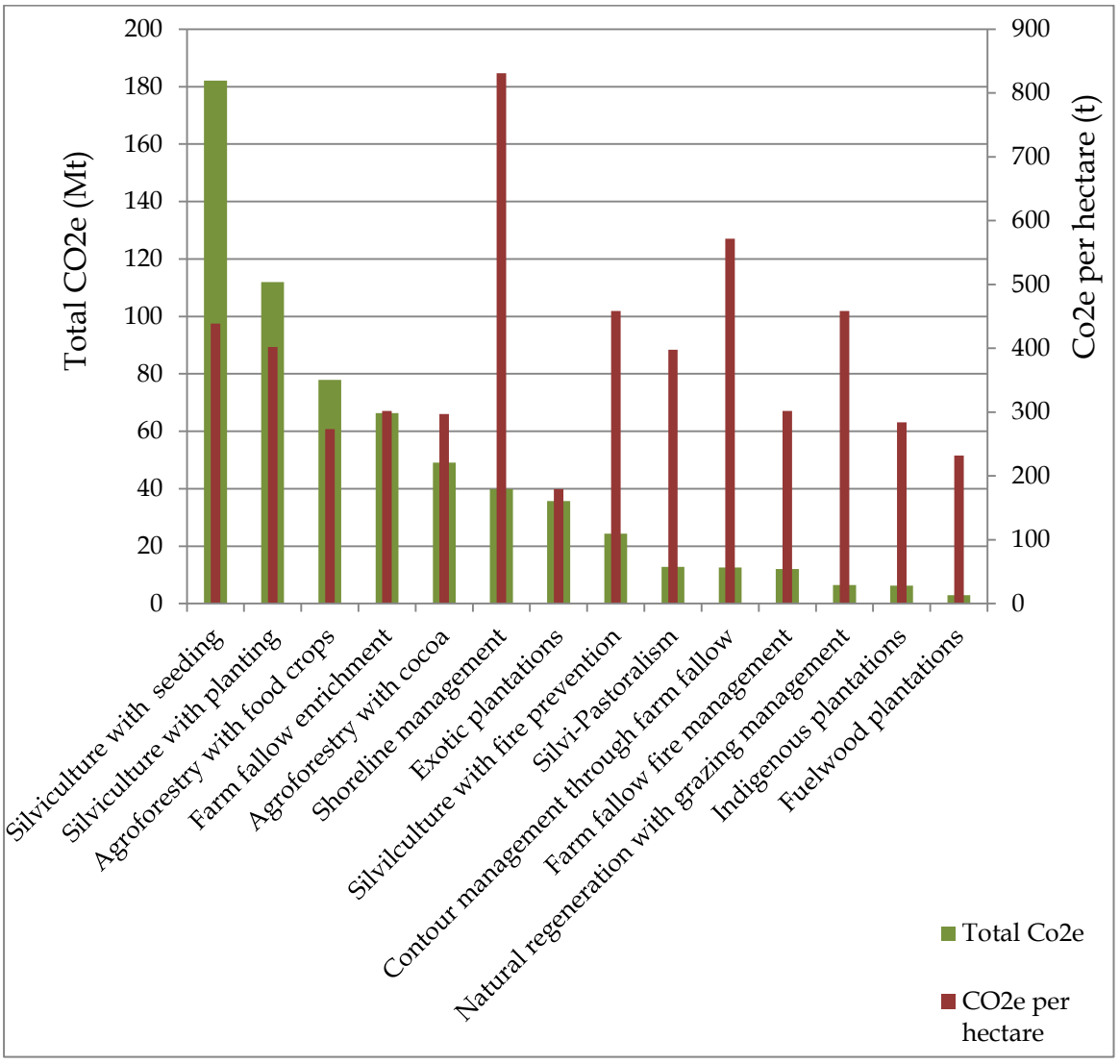


Figure 8: Emission reduction potential ($MtCO_2e$) of landscape restoration interventions: Western Region.

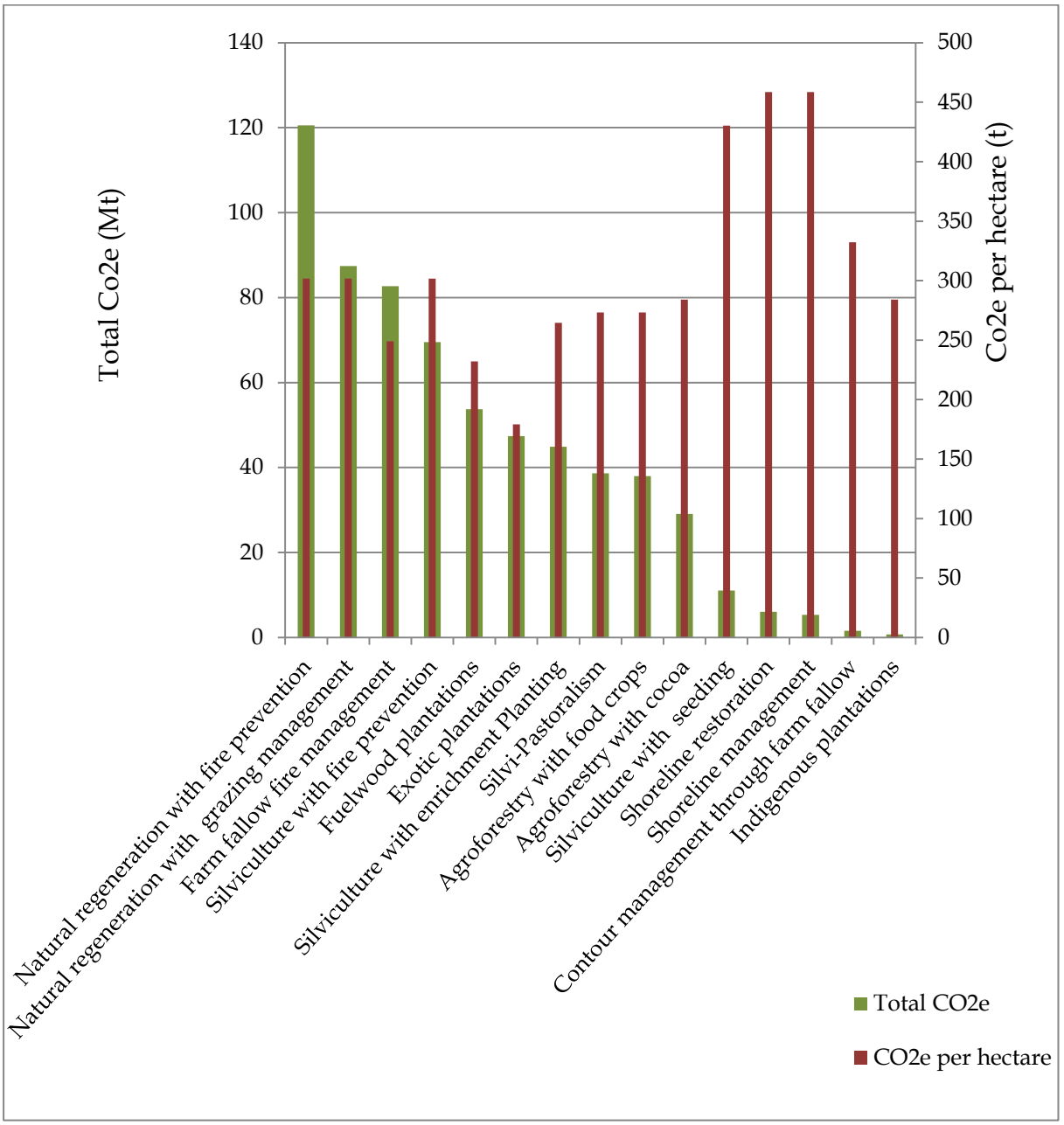


Figure 9: Emission reduction potential ($MtCO_2e$) of landscape restoration interventions: Brong Ahafo Region[18]

[18] It should be noted that only part of the region is in the HFZ and most of it is transition or savannah zone.

2.2 GHG ESTIMATES FOR THE FIP INTERVENTIONS

71. The FIP Ghana will invest US$50 million in grants and loans through three projects which are expected to attract co-financing of a similar magnitude. The following is presenting and estimate on the potential emission reduction effects of the three projects.

Project 1: Reducing pressure on natural forests through an integrated landscape approach.

72. The project intends to develop, pilot and validate replicable and up-scalable participatory forest resources management models in and off forest reserves. The present forest area in the HFZ is estimated at about 1.6 million ha, mostly in government managed forest reserves. This is a conservative estimate and some of the reserve areas may already have lost some of or their entire forest cover. The estimated average carbon stock of the HFZ forests is about 422 tCO_2e/ha (about 115 tC/ha), if soil carbon is included. However, the currently cited annual deforestation rate of 2% (about 110,000 ha/year) may be too high. The actual deforestation rate of the HFZ seems to slow down. It was estimated at 135,000 ha for the period 1990 – 2000 and 115,000 ha for 2000 – 2005 (Hansen *et al.* 2012, citing FAO and other sources). Hansen *et al.* 2012 argue that the HFZ forest area is significantly overestimated, and that approximately 3.9 million ha outside the FRs, accounted as "forest" in the FAO statistics, are predominantly under agricultural use.

73. Following from this an estimate based on e.g. a 1,5% deforestation rate of a forest area of 1.2 million ha over the first 15 years, and with a 1% rate from years 15 – 30, this would result in a forest loss of 373,000 ha or 158 $MtCO_2e$ (43 MtC). Further, this does not account for the fact that the included soil carbon will not be emitted immediately and entirely, but will be decreasing over many years, with some carbon remaining in the deeper parts of the soils after deforestation.

74. Another uncertainty factor, however, is the degradation of forests and non-forest land use systems in respect of biomass and soils. The FIP design, which takes a landscape approach, effectively considers degradation, which during the next 30 years may continue to increase in importance.

75. It is difficult to assess the long term (30 years) success of a short term project, but given the financial resources that are tentatively foreseen; a significant impact on deforestation and forest degradation can be expected. This could be better assessed, again, if the opportunity costs of the most important competing land uses were available. Some deforestation will be unavoidable (infrastructure development, legal forest conversions outside the reserves to high profit land use etc.) and some illicit deforestation, especially degradation, will occur in spite of the project activities. Therefore, it may be regarded as a full success, if between two thirds and three quarters of the (adjusted) deforestation and degradation baseline could be avoided.

Project 2: Engaging local communities in REDD+ / Enhancing Carbon Stocks.

76. The objective of Project 2 is to enhance carbon stocks in the off reserve areas in the HFZ by engaging communities in approaches that generate direct financial and

environmental benefits for them, leading to reduced deforestation and forest degradation in the landscape.

77. This project will focus on the off-reserve excluding the ecological corridor areas of the HFZ to avoid overlapping spatially and partly thematically (replanting, capacity building) with Project 1. It concentrates on work with farmers and communities, on-farm trees (especially in cocoa farming systems), and reforestation. Beyond local interventions, the project will facilitate cooperation and planning between the forestry and environmental sector, MoFA, and the Cocoa Board under the MoFEP.

78. The concrete scope of measures will be determined in the detailed preparation of the project. Tentatively a budget of US$15 M of grant and loan is scheduled. Assuming that half of the budget was directed into plantation incentives for long lasting shade and timber trees, the following rough estimation of the carbon sequestration effect over 30 years could be envisaged.

79. Incentives in the form of PES for 1 ha agroforestry tree plantation (with 200 seedlings, 40 trees at year 30) at the cost of US$375 per ha, and a 40,000 ha intervention area. After 30 years, this may result in 215 tCO_2/ha or 8.6 $MtCO_2$ total (for US$7.5 million), or an investment of US$0.87/$tCO_2$, if the trees are not harvested. If trees are harvested and re-established using a small part of the timber revenue, then the time average carbon effect would be half, i.e. a total of 4.3 $MtCO_2$, or an investment of US$1.74/ tCO_2, (i.e. below the market price for forestry emission reductions).

Project 3: Engaging the private sector in REDD+.

80. The objective of Project 3 is to transform the ways in which private actors in the forestry and agricultural sector operate. This in turn will have direct impacts on carbon emission reduction and the area of sustainably managed land. The project will aim this by addressing key barriers that discourage private sector engagement, primarily: (1) High cost of borrowing; (2) Lack of technical expertise; (3) High upfront, operational and transaction costs; and (4) High investment risks for forest investments.

81. It can be assumed that Project 3 with a planned investment of US$10 M of loan and grant will have positive effects on emission reductions. However, as stated in the project description, concrete GHG emission reduction estimates can only be provided once the financial mechanism is defined and a pipeline of potential activities that will be financed using FIP resources is established.

82. In Project 3 all sub-projects will have as a strict requirement to give an estimate of the amount of GHG that they aim to reduce and in what timeframe. They will also be required to include a monitoring plan, including baselines. This requirement and a similar monitoring scheme should be developed for the two other projects as well during the detailed project preparation.

2.3 FIP INTERVENTIONS AND THE REDD+ STRATEGIES IN GHANA

83. The proposed FIP investments in Ghana have been reviewed against the objectives and scope of FIP financing, as part of the readiness process. They have also been assessed in relation to the 14 potential REDD+ strategies (Table 4), and against the potential to catalyse transformational change to reduce GHG emissions. In summary, the three most promising R-PP strategies for FIP engagement are to:

- Mitigate effects of agricultural expansion (particularly cocoa in the HFZ);
- Address unsustainable timber harvesting by supporting sustainable supply of timber to meet export, regional exports, and domestic timber demand; and
- Clarify tree tenure and rights regimes, especially in off-reserve areas.

Table 4: Possible REDD+ Strategies as Defined in the RPP.

Challenge/Immediate Driver of Deforestation	Candidate element within national REDD strategy	Sub-component
Gaps in Forest Policy, and Policy implementation	A: Improve the quality of multi- stakeholder dialogue and decision–making	A: Strengthened National Forest Policy Forum and improved Forest Information Dissemination
	B. Clarify rights regime	B. Carbon rights allocated
	C. Improved FLEGT	C. Implement VPA and related actions
	D: Address unsustainable timber harvesting by supporting sustainable supply of timber to meet export and domestic / regional timber demand	D: Policy measures to ensure a sustainable timber industry, including on-reserve rehabilitation, plantations development and off-reserve actions (incl. tree tenure reform and REDD-friendly cocoa)
	E. Address problem of local market supply	E. Better regulation of small scale lumbering (SSL), sustainable supply of timber to meet export and domestic / regional timber demand, implemented
Demographic Pressures	F: Mitigate effects of agricultural expansion (particularly cocoa in the HFZ)	F1. Support Ecosystem-friendly Cocoa Production F2. Improve productivity of farmland F3. Improve law enforcement on FR encroachment F4. Promote ecosystem-friendly agro- industry development
	G. Strengthen local decentralized management of natural resources	G1: Support training in forest and resource management at district level administrations (already part of NREG) G2: Support pilot project in decentralized environmental management and resource planning, through national agencies (EPA, MLGRD)
	H. Improve sustainability of fuel wood use	H1: Implement policy measures and fuel efficiency initiatives projects that will reduce carbon emissions arising from charcoal and fuel wood use. H2: Develop wood-based fuel supply (woodlots, etc.) H3: Develop alternatives to primary fuels

	I. Improve quality of fire-affected forests and rangelands	I. Policy and practical measures to address degradation caused by fire in the agricultural and livestock production cycles (e.g. rangeland zoning strategies; alternative grass control methods, incentives for community fire management; payments for ecosystem services)
Economic Forces	J. Address local market demand	J. Timber supply situation rationalized
	K. Improve returns to small-scale enterprise	K. Ecofriendly approaches to forest land development K. Intensification strategy supported
	L. Improve regulation of mining activities to reduce forest degradation	L: Implementation by mining companies of EIA requirements for forest rehabilitation following the closure of mining sites enforced L: Measures to reduce forest degradation as a result of unregulated (sometimes illegal) small scale mining implemented
Natural causes	M. Implement actions to address acts of God (wind and natural fire events, floods, pests and diseases)	M: Policy implantation takes account of risks from natural events

3 SECTION 3: ENABLING POLICY AND REGULATORY ENVIRONMENT

3.1 FOREST POLICY AND REGULATIONS

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

85. The stated overall aim of the FWP was: "Conservation and sustainable development of the nation's forest and wildlife resources for the maintenance of environmental quality and perpetual flow of benefits to all segments of society." The policy represented a shift towards the principles of sustainability. This is most evident in the objectives for management of the off-reserve forest areas.

86. The FWP set out several strategies to achieve the aims, including: (1) Revision of forest reserve management planning procedures for sustainable forest management, including development of biodiversity conservation and environmental protection in the high forest zone; (2) Establishment of databases, and information and communications technology (ICT) to facilitate decision-making and policy analysis; (3) Local community participation in the management of forest and wildlife resources, with rights to consultation, access and benefits; (4) Private sector investment in plantation development, focusing on the conversion of the timber industry into a low volume, high value industry; and (5) Legislative reform in support of these strategies.

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

88. In order to further strengthen the objectives of the FWP and the FDMP, the Government enacted the Timber Resources Management Act, 1997 (Act 547), the Timber Resources Management (Amendment) Act, 2002 (Act 617), and the Timber Resources Management Regulations, 1997 (LI 1649). These pieces of legislation focused on efficient resource allocation and prevention of illegal logging and chainsaw lumbering.

89. However, the Timber Resources Management Act made it illegal for farmers and other users of off reserve lands to harvest any naturally growing trees for commercial or domestic purposes, even if it is growing on their land. It also prohibited logging without prior authorisation from concerned groups or individuals.

90. Under the Timber Resources Act, farmers and land owners have legal rights to planted trees. When Timber Utilisation Contracts are granted off-reserve, the contract holder is obliged to engage in a Social Responsibility Agreement (SRA) with the concerned communities in the proposed area of logging. According to the SRA, 5% of the stumpage fees should be directed to the community as compensation for damaged crops[19]. However, this fee is often captured during the process and the SRAs have not been sufficiently effective in rewarding the farmers and communities for trees on their lands.

91. Ghana's forest sector fiscal regime involves eight main instruments. Pre-harvest involves the Timber Rights Fee and a Contract Area Rent (concession rent). Stumpage Fees are the key harvest level instrument, and the main source of government revenue from the forestry sector. Post-harvest fees include a 2% Export Levy, a 1% Export Levy and an Export Levy on Air-dried Lumber. In addition to these forest sector fees, there are two government tax instruments: Corporate Tax and Import Tariffs.

92. The efforts to stop illegal trade of forest products have been driven primarily by the VPA/FLEGT process, including the Timber regulation in the EU, and by the Lacey Act in the USA. Ghana is committed to ensure that all timber exported is of legal origin. In September 2008, it was the first tropical timber-producing country to sign a Voluntary Partnership Agreement (VPA) with the EU. The VPA mechanism forms part of the EU's Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan to tackle the causes of illegal logging. The essence of the agreements is a commitment by exporting countries to verify the legality of timber exports to the EU in exchange for which the EU contribute toward the cost of putting in place the required verification systems. Ghana recognizes that legality is an importance first step towards sustainability.

93. These agreements were also promoted as a means of strengthening sector governance more broadly. In December 2006, GoG initiated formal negotiation process with the EU, defining the scope of the negotiations to address illegal logging not just for export to the EU, but to all exports and the domestic market as well. Through the VPA process, GoG recognized an opportunity to further their sector reform agenda more broadly. Issues relating to strengthening of rights of access to resources also forms part of the legislative reform agenda set out under Ghana's VPA. In 2010 the first Ghana/EU meeting of the Joint Monitoring Review Mechanism met to discuss implementation of the Agreement, the process of appointing an independent monitor, and arrangements for monitoring the impacts on local livelihoods.

94. However, regardless of the efforts Ghana still struggles with illegal logging and good governance of the forest sector (RoG 2011a). There appears to be no significant

[19] Timber Resource Management Regulations (L.I. 1649) 1998 and Economic Plants Protection Act (AFRCD 47 1979).

reductions in illegal logging. The problems are most obvious in the CSM sector and the domestic timber supply. Though parliamentary oversight of forest agencies is relatively good, information management and use of best practise in law enforcement remains weak.

95. The Natural Resources and Environmental Governance (NREG)[20] framework for the forest and wildlife sector, therefore builds on the reform agenda set out as part of the VPA negotiation process.

96. In 2011, the FWP was a reviewed following an extensive consultation process. Part of this reform aims to enable the forestry sector to maximize its contribution, among other things, to climate change mitigation and adaptation. The revised policy aims at addressing major barriers to investments in forestry, such as tree tenure, complexities of land ownership, forest encroachment, weak infrastructure, and insufficient implementation of legal instruments.

97. These aims were further underpinned by the multi-stakeholder engagement in the on-going REDD+ Readiness process. The revised policy also focus on public and private sector investments in rehabilitation and restoration of degraded landscapes; the promotion of good governance through accountability and transparency; and promotion of forest enterprise development as a means of wealth creation. The revised policy has not yet been officially approved. It is anticipated that the FWP will be implemented through an updated 20 year Forest Sector Master Plan.

3.2 ENVIRONMENTAL POLICY

98. Ghana's first Environmental Policy was adopted in 1995 and reviewed in 2000. Focus is on building linkages between long-term economic growth, social transformation, poverty reduction and environmental sustainability. One of the main objectives of the revised EP was to reduce deforestation through the integration of climate change and disaster risk reduction into national development policy formulation and in planning processes. Climate change mitigation and adaptation was also a priority. Proposed actions to mitigate GHG emissions included the use and operationalization of the Comprehensive Mitigation Analysis Process (COMPAP) model; and the implementation of effective technologies and programmes.

3.3 AGRICULTURAL POLICY

99. Agricultural expansion is one of the major underlying causes of deforestation in Ghana. The first Food and Agriculture Sector Development Policy (FASDEP) was developed in

[20] NREG is a joint effort by EU, WB, DFID, The Netherlands and French development agencies supporting GoG to address governance issues as regards to natural resources and environment to ensure sustainable economic growth, poverty alleviation, increasing revenues and improving environmental protection.

2002 as a framework for the implementation of strategies to modernise the agricultural sector in order to increase food and cash crop production. The strategies in the policy were based on the Accelerated Agricultural Growth and Development Strategy, which was designed to forge linkages in the value chain.

100. In 2006, after nearly four years of its implementation, the FASDEP was revised to reflect lessons learned and to respond to the changing needs of the sector. This revised policy of 2006 (FASDEP II) encourages the formation of inter-ministerial teams to ensure environmental sustainability in agricultural production systems. These could be common platforms to consider also in the implementation of FIP. FASDEP II emphasis was more on increased production at the national level instead of increased yield per unit area. Partly because of this policy focus but also lack of credit, insufficient extension and other factors most of the increased production at the national level has been achieved through expanding the area under agriculture. This is particularly apparent with cocoa production, which has grown rapidly and is partly disconnected from the main agricultural policies as it is operating under the MoFEP and not under the MoFA.

101. The MoFA has also recently published a Tree Crops Policy (RoG 2011c) dealing with Cocoa (1.6 million ha), Oil Palm (300,000 ha), Cashew (70,000 ha), Coconut (40,000 ha), Citrus (15,000 ha), Rubber and other tree crops. The tree crops sub-sector, involving around 1.6 million farming families, is considered by MoFA as a key to the overall economic growth and development in Ghana. However, the policy seems to have been developed without much contact to the forestry sector, though it faces many similar challenges and there are important linkages, such as the cocoa. The land tenure is seen as a challenge for crops that occupy land for long time. Some of the cross-cutting important issues mentioned are access to land and promotion of fair investments for small-scale farmers, and promotion of decentralised planning and land use management at district and village levels. There also a range of proposed practises for environmental protection (e.g. agroforestry) and interventions which could be useful for the FIP interventions to link up with.

102. Within the tree crops sub-sector Ghana oil palm is cultivated of 300 – 350,000 ha, 80% by small-scale farmers. Ghana was the first African country to receive an endorsement of its National Interpretation (NI) by Roundtable for Sustainable Palm Oil (RSPO) in 2010. The NI in Ghana has included the High Conservation Value approach in the certification process. This provides a positive lesson for similar efforts for sustainable production e.g. within the cocoa sector (World Bank 2012b).

3.4 LAND POLICY

103. Land rights and tenure are administered in a complex legal environment with customary laws and norms operating alongside statutes. The customary owners (stools, clans,

families, and Tendamba) who hold the allodial[21] title, own about 78% of the total land area in Ghana. Of the remaining 22% the state is the principal owner of about 20%, while 2% is held in dual ownership (i.e. the legal estate in the Government and the beneficiary/equitable interest in the community). Customary owners hold land in custody for communities and various arrangements on land use for community members prevail. The situation has been further complicated by internal migration related primarily to expanding cocoa and in many areas more than 50% of the population are from other parts of Ghana engaged through various arrangements, (lease, share-cropping etc.) in cocoa and other farming activities. Even though the state has elaborate institutional and legal structures for the management of all these types of land, the management of this resource is characterized by incoherent, conflicting and sometimes out-dated legislations.

104. The separation of land from the resources on land, such as naturally growing trees, is complicating tenure and benefit sharing as well as reducing incentives for maintaining trees on off-reserve lands. Insufficient consultation and engagement of stakeholders in land management has contributed to increased encroachment of acquired lands (including forest reserves), unapproved and haphazard development schemes, uncertainties about titles to land and land litigation. The complexity is illustrated by the number of land litigation cases before the courts, estimated at about 60,000 in 2002. The effect of this is continuous conflicts, overburdening of the judicial processes, over centralization of authority in urban capitals and rent seeking behaviour.

105. The revised National Land Policy (NLP) in 2002, and the implementation of the World Bank supported Land Administration Project (LAP), has promoted the judicious use of land and natural resources in the pilot areas. However, the achievements have so far been local and there is need to upscale the achievements.

3.5 REGULATIONS AND THE REDD+ OBJECTIVES

106. The overarching aims and guiding principles of all the government policies dealing with forests are relatively consistent with REDD+ objectives. However, legislation and implementation of policies and legislation renders itself to considerable inconsistencies.

107. This is particularly relevant with respect to tree tenure regimes. The Timber Resources Management Act prohibits farmers to harvest any naturally occurring trees and is at the core of the deforestation problem. The farmer, land owner or rural land users are not sufficiently benefitting economically from timber resources growing on their own land.

[21] Allodial title is a real property ownership system where the real property is owed free and clear of any superior landlord. In this case, the owner will have an absolute title over his or her property. Property owned under allodial title is referred as allodial land.

Partly as a consequence of this disincentive, the bulk of the domestic demand for timber is harvested illegally in off-reserve areas and agricultural landscapes, and largely supports the existence of the illegal chain saw logging sector. There is also popular support for the CSM as it provides some real benefit sharing from commercial exploitation with farmers and land owner. The existing tree tenure regime is a major disincentive for maintaining and managing trees, especially high value trees on farms.

108. The existing incentive framework is leading to overharvesting and major loss of revenue, estimated at around 26 million per year. The challenge for the Forestry Commission (FC) and the Ministry of Lands and Natural Resources has been to address the inefficiencies in the forest revenue system, and to meet the fiscal policy objectives and revenue potential of the forest sector.

109. The revised Forest and Wildlife Policy (2011) acknowledges the failure of previous efforts to address deforestation and issues such as illegal chainsaw milling. The Ministerial statement at the start of the new policy indicates a shift with respect to tree tenure. Major aspects of tree tenure, including detailed formulas for benefit sharing, are expressed in the Constitution and are likely to be difficult to change in the short-term. The challenge is to devise mechanisms within the available policy, legal and administrative framework, and to revise the policies and the regulatory framework that can be addressed, including institutional arrangements and mandates, to review regimes and the rights to manage, decide and to benefits from trees on farm.

3.6 GOVERNANCE OF REDD+ READINESS PROCESS

110. An inter-sectoral Technical Coordinating Committee (TCC) was established in 2007 by GoG and NREG Development Partners to oversee the NREG reform program. It was expanded in 2010 (now called TCC+). The TTC+ is chaired by MoFEP (Chief Director) and composed of representatives of various government sector ministries and administrations as well as from civil society[22]. The TCC+ is expected to meet on a quarterly basis. The TCC+ will guide the policy and institutional aspects and oversee REDD+ implementation, including FIP, addressing coordination between the various agencies involved in the implementation.

[22] Chief Director, MoFEP (Chair); Chief Director, MLNR (co-chair); Technical Director Forestry, MLNR; Technical Director Mines, MLNR; Technical Director Environment, MEST; Chief Executive Forestry Commission; Chief Executive Mineral Commission; Chief Executive EPA; Representative, MOFEP-NREG Coordinator; NREG Policy Focal persons, MLNR; NREG Policy Focal persons, MC; NREG Policy Focal persons, MEST; NREG Policy Focal persons, EPA; Representative of NDPC; Representative, MoFA; Representative, Ministry of Energy; Representative, Lands Commission; Representatives, private sector; Representatives, civil society; Representative, Forest Forum; Representative, research Institutions; Representative, Traditional Authorities.

4 SECTION 4: EXPECTED CO-BENEFITS FROM FIP INVESTMENT

111. Forests are important both for the Ghanaian economy and for the livelihoods of people. It is estimated that 70% of the population depend on natural resources for their basic food, water and energy requirements, and forest resources are particularly important for women.

112. The primary benefits from the FIP investment relate to **climate change mitigation and GHG abatement.** The program impact will reduce deforestation and degradation and increase ecosystem resilience to climate change. Interventions in the forest reserves and in the off reserve areas will protect existing forests from further encroachment and degradation as well as enhance carbon stocks, though landscape and forest restoration and plantations.

113. The FIP investment will initiate restoration of forest reserves and forests in off reserve areas. Addressing tree tenure, coupled with interventions in off-reserve forest areas and especially in agricultural landscapes, including farm fallows, will have the potential to substantially increase carbon stocks in the landscape (soil carbon and above ground biomass). Landscape level planning and working broadly with land use may also reduce bush fires, a significant source of GHG emissions, and improve forest status, regeneration and resilience.

114. **Social impact**. The FIP investment will target both rights, benefit sharing, institutional and management models, such as the CREMAs, and landscape planning, all of which provide opportunity for building social capital and empower communities and their institutions. The interventions may pave the way for income generation opportunities from alternative forest management models and increased access to forest resources.

115. The piloting of inclusive management models and application of the CREMA concept to the management of forests and forest resources would aim at empowering women in decision making and in sharing benefits. Improved management of forest patches in off reserve areas would provide access to fuelwood and conserve important NTFP species that are crucial for women both for household use and as a source of income and livelihood. FIP would also support women's engagement in forest rehabilitation and plantation development initiatives to create alternate income streams.

116. **Economic impact and poverty reduction**. The FIP investment will provide increased opportunity to enhance food production, through agroforestry and as part of plantation development and forest restoration. FIP will explore a broad range of incentives, including premiums from organic or fair trade niche markets and products, increasing cocoa productivity by improving access to improved planting materials, and by providing access to farm inputs. There are also increased income generation opportunities through the establishment of financially sound CREMAs.

117. The FIP interventions can provide increased access to benefits from climate mitigation and carbon finance projects, including additional income and market access through

participation in REDD+. This can also lead to diversification of income from engagement in plantation development and landscape restoration. The engagement with national financial institutions and addressing the financial incentives and mechanisms may improve access to affordable credit for investments in agriculture and forestry sector that reduce pressure on the forests and enhance GHG abatement. The investment will catalyze innovative private and public-private sector initiatives to implement REDD+ objectives in Ghana.

118. **Rights**. FIP will address the tree tenure regime and carbon rights issue. Secured tenure and rights to benefits from trees on farms will also give women greater access to forest resources and associated economic benefits. Secure rights may on the longer term also reduce conflicts and boundary litigation. The gender aspect is crucial throughout the investment program, as the interventions will touch on several policy and regulatory aspects as well as testing various management models, which all have implications especially for women's access and rights.

119. **Biodiversity and ecosystem resilience**. The main thrust of the FIP investment is to address deforestation and forest degradation. The program will catalyse a change that will reduce pressure on existing forests and conserve and restore important biodiversity habitats. Landscape level planning and interventions to improve landscape connectivity and reduce fragmentation will increase ecosystem resilience and strengthen the impact of the protected areas as the core habitats for biodiversity conservation. There is evidence that agricultural tree crops and agroforestry farming systems may play an important role in maintaining biodiversity in the broader landscape matrix, while simultaneously enhancing agricultural biodiversity and conserving soils. This may also improve other ecosystem services, such as sustaining water supplies through watershed management.

5 SECTION 5: COLLABORATION BETWEEN MDBs AND WITH OTHER PARTNERS

5.1 MDBs, DEVELOPMENT PARTNERS AND FIP

120. The MDBs (AfDB, IFC, WB/IBRD) and their development partners in Ghana have over the years supported the Government of Ghana through a number of programs, project and initiatives in the forestry, natural resources and agriculture sectors.

121. **The World Bank** (WB) has in the recent past supported the Forest Resources Management Project (FRMP), the Natural Resources Management Project (NRMP), the Community-Based Rural Development Project (CBRDB), and the Community-Based Natural Resources Management Project. Current IBRD support includes Forest Carbon Partnership Facility Readiness Preparation Project, the Land Administration Project (LAP), the Natural Resources and Environmental Governance (NREG) Program, and the Sustainable Land and Water Management Project (SLWMP) in the northern savannah region. Though the geographical focus is different, there could also be synergies with the planned Ghana Commercial Agriculture Project (GCAP), especially on small-holder links to credits and markets. The World Bank has considerable experience working with the Government of Ghana on policy, regulatory and fiscal issues based on financing, economic sector work as well as building on experience from project and programme implementation.

122. **The African Development Bank** (AfDB), through its Agricultural Sector Strategy (2010-2014) focus on agriculture and natural resources interventions supporting broader development objectives of agricultural productivity, food security and poverty reduction. AfDB has recently supported the Community Forestry Management Project, where the overall objective was rehabilitation of degraded forest reserves, while increasing production of agricultural, wood and non-wood forestry products, and strengthening the capacity of relevant institutions. On-going agricultural sector projects include the Export Market and Quality Awareness Project, the AFRAM Plains Rural Development Project and the Northern Rural Growth Program. It has also recently supported the multinational Integrated Management of Invasive Aquatic Weeds Project. The AfDB is well positioned to work with the key national institutions in the agriculture and forestry sectors.

123. **The International Finance Corporation** (IFC) of the World Bank Group provides investments (loans, equity) in the private sector in developing countries, and compliments these investments with advisory programs to improve the 'triple bottom line' of their investment clients (improved productivity as well as environmental and social sustainability) and the sector at large. IFC investments include multiple forestry companies in Sub-Saharan Africa and on other continents, and discussions with various Ghanaian forestry companies are on-going. There are also opportunities to build on the experience from the West Africa RSPO project and IFC's engagement in the planned GCAP and previous other agricultural investments in Africa. IFC will be responsible for the private sector components of program.

124. The NREG Development Partners[23] and the World Bank have provided umbrella support for environmental actions under a common framework—the Coordinating Platform for the Environment. These activities include the Voluntary Partnership Agreement (VPA) between the European Union and Ghana on Forest Law Enforcement, Governance and Trade; GIZ supported UNFF Non Legally Binding Instrument (NLBI); and FCPF support to Ghana's R-PP to develop readiness for REDD+ implementation.

125. FIP and other REDD+ related projects will be implemented within this collaborative framework to avoid duplication and facilitate synergies and learning. The focus of these initiatives is to identify and address the underlying factors of deforestation and forest degradation (NREG, VPA/FLEGT, FCPF-RPP,) leading to emission reduction and enhancement (REDD+, FIP) and the ultimate goal of managing Ghana's forests sustainably (NLBI). Synergies between FIP and other programs will be addressed. For instance, support to forest governance and law enforcement, will be included in complementarity with other initiatives, particularly VPA/FLEGT. Also program and project preparation will be based partly on the support of the planned World Bank Forestry Sector Technical Assistance to the GoG.

126. Table 5 summarizes on-going REDD+ related projects in Ghana, including the seven national REDD+ pilot projects selected to support implementation of the R-PP. With the exception of the Community Forestry Management Project, all listed projects are on-going and provide opportunities for synergies with FIP which should be explored during project preparation.

5.2 PRIVATE SECTOR, CIVIL SOCIETY PARTNERS AND FIP

127. The preparation of Ghana's FIP benefited from past collaboration between the parties (GoG, MDBs, donors and development partners, Traditional Authority, civil society, and private sector, communities). It has also benefitted from the R-PP consultations process and has been extensive and targeted in its effort to seek views and inputs from stakeholders.

128. Engaging the private sector in a REDD+ has been identified as one of the major transformations that should occur in order to address the drivers of deforestation in Ghana. It is necessary that FIP explores the potential synergies between public and private sector actions because of the cross-sectoral nature of and private sector role in deforestation and forest degradation. FIP will support a broad set of policies and instruments (e.g. on tree tenure and carbon rights; new forest investment policy), capacity building and financial mechanisms to create an enabling environment for

[23] The Government of Netherlands; the French Development Agency; UK Department for International Development; and the European Commission.

private sector activities, both forestry and agriculture, which are aimed at reducing pressure on forest and reducing GHG emissions.

129. Currently, there are many barriers but few incentives that would encourage private sector investments in REDD+ projects. Some of the key barriers are: (1) Lack of technical information; (2) Lack of finance and/or high costs of borrowing; (3) High upfront, operational and transactional costs; and (4) High investment risks for investors. Moreover, different private sector actors such as commodities producers and buyers would benefit from improved cooperation mechanisms to ensure economic, social and environmental sustainability throughout the supply chain. Some of the identified opportunities for private sector engagement include: Promoting incentives to improve the efficiency and sustainability in timber harvesting and processing; Increasing access to finance for REDD+ projects; Promoting carbon sequestering cocoa and agricultural farming systems ; Promoting sustainable forest management; Training and capacity building activities; and Exploring market mechanisms and processes (certification, commodity roundtables) enabling wide scale engagement from various private sector actors to ensure sustainability in commodities' supply chain.

130. Other potential partners include the WWF Ghana, with whom the IFC is considering partnering with to build on their local expertise and capitalize on their Global Forest and Trade Network (GFTN) as well as their platform of New Generation Plantations. The implementation of the FIP will also be closely aligned with the implementation of the Dedicated Grant for Indigenous Peoples and Local Communities (DGM). While the DGM country level project has yet to be designed, it is anticipated that there will be opportunities for communities and community based organizations to engage in the roll-out of the FIP as envisioned in the DGM design document.

131. Inclusion of well-structured monitoring and evaluation systems will ensure that the private sector investments are in line with the environmental and social objectives of the Forest Investment Programme in Ghana.

Table 5: List of REDD+ related projects and programs.

TITLE OF PROJECTS / PROGRAMME	OBJECTIVE	DATE OF COMMENCEMENT	EXPECTED DATE OF COMPLETION	AMOUNT (MILLION US$)	DONOR	LOCATION
Natural Resources & Environmental Governance Programme (NREG)	To address governance issues as regards to natural resources and environment to ensure sustainable economic growth, poverty alleviation, increasing revenues and improving environmental protection	2008	2012	Annual Pledges paid by Donors	EU, WB, DFID, The Netherlands, AFD	MLNR, FCHQ
Non Legally Binding Instrument on all Types of Forests (NLBI)	To pilot a project to support Ghana to move in the implementation of the NLBI	2009	2011	0.5	GIZ, FAO, BMZ	FCHQ
Forest Preservation Project (FPP)	To support measures towards forest conservation in Ghana by providing equipment, materials and services	2011	2012	7.8	JICA	FCHQ
REDD+ - Reducing Emission from Deforestation and Forest Degradation (FCPF) Project	To assist Ghana to prepare itself for REDD+ and become ready for the implementation of the REDD+ mechanism	2010	2013	3.6	World Bank-FCPF	FCHQ
Land Administrative Project (LAP)	Dealing with land tenure and legislative reforms in aspects of land use	2011	2014	70	World Bank	MLNR
Global Environment Facility (GEF)	Small grants administered through UNDP on Environment for improving local resource use	2011	2014	Pledges	UNDP	Various Communities
Other REDD+ Related Projects	Aims to establish CDM mechanism and Piloting REDD+ and Biodiversity Conservation with communities	2009	2013	1,2	ITTO/UNEP	MEST
Community Forestry Management Project	Poverty Reduction and restoration of degraded forest reserves through plantations	2004	2010	10	AfDB	MEST
National REDD+ Pilot Projects under R-PP	Facilitate implementation of REDD+ in Ghana using a sub-national, bottom up approach so	2011	TBD	No funding to support		FC-CCU

	as to facilitate learning and widespread stakeholder engagement			pilot project development, but capacity building available.		
National REDD+ Pilots						
Proponent	**Project Title**			**Location**		
K.A. Opoku Farms	REDD+ Piloting Project			Kwamisa Forest Reserve, Offinso, Ashanti		
Cocoa Research Institute of Ghana	Managing Cocoa Production Landscapes for Increases in Forest Carbon Stocks and Biodiversity Conservation			Aowin-Suaman, Western		
Permian Ghana	Ecosystem Restoration; A Proposal for a REDD+ Project in Ghana			Atewa, Atewa Extension, Dadieso Forest Reserves		
Conservation Alliance	Cocoa Agroforestry Project			Kakum National Park area, Central Region		
International Union for the Conservation of Nature (IUCN)	IUCN Pro-poor Agroforestry Project			Asankragwa, Western		
Portal Company Limited	Portal Agroforestry Model			Akasaho Amuni, Western		
Vicdoris Limited	Bee-keeping and Woodlot Development to Alleviate the Degradation of the Agro Ecosystem of the Dawadawa and Surrounding Areas in Brong Ahafo			Kintampo, Brong Ahafo		

6 SECTION 6: IDENTIFICATION AND RATIONALE FOR PROJECTS AND PROGRAMS TO BE CO-FINANCED BY FIP

6.1 BACKGROUND

132. The Land Use, Land Use Change and Forestry (LULUCF) sector in Ghana has rapidly changed from sink to a source of emissions, accounting for 25% of total emissions in 2006. The Readiness Proposal (R-PP) identifies the principal drivers of deforestation and degradation as:

    a. Agricultural expansion, e.g. permanent cultivation, cattle ranching, shifting cultivation/traditional slash and burn (about 50%);

    b. Harvesting for fuelwood and charcoal, illegal logging, wildfires and biomass burning (about 35%);

    c. Population and development pressure, e.g. expanding urbanization, settlements and new infrastructure (10%); and

    d. Mining and mineral exploitation (5%).

133. Forests have been a major sink in the past and trees and forests still present a considerable potential for GHG abatement. Recent analyses of landscape restoration potential in Ghana show, that especially forest regeneration, plantations and management within Forest Reserves as well as interventions in farming systems (tree crops, agroforestry and farm fallows) and can provide important climate benefits .

134. An analysis of the underlying drivers and the potential for carbon abatement against the FIP investment criteria and scope within the REDD+ readiness process in Ghana, indicate that the best added value from the Forest Investment Plan will be achieved by:

- Mitigating effects of agricultural expansion on forests and carbon stocks (particularly cocoa expansion and transition to open cocoa farming in the HFZ);
- Addressing unsustainable forest use and wood harvesting, especially by supporting sustainable supply of timber and wood products to meet export and domestic demand from a value chain approach;
- Clarifying tree tenure and rights regimes and developing more inclusive benefit sharing arrangement, especially in off-reserve areas; and
- Addressing the access to credit, incentives and investments of the private sector in forestry and agriculture.

135. The FIP investments will be focussed both thematically as well as geographically to achieve the best added value as well as have the greatest opportunity for scaling up, and hence over the long-term make a significant impact to reduce GHG emissions in Ghana.

6.2 OVERALL GOAL OF THE FIP

136. Deforestation in Ghana is driven mostly by demand for agriculture land and overharvesting of forest products to meet livelihood needs as well as the need to fulfil basic food needs.

137. The overall goal of the FIP in Ghana is to: **Reduce GHG emissions from deforestation and forest degradation, while reducing poverty and conserving biodiversity**.

138. In order to reduce GHG emissions from deforestation and forest degradation, the immediate goals are to:

a. Ensure the integrity, restoration and sustainable forest management of Forest Reserves by introducing more inclusive management and benefit sharing models, other financial incentives, and investments, for stakeholders;
b. Restore forest cover in off-reserve areas by securing tree tenure and benefits, forest plantations and landscape restoration, and rehabilitation of degraded forest land;
c. Increase trees and enhance carbon stocks in the farming system by promoting sustainable cocoa and agriculture practices, and payment for environmental services;
d. Develop viable alternative livelihoods for local communities by addressing a broad range of technical, financial and market incentives, to reduce pressure on existing forests.

6.3 TRANSFORMATIONAL FACTORS OF THE FIP

139. The FIP investment criteria put emphasis on the catalytic and transformational role of the interventions. The project time frame is short (4 – 5 years) and while the investment is significant it is modest in relation to the requirements to change development to a low carbon growth trajectory. Further, investments in forestry are mostly long-term and the same applies to cocoa farming where a 15 – 30 years perspective is necessary. Hence it is clear that many of the impacts on GHG emission will be realized beyond the FIP investment time frame, over a period of up to 20 – 30 years or longer.

140. In addition, to the catalytic role and long-term perspective, the lessons from past interventions in Ghana, call for major transformational changes to achieve the goals of reduced GHG emissions from forests. The proposed FIP design and implementation arrangement build on the experience from the past broad based consultation and processes, such as the REDD+ readiness work, especially the R-PP. Further FIP takes into account the lessons from programs such as NRMP, HFBCP, NREG, and VPA/FLEGT. Some of the identified shortcomings of past programs were e.g. lack of coordination between stakeholders, both at national and local level; the a tree tenure regime and benefit sharing arrangements that does not give incentives for maintaining, managing or

conserving trees or establishing plantations; and a lack of engagement or interest of the private sector in REDD+ and sustainable climate smart investments.

141. FIP is proposing a pragmatic approach for consensus building, and policy and institutional reform. It aims at reviewing and supporting a more efficient and effective assignment of roles and responsibilities in the sector, especially at the Forestry Commission, with particular emphasis on service delivery and decentralization, looking specifically into separating regulatory functions from service delivery. The proposed testing and validation of policy options should help avoiding the critical political economy traps that have stymied reforms supported by several projects in the past.

142. The multi-ministerial and inter-sectoral approach, with the strong roles of the agriculture, cocoa and financial sector, including private sector and community involvement, will anchor FIP on a broader platform. The institutional arrangements and responsibilities will be further developed during project preparation to establish the best institutional framework for each intervention as well as at program level.

143. The plan also presents a landscape approach to address the GHG emission from the forestry sector by a broad set of interventions within but particularly beyond the forestry sector. Access to credit, financial as well as market incentives within the private sector provides a crucial contribution and element for a successful program. Especially addressing the agriculture and cocoa sector from a value chain and financial incentives angle has the potential to make a difference.

144. The major transformations that FIP will introduce include:

a. Change in tree tenure and benefits regimes that would provide incentives to plant, retain and manage trees, especially naturally occurring trees in off-reserve areas;
b. New inclusive models for management and benefit sharing arrangements rewarding relevant stakeholders (GoG, local communities, traditional authorities, private sector, civil society) for management of FRs;
c. New financial instruments and incentives (e.g. REDD+, commodity roundtables, green investment standards and incentives) and engaging the private sector in REDD+ and in sustainable investments in the forest and agriculture value chains; and
d. Improved coordination between ministries, agencies, stakeholders, both at national as well as sub-national and local level.

145. The activities required for these transformations may be very different in nature: ranging from work on policy and legislation, capacity building and technical support, piloting of different management and benefit sharing models, to scaling up investments.

6.4 GEOGRAPHIC FOCUS FOR FIP INTERVENTION

146. The FIP investments will target the HFZ covering the Western and parts of the Brong Ahafo Regions. This focus is justified against the background of the FIP investment criteria, especially the need for transformational change of primary drivers with the intention to address GHG emissions. Specifically the choice of the HFZ is justified by:

- Addressing the primary drivers of deforestation and degradation;
- The carbon abatement potential;
- The scale-up potential from demonstrations and pilots in this area; and
- Potential socio-economic co-benefits but also considerable co-benefits for the conservation of biodiversity and sustaining ecosystem services.

147. In the HFZ carbon sequestration potential per unit land area is the highest in Ghana. In addition, the opportunities for landscape restoration and increasing the carbon stocks in the agricultural, especially the cocoa systems are significant. Successful implementation and scaling up will also have a significant impact on biodiversity conservation, which goes beyond Ghana as the HFZ represents one of the global biodiversity hotspots. There is also huge opportunities in plantation establishment and sustainable forest management in the Western and Brong Ahafo Regions, both for timber production as well as for charcoal (particularly in Brong Ahafo).

148. The REDD+ and FIP focus is on addressing the main drivers of deforestation. Given the fact that the main driver is agricultural expansion, the choice of the farming systems and the cocoa production in the HFZ address the core of the problem in Ghana. The HFZ, especially Western Region, is core cocoa production area with significant deforestation and degradation following expansion of production. There are huge possibilities for carbon abatement by changing the current trend towards more open farming, and by promoting agroforestry in the cocoa production system. It would also be possible to build on the GoG initiatives[24] to stop the expanding cocoa frontier by providing incentives for and focus on rejuvenating old cocoa plantations and bringing old cocoa fallows under more sustainable agroforestry-based cocoa cultivation. Similar synergies can be found working closely with the certification of sustainable cocoa production and with the implementation of the Tree Crops Policy of the MoFA.

149. The consequence of this geographic focus is that the FIP investments will not be able to address the degradation and challenges, such as overgrazing, fuelwood and charcoal extraction, in northern Ghana, especially in the Savannah Zone. However, the FIP

[24] Presently free seedlings are offered to farmers who start cocoa on old cocoa fallows rather than expanding cocoa into forest areas or areas where cocoa has not been cultivated in the past.

criteria of demonstration and ability to scale up justifies the proposed focus to test interventions, which could help to transform the trend of increasing GHG emissions from the LULUCF sector in Ghana.

6.5 CHOICE OF INTERVENTIONS: A MIX OF ENABLING, COORDINATION, PILOTS AND SCALE-UP INVESTMENTS

150. A mix of enabling activities and sectoral interventions is important to balance measurable outcomes and results-based support, which is one of the general FIP principles. The investment program should also balance pilot activities, which test new approaches supporting policy and regulatory decision-making, and activities that guarantee measurable results. Hence the proposed interventions of the FIP in Ghana will broadly fall into four categories described below. The investment program will only describe the main emphasis and activities. The projects are elaborated in greater detail in the project concept notes (PCN) of the project proposals and further developed during the project preparation process.

6.6 FIRST CATEGORY: COORDINATION ACTIVITIES

151. The coordination between sectors within the GoG is a major emphasis of any effort to work with climate strategies in Ghana. It is also essential because of the involvement of the different sectors (MLNR, MEST, MoFEP, MoFA) in the main drivers of deforestation. Equally important is coordination with other Government and development partner programs, especially in the field of forestry, natural resources and the REDD+ process in Ghana. The coordination activities will ensure a consolidated program approach building on the synergies of the program components and engagement of relevant stakeholder to promote transformational change.

152. Proposed activities:

153. **Cross-sectoral landscape planning** in the HFZ: This intervention (Project 1) aims at providing an integrated response to the increased pressure on remaining forest along a landscape approach. The idea is to foster a dialogue between ministries, traditional authorities, and local communities around integrated land-use planning in the Western and Brong Ahafo regions, specifically addressing the relationship between deforestation and degradation and the expansion of farming of cocoa and food crops. This could also build on the inter-ministerial or inter-agency districts teams promoted in the revised agricultural policy of 2006. Particular focus will be given to strengthening community capacity to engage in planning and management of forests and natural resources: this will be undertaken in partnership with the Dedicated Grant Mechanism for Indigenous Peoples and Local Community (DGM)

154. **The pilot areas** for this landscape level planning should be located between important protected areas or forest reserves. The aim is to strengthen biodiversity conservation and ecosystem resilience by increasing landscape level connectivity through a corridor approach in an increasingly fragmented forest landscape. Applying e.g. the CREMA concept in the pilot areas would enable the testing of tree tenure and benefits

arrangements in connection with the land use planning and implementation of the pilots. The planned World Bank Technical Assistance to the forestry sector and the recent PROFOR supported work by CERGIS *et al.* on the status of the FRs and the potential for landscape restoration would also help to prioritise pilot areas during project preparation.

6.7 SECOND CATEGORY: ENABLING ENVIRONMENT ACTIVITIES

155. Some of the core underlying drivers, such as tree tenure, carbon rights and benefit sharing, directly relate to policy and legislation. Through the FIP support the Government aims at securing the integrity of existing forest by focusing on governance issues. This will determine how and in whose interests forests are managed and utilised, and at creating an enabling environment for sustainable forest management and plantation development. The component will build on reforms supported under the NREG Program and it will be designed such that it complements other on-going initiatives, particularly with the VPA-FLEGT on governance issues. It will help develop on-the-ground pilots, with a specific focus on land tenure and benefit-sharing arrangements. Strong linkages will be developed with the DGM mechanism to ensure communities can actively participate to the development of the pilots. FIP will also support Forest Sector Institutions to enhance the quality of services delivered to communities and the private sector. These interventions will not have an immediate impact on reducing GHG emissions but the potential long-term impact is significant. If the policy and regulatory framework would provide clear incentives for maintaining, managing and benefitting from trees instead of being a barrier and a disincentive there could be significant increase in carbon stocks in the landscape.

156. Proposed activities:

157. **Review of tree tenure.** Through pragmatic testing FIP would contribute to the development of regimes on tree tenure and carbon rights. Currently, there are insufficient incentives for farmers, communities and private sector to engage in sustainable forest management. Evidence and experience over the past years show that the lack of tree tenure is the major cause for unsustainable levels of harvesting and associated depletion of forest stocks. The popular support for CSM, which though illegal provides benefits to farmers, is a case in point.

158. The aim is to address and remove the barriers for small-land owners, farmers and local communities to conserve and replant trees (especially on farm). This could have far-reaching impacts, including slowing down or reverting the shift from shaded to open cocoa farming, and reducing illegal chainsaw logging.

159. **New forest investment policy.** FIP would contribute to the operationalization of the draft forest plantation and investment policy learning from the NFPDP, and taking advantage of the recent Tree Crops Policy of the MoFA. The aim is to create an enabling investment environment that could foster the rehabilitation of degraded forest and the development of plantations by the private sector. This could help to meet the domestic

demand from the timber industry, which presently is driving the illegal CSM sector. This is also crucial to be able to bring forest use and wood harvesting in line with sustainable forest management thus reducing the pressure on remaining natural forests.

6.8 THIRD CATEGORY: PILOTING AND TESTING ACTIVITIES

160. Piloting and testing concrete models identified in the REDD+ readiness process and providing upfront investments is at the core of the FIP. These concrete pilot activities will help generating practical examples of low GHG emission forest development that may be applied at scale both at sector as well as sub-national level in Ghana. The pilots should also serve as examples and building evidence and consensus for necessary policy reforms. The engagement of the private sector in the implementation of the investment plan is important, because scaling up and replication of some of the interventions would require large-scale private investments.

161. Proposed activities:

162. **Enhancing tree tenure.** FIP would engage in testing innovative tree tenure to provide necessary experience and evidence to support policy and legal reforms. These pilots would provide the opportunity for assessing different models and arrangements, e.g. by applying the CREMA concept, to create incentives for farmers and land owners to retain naturally occurring trees on farms as well as forest in the off reserve landscape.

163. **Alternative management models for forest reserves**. FIP would pilot models with the private sector and the local communities mainly by reviewing and putting in place improved and more inclusive benefit sharing arrangements and management models, which would support sustainable forest management. This should also include establishment of forest plantations building on the draft national forest plantation strategy.

164. **Increase carbon in cocoa and food farming systems.** FIP would test various agroforestry solutions as well as potential incentives for increasing trees and carbon in agriculture, especially in cocoa farming systems. The aim is to reverse the transition to open cocoa farming by introducing agroforestry species, especially N-fixing species and by looking for various models for landscape restoration, especially the use of farm fallows. There is also considerable potential to significantly increase the productivity of cocoa farming in Ghana, presently among the lowest in the world, with considerable increase of farm income. The pilots would also assess the potential of market incentives such as certification, commodity roundtables etc. The success of these interventions is closely linked to addressing tree tenure.

6.9 FOURTH CATEGORY: SCALE-UP INVESTMENTS

165. The overall objective of the intervention is to transform the ability of private sector actors and community enterprises to do business in the forest and agriculture sectors, which will have a direct impact on carbon emission reduction and promotion of social, environmental and economic co-benefits. This category will enable the scaling-up of

approaches, forest management models, technologies, and solutions that are successfully piloted. Activities will directly reduce emissions and their potential GHG abatement impacts are more easily assessed.

166. A wide range of opportunities exists in the timber sector, agriculture sector, financial sector and energy sector, amongst others, to engage the private sector in addressing the issue of deforestation and forest degradation in Ghana. Therefore, the private sector participation is essential for the development and implementation of the below proposed activities.

167. Proposed activities:

168. **A REDD+ investment program** that would either facilitate an on-lending arrangement with a local financial institutions or to invest directly in businesses. It would provide finance to companies investing in certifiable, climate-friendly cocoa, agriculture or forest plantations, and forest rehabilitation; other products (rubber, bamboo) as alternative for timber; or in efficiency gains in the timber industry.

169. **A technical support program** would complement the proposed investments by providing technical assistance and training to various private sector actors (such as financial institutions, companies producing and purchasing cocoa, timber and/or palm oil, and other businesses) in order to promote sustainable forestry and agriculture, certification and resource efficiency.

170. The rationale for the proposed interventions is summarised in Table 6 below.

Table 6: Rational for FIP Investments.

THEME	RATIONALE
Coordinating activities	
Cross-sectoral landscape planning in the high forest zone	• Foster inter-sectoral and inclusive stakeholder dialogue and actions; • Address the relationship between cocoa expansion and deforestation/degradation; • Create a framework to streamline investments; • Replicable nationally if efficient.
Enabling activities	
Contribution to the development of legislation on tree tenure and carbon rights	• Presently lack of tenure constitutes a major disincentive to conserve forests and maintain especially naturally occurring trees; • Could have a transformational impact proving incentives and rights to trees on farms and forest patches in the landscape.
Contribution to the development of a new forest investment policy	• Potential for engagement of private sector with far-reaching impact on REDD+ implementation and sustainable forest management.
Piloting activities	
Test innovative tree tenure models	• Concrete pilot models providing experience to support decision making and consensus for policy and legal reforms; • Concrete pilots and testing demonstrating potential for scale up and large-scale investments.
Test alternative management models for forest reserves	
Test climate smart cocoa and agriculture farming systems	
Scaled-up investments	
	• Direct and long-term GHG mitigation effects; • Transform the way in which key actors in the forest sector and agriculture sector do business; • Promote innovation that has the potential to be scaled-up across the country and the continent.

Table 7: Coherence between FIP objectives and Ghana investments.

FIP objectives	Relevant elements of the FIP in Ghana
Global objective: to support funding to initiatives aiming at eliminating the causes of deforestation and forest degradation and overcoming obstacles that have prevented this so far	The mix of coordination, enabling, piloting and large-scale activities, proposed in the FIP will provide a significant transformative effect.
Initiate and facilitate measures aiming at transforming policies and practices related to forestry in developing countries	Enabling activities can initiate fundamental reforms at the national level that will remove disincentives and barriers to investment and offer new opportunities to transform the sector.
Pilot replicable models so as to better understand the correlation between investment, policies and measures related to forests and viable emission reductions, conservation and sustainable management of forests as well as forest carbon stocks enhancement in developing countries	Piloting activities can demonstrate the feasibility of innovative approach and provide experience and justification for scaling up.
Facilitate the mobilization of new financial resources to the benefit of the REDD+ program, which will effectively and sustainably reduce deforestation and forest degradation, and thus improve the sustainable management of forests	Necessity to leverage from the private sector (loans from banks and FI, investors' capital). More generally, creation of enabling conditions to stimulate investments from the national and international private sector in sustainable forestry and climate smart agriculture.
Provide useful feedback to the UNFCCC deliberations on REDD +	Feedbacks from Ghana experiences to UNFCCC shall be systematic using the information mechanism.

6.10 PROGRAMME STRUCTURE AND DESIGN

171. The Ghana Forest Investment Programme is designed with the aim of benefitting from the specific experience of the three MDBs to add value and building on the potential complementarity and synergies of their respective expertise. FIP also builds on the REDD+ readiness work in Ghana. The structure and design take into account the lessons learned (e.g. tree tenure, benefits sharing, and governance) from previous work in the forestry sector (NREG, VPA/FLEGT etc.) or climate change adaptation and mitigation (R-PP/FCPF etc.). The program will build on reforms supported under the NREG Program and it will be designed such that it complements other on-going initiatives, particularly with the VPA/FLEGT on governance issues or on-going and planned activities to implement the R-PP in Ghana. Collaboration and synergies with other government or partner supported programs is essential in preparing the three project interventions.

172. The World Bank has a long-time involvement in the natural resources sector in Ghana. The WB has worked with cross-sectoral coordination and policy and regulatory issues but also considerable with concrete pilot activities to support decision making, such as in the land management programme. The World Bank will be responsible for Project 1 where the strength and expertise of the WB will add greatest value to the investment programme. The World Bank led project will be dealing with coordination and enabling policy environment, underpinned by land use planning, piloting in tree tenure and FR management models, and landscape connectivity models.

173. The African Development Bank has a long experience of involvement of local communities in sustainable resource management, both in agriculture and the forestry sector. AfDB will be responsible for Project 2, dealing with piloting innovative approaches and climate smart agricultural models in the agricultural sector, with specific emphasis on the cocoa farming system.

174. The International Finance Corporation has extensive experience working with investments in the private sector, including with multiple forestry companies in Sub-Saharan Africa. Project 3 led by IFC will seek to engage the private sector in a REDD+ investment program, as well providing technical assistance and capacity building. The IFC project will complement the interventions of the two other projects, especially from the investment, and financial and market incentives angle, and provided the basis for scaling up successful actions.

Table 8: Summary of FIP Projects in Ghana.

Project 1 **Reducing pressure on natural forest through an integrated landscape approach.** ***Budget: 30 Million US$*** ***MDB: IBRD***	**Component 1: Policy reforms and institutional strengthening;** **Component 2: Participatory landscape planning and integrated management of forest reserves and ecological corridors;** **Component 3: Innovation and Capacity Building;** **Component 4: Project management and coordination.**
Project 2 **Engaging local communities in REDD+ / Enhancement of Carbon Stocks** ***Budget: 10 Million US$*** ***MDB: AfDB***	**Component 1: Support Enabling Mechanisms for Local Community and Private Sector Engagement in Restoration of Degraded Forests and Agricultural Landscapes (Plantation Development);** **Component 2: Promoting a Sustainable Cocoa and Agroforestry Landscape Off-Reserve that Is Productive, Climate Smart and Environmentally Responsible;** **Component 3: Support for Community Restoration of Degraded Forest and Agricultural Landscapes;** **Component 4: Project Management.**
Project 3 **Engaging the private sector in REDD+** ***Budget: 10 Million US$*** ***MDB: IFC***	**Component 1: REDD+ Investment Program;** **Component 2: Technical Support Program.**

7 SECTION 7: IMPLEMENTATION POTENTIAL AND RISKS

7.1 LESSONS LEARNED

175. The forest sector has played an important role in the Ghanaian economy with interventions and programs addressing the sector over a long period of time. The lessons from programs, such as R-PP, NRMP, HFBCP, NREG, and VPA/FLEGT have been important in designing the investment plan, including the implementation arrangements.

176. FIP is proposing a pragmatic approach aiming at clearer responsibilities and mandates, with an emphasis on service delivery and decentralization. The inter-sectoral approach, involving the agriculture, cocoa and financial sectors, including private sector and community involvement, will anchor FIP on a broader platform.

177. The plan is based on a landscape approach presenting a broad set of interventions going beyond the forestry sector. Especially addressing the agriculture and cocoa sector from a value chain and financial incentives angle has the potential to make a difference.

7.2 IMPLEMENTATION CAPACITY

178. Ghana is implementing a number of environmental governance initiatives in the natural resources sector. The climate adaptation and mitigation actions, such as under the REDD+ process, are particularly challenging as they often cut across the traditional sector perspectives and divides. Good inter-sector coordination extending also to the private sector and civil society is essential to take full advantage of the potential value added from the FCPF and the FIP investment. Implementation of the FIP will require effective coordination at sufficiently high level with political leverage. This body should coordinate the different initiatives and maintain the dialogue with development partners using the established stakeholder consultation process and existing platforms.

179. The Environment and Natural Resources Advisory Council (ENRAC) was established as a cross-sector, cabinet level body with oversight responsibility for national climate change issues including REDD+ initiatives. FIP implementation will be coordinated by the TCC+[25], which is also responsible for the coordination of FCPF-REDD+, the EU-VPA/FLEGT, and the UNFF-NLBI processes. This should ensure the synergies and strengths of complementarity of different programs. If relevant, technical working groups may be established to address specific FIP related thematic or implementation issues.

[25] The expanded NREG Technical Coordinating Committee.

180. The lead executing agencies (MDBs) for the FIP projects will identify partners and invite stakeholders during project formulation, planning and implementation. An M&E system will be developed to clarify design, track progress and point at corrective measures. Inception workshops are planned for each of the investment projects to discuss the project's rationale, goals, managerial and well as technical aspects of implementation.

181. There is considerable experience in Ghana on the issues covered by the investment programme. All projects, including sub-components, represent initiatives that have been discussed, planned or initiated in early stages and on a small scale. Hence, whether within the Government, the private sector, or civil society organizations, much capacity (or emerging capacity) does exist. However, at project preparation stage critical gaps will be identified and measures to address them will be designed.

182. Many of the projects will require cross-cutting capacity. For example, there is significant experience in implementing and working with CREMAs, which will be a potential concept for improving landscape connectivity and to test various tenure and benefit sharing arrangements. These will also address biodiversity conservation, building institutional capacity to address climate concerns in communities, engaging communities on forest management issues, and ensuring economic returns (poverty reduction) to local people.

183. There is a history of plantation development and engagement with communities with examples of successful impact, demonstrating that capacity exists. Climate smart agriculture and cocoa initiatives have been discussed and are moving towards piloting. Premiums and other market incentives have been introduced to the value chain of forestry and agricultural production. Nevertheless, REDD+ is a new concept in Ghana (although it should be noted that Ghana is advanced compared with many African countries) and therefore the REDD+ readiness process, including the FIP investment program, is structured to build capacity and enable implementation.

7.3 RISK ASSESSMENT

184. The underlying drivers of deforestation and forest degradation are known and identified during the REDD+ readiness preparation process. Projects providing financial resources and technical assistance alone are unlikely to have a transformational impact. The political will to support and transform land use and resource rights by addressing some of the long-standing issues will be critical for the programme to succeed.

185. The resistance to change on specific sensitive issues, particularly within government and the public sector institutions may be significant as there are many vested interests in the current situation. The complexities involved and the challenges of change may prove too difficult to overcome for FIP. Gaps and weaknesses in policy and regulatory framework are being addressed through specific measures and legislation, but good policies and laws are not enough. They can be ignored, subverted, or avoided by the institutions and actors involved in their implementation and interpretation. A detailed analysis of the factors and dynamics of the political economy of the sector should be

considered as part of Economic and Sector Work in the detailed planning of the program, especially in connection with Project 1.

7.4 STRATEGIC ENVIRONMENTAL AND SOCIAL ASSESSMENT (SESA)

186. The process to assess the likely impacts Ghana's REDD+ activities is described in the Ghana R-PP. FCPF funding will cover over half the budget for this action ($177,000 over four years), while the Government of Ghana will provide 15% of the funding. About one third of the estimated funding should be leveraged from other sources. Provided funding can be arranged, it would be useful to assess the potential environmental and social impacts of the FIP supported activities simultaneously with the REDD+ readiness assessment funded by the FCPF. The Strategic Environment Assessment (SEA) procedures of Ghana's Environmental Protection Agency (EPA) as well as the SESA requirement of the respective MDBs need to be applied during the design process for the individual projects.

187. All FIP projects will need to identify likely social (land use changes, gender inclusion, community participation and voice, etc.) and environmental impacts, assess co- benefits (poverty reduction, biodiversity conservation, ecosystem services etc.). Where necessary, relevant mitigation instruments will be prepared to mitigate unavoidable negative impacts and design features put in place to enhance positive impacts. FIP projects will start by establishing a baseline/reference scenario. A monitoring and evaluation framework will be designed to monitor, review and verify implementation processes.

8 SECTION 8: FINANCING PLAN AND INSTRUMENTS

188.The summary of the investments of the Forest Investment Plan, including the co-financing and leveraged funding is presented in Table 9.

Table 9: Ghana Forest Investment Plan financing (million US$).

Projects	**FIP Financing**[26]			**Co-Financing**				
	GR	**CF**	**CL**	**Private Sector**	**GoG**[27]	**IFC**	***Sub-total***	**TOTAL**
PROJECT 1: Reducing pressure on natural forest through an integrated landscape approach.								
Component 1: Policy reforms and institutional strengthening	3.0				3.0		*3.0*	6.0
Component 2: Participatory landscape planning and integrated management of forest reserves and ecological corridors	18.0				7.0		*7.0*	25.0
Component 3: Innovation and Capacity Building	5.0				4.0		*4.0*	9.0
Component 4: Project management and coordination	4.0				1.0		*1.0*	5.0
SUB-TOTAL	**30 .0**				**15.0**		***15.0***	**45.0**

[26] GR – grant; CF – concessional finance; CL – concessional loan.

[27] Potential IDA co-financing is currently under discussion with the World Bank.

PROJECT 2: Engaging local communities in REDD+/ Enhancement of carbon stocks								
Component 1: Support Enabling Mechanisms for Local Community and Private Sector Engagement in Restoration of Degraded Forests and Agricultural Landscapes (Plantation Development)	3.0				1.5		*1.5*	4.5
Component 2: Promoting a Sustainable Cocoa and Agroforestry Landscape Off-Reserve that Is Productive, Climate Smart and Environmentally Responsible	4.0				1.5		*1.5*	5.5
Component 3: Support for Community Restoration of Degraded Forest and Agricultural Landscapes	2.0				2.0		*2.0*	4.0
Component 4: Project Management	1.0							1.0
SUB-TOTAL	**10.0**				**5.0**		***5.0***	**15.0**
PROJECT 3: Engaging the Private sector in REDD+								
Component 1: REDD+ Investment Program			7.0	16.0				23.0
Component 2: Technical support program	3.0							3.0
SUB-TOTAL	**3.0**		**7.0**	**16.0**			***16.0***	**26.0**
PROGRAM TOTAL	**43.0**		**7.0**	**16.0**	**20.0**		***36.0***	**86.0**

9 SECTION 9: RESULTS FRAMEWORK FOR THE FOREST INVESTMENT PLAN

189. The overall FIP program results framework is being developed. Clear guidance on e.g. the indicators, is still pending, which will require most FIP countries to revisit their FIP plans to review their results frameworks. The current relatively general results framework in the Ghana FIP will be revised, including providing more explicit indicators to reflect more concretely the investment in Ghana, once the FIP framework is available and the detailed preparation for implementation of the investment program in Ghana, including project preparation is done.

Table 10: Results Framework for the Forest Investment Plan.

Results	Indicators	Data source
<u>Core objective:</u> A.1 Reduced GHG emissions from deforestation and degradation; enhancement of forest and agricultural carbon stocks	a) Tons (millions) of CO_2 emissions from reduced deforestation and forest degradation relative to reference emissions level; b) Tons (millions) of CO_2 sequestered through natural regeneration, re- and afforestation activities, and conservation relative to forest reference level; c) Tons (millions) of CO_2 sequestered through agroforestry and other landscape restoration interventions relative to reference levels.	National monitoring systems following relevant UNFCCC/ IPCC guidelines

Results	Indicators	Data source
Co-benefit objective: A.2 Reduced poverty through improved quality of life of forest dependent local peoples and forest communities[28]	a) Percentage of local community members/ forest communities (women and men) with legally recognized tenure rights and secure access to economic benefits and/or the means of maintaining traditional livelihoods; b) Changes in income in forest communities over time; c) Percentage of enrolment of boys and girls in primary and secondary education among local and / forest communities (MDG 2 a); d) Other quality of life indicators may be identified and validated through a consultative process with local communities.	National monitoring systems or equivalent
Co-benefit objective: A.3 Reduced biodiversity loss and increased resilience of forest ecosystems to climate variability and change	a) Percentage (%) change in forest fragmentation (rate and area); b) Reduction in the rate of loss of intact forest areas important for maintaining native biodiversity, ecosystem functions, including water, air quality, soil protection and resilience to climate stress; c) Species richness index[29] and Shannon-Weiner or Information Index.	National monitoring systems or equivalents Country reporting to UNCBD
FIP Catalytic Replication Outcomes		

[28] Indicators related to local peoples and forest dependent communities may need to be refined after feedback from local groups and forest communities has been received.

[29] The Shannon-Weiner and the Information Index have limitations. A final decision on FIP-wide indicator will be made after investment plans have been developed and countries decided on the adequate national indictor to track changes in biodiversity.

Results	Indicators	Data source
B.1 Reduced deforestation and forest degradation	a) Change in hectares of natural forest cover (percentage change against baseline); b) Change in hectares of natural forest that are degraded (percentage change against baseline); c) tCO2 sequestered/$ by investment plan; d) Areas (ha) of deforestation/degradation avoided/$ of investments.	National or sub-national monitoring systems
B.2 Increased direct management of forest resources by local communities	Increase in land and resources under legal control and management of local communities including through traditional forest management systems.	National M&E
B.3 Improved enabling environment for REDD+ and sustainable management of forests	a) Change in the extent to which environmental/GHG/ deforestation considerations/ solutions are integrated into the process of creating economic incentives/new policies and programs; b) Area of forests under clear, non-discriminative tenure and territorial rights, including the recognition of traditional rights; c) Evidence that infractions in the forest sector are detected, reported and penalized; d) Extent to which local communities (women and men) have access to relevant information in a timely and culturally appropriate manner; e) Other “Nationally owned-governance” indicators, developed through a country-led process.	National M&E systems

Results	Indicators	Data source
B.4 Access to predictable and adequate financial resources, incl. results-based incentives for REDD+ and sustainable management of forests	Leverage funds through results-based schemes offered by bilateral partnerships, the FCPF Carbon Fund or other mechanisms.	National M&E systems
<u>Regional level:</u> B.5 Replication of FIP learning in non-FIP countries	Number of non-FIP countries which replicate FIP project and program approaches (e.g., investment documents citing FIP pilot country projects); Indicators related to the KM component of the dedicated Grant Mechanism for Indigenous Peoples and Local Communities (DGM).	MDB cross-country review Review of national UNFCCC reporting relevant to REDD+

10 LIST OF RERENCES

Adu-Bredu, S., M. K. Abekoe, E. Tachie-Obeng & P. Tschakert. 2010. Carbon stock under four land-use systems in three varied ecological zones in Ghana. In: Bombelli, A. & R. Valentini (Eds.), Africa and Carbon Cycle. *World Soil Resources Reports* No. 104: 105 – 113. FAO, Rome.

Bamfo, R. 2009. Ghana- Multi-stakeholder participation in the VPA process: Lessons for REDD. FCPF Participants Committee meeting, Gamboa, Panama, 11 – 13 March. Ghana Forestry Commission, Accra.

CERGIS, IUCN, University of Maryland and WRI. 2012. Assessment of landscape restoration potential in Ghana. Unpublished Interim Report.

Collins W.B. 1961. They went to bush. MacGibbon & Kee, London. (pp. 127, 128, 159).

Davies, J. & C. Awudi. 2001. Review of reform of fiscal policies affecting forest management in African ACP countries.

FAO. 2010. Global Forest Resources Assessment. FAO, Rome.

FORIG. *In prep.* Forestry Statistics Handbook.

Gillis, M. 1988. West Africa: resource management policies and the tropical forest. In: Repetto, R. & M. Gillis, *Public policies and the misuse of forest resources*, pp. 299 – 352. Cambridge University Press, Cambridge. 432 pp.

Gineste, M., S. Martel, M. Henry, S. Adu-Bredu & L. Saint-André. 2008. Estimating the impact of selective logging on above-ground carbon stocks in BoiTano Forest Reserve. Proceedings of the Carboafrica Annual Meeting, 25–27 November, Accra, Ghana.

Hall, J.B. & M.S. Swaine .1981. Distribution of ecology of vascular plants in a tropical rain forest; forest vegetation in Ghana. Dr W Junk Publishers. 383 pp.

Hansen C.P., J.F. Lund & T. Treue. 2009. Neither fast nor easy: the prospect of Reducing Emissions from Deforestation and Degradation (REDD) in Ghana. *International Forestry Review* Vol.11 (4).

Hawthorne, W.D. & M. Abu Juam. 1995. Forest Protection in Ghana. IUCN, Gland and Cambridge, 203 pp.

Henry, M., M. Bernoux, D. Tutu, W. Asante, W.L. Kutsch, R. Valentini & L. Saint-André. 2010. Potential for country-level above-ground carbon sequestration and emission reductions through forestry activities in sub-Saharan Africa – evidence from Ghana. In: Bombelli A., Valentini R. (Eds.). - *Africa and carbon cycle*. World Soil Resources Reports No. 104:105 – 113. FAO, Rome.

Kapp, G. 2012. Expert opinion regarding the GHG reduction potential of the Forest Investment Program (FIP) Ghana. World Bank Internal Paper.

Katoomba Group West Africa Incubator, Nature Conservation Research Centre, Oxford University & Ghana Forestry Commission. 2011a. Biomass Map of Ghana 2008 – 2009. (Available at: http://forest-trends.org/publication_details.php?publicationID=2837.)

Katoomba Incubator for Ecosystem Services, Nature Conservation Research Center, Oxford University, National Aeronautics and Space Administration, & Ghana Forestry Commission. 2011b. The Ghana Carbon Map: Potentials, Opportunities and Implications. UnpublishedWorking Paper.

Marfo, E. 2010. Chainsaw Milling in Ghana - context, drivers and impacts. Tropenbos International, Wageningen.63 pp.

Myers, N., R.A Mittermeier, C.G., Mittermeier, G. Fonseca & J. Kent. 2000. Biodiversity hotspots for conservation priorities. *Nature* 403 (24): 853 – 858.

Owusu, J.H. 2008. New trends in Ghana's international timber trade: some implications for local livelihoods and sustainable forest management. Paper presented at Workshop on forest governance and decentralisation in Africa at Durban, South Africa 8 – 11 April, 2008.

Pendleton, L., D.C. Donato, B.C. Murray, S. Crooks, W.A. Jenkins, S. Sifleet, C. Craft, J.W. Fourqurean, J. B. Kauffman, N. Marbà, P. Megonigal, E. Pidgeon, D. Herr, D. Gordon, A. Balderaet. 2012. Estimating Global ''Blue Carbon'' Emissions from Conversion and Degradation of Vegetated Coastal Ecosystems. PLoS ONE 7(9): e43542. doi:10.1371/ journal.pone.0043542. 7 pp.

Republic of Ghana. 2012. National Climate Change Policy. MEST, Government of Ghana, Accra.

Republic of Ghana. 2011a. Ghana Forest and Wildlife Policy (Final Draft). MLNR, Government of Ghana, Accra.

Republic of Ghana. 2011b. Ghana's Second National Communication to the United Nations Framework Convention on Climate Change. MEST, Government of Ghana, Accra.

Republic of Ghana. 2011c. Tree crops policy (final draft). MoFA, Government of Ghana.

Republic of Ghana. 2010. Ghana Shared Growth and Development Agenda (GSGDA) 2010 – 2013. Medium-Term National Development Policy Framework. National Development Planning Commission, Government of Ghana, Accra.

Republic of Ghana. 2010. Revised Readiness Preparation Proposal (R-PP) for the Forest Carbon Partnership Facility (FCPF). MEST, Government of Ghana, Accra.

Republic of Ghana. 2008. Readiness Plan Idea Note (R-PIN) for the Forest Carbon Partnership Facility (FCPF). MEST, Government of Ghana, Accra.

Republic of Ghana. 2005. Ghana Poverty Reduction Strategy II. National Development Planning Commission, Government of Ghana, Accra

Republic of Ghana. 1998. Wildlife Development Plan 1998 – 2003. MLNR, Government of Ghana, Accra.

Rice, R.A. & Greenberg, R. 2000. Cocoa cultivation and the conservation of biological diversity. *Ambio* 3 (29): 167 – 173.

Tutu, D.B. *Personal communication.* March 2011.

WCMC .2011. Carbon, biodiversity and ecosystem services: exploring co-benefits. Ghana Short Profile. UNEP World Conservation Monitoring Centre, Climate Change and Biodiversity Programme. (Available at: http://www.carbon-biodiversity.net/Content/ShortProfiles/Ghana%20Profile%20110408_final.pdf)

World Bank. 2012a. Cocoa sector policy brief. PREM Africa Region. World Bank, Washington DC.

World Bank. 2012b. Palm Oil. Country situation analysis – Ghana (unpublished draft).

World Bank .2011a. Countries, Ghana: Data and Statistics. World Bank, Washington D.C.

World Bank. 2011b. Supply chain risk assessment. Cocoa in Ghana. World Bank, Washington DC.

World Bank. 2010. Tackling Poverty in Northern Ghana. World Bank, Washington D.C.

World Bank. 2005. Ghana natural resources management and growth sustainability. World Bank, Washington D.C.

11 ANNEX 1- FIP PROJECTS

PROJECT 1: SECURING AND ENHANCING CARBON STOCKS IN NATURAL FORESTS RESOURCES THROUGH IMPROVED FOREST RESERVE MANAGEMENT

MDB AND LEAD GOVERNMENT AGENCIES

1. The Ministry of Lands and Natural Resources (MLNR) and the World Bank will respectively act as the lead government agency and the lead Multilateral Development Bank (MDB) for the proposed project.

2. MLNR is well-positioned to be the lead government agency. It 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 which are responsible for the implementation of the Forest Investment Programme (FIP), as well as other on-going programmes supporting the New Forest and Wildlife Policy and the Forest Development Master Plan. In order to prepare and implement the FIP project a Forest Investment Project Unit (FIPU) will be established at MLNR to serve as the project´s secretariat.

3. The MLNR will be supported by: (1) the Ministry of Environment, Science and Technology (MEST), which has the broad mandate for developing climate change policies; (2) the Ministry of Finance and Economic Planning (MoFEP), which coordinates donor support in the country; (3) the Forestry Commission (FC), which is the implementation and executive arm of MLNR responsible for regulation, control and management of forest resources and the home to Ghana's REDD+ Secretariat; and (4) the Forestry Research Institute of Ghana (FoRIG), which is mandated to undertake forestry research and setting criteria and monitor afforestation and reforestation development in Forest Reserves.

PROBLEM STATEMENT

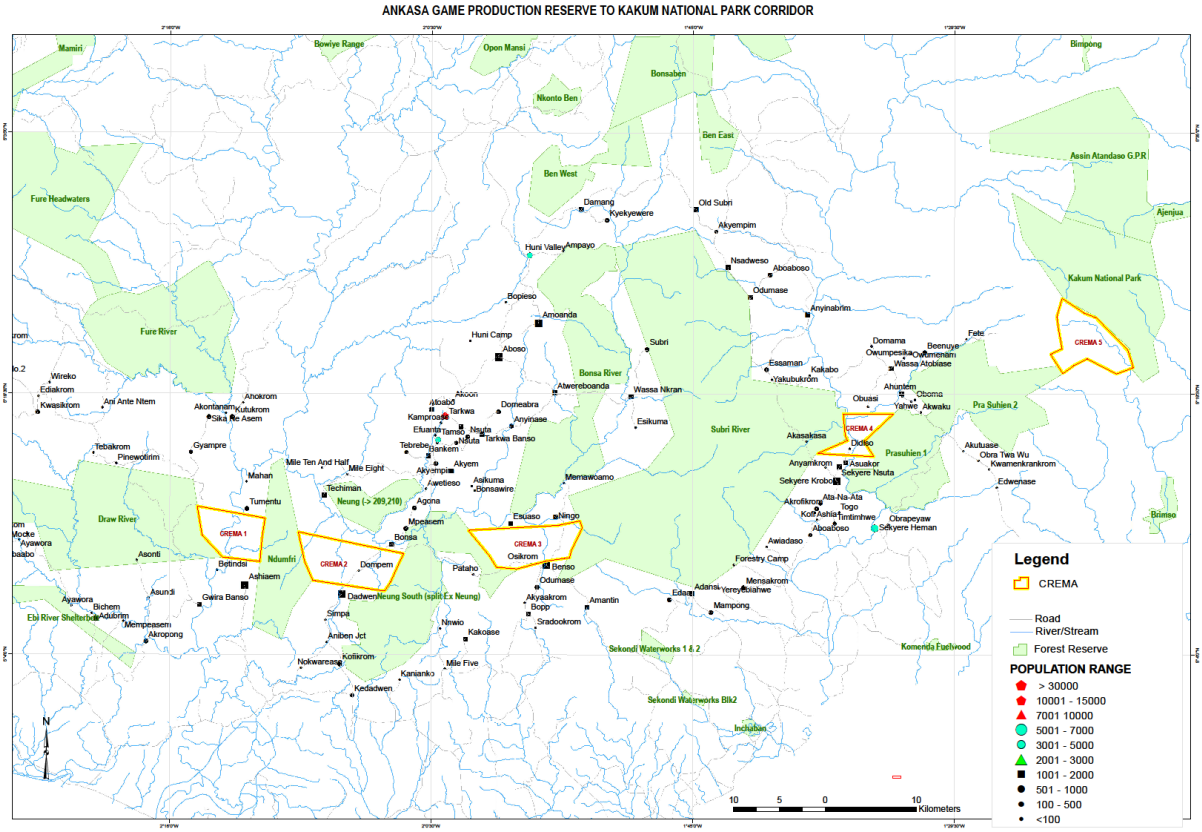
4. During the last two decades, annual deforestation rates have been approximately 2.0 %[30]. Ghana is therefore losing annually approximately 135,000 ha of forests, of which 65,000 ha are thought to relate to intact closed forests. The major direct causes of deforestation in the High Forest Zone (HFZ) are demand for land for agricultural expansion and unsustainable logging. There are also underlying factors such as demographic and economic pressures as well as the existing framework for tree tenure and benefit sharing that constitutes a major disincentive in the off-reserve areas but also negatively influence perceptions and attitudes towards trees and forests within reserves. Weak institutional capacity of the Forestry Commission to enforce integrity and ensure adequate management of the

[30] FAO. Global Forest Resources Assessment (2010).

nation's forest estate; and the lack of favourable enabling environment for private sector investment, also indirectly contributes to deforestation and forest degradation in the HFZ.

5. After a consultative process, it was agreed that the FIP Investment program would focus its interventions on the High Forest Zone in the Western and the Brong Ahafo regions as these two regions are likely to yield the highest total benefits from carbon sequestration and GHG emission reduction through landscape restoration. Specifically, securing the integrity of the remaining natural forest in forest reserves and surrounding areas (corridor approach – see Map 1) has been identified as a cost-effective and efficient option of reducing emissions from deforestation and forest degradation in Ghana, whilst generating significant biodiversity and poverty reduction co-benefits, particularly in the off-reserve areas.

Map illustrating a potential ecological corridor covering the area from Ankasa Game Production Reserve to Kakum National Park



PROJECT DESCRIPTION

6. **<u>Project Objective</u>**: The proposed project aims at reducing pressures on natural forests through a participatory landscape approach. It will initiate and facilitate steps towards transformational change in Ghana's forest sector by promoting an integrated approach to develop, pilot and validate replicable and

up-scalable models of participatory forest resource management in in- and off-reserve forest with the ultimate aim to reduce GHG emission and increase carbon stocks. Special efforts will be made to facilitate linkages with the Dedicated Grant Mechanism (DGM) since this project is aimed at facilitating community actions.

7. The proposed project will be financed with US$ 30 million from the FIP and the Government of Ghana a tentative co-financing of US$ 15 million.

8. The Project will consist of the following components:

Component 1: Policy reforms & Institutional strengthening (US$3 million FIP; US$3 million Government co-financing). Under this Component, the Government aims at securing the integrity of existing forest by focusing on governance issues - which critically determine how and in whose interests forests are managed and utilised and at creating an enabling environment for sustainable forest management and plantation development. To do so, the component will build on reforms supported under the NREG Program and it will be designed such that it complements other on-going initiatives, particularly with the VPA-FLEGT on governance issues. It will help develop on-the-ground pilots, with a specific focus on land tenure, benefit-sharing arrangements. Strong linkages will be developed with the DGM mechanism to ensure communities can actively participate to the development of the pilots. The Component will also support Forest institutions to enhance the quality of services delivered to communities and private sector. Specifically the Component will be articulated around the two sub-Components:

Sub-Component 1.1: *Pursue policy reforms and create an enabling environment for SFM activities*

- Develop, through participatory approaches, policy pilot(s) to test the effectiveness of intended tree tenure, benefit sharing , and carbon rights;
- Develop and validate community management and forest monitoring systems, to underpin an performance based payments (incentive mechanism);
- Review forest management regulations and procedures;
- Support forest governance and law enforcement in complementarity with other initiatives, particularly VPA-FLEGT;
- Operationalize the “National Strategy on Plantation” through creating an enabling environment for private sector’s and communities’ engagement

Sub-Component 1.2: *Develop an alternative organizational model for forest institutions to enhance quality of service delivery*

- Introduce and implement a new organizational model for the forest institutions, especially on the Forest Reserves, to move away from the existing centralized management model to a decentralized and participatory co-management approach. In particular, this sub-component will ensure that Forestry Commission can appropriately respond to the needs at the field level (staff, equipment, technology…). Mandates of Forestry Commission will also be clarified (to avoid it acting as both implementing and regulating agency possibly which currently leads to

underperformance on both tasks): this new arrangements will be piloted in field offices in the Project areas

Component 2: Participatory landscape planning and integrated management of forest reserves and ecological corridor[31] (US$18 million FIP; US$7 million Government co-financing). This Component aims at providing an integrated response to the increased pressure on remaining forest, through piloting replicable and up- scalable forest resource management models in in- and off-forest reserves, along a landscape approach. Particular focus will be given to strengthening community capacity to engage in planning and management of forests and natural resources: this will be undertaken in partnership with the Dedicated Grant Mechanism for Indigenous Peoples and Local Community (DGM).

Sub-Component 2.1: *Participatory and inclusive landscape planning in the ecological corridors*

- Conduct a participatory and inclusive landscape planning exercise in off reserve area to improve landscape connectivity, building e.g. on the cross-sectoral teams and approaches of the Agricultural Policy, and to be carried out with the engagement of community members and relevant stakeholder (i.e. resource users).

Sub-Component 2.2: *Enhance sustainable management of Reserve Forests.*

- Revise and implement revised forest management plans;
- Establish regular inventories of forest compartments through fixed inventory parcels.

Sub-Component 2.3: *Pilot new SFM Schemes in off reserves areas* (ie. ecological corridors)

- Pilot alternative SFM models and test-cases of pragmatic approaches on tree tenure and benefit sharing schemes.
- Assess the effectiveness of alternative models to provide the necessary evidence and impetus that could help adjust existing legal and institutional frameworks on tree-tenure and benefit-sharing scheme.

Component 3: Innovation & Capacity Building. (US$5 million FIP; US$4 million Government co-financing). This Component will support the transformative nature of the FIP program through targeted R&D activities (i.e. SFM, plantations, timber processing, MRV) as well as capacity building activities to support enhanced efficiency of various actors in the timber value-chain (from the production to the transformation) as well as in the agriculture sector (ie cocoa).

Sub-Component 3.1: *Support innovation in plantations*

- Research on new species, procedences and progeny (forest genetics)
- Improved techniques/technologies for plantations
- Technical assistance to private operators and communities involved in plantations
- Support to the establishment of PPPs (in close coordination with Project 3).

[31] The exact geographical scope of the Project 1 will be determined during the preparation phase.

Sub-Component 3.2: *Enhance efficiency in timber processing*

- Support increased efficiency in timber processing.
- Support vocational training.

Sub-Component 3.3: *Development of an MRV/Forest Monitoring system*

- Support the roll out of an MRV system in line with current REDD+ plans to enable development of a national emission reference scenario and carbon accounting;
- Align with a broader Forest Monitoring to provide Government with a monitoring tool to enhance daily management of forests as well as support decision-making process on forest sector.

Component 4: Project management & coordination. (US$4 million FIP; US$1 million Government co-financing). This Component will facilitate the co-ordination of project activities on a daily basis and also provide linkages with other FIP interventions in the landscape and at the national level by working closely with the Government and other MDBs.

The component will also provide support to facilitate project supervision and monitoring.

Sub-Component 4.1: *Day-to-day management of the Project*

- Support daily fiduciary management of the project
- Ensure an appropriate application of safeguards to project's activities
- Monitor and Evaluate the implementation of the project activities (as per the Results Framework and related M&E system to be established during preparation phase)

Sub-Component 4.2: *Coordination & Knowledge dissemination*

- Support strategic communication, collection, analysis and dissemination of major lessons learned from FIP projects and conduct policy dialogues to support evidence-based policy reforms aimed at reducing deforestation and forest degradation.
- Establish and implement a monitoring and evaluation framework for the FIP program (and build M&E capacity in government, civil society and local communities).
- Collect the socio economic and forest baseline information for all FIP projects;
- Provide linkages with other FIP interventions in the landscape and at the national level by working closely with the Government and other MDBs;
- Provide linkages with the Dedicated Grant Mechanism (DGM).

TRANSFORMATIONAL IMPACTS

9. The Project is expected to yield transformational impacts in the forestry sector in Ghana for the main following reasons. While it is acknowledged that some of the transformational impacts of the project may actually materialize beyond the scope of the project, the proposed approach is to create strong fundamental basis for an enabling environment that will generate full impacts over the longer term.

10. **Integrated landscape approach**. Since agriculture, forests, and community livelihoods are all connected, meeting challenges related to climate change (both mitigation and adaptation), to poverty reduction and more globally inclusive green growth requires better integrating the management of these resources. Therefore the Project 1 will be designed to pilot interventions that work across

different sectors to find solutions at the scale of entire landscapes (Reserves forests and ecological corridors): such an approach will integrate management of land, water, and living resources, and will promote sustainable land use in an equitable manner.

11. **Value chain approach**. The proposed project aims at providing a comprehensive response to the challenge of meeting demand for timber (particularly growing domestic demand) and enforcing sustainable management of forests. So far, most initiatives have taken a segmented approach, with a focus on specific links of the timber value-chain. The project aims at moving away from this piece-meal approach and will address the challenges in comprehensive manner, finding options to reconcile supply and demand.

12. **On-the-ground pilots to avoid debate trap on tree tenure and benefit sharing**. One other transformational dimension of the proposed project lies in testing and validating on-the-ground alternatives to the current incentive framework, specifically by targeting incentives to resource user groups or individuals who actually manage forest resources. The current political economy in the sector favors a status-quo that is likely to cause a total depletion of forest stocks unless addressed: Discussions on how to address the shortcomings of the existing incentives framework in forestry have been prevalent but have not resulted in a consensus on how to move forward[32]. The proposed approach thus aims at generating evidence to support eventual policy and legal changes so that the debate trap in which policy reform is stymied can be avoided. As a matter of fact, it is believed that, under such political economy, only the trial and validation of alternative models that demonstrate the possibility of win-win alternatives can provide the necessary evidence and impetus to find a way out of the debate trap and overcome the existing status-quo and

13. **Unlock potential for private sector engagement.** Strong linkages will be built between the Policy component of the Project 1 and the Project 3 implemented by IFC to support private sector involvement. As a matter of fact, major barriers (including legal and regulatory) prevail and prevent full involvement of private operators in SFM; it is however widely recognized that potential options exist. Removing these barriers, along with providing operators with financial and technical support (under Project 3), is expected to yield transformative impacts,

EXPECTED CO-BENEFITS

14. The primary objective of the FIP interventions and the Project 1 is to reduce GHG emissions from deforestation and forest degradation. Project 1 will particularly support interventions in the forest reserves and in the off reserve areas that will protect existing forests from further encroachment and degradation as well as enhance carbon stocks, though landscape and forest restoration and plantations. As indicated in the main FIP plan, there are only limited available data to assess the potential for GHG emission reduction under the overall program. This statement also applies to the Project 1 and it is thus anticipated that a detailed analysis of mitigation potential will be conducted during the preparation

[32] Views range from those who propose a radical revision of the existing legislation; including the amending the Constitution, to those who consider that it is possible to achieve progress within the existing legal norms.

phase of the Project. The below box presents the assumptions used to roughly estimate the mitigation potential of the Project 1. In addition other co-benefits are expected from the Project 1.

Box 1: Preliminary assessment of GHG mitigation potential

It is estimated that about 1.6 Mha of forests exist today in the HFZ and that the deforestation rate, currently estimated at 2% is expecting to down (based on recent trends). If the following assumptions are taken: 1,5% deforestation rate of a forest area of 1.2 Mha over the first 15 years, and with a 1% deforestation rate from year 15-30, about 373,000 ha of forest would be lost during the 30 year period, which would correspond to about 43 MtC emitted in the atmosphere (under the assumption that HZF forests contain an average of 115tC/ha).

In addition to the reduction in forest loss over the Project will also support activities that are likely to increase carbon stock in off reserves areas: agroforestry, plantations … This has not been assessed as part of the preparation of the FIP document but will be during the preparation of the Project.

15. **Social benefits and community empowerment**: Having 70% of the population in Ghana depending on natural resources for their basic food, water and energy requirements clearly makes the preservation of the remaining natural forests a priority. In addition, the proposed approach under Project 1 aiming at piloting innovative and inclusive SFM models (related to rights, benefit sharing and landscape planning) is expected to provide opportunity for building social capital and empower communities and their institutions. The piloting of these management models will be implemented with the particular objective of empowering the role of women in decision making and in sharing benefits from natural resource management.

16. **Economic benefits and poverty alleviation**: The proposed Project 1 is expected to provide increased opportunity for revenue generation and job creation through improved SFM models (incl. establishment of financially sound CREMAs), plantation development and forest restoration as well as agroforestry system in off reserve areas.

17. **Biodiversity protection and ecosystem resilience:** High Forest Zone falls within the West African Biodiversity Hotspot. Project 1 through improved management of Forest Reserves as well as improved connectivity through ecological corridors will to enhance biodiversity in production landscapes. Under its Component 2, the Project 1 will reduce pressure on existing forests and conserve and restore important biodiversity habitats. Landscape level planning and interventions to improve landscape connectivity and reduce fragmentation will increase ecosystem resilience and strengthen the impact of the protected areas as the core habitats for biodiversity conservation. Interventions in ecological corridors will also contribute to maintain biodiversity in the broader landscape matrix, while simultaneously enhancing agricultural biodiversity and conserving soils. This may also improve other ecosystem services, such as sustaining water supplies through watershed management.

IMPLEMENTATION READINESS

18. Ghana's implementation readiness for the proposed project is high. There is a comprehensive body of legislation in forestry, wildlife and the environment with institutional capacity to plan and implement policies, programs and projects. The institutions in charge of the FIP are well-staffed in terms of quantity and in terms of the quality of professionals. Furthermore, there is a wealth of experience in

implementing donor supported programs in Ghana, such as the EU supported VPA/FGLEGT and the FCPF REDD+ process, the FPP and NREG.

19. The proposed FIP implementation arrangement will use the existing Natural Resources and Environmental Governance Technical Coordination Committee (NREG TCC+), which has been operational for three years to facilitate the implementation of all natural resources and environment donor funded programmes. The NREG TCC+ will form the basis for overall guidance of the FIP and will be expanded with relevant members, including from private sector, civil society and community based organizations and women's groups, research institutions, traditional authorities, MoFA, Ministry of Energy, and the Lands Commission. The TCC+ is responsible for guiding Ghana's REDD+ agenda.

20. The main implementing agencies under MLNR and MEST will be the Environment Protection Agency (EPA), Forest Research Institute of Ghana (FoRIG), and Forestry Commission (FC), with their Forest Services Division, Resource Management Support Centre, and Climate Change Unit, which provides the National REDD+ Secretariat. Through these institutions, project secretariats that contain the required expertise (from within government, research institutions, civil society, and private sector operators) will be constituted to oversee more specific planning and implementation of project components and activities.

SAFEGUARDS

21. The proposed Project is anticipated to have positive social and environmental impacts. In compliance with World Bank safeguards policies specific safeguard instruments (e.g. EIA, EMP, and Involuntary Resettlement Frameworks) will be prepared during project preparation and will adhere to Bank's safeguard policy requirements.

22. It is anticipated that Component 2 may result in changes in land use which impact livelihoods. However, these will be voluntary and based on community based decision making. The community decision making process will be designed and monitored to ensure that it is adequate, as per Bank standards, and that it provides for the identification of appropriate measures to mitigate adverse impacts of vulnerable members of the community.

23. On broader social development themes, the proposed project will: (1) Provide for meaningful community participation in decision-making and management of forest, a natural resource on which the majority of Ghanaians depend for their livelihoods; (2) Contribute to the exploration of benefit sharing regimes that will directly provide incentives for protection of trees but indirectly will strengthen the relationship between resource users, resource owners, and government and in so doing strengthen social cohesion at the local level.

24. The proposed project will put in place detailed and comprehensive procedures for consultation, in collaboration with the DGM process, to ensure that there is awareness of the project (through information sharing activities) and that there is broad community support for the activities. Guidelines on consultations, that are relevant to the Ghana context, will be developed and used in the preparation of the project and during implementation.

25. A Social and Environmental Strategic Assessment is being prepared under FCPF and this will explore other possible social and environmental impacts and will ensure that relevant mitigation measures are identified and designed. A public consultation manual is also under preparation.

FINANCING PLAN

Table 6: FIP Financing (million USD).

190. Project 1 Financing Proposal			
Components	**FIP Financing**	**GoG Co-financing**[33]	**Sub total**
Comp. 1: Policy reforms & Institutional strengthening	**3.0**	**3.0**	**6.0**
Comp. 2: Participatory landscape planning and integrated management of forest reserves and ecological corridor	**18.0**	**7.0**	**25.0**
Comp. 3: Innovation & Capacity Building	**5.0**	**4.0**	**9.0**
Comp. 4: Project management & coordination.	**4.0**	**1.0**	**5.0**
Total	**USD 30.0**	**USD 15.0**	**USD 45.0**

Project preparation timetable

26. The table below proposes the timeframe for the project, from concept development and review, to implementation.

Table 2: Project Preparation Timetable (Project 1).

MILESTONE	TENTATIVE TIME FRAME
Scoping mission and stakeholders consultation	February 2013
Launching of the Preparatory studies	February – March 2013
Presentation of preparatory studies and pre-appraisal project document /stakeholder consultation	July – August 2013
Disclosure of safeguard instrument	September 2013

[33] Potential IDA co-financing is currently under discussion with the World Bank.

Submission of the Appraisal document to FIP Sub-Committee	September 2013
Project appraisal and negotiations	October 2013
Submission to the World Bank Board	November 2013
Start implementation	January 2014

Request for project preparation grant

<table>
<tr><td colspan="4">FOREST INVESTMENT PROGRAM

Project/Program Preparation Grant Request</td></tr>
<tr><td>1. Country/Region:</td><td>Ghana</td><td>2. CIF Project ID#:</td><td>(Trustee will assign ID)</td></tr>
<tr><td>3. Project Title:</td><td colspan="3">Reducing pressure on natural forests through an integrated landscape approach</td></tr>
<tr><td>4. Tentative FIP Funding Request (in USD million total) for Project[34] at the time of Investment Plan submission</td><td colspan="2">Grant: 30,0 (including preparation grant)</td><td></td></tr>
<tr><td>5. Preparation Grant Request (in USD):</td><td colspan="2">500,000</td><td>MDB: The World Bank</td></tr>
<tr><td>6. National Project Focal Point:</td><td colspan="3">Mr. Musah Abu Juam, Ministry of Lands and Natural Resources
majuamuk@yahoo.co.uk</td></tr>
<tr><td>7. National Implementing Agency (project/program):</td><td colspan="3">Ministry of Lands and Natural Resources</td></tr>
<tr><td>8. MDB FIP Focal Point and Project/Program Task Team Leader (TTL):</td><td colspan="2">Headquarters-FIP Focal Point:
Email:</td><td>TTL: Flavio Chaves
Email: fchaves@worldbank.org</td></tr>
<tr><td colspan="4">9. Description of activities covered by the preparation grant:
• Project scoping.
• Identification and mobilization of implementation partners.
• Stakeholder consultation.
• Development of baseline data framework for monitoring and evaluation (M&E)
• Safeguards instruments preparation</td></tr>
<tr><td colspan="4">10. Outputs:</td></tr>
<tr><td colspan="2">Deliverable</td><td colspan="2">Timeline</td></tr>
</table>

[34] Including the preparation grant request.

Project scoping	December 2012
Reports on Preparatory activity (including safeguards)	May –June 2013
Consultation workshop on preparatory outputs and first draft project document (including presentation of the project activities, first year's workplan and procurement plans, project manual and safeguards documents)	July 2013
Development of baseline data framework for monitoring and evaluation (M&E)	July 2013
Aide-Memoire of Appraisal mission along with appraisal report	October 2013
11. **Budget (indicative):**	
Expenditures[35]	**Amount (USD) -** estimates
Consultants	330,000
Equipment	20,000
Workshops/seminars	80,000
Travel/transportation	
Others (admin costs/operational costs)	40,000
Contingencies (max. 10%)	30,000
Total Cost	**500,000**
Other contributions:	
• Government (in-kind)	TBD
• MDB	TBD
• Private Sector	TBD

35 Expenditure categories are subject to revision based on emerging needs.

• Others (please specify)	TBD

12. **Timeframe (tentative)**
Submission of project preparatory grant request: December 2012
Identification of firm/consultants and commencement of study: February 2013
Completion of preparatory studies: July 2013
Submission of Program/Project Proposal for FIP Sub-Committee Approval: August 2013
Expected MDB Management[36] approval date: September 2013

13. **Other Partners involved in project design and implementation**[37]:
IUCN; Civic Response; CERGIS

14. **If applicable, explanation for why the grant is MDB executed:**
The preparation grant will be executed by the Recipient.

15. **Implementation Arrangements** (incl. procurement of goods and services)**:**
The implementation arrangements for the PPG build on the arrangements set up for the NREG-TA (this will allow economies of scale as well as enhanced synergies/complementarities between the two operations).

36 In some cases activities will not require MDB Board approval

37 Other local, national and international partners expected to be involved in design and implementation of the project.

PROJECT 2: ENGAGING LOCAL COMMUNITIES IN REDD+ / ENHANCEMENT OF CARBON STOCKS

MDBS AND LEAD GOVERNMENT AGENCIES

1. The Forestry Commission (FC) in the Ministry of Lands and Natural Resources (MLNR) will serve as the lead government agency for this project. The MLNR is is responsible for forestry activities on and off reserve and it is also the designated focal point ministry for the Forest Investment Programme. A project coordination unit will be established to manage the project and ensure linkages and coordination with other interventions under the FIP, including the Dedicated Grant Mechanism. The focal point ministry will work closely with the Ministry of Food and Agriculture (MOFA), the Cocoa Board, the Ministry of Environment Science and Technology, as well as other relevant agencies to ensure smooth implementation and the documentation sharing of the lessons learnt.

2. The African Development Bank will be the lead MDB for the proposed Project that focuses on enhancing carbon stocks in the areas outside the designated forest reserves.

PROBLEM STATEMENT

3. Ghana has a land area of 238,500 km^2, made up of two broad ecological zones - a high forest zone (HFZ) covering much of the southern 30% of the country, and a savannah zone over the considerably drier northern 70%. The project will focus its activities in the two regions in the High Forest Zone where the key drivers of deforestation include unsustainable agricultural expansion and illegal and unsustainable logging. The problems in the agricultural landscape of the region are exacerbated by an increasing demand for food, fuel and timber from growing populations. The agricultural landscape is dominated by cocoa production by small scale farmers. On average, over 70 per cent of the cocoa farms in the country are below 4 hectares in size. The cocoa sector employs over 400,000 small scale farm families. In 2008, the sector contributed over $1.2 billion to the export revenues (GoG 2008). Nationally, cocoa currently covers an area of over 1.6 million hectares.

4. In 2010, the population reached 24 million with an average annual growth rate of 2.4%. In the HFZ, cocoa, cassava, plantain, cocoa yam, oil palm, rubber, timber processing and mining predominate. In 2008, timber exports were the third most important export providing 7% of exports by value after minerals (45%) and cocoa (27%).

5. Deforestation and forest degradation have long been public preoccupations in Ghana, independent of REDD+ policy development. The process is largely one of progressive degradation, and the drivers derive from a mix of forest sector and extra-sectoral forces. Ghana's R-PP analysis identifies the principal agents of deforestation and forest degradation as: agricultural expansion [c.50%], harvesting of wood [c.35%], urban areas sprawl and infrastructure expansion [c.10%] and mineral exploitation and mining [c. 5%].

6. Factors contributing to deforestation and forest degradation and loss in Ghana have been well documented. Increasing demand for lumber for local markets, combined with poor incentives for communities and farmers to maintain and manage forests outside forest reserves, is a major stimulus for unsustainable levels of harvesting and associated depletion of forest stocks. In addition, increasing demand for firewood and charcoal has also become a major driver of deforestation.

7. This project will specifically target the Western and Brong Ahafo Regions. A recent IUCN study (Adeleke et al, 2012) has indicated that these regions are likely to yield the highest total benefits from carbon sequestration through landscape restoration in terms of both total carbon and net benefits per ton of carbon sequestered. The two regions have been prioritized for FIP investments through a consultative process involving stakeholder consultations and the analysis of available data. The IUCN study has further concluded that "the improved management of farm fallow and agroforestry compare favourably in terms of total tons of carbon sequestered with more conventional approaches such as plantation development."

8. In addition to the emitted carbon and loss of biodiversity, the effects of deforestation also translate into economic losses to the state. Based on the estimated chain saw milling production, the stumpage revenue foregone by the state is more than GHC 25 million (US$18 million) per year (Marfo 2010) [38]. This estimate does not take into account additional future losses incurred from over harvesting or the economic value of ecosystem services that forests provide.

9. Within the HFZ, cocoa farming, food crop production, and the expansion of other tree crops have played a key role in the conversion of forests, and the prioritization of agricultural intensification practices. In the absence of community-based or sector based land use planning, this has led to further expansion of tree and food crops into forested lands as profits are re-invested and prevailing farming practices copied in new plantings. It is important for the forestry sector to interphase with the agricultural sector through appropriate interventions in the targeted project sites. There is also need for more resources and information on the REDD+ opportunities available for local farmers.

10. Currently, there are few incentives to encourage local communities and small farm-holders to invest in forest conservation**.** The disincentives include among others, the lack of suitable benefits sharing mechanism and tenure arrangements that do not encourage long term investment in tree crops – for example in cases where farmers are tenants on the land.

11. Enabling a transition from agricultural systems that cause emissions through forest conversion and degradation, to a climate smart farming systems that conserves or sequesters C02 in the biomass

[38] Marfo, 2010. Chainsaw Milling in Ghana: Context, drivers and impacts (Article ETFRN news 52). Tropenbos.

and soil provides a pathway for significantly reducing business as usual emissions associated with the agricultural and tree crop sectors.

12. Climate smart agriculture refers to sustainable agricultural practices and activities that can potentially benefit adaptation and mitigation, as well as development and food security issues. Agriculture is considered to be climate smart if sustainably increases productivity, increases resilience (adaptation) to climate change, removes/reduces greenhouse gases (mitigation), and/or enhances national food security and development[39].

CONTRIBUTION TO A TRANSFORMATIONAL IMPACT AND CO-BENEFITS

13. **The overall objective of the project** is to enhance carbon stocks in the off reserve areas in the High Forest Zones by engaging communities in approaches that also generate direct financial benefits and other environmental benefits for them leading to reduced deforestation and forest degradation in the landscape. The lessons learnt will guide the selection and scaling up of future investments in similar landscapes.

14. The project will seek to: (i) build capacity among local communities to enable them to participate effectively and efficiently in decision making and sustainable activities; (ii) implement policy pilots to test the effectiveness of intended tree tenure, benefit sharing, and carbon rights for REDD+ on the ground, including strong mechanisms for farmers to retain existing trees and plant new ones; (iii) develop alternative livelihoods for communities.

The project will engage local communities through the following four components:

Component 1: Support Enabling Mechanisms for Local Community and Private Sector Engagement in Restoration of Degraded Forests and Agricultural Landscapes [Plantation Development]

This will include the following sub components.

Sub-Component 1.1: Governance Arrangements

i. Policy and Legislation: Determine the potential implications of REDD^{+} benefits within the existing legal context
ii. Institutional Arrangements

[39] As defined by the FAO, 2010.

iii. Tenure and Carbon Rights: Implement policy pilots to test the effectiveness of intended tree tenure, benefit sharing, and carbon rights for REDD+ on the ground, including strong mechanisms for farmers to retain existing trees and plant new ones.
iv. Study on Benefit Sharing to stakeholders - in particular, test how to provide opportunities for fringe communities to benefit from REDD+ actions
v. Test various mechanisms including - Incentives, Certification and Market Premium for Cocoa (Including Assessing Possibility of Roundtable for Cocoa). Also support development of strong incentive mechanisms for farmers to retain existing trees and plant new ones.

Sub-Component 1.2: Capacity Building, Research, Monitoring and Lessons Learning

i. Capacity Building among local communities to enable them to participate effectively and efficiently in decision making and sustainable activities: Institutional capacity should go beyond training and restructuring of public sector agencies and include arrangements for forest protection and law enforcement, partnership and networking of public, private, civil society and communities in securing the integrity of the forest. In addition, Community capacity building should aim at strengthening skills and abilities of fringe communities to overcome the cause of their exclusion from resource management.
ii. Training, Extension services and Consultancies:
iii. Set up Carbon Stocks Monitoring Centre and Carbon Flux Towers and tree provenance areas:
iv. Collect, analyse and disseminate major lessons learned from previous projects and programmes so as to inform more detailed project planning and decision making.
v. Establish a systematic monitoring and evaluation framework for community restoration of degraded landscapes [plantation development]: Ghana has recently completed a National Carbon Map. Thus the development of an efficient Measurement (monitoring), reporting, and verification (MRV) framework should be a focus of this output. However, concerns were raised that until scope and reference level issues have been resolved in the country, MRV components remain in flux.

Component 2: Promoting a Sustainable Cocoa and Agroforestry Landscape Off-Reserve that is Productive, Climate Smart and Environmentally Responsible

Sub-component 2.1: integration of trees into the cocoa landscape

Cocoa and food crops Agroforestry is the tropical land use system in Ghana with the greatest potential to sequester carbon. For sustainable cocoa production, permanent shading up to 40% (equivalent to about 15-18 trees) per hectare is recommended. Managing trees within cocoa landscape does not only contribute to GHG abatement but also contributes to biodiversity conservation and enhanced fragmented forest connectivity.

Activities will include the following:

i. Test how trees influence productivity, resilience and carbon gain in cocoa farming systems
ii. Test the introduction of trees within the cocoa landscape as a biodiversity conservation tool
iii. Re-introduction of cocoa and multi-purpose trees in degraded landscapes which were formerly used to cultivate cocoa: Reduce “new frontier” farming (converting virgin forests to cocoa) and test the use of trees to create the necessary micro-climate for the growth of cocoa in old cocoa growing areas which are currently under food crop farming.

iv. Raise public awareness about the need for shade in cocoa and ecosystem-based adaptation of cocoa systems.

Sub-Component 2.2: Managing Naturally Occurring Trees in food and other tree-crop farming systems

i. Piloting innovative tenure and incentives systems to help farmers retain naturally occurring trees on crop farms
ii. Integrating trees forest carbon sequestration into food crop landscapes
iii. Pilot tree conservation systems within the crop farming landscape – e.g. with species such as *Faidherbia albida*
iv. Pilot agroforestry systems which increase carbon stocks while increasing food crop productivity
v. Pilot BioChar (activated carbon incorporated into the soil) as a Soil Carbon Enhancement measure within the crop farming landscape
vi. Increase carbon stocks within farm fallows, through among other measures an increase the fallow period

Component 3: Support for Community Restoration of Degraded Forest and Agricultural Landscapes

i. Pilot Modified Taungya System (agroforestry system involving a partnership between Government and local communities) in off-reserve areas
ii. Pilot rehabilitation of degraded forest reserves using four main reforestation systems tested under the Community Forestry Management Project (CFMP), namely; Contract Farming, Outgrower Scheme, Modified Taungya System (MTS) and Public-Private Partnership (PPP).
iii. Pilot incentives for farmers and land owners to conserve trees on their lands for both timber production and enhancement of carbon stocks
iv. Promote and support research and knowledge transfer into land-use practices and management options which could enhance co-benefits of carbon sequestration and biodiversity conservation
v. Pilot gender specific access and rehabilitation to degraded forests and agricultural lands
vi. Identify and determine the economic feasibility of introducing alternative livelihood programmes into restoration of degraded landscapes

Component 4: Project Management

This component will facilitate the co-ordination of project activities on a daily basis and also provide linkages with other FIP interventions in the landscape and at the national level by working closely with the Government and other MDBs. The component will also provide support to facilitate project supervision and monitoring. Special efforts will be made to facilitate linkages with the Dedicated Grant Mechanism (DGM) since this project is aimed at facilitating community actions.

TRANSFORMATIONAL IMPACTS

The intention of the FIP is not only to directly reduce carbon emissions, but also to transform the ways in which key actors in the forestry and agricultural sectors operate, ultimately resulting in multiple reductions in deforestation and forest degradation beyond the timeframe of this project. Specifically, the project has the potential to:

a) Facilitate high level discussion and planning between the lead government agencies implementing the FIP and other agencies and institutions that have not traditionally collaborated with the forestry and environment sectors, including Ghana's Cocoa Board and the Ministry of Food and Agriculture.
b) On-the-ground collaboration and streamlining of strategies and activities so as to facilitate measurable results, wherever possible, in achieving REDD+ goals. {positive changes with regards to market driven approaches and mechanisms}
c) Promoting agricultural crop and tree plantations on degraded lands (improved food security, higher value crops for export, better rural infrastructure)

For local communities, the project will transform their capacity to engage with private and public sector actors, particularly in forestry and agriculture and REDD+.

EXPECTED CO-BENEFITS

15. Associated co-benefits are likely to increase yields and thus income (poverty alleviation), diversify production systems and enhance food security (livelihoods), increase or maintain biodiversity in the agricultural landscape, provide watershed services, furnish emissions reductions or removals, and make agricultural systems more resilient.

IMPLEMENTATION READINESS

16. Implementation readiness in Ghana is quite high. This is because there is currently an NREG Technical Coordination Committee (TCC) which has been operational for three years to broadly facilitate the implementation of all natural resources and environment donor funded programmes. The NREG TCC will form the basis for overall guidance of the FIP and will be expanded with additional members (including two from private sector, two from civil society, one from Forest Forum representing community point of view, one from research institution, one from traditional authorities, one from Ministry of Agriculture, one from Ministry of Energy, and one from the Lands Commission). In this new configuration the TCC will be renamed TCC+, and will be responsible for guiding Ghana's REDD+ agenda. The existing Steering Committees including REDD+, VPA, National Forest Forum, Non-Legal Binding Instruments (NLBI), , and the FIP will be converted into Technical Working Groups and report to the TCC+. The TCC+ will meet four times per year. In addition, ad hoc working groups will be formed as needed, and would include initially an Ad Hoc Working Group for the preparation of the FIP Investment Strategy.

17. The main implementing agencies under MEST and MLNR will be the EPA, FORIG, and Forestry Commission. Through these institutions, project secretariats that contain the required expertise (from within government, research institutions, civil society, and private sector operators) will be constituted to oversee more specific planning and implementation of each project and its associated components. In addition, a number of national and international potential partners, including the Global Environment Facility (GEF) Small Grants programme and the Regional Forestry Office for Africa of the Food and Agriculture Organisation (FAO) have been contacted as potential partners in this process. It will be crucial to find the right partners/stakeholders on the ground that will be responsible for informing project planning and the day to day function of implementation.

POTENTIAL NATIONAL AND INTERNATIONAL PARTNERS INCLUDING THEIR REDD+ FINANCIAL SUPPORT

18. AfDB will seek to collaborate with various partners.

Table 1: Project Partners

	NAME	PRIMARY ROLE
MDB and co-financiers	AfDB as MDB	>Management of FIP project allocation including monitoring and evaluation (M&E) >Project implementation and associated technical assistance for project
National Partners	Timber Industry Development Division (Forestry Commission)	Project implementation assistance
	NREG	Additional financing for interventions in the agricultural landscape
	Climate Change Division (Forestry Commission)	Data collection and dissemination
	Community Resource Management Areas	Representing community interests, possibly forming private sector entities
	Private sector partners	Direct stakeholders (industries include timber, agriculture, energy, eco-tourism, etc.)
	Cocoa Research Institute of Ghana	Project implementation and technical assistance
	Ministry of Food and Agriculture (MOFA)	Technical and policy support in agricultural interventions in the landscape
	New Foresight	Risk assessment
International Partners	IUCN	Studies and Project implementation
	FAO National Forest Partnership Facility	

RATIONALE FOR FIP FINANCING

19. This project is aligned with the FIP investment criteria as follows:

Table 2. Financing Rationale

FIP CRITERION	JUSTIFICATION
Climate change mitigation potential	Each project component has both a direct target for reducing carbon emissions, and a market transformation impact target.

Demonstration potential at scale	The pilots could be replicable in other forest zones in Ghana
Cost-effectiveness	Support to the improvement and restoration of forests in the agricultural landscape adjacent to the high forest zone has significant potential in enhancing carbon stocks. The proposed project is expected to improve the carbon stocks in a cost effective way.
Implementation Potential	The country has fairly robust institutional arrangements for the implementation of these types of projects. MDBs and other partners have supported community based natural resources management interventions and some useful lessons that could benefit the FIP have been learnt. The potential for the proposed interventions is high.
Integrated sustainable development (co-benefits).	The project will reduce carbon emissions, support sustainable private sector growth, reduce pressure on high biodiversity areas, and help meet growing demand for wood.

20. The objective of this project is to enhance carbon stocks in the off reserve areas in the HFZ by engaging communities in approaches that generate direct financial and environmental benefits for them, leading to reduced deforestation and forest degradation in the landscape.

21. This project will focus on the off-reserve and off-ecological corridor areas of the HFZ to avoid overlapping spatially and partly thematically (replanting, capacity building) with Project 1. It concentrates on work with farmers and communities, on-farm trees (especially in cocoa farming systems), and reforestation. Beyond local interventions, the project will facilitate cooperation and planning between the forestry and environmental sector, MoFA, and the Cocoa Board under the MoFEP.

22. The concrete scope of measures will be determined in the detailed preparation of the project. Tentatively a budget of US$15 M of grant and loan is scheduled. Assuming that half of the budget was directed into plantation incentives for long lasting shade and timber trees, the following rough estimation of the carbon sequestration effect over 30 years could be envisaged.

23. Incentives in the form of PES for 1 ha agroforestry tree plantation (with 200 seedlings, 40 trees at year 30) at the cost of US$375 per ha, and a 40,000 ha intervention area. After 30 years, this may result in 215 tCO_2/ha or 8.6 $MtCO_2$ total (for US$7.5 million), or an investment of US$0.87/$tCO_2$, if the trees are not harvested. If trees are harvested and re-established using a small part of the timber revenue, then the time average carbon effect would be half, i.e. a total of 4.3 $MtCO_2$, or an investment of US$1.74/ tCO_2, (i.e. below the market price for forestry emission reductions).

SAFEGUARDS

24. The project will comply with all AfDB safeguards. A Strategic Environmental and Social Assessment (SESA) will be undertaken to analyse Ghana's Investment Plan for all proposed activities.

FINANCING PLAN

Financing from the FIP for the proposed activities will be in the form of grants. Additional AfDB co-financing is also being sought.

Table 3. Financing Proposal (USD millions)			
Components	**FIP Financing**	**Co-financing**	**Sub totals**
Support Enabling Mechanisms for Local Community and Private Sector Engagement in Restoration of Degraded Forests and Agricultural Landscapes	3.0	1.5	4.5
Promoting a Sustainable Cocoa and Agroforestry Landscape Off-Reserve that Is Productive, Climate Smart and Environmentally Responsible	4.0	1.5	5.5
Support for Community Restoration of Degraded Forest and Agricultural Landscapes	2.0	2.0	4.0
Project management	1.0	-	1.0
Total	**USD 10 Million**	**USD 5 Million**	**USD 15 Million**

PROJECT PREPARATION TIMETABLE

25. The table below propose a timeframe for the project, from concept development and review, to implementation.

Table 4. Project Milestones

MILESTONE	**DATE**
Investment Plan approval	November 2012
Approval of Concept Note and Commencement of project preparation activities	January 2013
Completion of stakeholder consultations Preparation Report	April 2013
Consultations on safeguards and completion of Environmental Assessments	June 2013
Preparation of Appraisal Report	September 2013
Submission of Project for FIP Sub-Committee Approval	November 2013

Commencement of Implementation	November 2013

REQUEST FOR PROJECT PREPARATION GRANT

A preparation grant of US$ 250,000 is requested to cover the analyses, consultations and preliminary meetings needed to develop the project.

Request for project preparation grant

FOREST INVESTMENT PROGRAM **Project/Program Preparation Grant Request**			
1. **Country/Region**:	Ghana	CIF Project ID#:	(Trustee will assign ID)
2. **Project Title:**	*Engaging local communities in REDD+/Enhancing Carbon Stocks*		
3. **Tentative FIP Funding Request (in USD million total) for Project[40] at the time of Investment Plan submission**	*Grant: 10 (including preparation grant)*	*Concessional loan: --*	
4. **Preparation Grant Request (in USD):**	*250,000*	*MDB: AfDB*	
5. **National Project Focal Point**:	*Mr. Musah Abu Juam* *Ministry of Lands & Natural Resources* *majuamuk@yahoo.co.uk*		
6. **National Implementing Agency (project/program):**	*TBD*		
7. **MDB FIP Focal Point and Project/Program Task Team Leader (TTL)**:	*Headquarters-FIP Focal Point:* *Mafalda Duarte* *m.duarte@afdb.org*	*TTL:* *Albert Mwangi* *a.mwangi@afdb.org*	

[40] Including the preparation grant request.

8. **Description of activities covered by the preparation grant:**

Ghana is requesting a project preparation grant of USD 250,000 to support studies in the cocoa-agriculture landscape in relation to GHG emissions, opportunities for land use planning, the area and trends in cocoa farming, opportunities and bottlenecks to farmers engagement in climate smart farming, and determination of average emissions reductions/removals associated with particular farming practices. The grant will also support an analysis of the options for bridging potential gaps.

More specifically, this will entail:

- Reviewing the environment for cocoa and agriculture in the target region in relation to climate change and GHG emissions to identify opportunities for climate smart cocoa and climate smart agriculture.
- Identifying key challenges, opportunities for engagement and potential pilot opportunities.
- Studying literature and expert knowledge to identify practices that increase carbon stocks above and below ground and calculate "average" climate benefit (emissions reduction/removal) associated with these particular agricultural practices (cocoa and food crops/agroforestry).
- Identifying and recommending community land use planning methods and mechanisms that can foster successful land use planning efforts to provide climate benefits.
- Analyzing existing implementation capacities for the project and recommend ways to bridge gaps efficiently through collaborations – including in depth analysis of REDD+ market demand and feasible partnership arrangements.
- Holding stakeholder discussions to further focus proposed project direction
- Identifying the key stakeholders that need to be involved
- Collecting of baseline data for monitoring and evaluation (M&E)
- Developing an implementation plan and an M&E framework for assessing success of project
- Developing risk assessment tools

9. **Outputs:**

Deliverable	**Timeline**
(a) Baseline data collection / identification of stakeholders	January 2013
(b) Validation workshop	May 2013
(c) Scoping study complete	July 2013

10. **Budget (indicative):**

Expenditures[41]	**Amount (USD) -** estimates
Consultants	150,000
Equipment	0
Workshops/seminars	40,000
Travel/transportation	25,000
Others (admin costs/operational costs)	10,000
Contingencies (max. 10%)	25,000
Total Cost	**250,000**
Other contributions:	
Government (in-kind)	TBD
MDB	TBD
Private Sector	TBD
Others (please specify)	TBD

11. **Timeframe** (tentative)
Submission of project preparatory grant request: November 2012
Identification of firm/consultants and commencement of study: December 2012
Completion of studies: July 2013
Submission of Project Proposal for FIP Sub-Committee Approval: October 2013
Expected MDB Management[42] approval date: September 2013

12. **Other Partners involved in project design and implementation**[43]:
Forestry Commission – Timber Industry Development Division (TBC)

Cocoa Board (TBC)

IUCN (TBC)

FAO National Forest Partnerships Facility (TBC)

41 Expenditure categories are subject to revision based on emerging needs.

42 In some cases activities will not require MDB Board approval

43 Other local, national and international partners expected to be involved in design and implementation of the project.

13. **If applicable, explanation for why the grant is MDB executed:**
The preparation grant will be used in the process of identifying the scope of the project[44]. The expertise and comparative advantage that the AfDB has in agriculture and community resources management, as well as its solid relationships with local institutions and NGOs places it in the best position to develop and implement this community component for FIP Ghana.

14. **Implementation Arrangements** (incl. procurement of goods and services)**:**
The AfDB will implement the project in accordance with is operations procedures and guidelines. The AfDB will work closely with the Forestry Commission, other relevant departments within the Ministries, MDBs involved in the implementation of the FIP and other stakeholders.

44 This process will be executed by the IFC using its procurement processes and procedures.

PROJECT 3: ENGAGING THE PRIVATE SECTOR IN REDD+

MDBS AND LEAD GOVERNMENT AGENCIES

26. The Ministry of Lands and Natural Resources and the Forestry Commission (amongst others part of the Timber Division), as well as the Ministry of Agriculture will serve as the lead government agencies.

27. The International Finance Corporation (IFC) will be the implementing agency for the proposed Program.

WHAT IS 'THE PRIVATE SECTOR'?

28. When looking at the role the private sector plays, both in the problem and the solution of (reduced) deforestation in Ghana, it is important to recognize that 'the private sector' is a broad term and can mean different things to different people. One way to categorize different private sector players related to FIP Ghana is as follows:

Category A: Companies with direct land-based activities in Ghana, such as forestry companies (both natural forest management and plantation companies; large, medium and small enterprises), agricultural companies (planting, harvesting and processing a.o. cocoa , coffee, palm oil), tourism companies (operating lodges), charcoal producers etc. These are companies registered in Ghana with direct land-based activities.

Category B: Companies purchasing commodities from land-based activities in Ghana, such as timber and paper & pulp purchasing companies, cocoa purchasing companies, palm oil purchasing companies etc. These companies can be, but often are not based in Ghana.

Category C: Companies interested in buying credits on the (voluntary) carbon market. This can be any company in the world that wants to buy REDD credits on the carbon market[45].

PROBLEM STATEMENT

[45] For a description of the current Voluntary Carbon Market see 'Developing Dimensions, State of the Voluntary Carbon Market 2012', see www.ecosystemmarketplace.com.

29. In the High Forest Zone of Ghana, broadly including the Western Region but also parts of Brong Ahafo, the major drivers of deforestation are unsustainable agricultural expansion and illegal and unsustainable logging. These problems are in turn fuelled by increasing demand for food, fuel and timber from growing populations both in and outside Ghana. The effects of deforestation, in addition to the emitted carbon and loss of biodiversity, translate into economic losses to the country. Based on the estimated chain saw milling production, the stumpage revenue foregone by the country is more than GHC 25 million (US$18 million) per year[46]. It should be noted that this estimate does not take into account additional future losses incurred from over logging or the economic value of ecosystem services that forests provide.

30. Natural forest management in and of itself does not contribute to deforestation. Moreover, sustainable natural forest management can contribute to REDD+. However, non-sustainable logging can be a driver for deforestation. Legality (which the Voluntary Partnership Agreement process with the EU works towards) is a first step, but does not equal sustainability.

31. Agricultural expansion is another major driver of deforestation (the largest driver according to the Ghana R-PP). Expansion of cocoa plantations specifically is a known driver of deforestation in several West-African countries. The cultivation trend over recent decades away from shade cocoa trees (benefiting from partial shade) to full sun varieties aggravates this situation.

32. In recent years, various commodity sectors (such as cocoa, timber and oil palm) have shown awareness of and interest in working throughout the supply chain to achieve economic, environmental and social sustainability. Pursuing these sustainability objectives, commodity purchasing companies (category B) are actively seeking cooperation with and provide support to land-based suppliers (category A).This is a recent process in Ghana and an opportunity that should be actively supported in order to keep momentum and achieve maximum impact. Therefore, financial incentives and technical support are important in enabling wide scale engagement from the various private sector actors.

33. Reducing illegal and unsustainable activities and promoting sustainable agriculture and forestry has the potential to reduce deforestation and forest carbon emissions, as well as support sustainable economic growth in Ghana.

34. Currently, there are few incentives and various barriers for companies with direct land-based activities (category A) interested in more sustainable ways of production that avoid and reduce

[46] Marfo, 2010. Chainsaw Milling in Ghana: Context, drivers and impacts (Article ETFRN news 52). Tropenbos.

deforestation. The incentives are, among others, access to new markets and price premiums for certified products. However, the barriers include[47]:

a) High cost of borrowing to implement more sustainable ways of production and processing;
b) Land and resource rights issues (partly addressed by FIP projects 1 and 2 by WB/AfDB);
c) Lack of technical expertise on REDD+;
d) High project costs (the novelty of REDD+ and the forestry sector in Ghana translates into higher upfront, operational and transaction costs).

35. Linked to these barriers is the reality that local financial institutions (FIs) currently offer little support for private sector REDD+ projects in Ghana. From the perspective of the FIs, the novelty of REDD+, the relative small size of projects at this stage of the development of REDD+ in Ghana, plus the lack of in-house expertise translates into higher investment risk. Consequently, the FIs have no incentives to support businesses with REDD+ projects.

36. The above not only decreases the chances of private sector companies acquiring finance for viable carbon friendly projects, but local FIs also fail to tap into the over $576 million voluntary carbon market[48].

37. Finally, a major challenge is provided by the fact that (international) companies interested in purchasing REDD+ credits (category C) are not creating as much demand as would be needed to create a vibrant market. Both demand and supply (such as projects following from RPP and FIP) sides have to be encouraged and developed in order to maintain a sustainable market for carbon credits.

STRATEGIC APPROACH

38. The overall objective of the Program is to contribute to transform the way private sector actors in the forestry and agriculture sectors operate in Ghana, which in turn will reduce deforestation and forest degradation, and promote sustainable forest management that will lead to emissions reductions and enhancement of forest carbon stocks.

39. The Program will seek to address the key barriers presented above that discourage private sector engagement in the forest and other sectors affecting forest. It will engage the three categories of

[47] Analysis from IFC preliminary feasibility studies on REDD+ investments in Ghana, 2011/2012.

[48] *Developing Dimensions: State of the Voluntary Carbon Markets 2012*

private sector actors with two complementary components: (i) A REDD+ Investment Program; and (ii) a Technical Support Program.

Component 1 – REDD+ Investment Program.

40. IFC could develop two types of investments under this program: (i) Investment through local financial intermediaries/banks that can on-lend to smaller companies/SMEs for REDD+ projects; or (ii) direct investments in sustainable forestry and agriculture companies.

41. Preliminary discussions with private sector actors with land-based activities indicates that their investment needs – those that can claim avoided and reduced deforestation as a result - are for small loans, which local FIs are unable or unwilling to finance due to the novelty of REDD+, the relative small size of projects, plus the lack of in-house expertise. Further diligence during the program preparation phase will be carried out to confirm this preliminary conclusion.

42. If the preliminary findings are confirmed, IFC could establish the "FIP Ghana REDD+ credit facility" that would invest in innovative projects in the Western and/or Brong Ahafo regions that can demonstrate REDD+ benefits, optimally aligned with the global land use plan to be developed through project 1 of the FIP Investment Plan (implemented by IBRD). The proposed facility would facilitate on-lending arrangements with local commercial banks. FIP concessional finance will be used to reduce perceived and real risks, as well as initial high costs associated with REDD+ projects that prevent banks to engage in such transactions.

43. Moreover, the facility will not be limited to one sector, ensuring that finance can be accessed by any sector (forestry, agriculture or otherwise) which can demonstrate that the impact of its activities will be REDD+ positive, i.e. demonstrate that the project will reduce deforestation and forest degradation, and/or ensure sustainable forest management that leads to emissions reductions and enhancement of forest carbon stocks.

44. The FIP Ghana REDD+ Credit Facility could finance activities such as:

- Sustainable forestry companies:
  - Investing in certifiable plantation and forest rehabilitation;
  - Investing in others products (rubber, bamboo) as alternative for timber; and
  - Investing in efficiency gains in timber industry (*e.g.* less waste, co-generation, wood products).
- Sustainable agriculture companies:
  - Investing in sustainable cocoa on degraded land;
  - Investing sustainable agriculture on degraded land
- Tourism companies investing in management of protected areas close to their tourism operations.

45. Where relevant, this component can complement AfDB's Project 2 under FIP Ghana. For example, if pilots conducted under AFDB's Project 2 prove to be successful and financially sustainable, they could be considered for financing under the REDD+ credit facility.

Component 2 – Technical Support Program.

This component will complement Component 1 and is target at the three private sector categories.

A. Technical Support to Financial Institutions and Companies seeking finance.

46. This Technical Support would: (i) Build expertise of Ghanaian financial institutions on REDD+ financing; (ii) Create awareness about the "FIP Ghana REDD+ Facility" and REDD+ in general; and (iii) provide support to private sector actors (mostly of category A) who have a need for REDD+ finance, but find it challenging to translate this into a coherent business plan and ultimately access credit.

B. Technical Support to companies purchasing commodities cocoa, timber and/or palm oil (category B) in their efforts to purchase sustainably, and to their suppliers (category A).

47. The IFC Technical Support program will work with both the purchasing companies and their Ghana based suppliers. The project will build on and scale up existing initiatives, and will seek to fill in potential gaps. IFC will engage with, among others, the following current governmental and non-governmental organizations that are currently working in this filed, such as: Ghana's governmental bodies (the Forestry Commission and the Cocoa Board, among others); organizations such as WWF, Solidaridad, IDH; certification standards such as Utz, FSC, Rainforest Alliance and RSPO; research institutions and certification bodies. IFC could play a key role in connecting the different players – including the financial sector.

C. Technical Support to link demand and supply of the international REDD+ market by engaging category C companies to opportunities in Ghana.

48. The IFC Technical Support program will seek to identify the hurdles to linking demand and supply in a REDD+ market in Ghana. The project will also promote the engagement of key stakeholders from both demand and supply sides.

CONTRIBUTION TO A TRANSFORMATIONAL IMPACT AND CO-BENEFITS

How will this be transformational?

49. The intention of the FIP is not only to directly reduce carbon emissions, but also to transform the ways in which key actors in forestry and agriculture operate, ultimately resulting in multiple reductions beyond the timeframe of FIP financed projects. Specifically, this Program has the potential to transform the ability to do business of private sector actors (small, medium and large) and community enterprises by:

- Incentivizing companies to improve the efficiency and sustainability of their operations, wherever they are in the supply chain (on the ground or buying commodities)
- Increasing access to finance, specifically for innovative on-the-ground REDD+ projects
- Stimulating innovation, by not limiting the risk facility to any given sector or type of project
- Promoting the application of sustainable forest management principles
- Promoting sustainable agricultural and tree plantations on degraded lands
- Increasing access to market for certified products
- Facilitating relationships between businesses, forestry communities and strategic investment partners
- Training and building capacity of private sector actors in forestry and agriculture, as well as certifying bodies and auditors, plus the financial sector.
- Connecting REDD+ projects developed by Ghana's R-PP and the projects 1 and 2 of this FIP plan to the international voluntary carbon market, linking supply with demand.

50. For the local FIs, the Program will transform their capacity to engage with private sector actors in forestry and agriculture and specifically on REDD+. It will broaden their portfolio and allow them to take risks they would otherwise avoid by reduced financial risk, technical assistance and building in-house expertise on REDD+.

How will this reduce carbon emissions?

51. The proposed Program will provide incentives (technical and financial) to the private sector and other key actors that will result in adoption of activities that reduce deforestation and forest degradation, as well as enhance carbon reservoir. Consequently, the Program will have both direct and indirect reductions of carbon emission. GHG emission reduction estimates can be provided at later stage of the program development once the financial mechanism is defined and a pipeline of potential activities that will be financed using FIP resources is established. All sub-projects under this Program will have as a strict requirement that they give an estimate of the amount of GHG that the sub-project aims to reduce and in what timeframe, and will be asked to include a monitoring plan (including baseline data).

52. Illustrations of GHG estimation methodology that could be used are as follows:
a) For a plantation (forestry or agriculture) on degraded land, the area (in ha) of forest that would otherwise have been deforested will be estimated. This would be combined with available data on GHG capture and storage in nearby forests and GHG emissions when such a forest is cut down.
b) For a sub-project aiming to use a loan for more efficiency in wood processing, the difference between the baseline efficiency (in % of wood waste) would be calculated, and prevented emissions will be calculated on that basis (also based on the particular wood species used).

What co-benefits are expected?

53. Co-benefits to local forest communities include opportunities for access to finance for community forest enterprises; increased employment opportunities and training; and increased awareness of sustainable forestry management practices. Internationally recognized sustainable forestry standards such as FSC have a strong social component, underlining that all certified companies will ensure communities benefits.

54. An additional co-benefit is reduced pressure on high biodiversity areas, resulting from increased application of best practices in Reduced Impact Logging (required for FSC certification) as well as from plantations of agriculture and tree crops on degraded lands (as opposed to forest conversion).

    Finally, the cross-sectoral characteristic of the proposed REDD+ credit facility will help build a broader knowledge base for REDD+ project implementation in the Ghanaian and Western and Brong Ahafo context. As the drivers of deforestation are not limited to the forestry sector, the solutions should also come from other sectors. Building the understanding of why and how to reduce GHG emissions in not only the forestry, but also the agricultural and financial sectors (and possibly other sectors such as tourism), builds a stronger foundation within the Ghanaian private sector community on REDD+.

IMPLEMENTATION READINESS

55. IFC's long-standing experience with private sector investments in developing countries and its good working relationship with the GoG, together with existing working relationships with both IBRD and AfDB will create a good enabling environment for the successful implementation of the Program.

56. IFC interactions to date with private sector players and commercial banks on the topic of REDD+ investments has been positive, with private businesses keen to share business plans with IFC, and banks expressing interest in further diversifying their current portfolio by servicing this new market. IFC will continue to leverage its relationships with local companies and FIs to successfully implement the Program.

57. IFC has also initiated dialogue with other organizations involved in REDD+ projects in Ghana to discuss potential collaborative efforts on the topic. IFC has discussed with WWF-GFTN possible collaboration on promoting sustainable forest management and certification. To date, the GFTN has successfully assisted three companies in achieving preliminary levels of FSC certification, and the potential to leverage IFC support and experience can significantly increase this success rate. In addition, WWF's New Generation Plantations could provide a platform for best practices in sustainable forest plantations.

58. As part of its R-PP process, the FC Climate Change division has initiated the process of knowledge dissemination and training for organizations interested in REDD+ activities in Ghana. Technical

workshops and capacity building programs are currently being organized to increase interest and expertise in REDD+ projects. The Timber Industry Development Division (TIDD) within the FC also provides specialized services in promoting efficiency and product quality assurance for the timber trade industry. IFC will therefore leverage the expertise and network of these divisions to successfully implement the private sector Program.

59. IFC will engage with key players in the agricultural sector (throughout the supply chain) and the Ministry of Agriculture (including the Ghana Cocoa Board) as well as the forestry sector and the Forestry Commission. The projects will build on existing initiatives ongoing in both the forestry sector and the various agricultural commodities impacting forests (including cocoa and palm oil).

POTENTIAL NATIONAL AND INTERNATIONAL PARTNERS AND THEIR REDD+ FINANCIAL SUPPORT

60. IFC will seek to collaborate with various partners including private sector players in the forestry, agriculture and financial sectors, with WWF, community forest enterprises such as CREMA, government organizations such as the Climate change division and Timber Industry Development Division of the FC. International partners that have indicated interest include European bilateral development partners. As much as possible, IFC will seek collaboration with international and multilateral partners to leverage support and funding for the Program.

Table 1: Program Partners

	NAME	**PRIMARY ROLE**
MDB and co-financiers	IFC as MDB	Management of FIP Program allocation including monitoring and evaluation (M&E) Program implementation and associated technical assistance for project
	Commercial Banks	Co-financing and providing expertise
	Timber Industry Development Division (FC)	Program implementation assistance
	Climate Change Division (FC)	Data collection and dissemination

National Partners	Community Resource Management Areas	Representing community interests, possibly forming private sector entities
	Research institutions	best practices in NFM, tree plantations, cocoa production
	Private sector partners	Direct stakeholders (industries include timber, agriculture, energy, eco-tourism, etc.)
	Global Forest Trade Network (coordinated by WWF)	Program implementation and technical assistance
International Partners	Forest Carbon	REDD+ verification
	Certification organizations and bodies such as FSC, Utz, rainforest Alliance	Certification
	International sector organizations such as the World Cocoa Foundation	
	WWF	Lessons from other WWF projects applied in Ghana
	WCF	Best practices in sustainable cocoa

RATIONALE FOR FIP FINANCING

61. The REDD+ credit facility would be open to investments that show they have the ability to reduce carbon emissions by reducing pressures on the forests. Additionally, the technical support Program will provide tools and trainings that support sustainable forestry and agriculture, certification and resource efficiency that also contribute to reduce pressure on forests and promote social, economic and environmental co-benefits.

62. This is therefore in line with the objectives of the Forestry Commission to develop business support for REDD+ projects. In addition, it is an innovative concept that has the potential to be scaled up across the country and then the continent. The Program is aligned with the FIP investment criteria as follows:

FIP CRITERION	**JUSTIFICATION**

Climate change mitigation potential	Each Program component has both a direct target for reducing carbon emissions, and a market transformation impact target.
Demonstration potential at scale	The REDD+ credit facility model, if found feasible and effective, could be a) scaled up in Ghana to increase impact and b) replicated globally. Other Program components also have demonstration potential.
Cost-effectiveness	FIP funding will be leveraged at least 1:3, possibly 1:4 or even higher (depending on the exact investment model chosen). GHG emission reduction estimates can be provided at later stage once the financial mechanism is defined and a pipeline of potential activities that will be financed using FIP resources is established.
Implementation Potential	IFC, as the world's largest solely private sector focused development bank, has the expertise, experience and network to implement this Program successfully. IFC has support from key stakeholders mentioned in this proposal, and has more in-depth research scheduled for the preparation phase to ensure a realistic and optimally effective Program will be developed. IFC has already established relations with various private sector partners and NGO's in Ghana, further demonstrating IFC's readiness to implement this Program.
Integrated sustainable development (co-benefits).	The Program will, support sustainable private sector growth, increase employment opportunities, promote social benefits, reduce pressure on high biodiversity areas, and help meet growing demand for wood.
Safeguards	IFC has a practice of applying high quality safeguards to all investments since 2006. IFC's Performance Standards were updated in a large multi-stakeholder process, making the new version - implemented as of 1 January 2012 – is state of the art. IFC's Performance Standards have since been used as a model by various banks following the Equator Principles.

SAFEGUARDS

63. The Program will comply with IFC safeguards. In 2006, IFC started to apply Performance Standards on social and environmental sustainability to all its investments. By now, 75 banks following the Equator Principles are applying standards based on IFC's Performance Standards. IFC has recently updated these Standards in a multi-year, extensive and global stakeholder process. This has

resulted in a state of the art safeguard policy[49], entering into force on 1 January 2012. Clients are obliged to comply with these performance standards, or if they lack full compliance to commit to a stepwise approach toward compliance.

IFC's 8 Performance Standards are:

a. Assessment and management of environmental and social risks and impacts;
b. Labour and working conditions;
c. Resource efficiency and pollution prevention;
d. Community health safety and security;
e. Land acquisition and involuntary resettlement;
f. Biodiversity conservation and sustainable management of living natural resources;
g. Indigenous people;
h. Cultural heritage.

For more information, see www.ifc.org/sustainabilityframework

64. In addition, stringent eligibility criteria will be developed for the REDD+ credit line/facility. These criteria will ensure that all investments under this facility clearly demonstrate the potential to contribute towards REDD+ objectives.

FINANCING PLAN

65. Finance from the FIP will be requested in the form of concessional loans for investments and grants for accompanying technical assistance. The IFC will co-fund the Program and seek to leverage additional funding from private sector players and other international agencies in support of the Program. The below numbers are based upon the choice for an investment in one or more financial institutions in Ghana. The flexibility proposed between grants versus concessional loans allows IFC to allocate more or less to the investment or advisory projects, based on further research done in the preparation phase.

FUNDING SOURCE[50]	**AMOUNT (Million US$)**

49

FIP Funds for Project Preparation Grant (Grant)	0.25
FIP Funds for Technical Assistance Component (Grant)	2.75
FIP Funds for Investment Component (Concessional Finance)	7.00
IFC co-financing for investments	10.00
Other private sector co-financing (commercial banks, investors, companies)	16.00
Government/Other sources	
TOTAL	**36.00 Million**

PROGRAM PREPARATION TIMETABLE

66. The table below proposes a tentative timeframe for the Program, from concept development and review, to implementation

MILESTONE	**DATE**
Investment Plan approval	November 2012
Identification of firm/consultants and commencement of market research and GHG abatement assessment	December 2012
Completion of research and assessment	June 2013
Submission of Program Proposal for FIP Sub-Committee Approval	October 2013
IFC Internal Approval	March 2014

REQUEST FOR PROGRAM PREPARATION GRANT

[50] The precise co-financing amounts depend on a variety of factors, including whether the investment will be in the financial sector, or directly in the forestry or agricultural sector.

67. US$ 250,000 is requested to cover the analyses, consultations and preliminary meetings needed to develop thoroughly the Program.

Request for Program Preparation Grant

FOREST INVESTMENT PROGRAM **Program Preparation Grant Request**			
1. **Country/Region**:	Ghana	CIF Project ID#:	(Trustee will assign ID)
2. **Program Title:**	*Engaging the Private Sector in REDD+*		
3. **Tentative FIP Funding Request (in USD million total) for Program[51] at the time of Investment Plan submission**	*Grant: 3 (total with loan 10)*	*Concessional loan: 7 (total with grant 10)*	
4. **Preparation Grant Request (in USD):**	*250.000*	*MDB: IFC*	
5. **National Program Focal Point**:	*Mr. Musah Abu Juam Ministry of Lands & Natural Resources* *majuamuk@yahoo.co.uk*		
6. **National Implementing Agency (project/program):**	*TBD*		
7. **MDB FIP Focal Point and Project/Program Task Team Leader (TTL)**:	*Headquarters-FIP Focal Point: Joyita M. Mukherjee* *JMukherjee1@ifc.org*	*TTL: Miriam Van Gool* *Email: mvangool@ifc.org*	

[51] Including the preparation grant request.

8. **Description of activities covered by the preparation grant:**

- In depth analysis of REDD+ market demand and feasible partnership arrangements
- Stakeholder discussions to further focus proposed Program direction
- Identification of private sector partners, communities, research institutions, certification bodies and government bodies to be involved.
- Collection of baseline data for monitoring and evaluation (M&E)
- Development of implementation plan, and M&E framework for assessing success of Program
- Development of risk assessment tools

9. **Outputs:**

Deliverable	**Timeline**
(a) Baseline data collection / identification of stakeholders	January 2013
(b) Validation workshop	March 2013
(c) Scoping study complete	June 2013

10. **Budget (indicative):**

Expenditures[52]	**Amount (USD) -** estimates
Consultants	170,000
Equipment	0
Workshops/seminars	20,000
Travel/transportation	30,000
Others (admin costs/operational costs)	10,000
Contingencies (max. 10%)	20,000
Total Cost	**250,000**
Other contributions:	
Government (in-kind)	TBD

52 Expenditure categories are subject to revision based on emerging needs.

MDB	TBD
Private Sector	TBD
Others (please specify)	TBD

11. **Timeframe** (tentative)
Submission of Program preparatory grant request: November 2012
Identification of firm/consultants and commencement of study: December 2012
Completion of study: June 2013
Submission of Program Proposal for FIP Sub-Committee Approval: October 2013
Expected MDB Management[53] approval date: March 2014

12. **Other Partners involved in Program design and implementation**[54]:
Forestry Commission – Timber Industry Development Division (TBC)
WWF Ghana
NewForesight on Credit Risk Assessment SME's, see http://www.newforesight.com/ (TBC)
Forest Carbon on REDD+ verification / TA, see http://forest-carbon.org/ (TBC)

13. **If applicable, explanation for why the grant is MDB executed:**
The preparation grant will be used in the process of identifying the scope of the Program, and will be executed by IFC. The expertise and comparative advantage that the IFC has in private sector development, as well as its solid relationships with local Financial Institutions (FIs), forestry companies, and local NGOs places it in the best position to develop and implement this private sector component for FIP Ghana. IFC has also been engaged in similar studies relating to agriculture, forestry and sustainability, and will leverage this expertise and knowledge in preparing and executing the Program at hand.

14. **Implementation Arrangements** (incl. procurement of goods and services)**:**
The Program will be implemented by the IFC. IFC will work closely with the Forestry Commission, as well as with other relevant departments within the Ministries. IFC will also work closely with its private sector partners, local government agencies, and community organizations such as Community Research Management Area (CREMA) to implement the Program.
In terms of procurement of goods and services, the World Bank Group procurement guidelines will be followed.

53 In some cases activities will not require MDB Board approval

54 Other local, national and international partners expected to be involved in design and implementation of the project.

12 ANNEX 2- STAKEHOLDER CONSULTATION AND PARTICIPATION PLAN

Ghana's Forest Investment Plan aims to contribute to on-going efforts by the Government of Ghana to prepare for and implement a REDD+ strategy, including other initiatives contributing to REDD+ objectives, such as the VPA/FLEGT process. During the consultation process, the government has organized several meetings and set up arrangements to seek inputs from a broad range of stakeholders and interests, and to build awareness, understanding and support for the process.

The FIP consultation process has benefitted from and built on the R-PP consultations and the VPA process. The Government considers the FIP preparation process as part of the broader REDD+ process in Ghana, where stakeholder engagement began with the drafting of Ghana's R-PP, approved in March 2010, and which underwent an extensive stakeholder consultation and engagement process. In addition, as REDD+ readiness has progressed over the past two years into the early stages of implementation (Phase 2), the Government has continued to benefit from the participation of numerous stakeholders engaged in REDD+ and climate change mitigation and adaptation in Ghana.

Nevertheless, during the preparation of the FIP in Ghana a large number of stakeholders have involved in the consultations and in the development of the draft investment plan by presenting project ideas and by providing comments and inputs (cf. Table 1). Throughout the preparation and consultations a smaller core team reviewed the feedback from the process and revised the FIP document accordingly. In addition, in 2012, the government established an email address, which stakeholders could use to send comments or questions regarding the process. The main stakeholder groups identified for engagement and consultation included:

Government	State level and statutory level with a focus on cross-sectoral linkages.
Multilateral Development Banks	African Development Bank (AfDB), World Bank (WB) and the International Finance Corporation (IFC).
Private Sector	Predominantly those within the timber industry and wood workers associations, plantation developers, cocoa farmers, but also those involved in charcoal production, agriculture, and finance.
Civil Society	A broad range of civil society actors were identified for inclusion, with a focus on forest fringe communities, NGOs specializing in the environment, climate change, natural resource management, and community development.
Development Partners	Mainly partners engaged in forestry, natural resources sector and climate change issues.

Annex 2, Table 1: Stakeholder consultation in the development of the FIP document.

Consultation meeting	Date	Venue	Stakeholder Institutions / No. of Participants	Mode of Engagement with Stakeholders	Remarks
Ghana Forest Investment Program Joint Mission	30th of May – 6th of June 2011	Miklin Hotel, Accra	MLNR, MEST, MoFEP, MOFA,MOTI FC, EPA, MC,FORIG,CRIG, TIDD, WD, FSD, CERSGIS, LTSI, FAWAG, GHAFTRAM , AKYIKYIRE, FIP- ASANKRAGUA GACON, ACCRA CLIMATE ACTION , IUCN TROPENBOS, CDF , NFFG, CARE, WWF, FWG, TA Offinso, TA Kumasi, IFS, WB, LTS, Netherlands Embassy, EU Delegation, AfDB, NCRC, NDPC, JICA, FORM International, Civic Response, Tree Aid, HATOF Foundation, WUR.	Information sharing; Questions and answers; FIP Consultation, R-PP approach; Outline for FIP document, discussion of drivers of deforestation and opportunities for FIP.	
Focus Group Private Sector	16th June 2011	Miklin Hotel, Kumasi	50+ participants MLNR, MoFEP, MEST, FC, TIDD, FORIG, LSTI, GTMO, GTA, FAWAG WAG, Anloga small scale carpenters association	Information sharing, questions and answers, FIP consultation approach, outline for FIP document, discussion of drivers of deforestation and opportunities for FIP. The plenary session was followed by Group Work to guide development of the FIP projects and participants responses to questions posed by the facilitators.	Concerns and questions expressed included: (1) tree tenure and lack of clarity for individuals; (2) will there be public procurement; how can activities on law enforcement be included; (3) it should focus on SFM; (4) the problem of chainsaw operations was raised and FC indicated that steps are being taken to combat.
Focus Group Forestry	2nd March 2012		TIDD, CCU, FSD, FC Headquarters, MoFEP, MLNR	Request for input on from decision makers and technical experts on project selection, technical details,	Each official made direct comments (track changes) into the draft document, and all comments were assessed and

Commission & Government Partners				and project selection	incorporated as possible.
Focus Group Consultation Civil Society Organizations	7th March 2012	FC, Boardroom		Information about the FIP and a draft of the document were shared with participants. Working Group sessions focused on providing technical input to strategy those projects selected.	Participants raised questions and concerns, including: (1) land and tree tenure was not adequately addressed in the existing draft; (2) the FIP does not link with on-going REDD+ efforts and the aim seems to be off-track; (3) some expressed concern that they had not had adequate time to read the document and prepare comments or ideas.
Email address launched	7th March 2012	Online	The FIP Team opened up an email account and the above address was shared with all participants on 7th March consultation, as well as participants at later consultations: forestinvestmentprogrammeghana@gmail.com	Email address shared with participants at 7th March consultation as well as subsequent consultations. Draft document available online (FC website, Ministry website)	Two (2) stakeholders used the opportunity to send in detailed comments, which were incorporated into documents revision: *WWF Ghana*- general focus on need to make private sector engagement happen, including realization of certification and related issues *CIKOD*- raised concerns about "green belts" and community woodlots.
Focus Group Private Sector	9TH March 2012	WITC, Kumasi	GTMO, GTA, FAWAG, WAG, CRIG, CCSFAG, FC, MLNR, FORIG	Information about the FIP and a draft of the document were shared with participants. Role of the Timber Industry in the FIP process was discussed. Presentation on IFC perspective, potential loans, and challenges to private sector engagement. Working Group sessions focused on providing technical input on	The main issues, questions and concerns included: (1) how to resolve problem of tree tenure and the lack of assurances and clarity; (2) how will benefits be shared; (3) the persistent challenge of law enforcement and illegal chain sawing; (4) a desire to see pro-active action, not just concepts on paper; (5) and finally a call to have greater focus on farmers.

				strategy and on projects selected.	
Focus Group Experts, Development Partners, & Traditional Authorities	23rd March 2012	Coconut Grove Regency Hotel, Accra		An overview was given of the FIP process in Ghana. A presentation was made by the IFC on their participation. Selected FIP projects were presented.	Participants provided comments on the selection of projects, including: 1) desire to see stronger focus on letting forests grow; 2) recommendations on potential PWS sites; 3) challenges the private sector faces and their need for carbon finance given risks and success rate; 4) the need for better baseline information; 5) the focus on law enforcement is too narrow because it doesn't address corruption; 6) encouragement to make community and private sector engagement strong; 7) no linkages between WFP project (on-going) and FIP.
Focus Group Government partners and MDBs	13th August 2012	Mac Dic Hotel, Koforidua	MLNR, FC, FORIG, IBRD	Workshop on FIP program objectives and logframe	

Future stakeholder engagement

For Ghana's Forest Investment Plan to succeed public, private sector and civil society participation is essential. Communities, the private sector, and NGOs will need to participate as core partners for the three projects and their respective sub-component to realize their goals and collectively contribute to REDD+ and associated co-benefits. In addition, the Research, Capacity Building and Monitoring Committee is responsible for disseminating information and findings to stakeholders.

Project preparation will build on the participation of the private sector, civil society, and communities. The reparation planning grants will enable planning workshops in which data, information and views will be collected, and results and implementation options shared for input. During the planning phase of each project component stakeholders will be included in the process to inform and validate the work plan. The importance of the private sector is further demonstrated by the specific intention to offer private sector loans and related emphasis on public-private partnerships. The FIP also provides an opportunity for greater inter-ministerial, inter-agency collaboration and participation within government.

13 ANNEX 3- DGM AND FIP IN GHANA

Ghana is a multi-ethnic country with a population of approximately 24 million people according to the 2010 population census. While diverse, nothing in Ghanaian legislation or policy recognizes any ethnic group or groups as indigenous. Ghana's inclusion as a DGM country therefore is understood to benefit local communities.

Ghana has been represented in the series of meetings leading to the design of the global DGM (Accra, Bangkok, and Washington) by a local community representative who was self-selected. The global DGM design document has been subject to input from selected representatives of indigenous peoples and local communities, of the selected countries, and consultations. At this time, the global DGM design document is under preparation and the country-level project design process is anticipated to start in calendar year 2013. In-country consultations on the country-level DGM design document will start, therefore, in 2013. So far, efforts to engage local communities on DGM have been limited to an information-sharing event that was held in June 2012, which targeted traditional authorities (chiefs and queen mothers) from all the regions in Ghana and included representatives from government and nongovernmental organizations.

The in-country consultations on the country-level DGM design document will focus on ensuring that the DGM design reflects the Ghana context. The consultations will follow international best practice on consultations including voluntary participation, prior notice of consultation processes, availability of information in a language that is understood and a form that is accessible, and inclusion across the dimensions of gender, age, socio-economic status, etc.

The consultations, and the subsequent DGM implementation, will pay close attention to the multi-layered nature of authority vis-à-vis natural resource ownership and management in Ghana, especially in the Western and Brong Ahafo regions. In particular, the role of the traditional authorities will be recognized as will the role and rights of natural resource users. A balance between the two will be necessary to ensure that benefits of the facility flow to the communities who rely on natural resources and are vulnerable to changes in natural resource management. Efforts to strengthen the relationship between traditional authorities and land users vis-à-vis natural resource management and documentation of user rights would be welcomed.

It is understood that the FIP and the DGM facilities will work in close collaboration and will provide the opportunity for government, the private sector, and communities to engage on the goals of the FIP on a level playing field. The implications of this collaboration include the following:

- The DGM resources will have tight and explicit linkages to the FIP vis-à-vis building the capacity of local communities, the community grant elements and the promotion of community-level monitoring and evaluation of FIP. In addition, the DGM will mirror the regional focus adopted by the FIP – that is, it will target local communities in Western and Brong Ahafo regions.

- Consultation processes for FIP and those for DGM, specifically those that will form part of the country-level project preparation process for DGM, will feed into and learn from each other. In this regard, where necessary, consultation processes will utilize or build upon existing/relevant mechanisms (for example the forest forums).
- Information and learning loops will be explicitly built into the FIP and the DGM to ensure that there are mechanisms to share information and lessons from projects financed by government and those that are community driven. The technical assistance subcomponent of the DGM will promote learning between FIP and DGM stakeholders in an effort to build and strengthen local knowledge and to build networks at the local and regional levels.

It is envisioned that a community driven development model will be used, with communities using inclusive participatory methods to identify sub-projects with elements of transparency and accountability will be built into the subprojects. However, concrete details on how the DGM facility will function in Ghana cannot be provided at this time as there is still a lack of clarity on the program level design and implementation modalities.

Nevertheless, the sub-projects financed under the DGM will have close links with the FIP investments. In addition, governance arrangements for the DGM (the National Steering Committee) will endeavour to foster additional links between the two facilities.

14 ANNEX 4 – GHANA'S R-PP

Through a comprehensive and exhaustive multi–stakeholder consultations process, Ghana developed its REDD+, Readiness Preparation Proposal (R-PP) document which was submitted to the Forest Carbon Partnership Facility (FCPF) of the World Bank in January 2010. Ghana has received an approval by the Facility Management Team (FMT) of the World Bank at the 5th Participating Committee meeting in Gabon (22nd -25th March 2010) to implement the REDD+ Strategy document.

The full draft of Ghana's R-PP is available on the Ghana Forestry Commission website on the Reduced Emissions from Deforestation and Degradation page- A National REDD+ Strategy.

http://www.fcghana.com/

EXECUTIVE SUMMARY

The R-PP

The Readiness Preparation Proposal (R-PP) aims to assist Ghana to prepare itself for reducing emissions from deforestation and forest degradation (REDD), and become 'ready' for the implementation of an international mechanism for REDD. The document provides a roadmap of preparation activities needed and will remain a living document throughout the preparation process. In this R-PP, REDD is taken to include all the elements mentioned in the Bali Action Plan, Section 1 (b), and officially known as 'REDD plus', namely 'policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.'

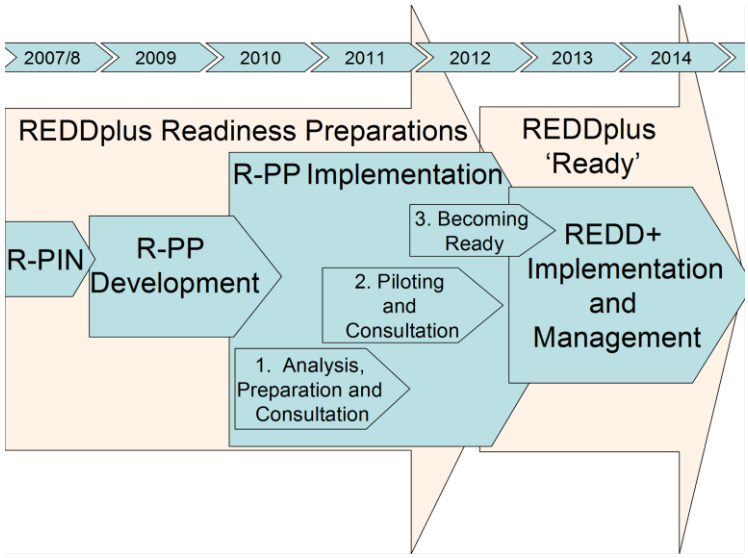
The Ghanaian Context

The condition of Ghana's forests has been in decline for many years, particularly since the 1970s. Many forest reserves are heavily encroached and degraded, and the off-reserve stocks are being rapidly depleted.

By and large, the problem is one of gradual 'degradation' rather than 'deforestation', and is incremental rather than dramatic, with no single dominant driver. The underlying causes involve a complex of demographic, economic and policy influences. The immediate drivers include: forest industry over-capacity; policy/market failures in the timber sector; burgeoning population in both rural and urban areas; increasing local demand for agricultural and wood products; high demand for wood and forest products on the international market; heavy dependence on charcoal and woodfuel for rural and urban energy; limited technology development in farming systems and continued reliance on cyclical 'slash and burn' methods to maintain soil fertility and fire as a tool in land management.

Arresting deforestation and forest degradation is an important priority for the country, and Ghana has already embarked on a series of forest and natural resource governance initiatives to address these challenges. The most prominent of these are the Forest Law Enforcement, Governance and Trade (FLEGT) Initiative, and the multi donor sector budget support through the Natural Resources and Environmental Governance Program (NREG).

Phasing of Ghana's Progress towards being 'Ready' for REDD+



Ghana and REDD+

Stakeholders within and outside of the Government of Ghana have very different expectations with respect to the benefits and risks associated with REDD+. This is partly due to mechanisms for REDD+ still awaiting definition by the UNFCCC and the funds currently available for REDD+ preparations remaining limited. As such Ghana seeks to explore REDD+ as a potential additional reward mechanism for sustainable forest protection and land-use, in support of existing policies including FLEGT and NREG.

The progression between expressing an interest in and fully implementing REDD+ mechanisms is challenging. It requires cross sectoral planning and coordination, as well as the revision of existing, and development of new laws, policies and institutions.

Within the context of Ghana and the FCPF, this process has been divided in two core phases (shown below and in adjacent diagram). These phases are made up of a series of stages and within these a number of steps. This phasing is intended to provide an overview of the anticipated process and should not be seen as fixed with different aspects of preparations potentially occurring at different speeds. It must also be noted that while the FCPF represents a key contributor to readiness preparations it should not be seen as the only mechanism to engage in future mechanisms for REDD+. National planning processes will incorporate existing activities being undertaken as well as those anticipated within the near future. As such REDD+ preparations will be part of, complement and add to the existing efforts towards environmentally sustainable development planning within Ghana.

Phase 1: REDD+ Readiness Preparations

Within the context of the FCPF this includes three stages:

Stage 1: The development and Submission of the R-PIN (2007)

The Government of Ghana submitted its REDD Readiness Plan Idea Note (R-PIN) to the Forest Carbon Partnership Facility (FCPF) in 2007 and received approval in July 2008.

Stage 2: R-PP Development (2009)

Following acceptance of the R-PIN, institutional structures for the further development of national REDD+ readiness preparations were put in place by the REDD+ Secretariat which included a National REDD Steering Committee (NRSC). The R-PP Development Stage was formally initiated in May 2009 with a week-long mission engaging key actors within the forest sector. Based on the outcomes of this May mission, a four step work plan for Ghana's R-PP development was elaborated and has subsequently been implemented:

Step 1: Information sharing – May to mid July 2009

Step 2: Continued Information Sharing and Initial Consultation – July 2009

Step 3: Expert Consultation – August 2009

Step 4: Validation – Late August early September 2009

Over 200 individuals were engaged during these activities encompassing the main stakeholder groups. The majority of these participants were involved more than once in the process.

The broader consultative process has been formative to the development of all components presented here, providing key inputs to the Consultation and Participation Plan; the identification of key drivers of deforestation and potential activities to address these and identification of the potential impacts of these activities on different stakeholder groups. The NRSC and expert working groups have provided input to and revisions of R-PP draft documents.

Stage 3: R-PP Implementation Phase (2010-2013)

This R-PP document represents Ghana's ongoing efforts to get 'ready' for a future mechanism for REDD+. It presents a three-step approach to REDD+ strategy development and establishment of the technical, policy, legal, management and monitoring arrangements necessary to enable Ghana to fully participate in a mechanism for REDD+. Implementation of the R-PP is anticipated to continue through until early 2012/2013.

The steps of this stage will include:

Step 1: Analysis, Preparation and Consultation
- Detailed analysis of REDD+ policy, legal and technical requirements
- Setting of the Reference Emissions Level (REL)
- Confirmation of institutional roles, responsibilities and oversight for REDD+
- Establishment of the entity responsible for MRV
- Selection of potential pilots / demonstration activities
- Continued consultation, information sharing and awareness raising on REDD+ strategy, legislative and institutional proposals
- Finalisation of REDD+ strategy (to progress towards REDD+ readiness)

Step 2: Piloting and Testing
- Initial capacity building for pilots
- Establishment of pilots / demonstration activities
- Establishment of carbon accounting registry
- Testing of carbon measurement, accounting and MRV procedures
- Consultation around demonstrations and pilots
- Consultation on potential REDD+ policies, decisions and actions
- Training Needs Analysis for full REDD+ implementation

Step 3: **Becoming Ready**
- Approval of any new legislation (e.g. carbon rights) and legal texts (as required)
- Finalised financing mechanisms, procedures, audit and controls
- Finalised operating procedures for MRV entity
- Recruitment of staff
- Training and capacity building on the development and technical aspects of REDD+
- Operational plan to scale up REDD+ in Implementation Phase

The **Consultation and Participation Component** of this R-PP (section 1b) describes how consultation has been

carried out during R-PP development and presents a plan to help guide the elaboration of the REDD+ readiness preparation activities. A complete Consultation and Participation Plan is included in the Annex 1b – 5.

The C&P Plan emphasizes increased awareness raising and broad involvement in implementation to help ensure effective communication and decision making. The R-PP as a living document will react to these consultations and evolve during the process of REDD+ readiness preparation to better fit the changing needs of stakeholders within the REDD+ process.

Potential **components of a REDD+ strategy** to control deforestation and degradation(components 2a/2b) are proposed for further analysis, elaboration, consultation and validation and fit in two themes: i). forest policy, legislation and governance and ii) carbon enhancement activities.

The **REDD+ Management Arrangements (2c)** outline the types of entities and institutions that will be needed for policy definition, implementation, and management- ranging from civil society to proposed inter-ministerial bodies. A process is defined to identify the resources needed for implementation and to help bolster capacities. Next steps are defined for laying the ground work for financial and legal arrangements needed in the subsequent REDD+ Implementation and Management Phase.

Strategic Environmental and Social Assessment (SESA) is recommended as part of the R-PP Implementation and REDD+ readiness preparation to promote due diligence in the design of the national strategy (Component 2d). The SESA will identify the likely social and environmental impacts (negative and positive) of proposed REDD+ strategies; assess the potential additional benefits of REDD+ (especially biodiversity conservation and poverty alleviation); and to inform the design of the national REDD+ strategy so that it avoids or mitigates negative social/environmental impacts and encourages positive ones. A strong SESA analysis (for which a Terms of Reference is provided) will take place during the upcoming R-PP implementation, and promote integration of social and environmental issues into the upstream policy-making process, thereby promoting more sustainable and equitable REDD+ policies.

Constructing the **Reference Scenario** (Component 3) begins with an assessment of available data and concludes that data for estimating historic emissions in Ghana are sorely lacking. It then describes how activity data can be acquired to map land cover change, what data are needed and how to obtain emission factors, and how to combine both data sets to develop a historic emissions scenario. Specific activities to evaluate uncertainties in the reference scenario and define a future trajectory are core elements of the work plan presented in the R-PP.

Components 4, 6 and 2c describe the **Monitoring Arrangements** needed during the REDD+ readiness preparation and during future REDD+ implementation and management. These include a National Working Group that helps design a Monitoring Framework and Data Archiving system, as well as training and capacity building for carrying out the monitoring, and a process for system review and verification.

Overall costs estimated for R-PP implementation (Component 5) are summarized in the table below

Summary of REDD+ Readiness Preparation Budget		
Component	**Sub-Component**	**Estimated Costs**

		(in US$ thousands)				
		2010	**2011**	**2012**	**2013**	**Total**
1. Organise and Consult						
	1.a National Readiness Management Arrangements	687	219	251	286	1443
	1.b Stakeholder Consultation and Participation	288	178	254	104	824
2. Prepare the REDD+ Strategy						
	2.a Assessment of Land use, Forest Policy and Governance	50	50	50	50	200
	2.b REDD Strategy Options	265	270	240	240	1015
	2.c Arrangements for REDD Implementation	45	80	25	15	165
	2.d Social and Environmental Impact Assessment	87	30	30	30	177
3. Develop a Reference Scenario		1370	790	215	115	2490
4. Design a Monitoring System		150	130	210	100	590
5. Schedule and Budget						
6. Design a Program Monitoring and Evaluation		90	70	80	190	430
Total		**3032**	**1817**	**1355**	**1130**	**7334**
Government		771.96	314.57	320.57	297.51	1704.61
FCPF		1436.89	964.56	664.09	534.46	3600.00
UN-REDD Programme (if applicable)		$	$	$	$	$
Gordon & Betty Moore Foundation		22.80	$	$	$	22.80
Other Development Partner 2		823.15	537.87	370.34	298.03	2029.39
Other Development Partner 3		$	$	$	$	$

15 ANNEX 5 – EXPERT EXTERNAL REVIEW AND FIP TEAM RESPONSE

INDEPENDENT REVIEW COMMENTS	TEAM RESPONSE
Part I: General criteria	
5.1: Plan complies with the principles, objectives and criteria of the relevant program as specified in the design documents and programming modalities	
Ghana's FIP plan meets the general specifications outlined in the design documents and programming modalities. There are certain lapses that should be addressed in a final revision but overall the plan complies with the principles, objectives and criteria.	Noted. The final revision of the investment plan has address the comments.
5.2: Plan takes into account the country capacity to implement the plan	
The plan outlines Ghana's capacity to implement the plan. The long list of previous project/programme implementation in this sector is listed with the implicit assumption that all such implementations were successful. The plan would be dramatically improved by including a section providing a solid review of the chain of interventions and measures in the sector over recent decades including an articulation of the lessons learned from these previous projects and programmes. Without such analysis, (which is mentioned in the document but absent in actuality) there is no evidence that the many lapses/failures in these previous projects/ programmes have enhanced Ghana's capacity to implement the FIP. An informed reader of this plan is left wondering how FIP implementation is going to be different from its predecessors.	FIP preparation built on REDD+ readiness work, especially the R-PP, and consultations with the aim to take into account lessons from past interventions (NRMP, HFBCP, NREG, VPA/FLEGT etc.). The R-PP identifies reasons for shortcomings in past programs such as: lack of coordination between stakeholders, both at national and local level; a tree tenure regime and benefit sharing arrangements not giving incentives for maintaining, managing or conserving trees or establishing plantations; and a lack of engagement or interest of the private sector in REDD+ and sustainable investments. FIP is proposing a pragmatic approach for consensus building, and policy and institutional reform. It aims at reviewing and supporting a more efficient and effective assignment of roles and responsibilities in the sector, especially at the Forestry Commission, with particular emphasis on service delivery and decentralization, looking

	specifically into separating regulatory functions from service delivery. The proposed testing and validation of policy options should help avoiding the critical political economy traps that have stymied reforms supported by several projects in the past. The plan presents a landscape approach to address the GHG emission from the forestry sector by a broad set of interventions both within as well as outside the forestry sector. Access to credit, financial as well as market incentives, including the private sector provides a crucial contribution and element for a successful program. Especially addressing the agriculture and cocoa sector from a value chain and financial incentives angle has the potential to make a difference.
5.3: Plan has been developed on the basis of sound technical assessments	
The document has been developed on the basis of sound technical assessments and logic. This version has built on the foundation provided by Ghana's R-PP provides a clear and reasonably rigorous framework for identifying mitigation strategies in the forest sector, and has outlined early pathways to reduce emissions from deforestation and forest degradation and promote the plus and co-benefits of the REDD+ mechanism. The linkages between the R-PP which reflects REDD+ actions and FIP are now clear and sound. Ghana's FIP will now clearly address the governance challenges of REDD+ implementation in terms of policy and legislation to make REDD+ full and effective on the ground in its transition from the readiness activities in Phase 1 to implementation activities in Phase 2.	Noted. The FIP is built on the readiness work in Ghana (e.g. R-PP). FIP is providing bridging and catalytic finance in the process of moving along the REDD+ process and stages. Moreover, the scope and proposed interventions are built on past activities and interventions in the sector, such as on the processes and activities of the inter-sectoral NREG program (e.g. the connectivity/corridor approach) and the VPA/FLEGT process dealing with the illegal logging and trade, and the general governance of the forest sector.
There are a few exceptions which can be easily corrected:	

1. section 21, page 5: old 2008 data which should be updated. 2011 data is available.	The updated data was not found and this section was revised to acknowledge the old data and that more up to date data exists.
2. section 24, page 5: very old 2003 data which should be updated. 2010/11 data is available	The updated data was not found and this section was revised to acknowledge the old data and that more up to date data exists.
3. figure 3, page 8: difficult to read and interpret from the legend. Adjust the colour/symbols for clarity.	Figure 3 has been provided with a footnote to clarify the legend on Western Region in the revision.
4. table 2, page 10: labeling needs correction. This table is titled "Above ground carbon stocks" but the final right-hand column is labeled Carbon stocks/ha but the figures are given in CO2/ha rather than carbon. These are not the same thing and the figures are not carbon figures.	Table 2 was revised and adjustments made. The estimates for total carbon figures have also been provided based on coefficients for below ground and soil carbon.
5. section 37, page 11: this statement is no longer correct. The oil and gas sector are already rapidly changing Ghana's overall emissions profile. Figures may not be available yet to quote but a caveat should be inserted to this section to state the Ghana's position in the world ranking for overall emissions is expected to change dramatically in next few years as the oil and gas sector ramps up.	The FIP has been based on the most recent official national report on climate change. However, since then the situation has changed with the rapid growth of the oil and gas sector (third in export earnings in 2011). Section 37 has been revised to reflect this changing situation with a note the rapid growth of the oil and gas sector and its implications on GHG emissions.
6. section 39, page 12: same issue in this section. Ghana's low carbon growth plan has not adequately incorporated future emissions from oil and gas sector in the percentage of overall emissions that will be coming from oil and gas. As such this statement is very misleading of the importance of baseline emissions from land use change (65%). Examination of Nigeria emissions would be instructive.	See comment above. This section has been revised to reflect the changing situation. The rapid growth and economic importance of the oil and gas sector will change the way Ghana will address emission and climate change. The on-going work to develop a National Climate Change Policy will reflect the changes. The revision makes a reference to the fact that the estimates in the low carbon growth plan will have to be adjusted in Ghana.

7. section 63, page 21:- This graph is not clear as the Y axis (net benefits) is confusing. What is mean by benefits? Would be useful to explain more clearly in the document as this is important to the geographical focus of FIP.	This text in this section has been thoroughly revised and the graph mentioned in the comment has been replaced with other graphs. A more detailed description of the assumptions and descriptions appearing in the graphs are provided in the plan.
5.4: Plan demonstrates how it will initiate transformative impact	
Yes, the document outlines a significant list of transformative impacts which the document suggests will result from the successful implementation of Ghana's FIP. Many of the transformative impacts will be realized beyond the timeframe of the FIP. It is not clear in the document how this is being handled. This needs to be addressed.	Considering the relatively short time frame of the project the transformational impact on a longer time frame is implicitly part of the FIP as a program. The different time horizons of the transformative impacts have been elaborated and made more explicit in the revision of the plan (especially ch. 6.3.). Particularly the catalytic role of the FIP is emphasized. Consequently the realization of many of the GHG related impacts will take place beyond the FIP investment time frame. This aspect was also addressed in the GHG impact analysis, which provides information on both immediate project level as well as long term outcomes at program as well as project level (especially Section 2, and the PCNs).
5.5: Plan provides for prioritization of investments, stakeholder consultation and engagement, adequate capturing and dissemination of lessons learned, and monitoring and evaluation and links to the results framework	
Yes, the document provides a robust prioritization of investments which are clearly linked to the RPP. It outlines a clear M&E plan but this plan has significant lapses that need to be corrected. Many of the indicators outlined in the M&E plan (table 10, page 55) are inappropriate for the timeframe of FIP. Many will not be measureable in the FIP timeframe and require adjustment. Adjustment of these indicators can easily be carried out during the final revision of this	The overall FIP program results framework is still being developed. Clear guidance on e.g. the indicators, is still pending, which will require most FIP countries to revisit their FIP plans to review their results frameworks. Hence, the current relatively general results framework will be revised, including providing more explicit indicators, once the FIP framework is available and the detailed preparation for

document.	implementation of the investment program in Ghana, including project preparation is done, to reflect more concretely the investment in Ghana.
The FIP outlines its own stakeholder consultation process but more importantly it now genuinely lays claim to the RPP stakeholder engagement and participation which has been extremely robust. Clearly the RPP serves as the FIP foundation and as such FIP is an instrument of the RPP. One lapse in the stakeholder engagement is that there is no evidence that Cocoa Board is aware, informed and in support of this plan. Without their positive engagement FIP will not succeed.	Noted. The FIP builds on the readiness process in Ghana, especially the R-PP, where Cocoa Board was engaged and involved. Since the FIP proposes broad landscape level agricultural interventions beyond the forest sector, the Ministry of Food and Agriculture (MOFA) will be the main government body linking to the FIP. However, because of the impact of cocoa farming on the GHG emissions and its potential for GHG abatement, COCOBOD is a crucial stakeholder and further engagement with and input from COCOBOD will be sought while developing the individual projects under FIP. As COCOBOD operates under the MoFEP this also serves to strengthen the collaboration with the key ministry responsible for finance and economic planning.
5.6: Plan adequately addresses social and environmental issues, including gender	
Yes, the plan provides a clear pathway for social and environmental issues to be addressed. It rightly draws on the RPP credibility in this space rather than develop its own independent credibility which makes sound logic.	Noted.
5.7: Plan supports new investments or funding is additional to on-going/planned MDB investments	
Yes, the plan definitely intends to support new investments which are in line with the successful implementation of the RPP. This is clear and well done. Depending on other revisions to be carried out, it may	Noted. The planned investments have been revised.

be necessary to review some of the planned investments.	
5.8: Plan takes into account institutional arrangements and coordination	
The plan recognizes the existing national institutions in the REDD+ and forestry space and does not duplicate. REDD+ governance structures will be further strengthened as result of FIP which will ensure consistency at the cross-sectoral level and ensure coordination and synergy of efforts to reduce deforestation and degradation.	Noted.
One aspect which is weak in this regard is the cocoa sector and particularly Cocoa Board. This plan is dominated by the conventional forestry sector. There is only one reference to Cocoa Board in the institutional arrangements. If Cocoa Board and Forestry do not sit at the same table on regular basis then FIP will not succeed as articulated.	This is a valid point. The fundamental approach of the FIP is to provide a broad based response to the problem of deforestation and forest degradation beyond the forestry sector, where the dynamics of the agricultural sector, specifically the cocoa sector is at the core. Regarding the involvement of the Cocoa Board see comment 5.5.
5.9: Plan promotes poverty reduction	
No, the plan remains weak on poverty reduction and provides only superficial coverage to the poverty reduction aspects of FIP implementation. Furthermore the geographical focus proposed in the document neglects the regions of the country with the highest poverty. In this regard the failure to link the SADA (with its agenda for a green, forested north) and the FIP is a missed opportunity.	The focus of the FIP is primarily determined by the climate change mitigation criteria and GHG abatement opportunities. Some of the regions with the highest poverty levels in the country do not necessarily have the same potential for GHG abatement as the HFZ. The regions (Western and Brong Ahafo regions) have areas with high poverty incidence. Accordingly there are considerable opportunities to address poverty reduction as a co-benefit of the FIP, e.g. though envisaged impact on cocoa and agricultural productivity and benefit sharing in forestry. As a consequence, however, the FIP investments will not directly address the challenges in

	northern Ghana where poverty is the highest. The scope and geographical focus of the FIP is a strategic choice of the Government of Ghana partly in response to the FIP sub-committee call for greater focus, including geographic focus. FIP resources should be seen in a broad framework of especially REDD+ efforts. This focus will also strengthen a coherent programmatic approach. Though the investment focus is in the two regions it is obvious that the successful implementation, scaling up and longer term impact will benefit a much larger part, including northern Ghana.
5.10: Plan considers cost effectiveness of investments.	
The plan demonstrates the cost effectiveness of investments. If the document connects FIP with the RPP process that is currently on-going thus it is clear how FIP funds will support and leverage this process to provide incentives to achieve results-based REDD+ actions and related PES activities.	Noted with thanks.
6. Part II: compliance with the investment criteria of the FIP program	
6.1: <u>Climate change mitigation potential:</u> The investment plan should provide an estimate of the direct GHG savings.	
The plan makes accurate or convincing estimation of direct GHG emissions reductions. One exception is the case for focus on Western and Brong-Ahafo Regions under the FIP. The analysis is cursory and weak. It appears to miss the lost economic cost of REDD activities in an area of the country where other land use choices are far more attractive economically than REDD type activities. The challenge of illegal mining and palm oil as threats in this geographic area of the country is missing. An informed reader is left asking what will	The focus of the FIP is primarily determined by the climate change mitigation criteria and GHG abatement opportunities in the Western and Brong Ahafo regions. The text in Section 2 has been reviewed to provide a logical, more explicit justification for the geographical focus and the GHG abatement potential. The challenge addressed by the proposed FIP plan is to

happen with the planned interventions when it is realized that local economic drivers run counter to REDD.	provide a broad set of policy, market, economic and other (technical, extension etc.) incentives for sustainable forest management, and climate smart cocoa and agriculture. This is addressed though the combined impact of all three proposed projects, where the market and private sector interventions through the IFC component are particularly important. Equally important are the incentives (tree tenure, benefit sharing) for retaining and planting trees and investing in forest plantations, including the impact of other important programs such as VPA/FLEGT in curtailing illegal logging and promoting good forest sector governance. On the whole the challenge of the FIP is to provide options (e.g. benefit sharing; species/crops; economic/ market incentives; rotations/crop cycles), with better return and continuous income for farmers that have positive climate impacts. The pilots and models proposed in the FIP plan will be both sustainable and replicable, including financially viable beyond the project and investment life time. During project preparation a more detailed analysis of the economic drivers and incentives will be made to ensure that responses will be relevant in the reality of the actors, especially the farmers. The text in relevant sections has been reviewed and revised with regard to acknowledge the challenges of illegal mining and development of oil palm and plantations in the two regions (especially ch. 1.3. and 1.4.).
6.2: <u>Demonstration potential at scale:</u> The investment plan should support replicable pilot programs in order to demonstrate how to scale up public, private and other resources and activities so as to achieve transformational change. FIP investments should address REDD+ priorities as presented in national REDD+	

strategies or action plans.	
The plan proposes demonstrations that are in agreement with the national REDD+ pilots that have been identified by the RPP implementation process in country through a transparent and open process. The concern has to be that all efforts will focus on the HFZ only. This is a risky strategy if site specific implementation goes wrong. It seems it would be more prudent for such a significant program to diversify this strategy to ensure some early success to build upon.	See also response to comment 5.9. The focus on the two regions is primarily determined by the climate change mitigation criteria and GHG abatement opportunities but also by the considerable socio-economic and especially biodiversity co-benefits. The FIP sub-committee also requested a greater focus, including geographic focus, in the revision of the investment plan. Though the investment focus is in the two regions it is obvious that the successful implementation, scaling up and long-term impact will benefit a much larger part, including northern Ghana.
6.3: Cost-effectiveness: The investment plan should leverage additional financial resources, including from the private sector where feasible. It should catalyze self-sustaining economically viable models for REDD+ at scale without the need for continuing subsidies and promotes coordination among relevant institutions at the country-level with respect to implementing and financing proposed investments.	
The plan outlines the other sources of finance in the sector – most of which are close to ending. The plan demonstrates the potential positive economic value of REDD+ activities for the country, the sector or communities/landowners. The potential negative economic impact on formal and informal timber operations in the country from implementing greater REDD+ activities is implied but not openly addressed. Cost benefit analysis and lost economic opportunity cost analysis are still missing from the document.	Noted. Limited data availability, particularly in regard to the informal sector (e.g. chainsaw operators), did not allow for a detailed cost benefit analyses of the Investment Plan. However, detailed analyses will be pursued as part of project preparation. The current dynamic both in the forestry and agricultural sector have contributed or not been able to contain deforestation, degradation and the increase in GHG emissions from the LULUCF sector. There is also loss of revenue for the state while revenue, both in forestry and agriculture, accrue to various actors based on illegal practices (e.g. illegal

	logging and encroachment) at least partly because of disincentives and poor governance. The GoG and the development partners recognize the challenges. Thus FIP is addressing these challenges by a broad multi-sector approach, including addressing the disincentives. The interventions will be further developed during project preparation, and the pilots aim to provide sustainable and financially viable options to the stakeholders behind the main drivers of deforestation, such as cocoa farmers or those involved in the CSM operations. FIP and Project 1 aim to address the policies and the institutional challenges. A major focus for FIP is to provide financially attractive choices if transformation is to succeed. There are no clear solutions to the possible negative economic impacts at this stage of the investment plan but these have to be addressed during project preparation and covered in the strategic and environmental assessments. During the preparation a more detailed analysis of the economic drivers and incentives will be made to ensure that responses will be relevant in the reality of the actors, especially the farmers.
The involvement of private sector is still very weak. The IFC component does not make logical sense and will likely not work. No private sector entity will be tempted to participate in such a programme as articulated. Further the real opportunity is to link the market for REDD credits or assets with the private sector and the specific pilots to be supported. Why for example does the plan not call for a serious engagement between the international chocolate companies, cocoa companies and the efforts to address deforestation and degradation on the ground in the HFZ? This would be innovative	The comment calls for a clarification of the different types of actors in the private sector related to FIP activities, and how the proposed IFC program plans to support these actors. This is addressed in a new section in the revision of the concept note (Project 3) identifying the different categories of players in the private sector. The reviewer also noted that the opportunities to create links with the market for REDD credits were not fully explored in

and a game changer! As articulated the private sector funding will not be utilized. **Final comment expert reviewer John Mason, 1 October 2012:** The revisions undertaken to the IFC program component have adequately addressed all concerns expressed in my comments to the previous draft on 14 September 2012. The revised language clarifies what is meant by "private sector" and outlines efforts to create market linkages and future demand for REDD+ credits/assets originating from Ghana. The 28 September 2012 IFC component text meets the requirements for the FIP.	the concept note for Project 3 (IFC). Following a discussion with the reviewer, the concept note has been revised to include a component in the technical assistance program to promote awareness of REDD credit opportunities in Ghana and link supply of REDD credits to demand. The importance to engage cocoa buyers and suppliers to address deforestation and degradation in HFZ was noted. The team agrees with this comment and has further clarified the text in component two (Project 3) of the technical assistance program, which aims to work with both buyers and suppliers of commodities, such as cocoa, timber, and/or palm oil to promote sustainable practices. Finally, the FIP aims an approach to address the GHG emission from the forestry sector by a broad set of interventions both within as well as outside the forestry sector, where access to credit, financial as well as market incentives within the private sector provides a crucial contribution and element for a successful investment program.
6.4: Co-benefits: The investment plan should consider the potential to contribute to the livelihoods and human development of forest dependent populations, including indigenous peoples and local communities, and to sustain biodiversity and ecosystem services and enhance the adaptive capacity of forest ecosystems and forest dependent communities to the impacts of climate change.	
The plan provides a list of co-benefits linked to the specific pilots. It also outlines a plan for new benefit sharing under REDD. It documents the many challenges in this space accurately.	Noted with thanks.

6.5: Implementation potential: The investment plan should have a high potential for success.	
The plan addresses implementation and its numerous transformational aspects but there are two disconnects. First the timeframe of FIP and the timeframe on delivering successful transformation are very different. This is not addressed. Second, the plan does not provide informed readers that the FIP will be implemented in a manner different than its predecessor programmes such as FRMP, NRMP I, NRMP II, NREG, etc. Previous interventions can provide a rich historical context and a long list of lessons learnt that FIP is building upon. Currently the reader is left with the impression that FIP will be just like all the other programmes in the sector that have been not been so successful. If those programmes had been successful then Ghana would not need FIP today.	See also comment 5.2. and 5.4. The different time horizons of the transformative impacts have been elaborated and made more explicit in the revised text. Especially the catalytic function of the FIP, consequently leading to the realization of especially many of the GHG related impacts beyond the FIP investment time frame is emphasized (especially ch. 6.3.). This was also be addressed in the GHG impact analysis, which provide estimates on both immediate project level as well as potential long term outcomes at program as well as project level (especially Section 2, and the PCNs). The proposed FIP implementation arrangement build on the experience from the past broad based consultation and project processes, such as the R-PP readiness, VPA/FLEGT and the NREG programs. The multi-ministerial and inter-sectoral approach, with the strong roles of the agriculture, cocoa and financial sector, including private sector and community involvement, will anchor FIP on a broader platform. The primary counterpart and stakeholder institutions have already been identified during FIP preparations and the consultation process. These institutional arrangements and responsibilities will be further developed during project preparation to establish the best institutional framework for each intervention as well as at program level.
In this same vein, there is no strategy/plan for how FIP will address the resistance to change within the sector (section 161, page 51). Without this being addressed one has to wonder if FIP will be any	The proposed FIP for Ghana focus on a broad inter-sectoral approach going beyond the forestry sector and bringing other sectors, such as cocoa and agriculture as well as the private

more successful than the long list of predecessors.	sector and finance institutions around the same table to address the GHG emission from deforestation and forest degradation. This inter-sectoral engagement under the supervision on ENRAC and the Technical Coordination Committee, and close collaboration between the FIP and other governance related work, such as that on VPA/FLEGT, will ensure a broadened outlook on the various drivers. The emphasis is on piloting up scalable models to better understand the obstacles and resistance for change. These are also aimed at providing concrete examples and compelling evidence for change. Further, FIP aims at reviewing and emphasizing a stronger service delivery role and decentralization of the sector, including analysis of the political economy of the sector to help identify problems and challenges for a broad inter-sectoral approach to address deforestation and degradation.
6.6: Natural forests: The investment plan should safeguard natural forests and should not support the conversion, deforestation or degradation of such forests, inter alia, through industrial logging, conversion of natural forests to tree plantations or other large-scale agricultural conversion.	
Yes, the plan outlines a number of proposed measures to safeguard natural forests and reduce conversion. The projects as outlined in the document are not quantifiable in terms of location, size, forest condition, tonnes of CO2 emissions reduced. Early action for REDD+, as identified under the Readiness process, should be supported with leveraged resources to achieve the objectives of REDD+ in Ghana. The plan should demonstrate the potential to realize reduced emissions from Ghana's forests (high forest and	With the geographical focus in the HFZ, FIP aims at securing some of the remaining high value biodiversity forests in Ghana (especially Project 1). The broader landscape approach, including corridors and connectivity, will support the viability of the existing forest reserves and address the challenge to sustaining biodiversity of increasingly fragmented and isolated natural forest habitats.

savanna woodland) and provide initial calculations and targets for such emissions reductions. It may be that this level of analysis cannot be completed until FIP commences but it could be better articulated in the plan.	The projects have been elaborated with greater detail on the interventions in the revision of the plan. The revision also includes a GHG analysis, which will provide some information on both immediate project level as well as long term outcomes at program as well as project level (especially Section 2, and the PCNs).
7. Part III. Recommendations	
This plan requires further improvements and corrections but it forms a solid basis for a bankable plan with the logic and rigor worthy of the anticipated investment. Ghana has completed an RPP and is entering the implementation phase under a small grant from WB-FCPF. The funds provided under FCPF are massively inadequate for RPP implementation. Ghana's FIP plan will move in step with the RPP and evolving REDD+ Readiness activities that are currently underway in-country. FIP will provide financing to support the piloting and scaling up of REDD+ pilots that are well thought out to reduce forest emissions and ensure that successes are replicated across the country to achieve transformational impact.	Noted with thanks.