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Agenda Item 7

DRAFT INVESTMENT PLAN FOR GHANA

- 19 April 2012-

MINISTRY OF LANDS AND NATURAL RESOURCES

GHANA FOREST INVESTMENT PROGRAM (GFIP)

April 2012

- 19 April 2012-

FORWARD

PREFACE

Ghana's forest and woodland resources provide diverse economic products and environmental services. The condition of Ghana's forests has been in decline for many years, particularly since the 1970s. Over the years, however, there has been a progressive decline in size and quality.Total carbon stocks have decreased and the forest is degrading with negative basal area of 0.13m^2/ha/yr. Many forest reserves are heavily encroached and degraded and the off-reserve carbon stocks are being rapidly depleted.

Due to acombination of factors that includehigh timber demand, governance, weak regulatory mechanisms and rights regimes, poor availability of timely information, rural poverty, weak institutional capacity and an inefficient processing industry with access to an underpriced resource- the situation over recent years hasdeteriorated.Extraction from forest areas - wood for timber, fuel wood and charcoal, wildlife and non-timber forest products – has reached an unsustainable level.

Ghana faces difficult choices if it is to support rational and optimal use of the remaining forest resource. The problems are familiar to most stakeholders, including government, civil society, the private sector and the donor community,but the development and implementation of sound and effective responses has proved challenging. Existingarrangements for land ownership and administration, in particular treeownership and user rights, have made it difficult to retain and manage trees on a long term basis. Illegal logginghas expanded from a small to a major problem.Other factors from outside the sector also threaten forest resources - anincreasing population,demand for agricultural land, and conflicts with mining where the below ground resources are of much higher value than the above ground forests.

However,there are opportunities for reducing deforestation andminimising its profound negative environmental, economic and social impacts.The Forest Investment Plan (FIP) has been designed in consultation with a variety of concerned stakeholders to develop approaches that address some of the deep seated problems.The medium to long term expectation of Ghana's FIP strategy is to reduce emissions from deforestation and degradation, while strengthening institutional capacity in forest resources management, expanding and diversifying management options, improving governance, strengthening the regulatory mechanisms, streamlining tenure and tree rights, improving local livelihoods and supportingmitigation and adaptation to climate change.

The goal for change is clear, but the means for achieving it will be defined by extensive and innovative collaboration between multiple stakeholders on number of key pilot projects. The challenge then will be to extend what it learned over a significant proportion of Ghana.

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ACRONYMS

AfDB	African Development Bank
AIS	Alien Invasive species
CBRDP	Community-based rural development project
CF	Concessional Financing
CHP	Combined Heat and Power
CREMA	Community Resource Management Area
CRIG	Cocoa Research Institute of Ghana
CL	Concessional Loan
ENRAC	Environmental and Natural Resources Advisory Council
EPA	Environmental Protection Agency
FAO	Food and Agriculture Organisation
FC	Forestry Commission
FCPF	Forest Carbon Partnership Fund
FIP	Forest Investment Programme
FLEGT	Forest Law Enforcement Governance and Trade
FORIG	Forestry Research Institute of Ghana
FR	Forest Reserves
FRMP	Forest Resources Management Program
FSTZ	Forest Savanna Transition Zone
FWP	Forest Wildfire Policy
GWCL	Ghana Water Company Limited
GEF	Global Environment Facility
GFTN	Global Forest and Trade Network
G	Grant
HFZ	High Forest Zone
IFC	International Finance Corporation
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
LAP	Land Administration Project
LAS	Legality Assurance Scheme
LULUCF	Land use, Land use Change and Forestry
MEST	Ministry of Environment, Science and Technology
MoFA	Ministry of Food and Agriculture
MLNR	Ministry of Lands and Natural Resources
MLG	Ministry of Local Government
MDB	Multilateral Development Banks
MRV	Monitoring, Reporting and Verification

NCCPF	Natural Climate Change Policy Framework
NGO	Non Governmental Organisation
NLBI	Non-Legally Binding Instrument
NPDP	Natural Plantation Development Programme
NREG	Natural Resources Management Program
NTFPs	Non Timber Forest Products
RAP	Rapid Assessment Programme
REDD	Reduced Emission from Deforestation and Degradation
PAS	Payment of Environmental Services
R-PP	Readiness Preparatory Proposal
SEA	Strategic Environmental Assessment
SESA	Strategic Environmental and Social Assessment
TCC	Technical Coordinating Committee
UNCBD	United Nations Convention on Biodiversity
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change
UNDP	United Nations Development Programme
UNFF	United Nations Forum on Forests
VPA	Voluntary Partnership Agreement
WRC	Water Resources Commission
WB	World Bank
WWF	World Wildlife Foundation

SECTION 1 FORESTS AND LAND USE IN GHANA

1.1 COUNTRY CONTEXT(GEOGRAPHY, DEMOGRAPHY AND ECONOMY)

1. The Republic of Ghana has a land area of 238,500 sq km, made up of two broad ecological zones - a high forest zone (HFZ) covering much of the southern 30% of the country, and a savanna zone over the considerably drier northern 70% [ds].

2. Oil, agriculture, timber processing and mining are the main economic activities. In the HFZ, cocoa, cassava, plantain, cocoa yam, oil palm, rubber, timber processing and mining predominate. In the woodland and savannah zones, yam, maize, cassava, plantation forestry, fuelwood production, shea nut collection and processing, and mineral exploitationare the main economic activities. Gross National Income per capita was around US$ 1,283 in 2010[1] and government policies aim to increase this to $3,000 by 2020.[2]

3. Ghana's population reached 24,223,431 in 2010, an increase of 28% from 2000, with an average annual growth rate of 2.4%. Women outnumber men, making up 51.3% of the population. Over the past ten years, population density increased from 79 to 102 persons per km². After Greater Accra, Central Region, Ashanti Region, and Eastern Region (all situated within the HFZ) maintain the highest population densities[3].

4. In 2011,Ghana's agricultural exports rose above 30% of GDP, but were only slightly higher than agricultural imports[4]. In 2010, reported exports of timber products were worth US$180 million (47% to other African countries, 21% to European countries and 17% to Far Eastern countries[5]). In the same year Ghana also imported a variety of forest products (just under US$15 million of wood products and US$133 million of paper products). Comparatively, agriculture

5. Ghana's export of timber products is its third most important export providing 7% of exports by value after metals and their ores such as gold, bauxite and manganese (45% of exports in 2008) and cocoa (27%).

1.2 GHANA'S FORESTS AND WOODLANDS, LAND USE, AND LAND USE CHANGE

6 Ghana's forests make up part of the Guineo-Congoleanphytoecological region. Within the HFZ, there are six main types of forest; dry semi-deciduous, upland evergreen, moist semi-deciduous, moist evergreen, and wet evergreen, southern marginal, and southeast outlier. A woodland savanna mosaic predominates across the middle belt of the country, becoming a grassland savanna in the north. Mangrove forests, wetlands, and swamp forest systems are found along the coastline (Figure 1).

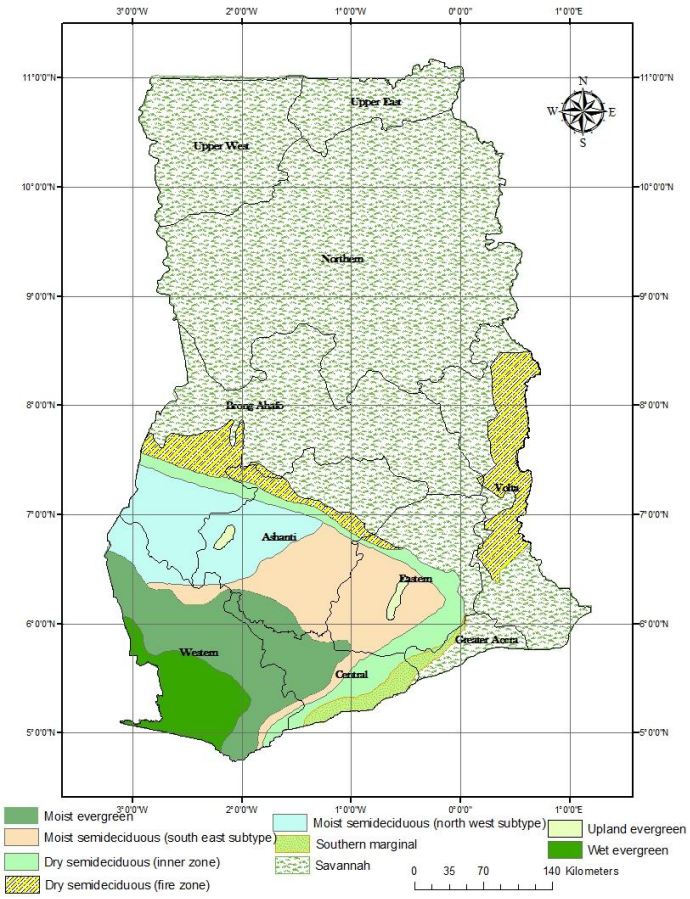


Figure 1: Vegetation Cover Map of Ghana

7 Outside of urban areas, the Ghanaian landscape is a mosaic of protected and unprotected forests, small-holder agriculture and tree crop farms, and fallow lands. Ghana has 266 protected areas, the majority of which are classified as forest reserves and national parks. These protected areas cover 25,559 sq km, of which 16,788 sq km are in the high forest zone. Biodiversity is high in some of these forests, and Ghana's HFZ falls within the West African Biodiversity Hotspot, as identified by Conservation International. Despite the extensive cover of forest and wildlife reserves, the majority of forest reserves are partly to mostly degraded[6] (Figure 2).

8 Land situated outside of forest reserves and other types of protected areas is referred to as the "off reserve" area. It is challenging to find data which accurately quantifies specific land use types in the off reserve. Within the HFZ, cocoa farms, food crop farms, and fallow lands are the dominant land use types. Land use, however, is not static, and over the past half century the country has seen a dramatic shift from forest to agricultural land use. For example, in 1999 cocoa farms covered approximately 1 million ha[7]. Three years later, Ghana's Cocoa Board reported that land under cocoa had increased to 1.45 million ha. Much of this has been at the expense of forested land, both on reserve and off-reserve.

9 In the woodland and savanna region it is more difficult to quantify land use and land use change as there is less information available. However, the rising urbanization in the country and increasing demand for charcoal, it is likely that there has been significant conversion and degradation of woodland forests.

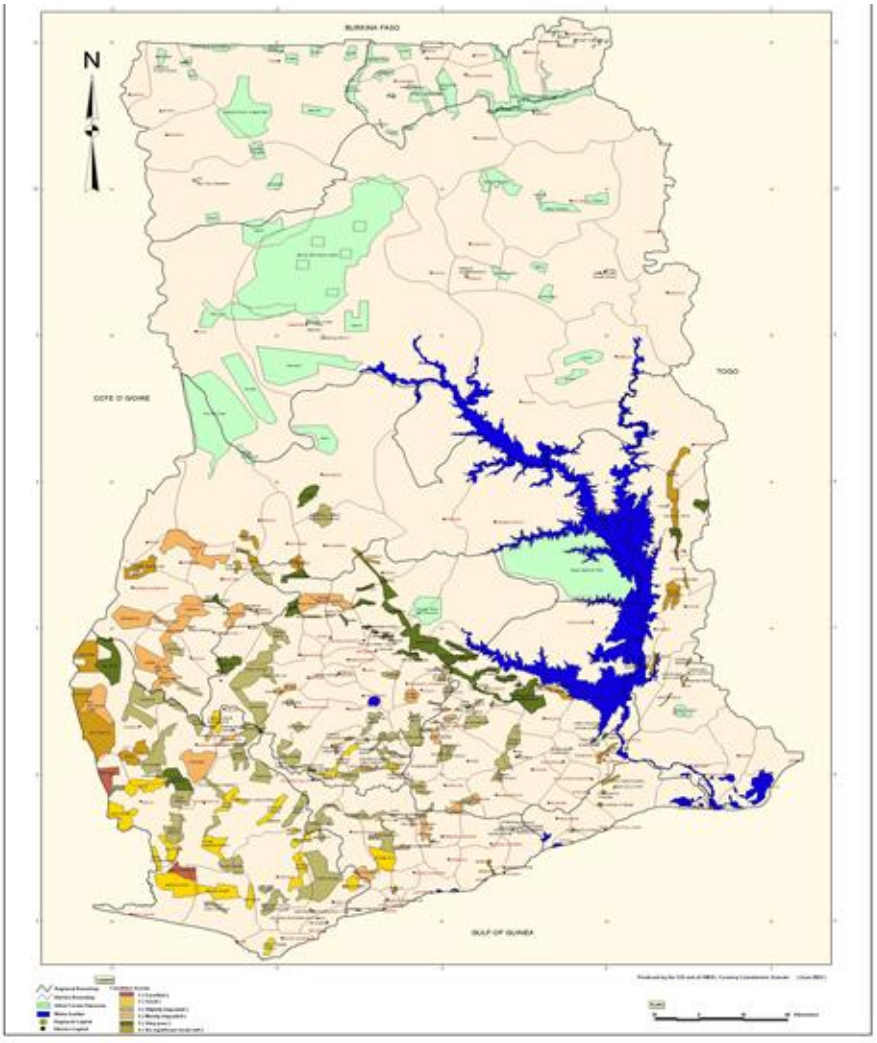


Figure 2: Forest and Wildlife Reserve Condition Map

1.3 FOREST DEFINITION

10 While forest tends to be defined quite broadly in national assessments, Ghana adopted a specific definition to facilitate its REDD+ Readiness efforts, and to comply with international guidelines (Kyoto Protocal and Marrakesh Accord). For the purpose of REDD+, the national forest definition equates to canopy cover greater than or equal to 15%, 5 meters tree height, and coverage of at least 1 hectare[8] (Ghana R-PP document).

11 This definition was adopted through an expert consultation process, and options analysis based on readily available remote sensing satellite imagery MODIS (Moderate Resolution Imaging Spectroradiometer). This investigation showed that forested pixels in 2000, using a 15% canopy cover threshold, cover an area of 6,031,000 ha, which compares to the national forest statistic report by Ghana in FAO FRA of 6,094,000 ha (Figure 3).

12 Land that falls within these thresholds is considered forest and can be included in REDD+ projects and programs. Land which does not meet these criteria, and has not for the past ten years is not REDD+ eligible. This definition is crucial because it distinguishes between CDM and REDD+ compatible land. It also enables compliance with international voluntary market standards and methodologies, and is in line with emerging expectations of what a compliance market is likely to require.

13 Ghana still needs to conduct a more thorough analysis to determine which areas of the country and which land use types will be considered "forest" under the REDD+ definition and those parts that will not. However, it is highly likely that significant portions of the grassland savanna zone will not meet the forest definition.

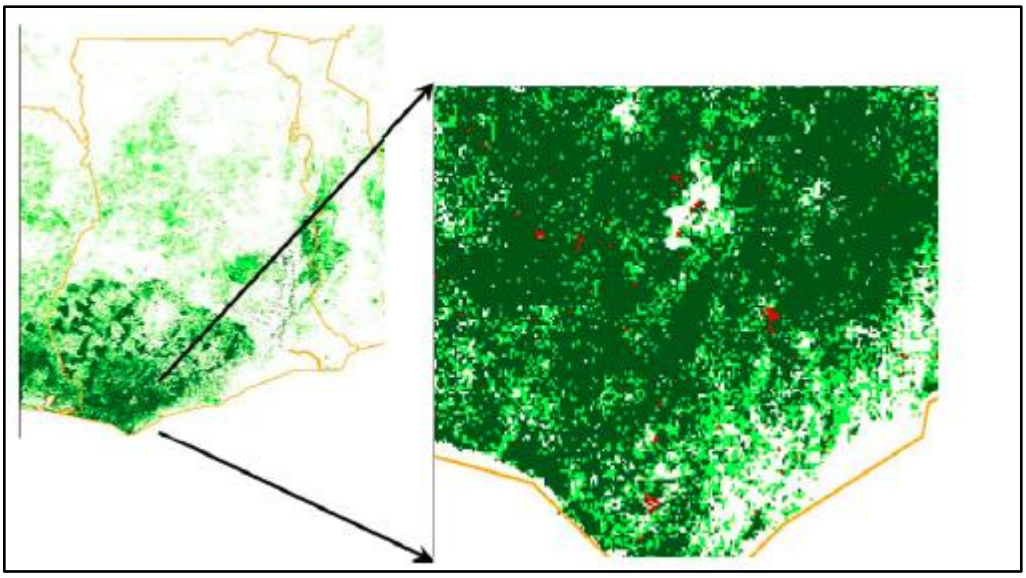


Figure 3: Forest Area Under REDD+ Forest Definition

(Ghana's forest areas basedon 15% canopy cover (dark green = >30 canopy cover and light green = >15% canopy cover) and in the zoomed image deforestation (red pixels) within the high forest zone of Ghana according to MODIS 500-m scale imagery from 2000-2005**.)**

1.4 ANALYSIS OF CARBON STOCK DISTRIBUTION

14. Through the carbon mapping process, Ghana's terrestrial carbon stocks are estimated to total2.04Gt, comprised of1.7Gt of carbon in above- and below-ground biomass and about .34Gt in soils to 1 m depth[9]. Both biomass and soil carbon are distributed unevenly over the country. Areas of high biomass carbon density contain 6% of Ghana's biomass carbon but cover only 2% of the country's land area. High carbon density areas are associated with intact natural forest in the moist / wet forest zone and contain around 200 Mg C per ha[10,11,12,13,14]. Although the total land area is small, mangroves also contain substantial carbon stocks.

15. In Ghana, carbon stock variation due to landuse and landuse change has caused significant heterogeneity, although broad trends are evident from the south to north. (Carbon stocks (C) are initially measured as biomass (Mg/ha), and then converted to carbon (MgC/ha or tC/ha) using a conversion factor of 0.5. Thus, carbon is equivalent to approximately half of biomass). At a national scale, the carbon map shows the highest biomass in the HFZ, ranging from 100 to 400 Mg/ha, whereasbiomass in the northern two-thirds of the countryis below 75 Mg/ha, including the entire savannah area and the transitional zone (See Figure 4) Table 1 provides estimates of above ground C in different land use and vegetation types based on sampling and remote sensing analysis[15].

16. Despite the tremendous effort at mapping aboveground carbon stocks across the country, carbon stocks data on soil is limited. Conservative estimates based on IPCC default values estimate Ghana's soil carbon stocks to be 72 Mg/ha[16]. Between the high forest zone and savannah zone C stocks to range from 30.88 - 93.47 MgC/ha to 28.46 - 34.05 MgC/ha. Cultivated areas within the high forest zone have soil C stock ranges from 28.27 – 72.7 MgC/ha, and cultivated land in the savannah zone has soil C that ranges from 18.46 - 32.04 MgC/[1718].

17. Mangrove distribution along the coast are quite substantial,however, very little attention has been paid to mangrove protection or management, resulting in massive degradation and exploitation for fuel wood. Mangrove aboveground and belowground carbon stocks have been found to range from 378 – 2077 MgC/ha for undisturbed areas, with degraded mangrove havingcarbon stocks ranging from 146.88 – 529.59 MgC/ha[19]. Based on these figures and the level of exploitation, it is clear that mangrove vegetation in Ghana holds a strong potential for REDD+ implementation which needs to be explored.

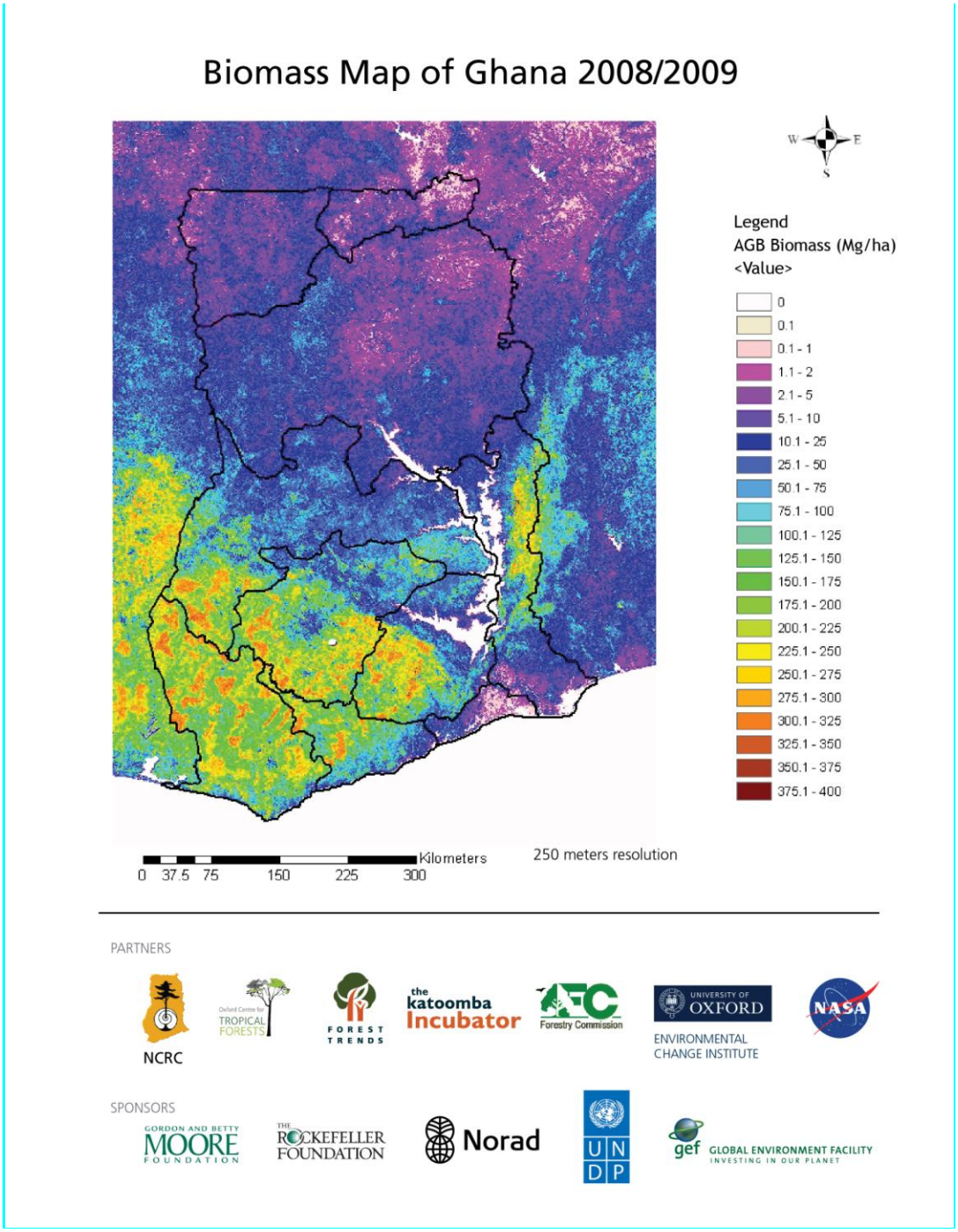


Figure 4: Ghana Biomass Map (Biomass map [26] showing the high forest zone in green and brown (relatively high carbon stocks) and the savanna zone in blue and purple (relatively low carbon).

Table 1: Above ground carbon stocks in different land use land use types.

Ecological strata	Sub-strata	Percentage of total land area	Land area (000 ha)[20],[21]	Estimated Average Carbon stock per ha (tC/ha)
High Forest		34%	8,189*	
	Reserves		1,200[a]	115
	Off-Reserve forestremnants		600	65
	Agriculture lands-food crops		1,200	15
	Cocoa		1,800[22]	55
	Fallow		1,400	10
	Grassland		600	6
Savanna		66%	15,700	
	Woodland			38
	Grassland			4
	Agriculture			12
Mangrove		0.5%	11	
	Undisturbed			927
	Disturbed			440
Total		**100%**	**23,900**	

*In the majority of publications, the HFZ area is 8.2 million ha. However, mangrove is usually excludedfrom these analyses. Therefore, in order to capture mangrove systems as a distinct land use type, the estimated mangrove area was subtracted from the total HFZ area. In addition, approximately 1,400,000 ha of the HFZ have gone to infrastructure, though not listed in the table.

1.5 ECONOMIC IMPORTANCE OF FORESTRY SECTOR AND THOSE SECTORS AFFECTING FORESTS

10. Official statistics focus on the role that forests play in providing raw material for the formal timber industry. However, forests and savanna areas also support a variety of less formal economic activity based on woodfuel, non-timber forest products including bush meat, medicinal plants and rattan. Around 70% of Ghana's energy needs are met through the use of wood fuel and charcoal.

11. In 2009, the 200 timber processing mills producedan estimated output of 522,000 cubic metres leading to exports worth €140 million in 2010. Only 10% of the output was sold on the domestic market.The informal domestic market is predominantly serviced by illegal chainsaw operations with one estimate of between 75,000 and 97,000 people involved[23]. The revenue that this economic activity generates is significant[24].

12. Current volumes of timber exported legally appear to be considerably less than the volumes placed on the domestic market and exported over land[25].

13. Four of the larger timber operators have signed up to WWF's Global Forest and Trade Network (GFTN) scheme which aims to increase transparency and supports the development of management systems towards certification.

14. Current forest GDP is estimated at 4% having fallen from a previous high of 8% a decade ago. Forest accounts for 9-12% of export earnings and provides livelihood to nearly 15% of the population. Non-timber forest products (NTFPs) are also extremely important but much of their value is not formally recorded and remains inadequately represented in policy analysis, due in part to "timberisation" of all aspects of policy formulation and regulation. However, the economic value of NTFPs, for both commercial and household purposes, may locally outweigh that of timber. This area requires further research in order to understand it properly and enable effective investment to support and enhance it.

1.6 RATES OF DEFORESTATION AND FOREST DEGRADATION

15. Historical Trend: . In 1900 the area of high forest was estimated to be between 8 and 9 million ha; by 1946 the combined area of reserved and unreserved forest was estimated to have halved to 4.4 million ha[26]. For the next 6 years around 260,000 ha per year of unreserved forest was cleared for agriculture, primarily cocoa; by 1953 the unreserved forest area had halved to 1.5 million ha, similar to the area of reserved forest at the time. Since then deforestation of off-reserve areas and degradation of forest reserves has continued but not at a uniform rate. Although sources differ in detail, clear peaks of timber export activity occurred in the late 1950s and early 1970s[27,28], with a significant trough in the late 1970s and much of the 1980s[29]. Assisted by aid funding the timber industry experienced significant growth over the late 1980s and the 1990s.

16. Contemporary: Forest degradation is considerably harder to report on, in part because there is no agreed definition and reporting mechanism. An analysis of basal area[30] shows clearly the continuing decline in stocking of forest reserves over the period 1955-1995. Whilst overall average basal area has only declined by 25% over this period, this average hides significant differences between reserves and regions with some reserves experiencing a reduction of stocking over the 11 year period 1990-2001 of 54% (Auro River), 40% (Dome River), 37% (Asukese); on the other hand, two of the sixteen reserves reported on showed increases in basal area of 13-14% over the same period.

17. Degradation is considered to be a greater issue than deforestation in Ghana [31,32] although the relative importance of the two will depend in part of their respective definitions.

18. Forest degradation can also be assessed from the perspective of wildlife and biodiversity. Long term declines in key indicator species such as elephant, buffalo and chimpanzee has been noted; declines in smaller species hunted for bush meat have also been noted. [23].

19. Comprehensive, quantitative assessments of deforestation and forest degradation are not currently available for Ghana, especially for the savanna zone. Recent estimates look at secondary data and extrapolations from earlier inventories. There are also inconsistencies relating to the land area that has been counted as 'forest' [33]. As a result, estimated trends and recent rates vary. Official deforestation-rate estimates are in the region of 2% yr since 1990 [34, 35]of which 65,000 ha per year is thought to relate to intact closed forest. However, both lower and higher estimates than these have been used for planning purposes within Ghana. For example, the World Bank funded Sustainable Land and Water Management Project in 2010 indicated a deforestation rate of 22,000 ha per year whilst Ghana reported a gross annual deforestation rate of 135,000 ha to FAO's Forest Resource Assessment for 2010, although the net figure was reduced by an annual reforestation programme of 20,000 ha per year[36]. 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 BrongAhafo Region and northern portion of the Western Region found that deforestation rates 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 forestswere lost at a rate of 2.3% over the last 11 years[37].

1.7 ANALYSIS OF DRIVERS OF DEFORESTATION AND FOREST DEGRADATION

20. Most of the pressures on forests have been present for many years. However, their relative balance appears to have changed over time. Table 2 indicates the immediate and underlying causes of deforestation and proposals to reverse the trends.

21. Principal drivers: Ghana's R-PP analysis identifies the principal agents of deforestation and forest degradation as: agricultural expansion [c.50%], harvesting of wood [c.35%],

population & development pressures [c.10%] and mineral exploitation and mining [c. 5%]. There are, however, differences between the high forest zone and savanna areas. Being drier and more open in the savanna, fire and livestock have more important roles than in the high forest zone; charcoal production is also important but is focused on specific areas. The Energy Commission has recorded transition and savanna zones as the main source of wood fuel and charcoal. The long term impact of charcoal production has not been assessed on an extensive basis and whilst in some areas heavy degradation is reported, in others exploitation may be closer to a sustainable yield.

22. Underlying drivers: The underlying drivers of deforestation include:
    - policy and governance issues (weak enforcement of regulations, weak regulatory mechanisms and rights regimes, excessive central control, conflicting government policies e.g. cocoa price support);
    - economic forces (a growing domestic demand, a relatively inefficient logging and milling industry, market failures, forest royalty system that does not price trees at their real economic value);
    - demographic factors (population growth and related factors such as high demand for wood products and fuelwood, uncontrolled agriculture expansion and urbanisation).

23. Ghana oil and deforestation**:** How Ghana's current status as emerging oil economy would affect its forest cover is a matter of public discourse. Experience from some oil producing tropical forest countries indicates that there are some confounding factors. The immediate impact of Ghana's offshore oil extraction is forest removal for the construction of workers camps and access roads. However, as the onshore explorations intensified in the long term there will be increased deforestation through construction of drilling platforms, pipelines and helipads. The indirect effects through macroeconomic changes which are yet to be fully assessed can have significant impact on the environment. Some of the impact of the macroeconomic change may be positive while others are likely to be negative. The expected increases in national income and employment can sometimes relieve pressure on forests. If government use most of the oil income to upgrade urban infrastructure more labour would be pulled out of the rural areas thereby reducing the 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 in activities leading to high remuneration for urban labour has the potential to cause "deagriculturisation", a phenomenon that led to the decline in cocoa exports and reduced forest conversion pressure in Nigeria in the 1970s. On the other hand if oil revenue is used to finance large infrastructural developments (large road construction/resettlement programmes) in the forested areas and provide cheap agriculture credit then deforestation and forest degradation would accelerate.

Table 2: Causes of deforestation and proposed actions to reverse trends.

Location	Direct/Immediate cause	Underlying Causes	Potential Interventions to Reverse Trends	On Going Initiatives
High Forest	Wood Industry overcapacity and inefficiency	• Log export ban • Undervalued timber prices and low forest fees • Low milling recovery • Steady supply of illegal chainsaw	• 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	VPA/FLEGT/NREG
	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 market	• Increase capacity for enforcement of forest laws • Implement effective log tracking & 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	VPA/FLEGT/NREG
	Ineffective forest management practices	• Insufficient involvement of local people in management • Ineffective mechanism for timber rights allocation	• Reinforce local community involvement in resource management. Off-reserve CREMA opportunities	NREG, REDD+

		• Perverse tree tenure regime • Inequitable benefit sharing arrangements	• Implement reserve by reserve management 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 practices and low yields • Perception that cocoa does not need shade • Perverse incentives (cocoa input subsidies/ lowering of input tariffs	• 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	FASDEP, Cocoa Sector Improvement Programme (CSIP)

	Food and other crops	• Limited technology in farming systems • Slash and burn farming practices • Shifting cultivation as a practice for soil regeneration • Increasing population, rural poverty and the need to secure livelihoods	• 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 trees into farming systems that bring additional economic revenue • Promote agriculture intensification practices	FASDEP/AGSSIP/WAAPP/NREG (Modified Taungya System)
	Mining	• Increasing legal and illegal surface mining activities • Increasing demand and encroachment by industrial, artisanal and small-scale miners on forest lands • Voluntary /involuntary resettlement of communities/villages • Increasing population in mining areas • Limited long term livelihood opportunities in the mining areas	• Vegetation restoration of degraded mined sites after closure of mines • Halt illegal mining activities	NREG
Savanna	Fuelwood and charcoal production	• High rural and urban demand • Open access nature of resource • Inefficient production system • Insufficient supply of alternatives	• Establishment of community/ family woodlots • Improve efficiency in fuelwood 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	Wildfire Management Project/NREG
	Agriculture expansion	• Limited technology in farming system • Overgrazing and soil compaction • Low soil fertility	• Improve productivity through technology transfer • Promote agriculture intensification • Integrate trees into farming systems • Planting trees to combat desertification	FASDEP
	Overgrazing	• Increasing livestock population • Degradation of pasturelands… • Depletion of fodder plants • Sedentarisation of livestock raisers	• Development of new pasturelands • Cultivation of fodder plants	FASDEP

1.8 CARBON EMISSIONS

24. Changing levels: Until the mid-1990s Ghana was considered to be a *net sink* for greenhouse gases, due to high levels of carbon sequestration in the Land-Use, Land-Use Change and Forestry (LULUCF) sector.Between 1990 and 2000,within the LULUCF sector, net greenhouse gas removals decreased by c.96% (from -0.026 Mt CO_2-eq to -0.001 Mt CO_2-eq). (Note- Mt is million tonnes). It further decreased to -0.005 million tonnes CO2e in 2006. Since 2000, the sector contributed as an emissions source, peaked in 2004 and reduced marginally in 2005 and 2006.

25. Ghana's low per-capita emission is similar to that of many other developing countries. According to the second national communication to the UNFCCC, Ghana emitted about 24 Mt of CO_2-equivalent in 2006 [27], amounting to around 1.1 tCO_2-equivalent per capita, and accounting for 23% of Ghana's net GHG emissions.

26. Cause for changing levels: According to Ghana's most recent greenhouse gas inventory, conversion of forest to other land uses (i.e. settlements, agriculture, and other uses) was the major cause for the depletion of sinks and increases in emissions in the LULUCF sector. Ghana's low carbon growth plan estimates that 65% of baseline emissions come from land use changes (LUCF) whilst a further 10% comes from the burning of biomass. Combined, the two are estimated to produce 42.3 Mt CO_2 equivalent emissions.

27. There are also estimates for emissions related to other specific deforestation / degradation activities in Ghana [29]. One estimate shows that selective logging in the high forest zone of Ghana typically results in loss of 10 Mg C ha^{-1} from above ground carbon stocks through road building, logging bays and gaps, skid trails.

1.9 GHANA'S NATIONAL REDD+ PROGRAMME AND STRATEGY

27. Ghana joined the international REDD readiness process through the World Bank's Forest Carbon Partnership Facility (FCPF). Ghana initially completed the Project Idea Note(R-PIN) in 2008, and then in 2010 received approval of the R-PP (Readiness Preparation Proposal).The R-PP is a living document that presents a strategy and implementation framework for REDD+ in Ghana, which is intended to incorporate and operate synergistically with other existing and anticipated programs and mechanisms. Specifically, the REDD+ strategy focuses on reducing emissions from deforestation and degradation, as well as conservation, enhancement of carbon stocks, and sustainable forest management (the plus in REDD+).

28. Though the process has been slow, Ghana received a US$ 3.6 million grant in support of its R-PP and REDD+ activities from the FCPF. Ghana has recently transitioned from the first phase (analysis, preparation, consultation) to the second phase (piloting and consultation) of Readiness Implementation.

29. In 2012, Ghana was also admitted into the UN-REDD program, though no financial support has been allocated to Ghana to date. Available FCPF funding for REDD+ in Ghana, while important, is not adequate to cover all estimated costs, nor is it allowed to support national piloting activities. FCPF money is targeted towards capacity building and supporting key steps in the process. Additional sources have been sought, and both Japanese and German support has been allocated to assist with development of national reference levels and development of a national MRV system.

30. In Ghana, it is envisioned that the FIP will be aligned with and build off of the REDD+ readiness process to date so as to support the over-arching goal, shared by both initiatives, of reducing emissions from deforestation and degradation. To achieve this goal, the FIP and REDD+ efforts are be aligned to promote synergies and to enable leveraging of resources and capacity. Already, the FIP has benefitted from and is building off of the learning, consultation, and prioritization process that the country went through with its R-PP.

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

- adaptation to impact of climate change and reduce vulnerability to climate change;
- mitigating the impact of climate change; and
- low carbon growth.

2.0 PARTICIPATION OF KEY STAKEHOLDERS INCLUDING RURAL COMMUNITIES

32. A number of relevant processes over recent years have provided the groundwork 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, Ghana's VPA, NLBI and R-PP processes. These processes have been strategically interlinked and build from 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.

33. Lessons learnt from these processes have led to the articulation of a number of principles for REDD+ process consultation[38], as well as implementation strategies. In turn, the FIP process has benefitted significantly from information gathered through REDD+ consultations, as well as its own consultation efforts.

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

SECTION 2: IDENTIFICATION OF OPPORTUNITIES FOR GREENHOUSE GAS ABATEMENT

35. Background: Ghana's total emission in 2006 was about 24 Mt of CO_2-equivalent, amounting to around 1.1t CO_2-equivalent per capitaThe LULUCF sector accounted for 23% of the net greenhouse gas emissions. While Ghana's emission is still low by global standard (0.05%) and ranked 108 in the world, the potential for growth as an emerging oil country and lower middle income economy is high Trees are the major source of carbon sink in the tropics, and the carbon sequestration and storage capacity of Ghana's forests is significant - 16% of the country (38,000 sq km) is gazetted as protected area and most of this can be used for carbon management, combined with other management objectives.Emission data for the period 1990-96 indicates that the country was a net sink due largely to high levels of carbon sequestration in the LULUCF sector. However,Ghana's Second National Communication to UNFCC estimated a decrease of the net greenhouse gas removals within the LULUCF sector around 96% from -26.1 Mt CO_2-eq in 1990 to -1.04 Mt CO_2-eq in 2000. If little is done to address deforestation and forest degradation, emissions are forecasted to grow above the 2006 levels.

36. Opportunities by sector: Abatement scenarios under Climate Change have been principally focused on three sectors that are potential sources of GHG emission and removals. Enormous opportunities exist in the energy, forestry, and sectors. Strategies mapped out in the energy sector to reduce GHG emissions including replacement of biomass (firewood and charcoal) at the rate of 10% a year from 1995 to 2020 and the gradual penetration of solar PVs to existing energy mix, though such efforts have not been pursued. In the forestry and agriculture sectors, measures range from reducingpressure on forest reserves,encouraging the retention of trees in the farming system, and improved management of reserves. Rehabilitation of degraded areas, agroforestry, community woodlots and commercial plantationsalso have potential, but major barriers including governance, regulatory, and institutional challenges need to be removed to unlock their abatement potential. Additional financial investment beyond FIP funding would be required to scale up potential actions to entirely reverse current trends in deforestation and forest degradation in Ghana.

37. Engaging the private sector and supporting public private partnerships has the potential to significantly contribute to relieving the pressures on the forests as well as reduce greenhouse gas emissions. A wide range of opportunities exist 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.

38. Boxes 1-3 provide more information on FIP abatement pathways. Where data exists, it provides estimates of the abatement potential. All of these pathways will require necessary policy support. Section 3 outlines the enabling policy environment, and FIP

Project 1 (Section 6: Table 6) encompasses needed policy reform and legislation to fill existing gaps.

Box 1:Abatement opportunitiesfrom securing the integrity of natural forests and woodland resources

SECURING THE INTEGRITY OF NATURAL FORESTS& WOODLAND RESOURCES

Three sets of actions are proposed to secure the integrity of the forests. These are actions aimed at addressing governance-related challenges; actions aimed at improving forest management practices; and on the ground activities aimed at ameliorating deforestation and forest degradation trends.Specific interventions that will directly or indirectly contribute to GHG abatement under the three broad actions include:

1. ***Research, Capacity Building, and Monitoring:*** This overarching component will apply to all three projects and ensure that adequate baseline information is collected, information is disseminated, key principles and understanding are built, and impacts and results are monitored and assessed. In addition, it will focus on identifying successful examples of each project component from civil society, private sector, and/or government efforts (if possible) so as to enable the projects to benefit from critical lessons learned and other key principles for success.

2. ***Governance and Regulatory Regimes in support of REDD+ processes:***This will include mechanisms such as support for policy and governance structures and strengthening of management institutions. The interventions would lead to:

- Strengthened tree tenure and carbon rights, including the introduction of strong incentive mechanisms for farmers to retain existing trees and plant new ones;
- Improvement of law enforcement and protection of existing reserves;
- Support for effective decentralisation and support for community and private sector engagement for sustainable protected area management;
- Linkages with NLBI, NREG and EU VPA/FLEGT processes would be established.

3. ***Ecological Networks and Biodiversity Conservation:*** This component will ensure that sustainable forest management is not undermined by fragmentation and degradation as a result of agriculture and wildfires. Ecological networks would be piloted between blocks of protected and unprotected forests. The effectiveness of the ecological network in maintaining long-term viable populations of key species depends on facilitating natural processes such as migration, species movements, and genetic exchanges. It would equally focus on providing strong economic incentives to affected communities and farmers, including REDD+ benefits. CREMAs provide a strong mechanism for enabling off-reserve corridors. In addition, site selection will prioritize areas where REDD+ projects are already being piloted with communities. The ecological networks intervention would lead to abatement through:

- **Reduced deforestation and degradation, plus enhancement of carbon stocks;**
- **Biodiversity conservation and other ecosystem services.**

4. ***Management of Forest Resources:***The concern of many stakeholders is that the forest estate has dwindled over the years because Government is not well placed to manage natural resources, including forests. Central to this is the belief that the private sector, in collaboration with communities and traditional authorities (the actual owners of the resource), but not solely government (public sector agencies), could be better placed to manage forests and other natural resources. The role of a public sectoragencyis therefore to create the conditions and policies necessary for others to manage forests in the national interest and regulating their actions. Thus the FIP will:

- Pilot a scoping and feasibility assessment of public-private sectormanagement (including community co-management) of forest reserves and plantations;
- The forestry sector needs to assess its capacity to manage for mitigation and adaptation goals;
- Pilot REDD+ Reserve with managementgoal of producing climate and community benefits;
- Mobilize community networks for wildfire management;
- **In terms of abatement, this would lead to reduced emissions from deforestation and degradation.**

Box 2: Abatement opportunities through carbon stocks enhancement

ENHANCEMENT OF CARBON STOCKS

The actions are aimed at rehabilitating degraded forests and enabling enhancement ofcarbon sequestration through plantations, woodlots, and agroforestry practices.

1. ***Rehabilitationof Degraded Natural Forests*:** Over 50% of the forest reserves and about 70% of the forest outside the reserves are in a state of degradation. Thus, this component will focus on enrichment planting in degraded compartments. Such efforts would be in strong collaboration with communities and the private sector, preferable where REDD+ pilots are being developed and in GSBAs that are under threat.
   This component has an estimated emission reduction potential of 4 million tCO2-e, calculated in a hypothetical 30, 000 ha reserve over a period of 20 years at a 2% deforestation rate.

2. ***Plantation Development*:** Create enabling environment for results based (REDD+/CDM) private sector plantation development with a strong focus on livelihoods and income generation for communities.
   Abatement potential could be realized through a mixed species indigenous**plantations which would yield a sequestered carbon value of around 500 t/ha CO2-e, based on a 20 year felling cycle, with 20% of basal area removed at each felling. This approach is expected to maintain continuous forest cover and lead to a full recovery of the original high forest vegetation**

through natural regeneration Alternately, planting of a teak plantation which is managed on an 18 year clear felling basis is estimated to yield 200 t/ha CO_2-e[39] (pers.com. Foli).

3. ***Sustainable Woodfuel Production***:About 20 million m^3 of biomass are used annually in the country in the form of firewood and charcoal. Vigorous promotion of more sustainable production systems would not only contribute to the biomass energy requirements,but also reduce pressure on indigenous woodlands in the savannaand the forest-savanna transition zone, and enhance incomes in a region where there are few non-agriculture income opportunities. Where possible, leveraging co-financing from private sector investment will be sought.
   The abatement potential of this component could include: 1) Community benefits through the planting oftrees, improved charcoal production systems, and wood for local uses from an 8 year rotation and could sequester carbon of 410 t/ha CO2-e. Managed on a clearfelling basis with uniform age class distribution (equal area of each age), average sequestered carbon would be 162 t/ha CO2-e[40]; 2) In terms of improved efficiency of charcoal production in the traditional kiln system, 438, 000 tCO_2e emissions reduction could be achieved per kiln through chimney installation for methane flaring and efficient wood packing.

Box 3: Abatement opportunities through promotion of climate smart agriculture and watershed protection

CLIMATE SMART AGRICULTURE AND WATERSHED PROTECTION

In forest fringe communities and rural towns and villages, agriculture and forest-farming systems are the primary livelihood option. Farmers' strategies have a significant impact on the nature of the environment and, and to date have contributed to the conversion of forests and tree-rich lands to lower biomass systems.Enabling a transition from agricultural systems that have caused emissions through forest conversion and degradation, to climate smart farming systems that conserve or sequester C02 in the biomass and soil provides a pathway for significantly reducing business as usual emissions associated with the agricultural and tree crop sectors. It also presents new options to reduce poverty and enhance livelihoods. In addition, focusing on opportunities for watershed protection through increased tree cover in agricultural landscapes and soil management could help to ensure crucial ecosystem services at multiple scales, and introduce innovative payment opportunities to communities. These measures will link strongly with aspects of Box 1: Project 1 (Governance and Regulatory Regimes) as it will require strengthened land and tree tenure and carbon rights, recognition of communities as partners in natural resource management who require substantial benefits for their roles, policies that enable a devolution of management rights, and enhancing the viability of micro-enterprises through access to markets and technology.

1. ***Promote Climate Smart Cocoa Landscapes:*** Working in collaboration with farmers, community leaders, the cocoa private sector, and financial or risk reduction institutions to:

- Reduce emissions from conversion of forests to cocoa or loss of trees in cocoa farms, and where appropriate enhance trees in the system or landscape;
- Support private sector engagement and prioritization of climate-smart practices
- Link increased productivity to a reduction/limit of the cocoa footprint.
- **This project could deliver 8.9 million tCO2 over 20 years (annual average of 440,000 tCO2) in 110,000 ha cocoa landscape that includes forest reserve**[41]

2. ***Promote Climate Smart Agriculture:*** Depending on the farming system, climate and livelihood benefits can be achieved through a the introduction and adoption of a combination of practices, including:

- Increased productivity from improved varieties, access to inputs, information
- Conservation or sequestration of soil carbon stocks through reduced tilling, no-burn methods and other practices;
- Integration of trees into the farming system for carbon stock enhancement and livelihood benefits (NTFPs, nitrogen fixing), or soil conservation (green belts);
- Community land use planning to reduce conversion of forest to farming landscapes.

3. ***Watershed Services*****:** Ghana already struggles with the challenge of water quantity and quality in both rural and urban environments. As population growth and urbanization continue, and projected increases in temperate and rainfall patterns change the climate, it will be crucial to ensure that key watersheds are capable of furnishing watershed services, in addition to other ecosystem services. This component will therefore focus on the design of an innovative system(s) to incentivize communities farming and living within important watersheds to protect and rehabilitate the landscape so as to support a sustainable and clean water supply. The Atewa Range and Kakum National Park are examples of critical watersheds that could benefit from such an initiative.

   The abatement potential of this component will stem from reducing emissions from deforestation/degradation and enhancement of carbon stocks. It will provide adaptation benefits to predicted changes in the climate, and development of a payment for watershed services scheme could also create strong incentives and livelihood benefits.

SECTION 3: ENABLING POLICY AND REGULATORY ENVIRONMENT

3.1 OVERVIEW OF POLICIES AND REGULATORY FRAMEWORKS

Natural Resources and Environmental Policies

35. The key legal and policy frameworks for the forestry sector fall within the remits of the Ministry of Lands and Natural Resources and the Ministry of Environment, Science and Technology. Policies influencing forestry are described below. Despite well-articulated intentions, it is felt that many of these policies have largely failed to achieve their over-arching goals.

36. The 1994 Forest and Wildlife Policy (FWP) and the 1996 Forestry Development Master Plan have served as guiding policies, but proved to be relativelyineffective in halting forest resource degradation.In particular, policy actions were not effective in controlling illegal chainsaw operations and illegal logging. The timber industry continues to operate with obsolete equipment having installed capacities far exceeding the annual allowable cut.

37. In 2011, the 1994 Forest and Wildlife Policy underwent a review to enable reform within the forestry sector. 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 hopes to do this by addressing major barriers to investments in forestry such as tree tenure, complexities of land ownership, forest encroachment, weak infrastructure, and weak implementation of legislative instruments. This is further underpinnedby multi-stakeholder engagement in the on-going REDD+ Readiness process. In addition, a National Expert Consultation will be set up to review carbon rights and benefit sharing options. 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. It should be noted that the revised policy has yet to be made officially public.

38. Ghana's first Environmental Policy was enacted in 1995.While the policy was effective in improving the general performance of the environment, it was not effective in controlling deforestation and reducing GHG emissions. Despite its implementation, environmental challenges increased, and emerging problems in the critical areas of pollution, urban congestion, loss of biodiversity, and climate change worsened.

39. The 1995 Environmental Policy was reviewed in 2000 with a focus on building linkages between long-term economic growth, social transformation, poverty reduction and environmental sustainability. One of the main objectives of the revised Environmental Policy (EP) was toreduce deforestation through the integration of climate change and Disaster Risk Reduction into National Development Policy formulation and Planning processes. Climate change abatement was also a priority objective. Actions to abate

GHG emission included the operationalisation of the Comprehensive Mitigation Analysis Process (COMPAP) model; and the implementation of effective technologies and programmes, including Energy Efficient Lighting, Industrial Energy Efficiency and Landfill Methane Gas Recovery. Unfortunately, the revised Environmental Policy (EP) of 2000 has so far not been effective in achieving significant levels of GHGs abatement and reduction of deforestation due to implementation difficulties, inadequate investments in the sector,ineffective enforcement of the policies, and poor attitudes and lack of behaviour changefrom individuals, households, private and public sector institutions.

40. One of the policies in the natural resources sector that has been touted as successful is the National Wildfire Policy of 2006. Wildfire is viewed as perhaps the most important single threat to the integrity of forests in Ghana. Since 2000, the annual loss of revenue from merchantable timber to wildfire has been estimated to be about US$24 million. The cumulative effect of wildfires from that period has also been estimated at an annual loss of 3% of Gross Domestic Product (GDP), amounting to about US$210 million annually. The national wildfire policy (NWP) was formulated to support the Forest and Wildlife policy which was viewed as being weak on wildfire management. Since the NWP was formulated the annual incidence of wildfire has reduced by over 30%. The NWP is based on the principle that land resources are a direct source of livelihoods for majority of rural population and that poverty reduction and wealth creation in the country are dependent upon effective management of wildfire. The NWP is unique in that it has taken cognizance of the failures of the past interventions,incorporated multi-sectoral and gender sensitive mechanisms and developed the necessary structures and systems which will ensure stakeholder participation in wildfire management.

41. One of the major underlying causes of deforestation in the country is agricultural expansion. The first Food and Agriculture Sector Development Policy (FASDEP) was developed in 2002 as a framework for the implementation of strategies to modernise the agricultural sector in order to increase food and cash crop production. The strategies in that policy were based on the Accelerated Agricultural Growth and Development Strategy (prepared in 1996), and which was designed to forge linkages in the value chain. In 2006, after nearly four years of its implementation it became necessary to revise FASDEP 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. However, FASDEP has also not been effective at controlling deforestation because it's emphasis was more on increased production at the national level instead of increased yield per unit area. Thus most of the increased production at the national level has been achieved through land extensification. This is particularly an issue within the cocoa sector, in part because cocoa is managed by COCOBOD and not the MOFA.

42. Also of importance to the FIP and REDD+ processes are three international conventions- UNFCCC, UNCCD and UNCBD. Ghana has ratified all three conventions, prepared

comprehensive strategies/plan of actions and set up oversight bodies to track implementation.

3.2 LEGISLATION

43. In order to further strengthen the objectives of the 1994 Forest and Wildlife Policy and 1996 Forestry Development Master Plan, the Government enacted the Timber Resources Management Act, 1997 (Act 547), Timber Resources Management (Amendment) Act, 2002 (Act 617) and Timber Resources Management Regulations, 1997 (LI 1649). These pieces of legislation focused on efficient resource allocation and prevention of illegal logging and chainsaw lumbering but were ineffective as a result of poor governance structures and institutional weaknesses. This was largely because the Forestry Commission Act, 1999 (Act 571) did not create a strong and sufficiently autonomous institution to ensure the implementation of the provisions of the legislation.

44. Furthermore, the Timber Resources Management Act, 2002 (Act 617) made it illegal for farmers and other users of rural land to harvest any forest tree for commercial or domestic purposes, even if it is growing on their land, and prohibited logging without prior authorisation from concerned groups or individuals. Thus, the rural land users are not allowed to benefit economically from timber resources growing on their own land (which, in many cases, the farmers nurtured). In light of off-reserve logging within agricultural landscapes, it also creates perverse incentives to keeping high value species on-farm.

45. Under the Timber Resources Act (Act 547) 1992, farmers and land owners have legal rights to planted trees. When a Timber Utilisation Contract is granted off-reserve, the holder is obliged to engage in a Social Responsibility Agreement with affected communities in the proposed area and the Contract should include a proportion of stumpage fees and compensation for damaged crops (Timber Resource Management Regulations (L.I. 1649) 1998 and Economic Plants Protection Act (AFRCD 47 1979). Unfortunately, the implementation of mechanisms to support this legislation has been weak.

3.3 LAND OWNERSHIP AND POLICY

46. The effectiveness of land policies are no different from that of other natural resources policies which have largely been ineffective at halting deforestation and forest degradation. Prior to 1999, the country's land policy development framework was neither comprehensively formulated nor implemented, probably because of inadequate consultations with landowners and traditional authorities.Land rights and tenure are administered in a plural legal environment with customary laws and norms operating alongside statutes. The customary owners (stools, clans, families, and tendamba) who hold the allodial title, own about 78% of the total land area in Ghana. Of the remaining 22% the state owns outright about 20% while the remaining 2% is held in dual

ownership (i.e. the legal estate in the Government and the beneficiary/equitable interest in the community). This lack of involvement of customary structures 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. In fact, families and individuals in most rural communities were scarcely consulted in the decision making process. 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 outdated legislations.

47. Thus there is general indiscipline in the allocation and development of land; numerous land litigation cases are before the courts, estimated at about 60,000 in 2002; with environmental degradation and poor institutional capacity in both traditional and state sectors. The net effect of this state of affairs is continuous conflicts, overburdening of the judicial processes, over centralization of authority in urban capitals and rent seeking behavior.

48. The revised National Land Policy (NLP) in 2002, coupled with the implementation of the Land Administration Project (LAP), has promoted the judicious use of land and natural resources in the pilot areas. However, the achievements have been localized and there is the need to upscale the achievements.

3.4 FISCAL FRAMEWORK

49. Even though the 1994 Forest and Wildlife Policy contains a number of guiding principles, including the recognition that: *"forest and wildlife fees and taxes are considered as incentives to encourage more rational and less wasteful utilization and should be revised according to market forces, and particularly to increase production of value-added wood products for export"* and *"a share of financial benefits from resource utilisation should be retained to fund maintenance of resource production capacity and for the benefit of local communities"*, the forest revenue system has neither been efficient nor effective in supporting or providing incentives for sustainable forest management. At present, forest pricing policies are not an incentive for good forest management. Most of the fees and charges were established at the time of Independence (1957) when development and political theory stressed the leading role of the public sector. By the 1970s and confronting a balance of payments and government deficit crisis, the consensus was to seek a reduced role for government. The stabilisation period during the 1980s saw the first attempts to liberalise financial and product markets. More recently debt, governance and poverty alleviation issues have seen government reform being highlighted, with emphasis on public accountability of government agencies, increasing the participation of civil society and law enforcement.

50. The challenge for the Forestry Commission (FC) and the Ministry of Lands and Natural Resources(MLNR) over the last few years has been to engineer the reversal of the

inefficiencies in the forest revenue system, and move towards meeting the fiscal policy objectives of the forest sector. Ghana's forest sector fiscal regime involves eight main instruments- at the pre-harvest level there are two instruments: the Timber Rights Fee and Contract Area Rent (concession rent); Stumpage Fees are the key harvest level instrument; 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 fees there are two Government tax instruments - Corporate Tax and Import Tariffs.

3.5 REGULATIONS AND THE REDD+ OBJECTIVES

51. The 1994 Forest and Wildlife Policy (FWP) has recently been reviewed and updated and awaits political confirmation. The revised policy 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 confirms its paradigm shift and this emphasis matches the stated aim of FIP to support transformational change.

52. The new FWP is reported to be aligned with REDD+ objectives, but some stakeholders question this conclusion. Nonetheless, it will have to address the relatively weak impact of the previous policy compared to other forestry laws and customary norms that directly or indirectly inform questions of tree ownership, user rights, and management.

53. In particular the new policy focuses on:

- sustainable management of both forest and savanna ecosystems,
- development of viable forest and wildlife based industries,
- ensuring transparency in the sector,
- strengthening capacity in sector institutions including education, research and training.

54. It is anticipated that the FWP will be implemented through a 20 year Master Plan. Based on these priorities, the Ghana FIP has an up to date framework within which to operate. FIP resources can assist in a number of key areas where FIP objectives mirror the Strategic Directions outlined in the new FWP.

55. The new FWP balances environmental, social and economic aspects of forest resources and their use. FIP's potential to support the implementation of the policy seems particularly timely. The desire to both reduce forest loss and support rehabilitation is entirely consistent with FIP's support for significant reductions in deforestation and forest degradation. These in turn lead to emissions reductions and conservation and enhancement of forest carbon stocks while at the same time acknowledging that significant numbers of livelihoods are dependent on forest use.

56. The FIP will help to catalyze, confirm and consolidate the new FWP in support of the REDD+ strategy.

3.6 WEAKNESSES IN EXISTING POLICY AND REGULATORY FRAMEWORK

57. Existing challenges of the current policy and regulatory framework for the forestry sector and impediments to successful operationalization include:

- Weak supportive fiscal regime
- Lack of clear tenure, tree and carbon rights
- Inadequate enforcement of regulatory policies
- Insufficient financial resources and manpower for effective forest management
- Inadequate political will to change the *status quo* or re-balance the power of the timber industry against the well-being of the forests and forest dependent communities
- Illegal timber harvesting and chainsaw production of lumber
- Over-capacity of the supply chain and under-pricing of wood products
- Misuse of power by some traditional leaders and public officials in order to benefit from encroachment into FRs
- Absence of integrated research and impact assessment
- Inadequate information to inform decision making and management of natural resources.

3.7 FIP PROPOSED ACTIONS ON POLICY & REGULATIONS

58. Without suggesting what specific measures policymakers should take, a number of policy and governance related actions are required to reduce deforestation and forest degradation whiles enhancing carbonstocks, biodiversity conservation and resilience to climate variability and change.

I. The formulation of a revised Forestry Development Master Plan (FDMP) based on the revised FWP of 2011, which setsout clearly the action plans to effectively tackle the issue of deforestation and forest degradation

II. Initiate reforms on tree and carbon tenure, and ensure the review or removal of the 1992 Constitutional provision on benefit sharing of forestry and land sector revenues during the on-going constitutional review process.

III. Formulate a policy on private sector investments in the forestry sector which minimises deforestation and contributes to the abatement of GHGs.

IV. Develop an implementation plan to operationalise the objectives of the 2000 EP which aims at minimising deforestation. There is the need to establish a Climate Change and Ecosystem Monitoring Centre or System to monitor mitigation impacts (emissions reductions and removals) in addition to impacts of climate change on the forest ecosystem. Development of this system/centre should be in alignment with current REDD+ requirements to develop a national forest monitoring system to assist in the

establishment of Reference Levels and enable monitoring of deforestation, degradation, emissions, and the geographic location of projects and programs (so as to manage double counting and overlap in project boundaries) amongst other things. A forest monitoring system/centre would also align with the establishment of a national REDD+ registry.

V. Develop a mechanism to mainstream sector policies into the National Development Planning processes.

VI. A comprehensive land use plan and inter-sector harmonisation of development policies of frontline sectors e.g. forestry, agriculture, energy and mining is needed. In particular there is the need to establish a network of forestry sector institutions for effective coordination and linkages

VII. A transparent, inclusive and accountable governance with full involvement of local communities around forest reserves should be installed

VIII. Capacity building among local communities to enable them to participate effectively and efficiently in decision making and management of forest reserves is needed.

IX. Policy for the supply of legal timber to the domestic market needs to be strengthened.

SECTION 4: EXPECTED CO-BENEFITS FROM FIP INVESTMENT

59. Table 3 provides a description of potential and anticipated co-benefits from Ghana's FIP projects. These co-benefits include attention to women (and their associated roles, challenges and specific livelihood opportunities), provision of biodiversity and other ecosystem services, livelihoods and development of forest communities, poverty alleviation, and resilience to climate change.

Table 3: Potential Co-benefits Associated with FIP Project Abatement Opportunities

	Gender	Biodiversity & Ecosystem Services	Livelihood & Human Development of Forest Communities	Poverty Alleviation	Climate Resilience
Project 1: Securing the Integrity of Natural Forests and Woodland Resources	• Improved forest/tree/carbon rights (tenure) giving women greater access to forest resources and associated economic benefits. • Diversified forest-agriculture livelihood options. • Expanded number of opportunities for women to participate in forest resource management.	• Reduced fragmentation and degradation of important biologically diverse (or key species) landscapes. • Improved conservation and protection of biodiversity on and off-reserve. • Improved ecosystem function and genetic diversity- pollination, seed dispersal, migration, etc. • Enhanced micro-climate function, including regulation of temperature and rainfall.	• Increased income generation opportunities from alternative management options, increased access to forest resources, and revised tenure arrangements • Increased, expanded role for communities and stools/skins in forest resource management • Improved land use planning and management	• Increased income generation opportunities through establishment of financially sound CREMAs. • Increased access to benefits from climate mitigation /carbon finance projects.	• Reduced deforestation / degradation increases forest resilience to climate change. • Potential for healthy forests to promote, maintain micro-climate. • Healthy forests help moderate climate. • Reduced incidence of bush fires improves forest condition, resilience.
Project 2: Enhancement of Carbon Stocks	• Improved management of "fuelwood" landscapes preserves NTFP species that are crucial for	• Mixed species plantingscreates increased biodiversity (flora and fauna) in landscape.	• Expanded role for communities in planning, implementing forest rehabilitation / plantation	• Increased opportunity to diversify income from engagement in plantation development / forest	• Enhancement of carbon stocks. • Increased resilience of forests to climate change.

	women—source of income/livelihood. • Focus on supporting women's engagement in forest rehabilitation/plantation development initiatives to create alternate income streams.	• Increased # trees in landscape promote soil conservation, soil fertility, maintenance of soil moisture.	development. • Increased opportunities to diversify income from engagement in plantation development / forest rehabilitation. • Increased access to and participation in REDD+ ventures that provide income, market access. • Acquisition of innovative practices through private and public-private sector initiatives. • Increased agricultural productivity	rehabilitation. • Increased opportunity to enhance food production as part of plantation development / forest rehabilitation. • Increased access to and participation in REDD+ ventures that provide income, market access.	• Potential forhealthy forests to promote, maintain micro-climate. • Healthy forests help to moderate climate.
Project 3: Climate Smart Agriculture and Watershed Protection	• Increases in productivity and management rights benefits women farmers. • Improved access to best planting materials, farm inputs, financial mechanisms.	• Reduced agricultural expansion enables conservation / protection of biodiversity. • Improved water services through watershed management. • Enhancement of biodiversity habitats on farm.	• Increased agricultural productivity. • Improved farming practices. • Reduced boundary litigation • Enhancement of local institutional structures. • Increased land use planning.	• Increased agricultural yields. • Potential for increased prices from climate friendly products. • Improved access to best planting materials, farm inputs, financial mechanisms. • Access to climate-smart benefits	• Increased carbon storage in landscape (soil, above ground biomass). • Increased soil fertility • Potential for maintenance / improved micro-climate partners. • Reduction in wildfires in rural areas.

SECTION 5: COLLABORATION BETWEEN MDBS AND WITH OTHER PARTNERS

60. The MDBs and development partners in Ghana have supported and continue tosupport a variety of initiatives in the forestry and related sectors. Some aspects are delivered through budget support mechanisms whilst others follow more traditional project operations. Examples include:

- The World Bank has supported Forest Resources Management Project (FRMP), the Natural Resources Management Project (NRMP), the Community-Based Rural Development Project (CBRDP) and the Community-Based Natural Resources Management Project.Current WB supported projects include the Land Administration Project (LAP) and Water Management Project operating in the northern savanna region.

- The Global Environment Facility (GEF) has funded over 170 small grants administered through UNDP.

- Under NREG,Development Partners (the Royal Netherlands Government,AgenceFrançais de Development, UK Department for International Development, the European Commission) and the World Bank have come together to provide an umbrella support for environmental actions within a single framework—the Coordinating Platform for the Environment. These include: the Voluntary Partnership Agreement (VPA) between the European Union and the Republic of 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 enable REDD+ implementation.

61. The implementation of FIP and other REDD+ related projects will be embedded or strongly link to this collaborative framework to avoid duplication and facilitate synergies and learning. Fig 5 is a graphical illustration of the links between the on-going environmental and natural resources initiatives. The thrust of these initiatives is to identify and address the underlying and predisposing factors of deforestation and forest degradation (NREG, VPA/FLEGT, FCPF-RPP,) leading to emission reduction and enhancements(REDD+, FIP) and the ultimate goal of managing Ghana's forests sustainably (NLBI).

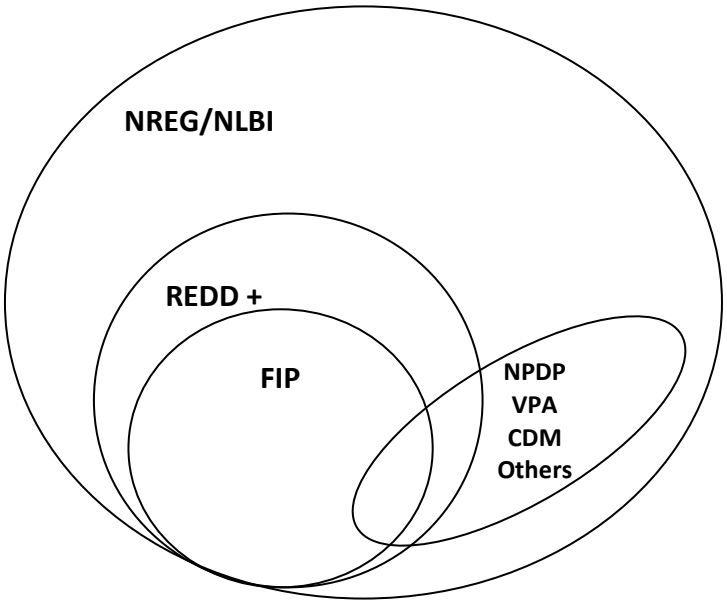


Figure 5: Linkages between FIP, REDD+, and other related initiatives

62. Table 4 summarizes on-going REDD+ related projects in Ghana, including the seven national REDD+ pilot projects selected to support implementation of the R-PP. The total amount of funding and the funding agencies are also presented in the table. With the exception of the Community Forestry Management Project (CFMP) all the listed projects are on-going and afford the opportunity for synergies with FIP. With the exception of REDD+, however, these projects have their own objectives and structures in which funding has been clearly allocated towards particular goals; therefore, these projects and programmes are unlikely to fully align with FIP's core goal of reducing emissions from deforestation and degradation.

63. The preparation of Ghana's FIP benefited from the long standing working relations of all the parties (MDBs, DPs, civil society, private sector, communities and government).The consultation process, which built off of REDD+ R-PP consultations,hastherefore been extensive and targeted in its effort to elicit views and inputs. It is our expectation that this collaboration will be carried forward to the implementation phase.

5.1 FIP AND THE PRIVATE SECTOR

64. In order to maximize the short and long term impact of FIP investments and related activities it is necessary to identify and develop explicit synergies between public and private sector valuation, and encourage leveraging of investments. This topic is perhaps too complex to go into in depth in this document so we will simply outline it conceptually and identify some examples.

65. Opportunities for private sector investment to drive and/or enhance progress towards the objectives of the FIP should be actively identified and developed. Whether it is promotion of economically profitable and ecologically valuable conservation projects such as the Wechiau Hippo Sanctuary (a CREMA); improved efficiencies in timber harvesting and processing that promote both environmental and economic returns; more effective plantation development or a host of other potential activities. There are virtually unlimited opportunities for the alignment of private sector interests with the environmental objectives outlined in the FIP report.

66. However, it should not be automatically assumed that all private sector interests align with the objectives of the FIP. This is far from the case. History has provided us with many, many examples of private sector interests that were at direct cross-purposes with environmental and eco-system sustainability. Rather, the FIP should seek to differentiate and encourage those private sector investments and private sector operators that seek to align financial returns with environmental and eco-system conservation.

67. Identifying and engaging the private sector is an important component within the FIP preparation phase. Facilitating the role of the private sector, and creating opportunities for its engagement has the potential to reduce forest pressures in the long run. The FIP will seek to do this by promoting an enabling environment which will align private financial incentives with social returns for the preservation of forests.

68. Opportunities for private sector investment are being actively explored within the FIP. The cross-sector nature of the private sector involvement in deforestation and degradation make it integral that the planned engagement be inclusive in nature. Identified opportunities for private sector engagement include: improved efficiencies in timber harvesting and processing, cook stove efficiency ventures, support to enable engagement in carbon markets, engagement in rehabilitation of degraded reserves, amongst others.

69. The AfDB with its broad Africa experience and network, and the IFC, with its extensive experience in private sector investments, will be the main collaborators on the private sector components of program. The World Bank's work will center on creating an enabling environment for private projects to thrive under by addressing the legal and institutional framework supporting the private sector.

70. Other potential include the WWF Ghana, with whom the IFC is seeking partnership with to build on their local expertise and capitalize on their Global Forest and Trade Network (GFTN).

71. Inclusion of well-structured monitoring and evaluation systems will ensure that the private sector investments are truly in line with the environmental and social objectives of the FIP.

Table 4: Summary of related projects / programmes

TITLE OF PROJECTS / PROGRAMME	OBJECTIVE	DATE OF COMMENCEMENT	EXPECTED DATE OF COMPLETION	AMOUNT (MILLIONS)	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, AgenceFrançais Development	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	USD0.5 Million	GIZ, FAO, BMZ	FCHQ
Forest Preservation Project (FPP)	To support measures towards forest conservation in Ghana by providing equipment, materials and services	2011	2012	USD 7.8 Million	JICA	FCHQ
Reducing Emission from Deforestation and Forest Degradation (REDD^{+}) Project	To assist Ghana to prepare itself for REDD+ and become ready for the implementation of the REDD+ mechanism	2010	2013	USD 3.6 Million	World Bank FCPF	FCHQ
Land Administrative Project (LAP)	Dealing with land tenure and legislative reforms in aspects of land use	2011	2014	USD 70 Million	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	$1.200,000	ITTO/UNEP	MEST
Community Forestry Management Project	Poverty Reduction and restoration of degraded forest reserves through plantations	2004	2010	$10 million	AfDB	MEST

National REDD+ Pilot Projects under R-PP	Facilitate implementation of REDD+ in Ghana using a sub-national, bottom up approach so as to facilitate learning and widespread stakeholder engagement	2011	TBD	No funding to support pilot project developmen t, but capacity building available.	FCPF	FC-CCU
Specific Details of 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 Pro-poor Agroforestry Project			Asankragwa, Western		
Portal Company Limited	Portal Agroforestry Model			AkasahoAmuni, Western		
Vicdoris Limited	Bee-keeping and Woodlot Development to Alleviate the Degradation of the Agro Ecosystem of the Dawadawa and Surrounding Areas in BrongAhafo			Kintampo, BrongAhafo		

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

6.1 FIP PROJECT RATIONALE

72. 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.

73. There are two immediate ways to reduce GHG emissions are (i) tohalt the destruction of the remaining forests (reduce emissions); (ii) to plant trees in degraded areas (enhance carbon stocks).To achieve these goals, a third element is required; ensuring livelihood benefits to individuals and local communities. To achieve this requirespolicy and institutional reforms,as well as specific on the ground actions including the securing the integrity of forests and other protected area, reducing emissions from deforestation and degradation, enhancing carbon stocks off-reserve and in degraded forests, increasing agriculture productivity, improving livelihoodsthrough financial benefits, and increasedresilience of rural communities to climate variability.

74. Table 2 (Section 1.6) summarises the analysis of the principal and underlying factors of deforestation and forest degradation , their manifestation on the forest and woodland resources,and potential actions and other ongoinginitiatives to deliver sustainable management. The analysis focused largely on the four principal causes of deforestation namely - agriculture expansion, overlogging, wildfires, fuelwood and charcoal production.

75. Boxes 1, 2 and 3 (Section 2) describes 3 potential abatement strategies that respond to these drivers, while prioritizing the essential elements for reducing GHG emissions.

76. The rational for proposing and adopting these strategies and the respective components is assessed based on factors outlined by the FIP guidelines, including scalability, serving as an example of low carbon forest development, demonstrating emissions savings, demonstrating an impact on deforestation and degradation, and providing co-benefits.This rationale is presented in Table 5. There are, however, many additional factors that will determine the actual feasibility of a project activity, including private sector interest, community engagement, landscape conditions, and implementation costs. Therefore, at this juncture it is prudent to demonstrate the rationale, but it is premature to weight one project over another.

77. Specific results indicators have yet to be defined, however, each strategy should adopt the monitoring and results methodology, which will be determined as part of Abatement Opportunity Box 1:Component 1- Research, Capacity Building and Monitoring.

Table 5: Rationale for FIP Projects

THEME	ECOLOGICAL ZONE(S)	RATIONALE
PROJECT 1: SECURING THE INTEGRITY OF NATURAL FORESTS AND WOODLAND RESOURCES		
Component 1: Research, Capacity Building, and Monitoring	All	As with the first component, these activities in and of themselves will not bring direct GHG emissions reductions, but encompasses fundamental underlying steps for all of the project components to be able to achieve impacts.
Component 2: Governance and Regulatory regimes	All	While there will be no direct emissions savings, this component focuses on creating an enabling environment for REDD+ and low carbon forest development, aspects which are fundamental to enabling the implementation and scalability of other interventions. Improving governance and regulatory regimes will also facilitate co-benefits.
Component 3: Ecological Networks and Biodiversity Conservation:	High Forest Zone	This concept helps to secure the integrity of forests, specifically through attention to maintaining biological diversity. To be successful it must address drivers and threats to the forest landscapes, and it must focus squarely on the needs and perceptions of famers and other people living in the landscape. Thus, if implemented appropriately it has the potential to reduce emissions, enhance carbon stocks and provide livelihood benefits in addition to other co-benefits. If a workable model/pilot is found, then this could be transferred to another appropriate site.
Component 4: Management of Forest Resources	High Forest	Changing the way in which forests are managed to prioritize communities, the private sector, improved benefit sharing regimes and emissions reductions (most recently) reflects a longstanding discussion between the forest sector, civil society, and communities. Therefore, there is strong institutional, technical, and social support for achieving this objective. It has wide spread scalability potential. By improving management of forests one can reduce GHG emissions and realize real impacts in terms of reducing deforestation and degradation. In addition, buy in from

		the private sector and communities will necessarily derive from new livelihood opportunities, improved benefit sharing arrangements, and other co-benefits.
PROJECT 2: ENHANCEMENT OF CARBON STOCKS		
Component 1: Rehabilitation of degraded natural forests Component 2: Plantation development	High Forest Zone	Given that over 50% of Ghana's forests reserves are degraded, these two components are crucial to improving the condition of forests and expanding plantation forests beyond reserve boundaries. This component also addresses the opportunity to integrate trees into farming system; another issue that has been the subject of substantial discussion and is therefore ripe for adoption. These activities have substantial scalable potential; can offer impressive GHG emissions benefits from carbon stock enhancement, and meet many of the co-benefit objectives (including improved livelihoods when implemented in concert with communities). Therefore, it is hard to argue against the rationale for including these activities.
Component 3: Sustainable woodfuel production	Savanna and Forest-Savanna Transition Zone	Wood fuel production is one of the principle drivers of deforestation and degradation in the transitional and savannah zones, covering a vast area of the country. Yet, it is a practice and enterprise that is almost entirely unregulated and thus remains largely informal. Therefore, there is significant opportunity to not only improve the sustainability of charcoal and wood fuel production, while bringing it in line with a desire to foster a low carbon forest sector and reductions in GHG emissions.
PROJECT3: CLIMATE SMART AGRICULTURE AND WATERSHED SERVICES		
Component 1: Promote Climate-Smart Cocoa Landscapes	High Forest	Agriculture is one of the primary drivers of deforestation in Ghana and cocoa has been the principle agricultural commodity driving this deforestation and degradation. Yet to date, the forest sector institutions and Ghana's Cocoa Board (responsible for all aspects of the cocoa industry in Ghana) have not engaged in a dialogue or planning process to acknowledge, much less address the dynamic relationship between cocoa, forests, trees and livelihoods in the HFZ landscape. Furthermore, research has shown that Ghana's cocoa sector stands to suffer from

		predicted changes in rain fall patterns and temperature. Therefore, it is imperative that in the absence of other government efforts, the FIP take the lead in initiating a dialogue and promoting action amongst other government agencies, communities and cocoa sector stakeholders so as to foster a more sustainable, climate smart cocoa farming landscape that can bring significant climate benefits as well as livelihood benefits.landscape that can bring significant climate benefits as well as livelihood benefits.
Component 2: Promote Climate-Smart Agriculture (food crops)	High Forest Transition, and Savanna Zones	The rationale for climate smart agriculture is similar to that of cocoa; agricultural expansion and farming practices have played a major role in forest degradation and deforestation in Ghana. At the same time, there is expanding international consensus that some agricultural practices and farming systems can significantly increase conservation or storage of above ground and below ground biomass. If implemented in conjunction information, technology, and financial resources, there is significant opportunity to produce both climate and livelihood benefits, including poverty reduction, gender impacts, and enhanced resilience to climate change.
Component 3: Promote Watershed Services	High Forest Transition, and Savanna Zones	As Ghana's population increases and demand for water resources grows, challenges surrounding water quality and quantity are likely to increase. Forest play a crucial role in maintaining a sustainable supply of water for urban (and rural) populations, and yet the condition of forests in Ghana is deteriorating. FIP funding provides a prime opportunity to explore potential incentive mechanisms, commonly known as payments for watershed services (PWS), to support upstream communities and leaders in their efforts to ensure a sustainable supply of water. In doing so, significant climate and livelihood benefits are also likely to ensue.

6.2 PROJECT CHOICES

81. Combining the assessment of the underlying and immediate drivers of deforestation (Section1), with the evaluation of opportunities for greenhouse gas abatement (Section2), recognizing the challenges posed by weak policy and regulatory framework (Section3), and the criteria for FIP support (Rationale) as detailed in Annex II of the FIP Design Document three major project interventions, with a series of supporting components are proposedin Table 6. Further project details are provided in Annex 1 of this document.

Table 6: Projects and priority activities for FIP

THEME	ECOLOGICAL ZONE(S)	PRIORITY ACTIONS	Stakeholders /Beneficiaries
PROJECT 1: SECURING THE INTEGRITY OF NATURALFOREST AND WOODLAND RESOURCES			
Component 1: Research, Capacity Building, and Monitoring		This overarching component will apply to all three projects and ensure that adequate baseline information, dissemination of information, key principles, and understanding are built, and impacts and results are monitored and assed. • Establish technical and science based committee to oversee project planning, data collection, monitoring and evaluation of results/impacts, and information dissemination • Support to operationalize MRV/ Forest Monitoring system, including setting baselines and mapping existing land use.	• FORIG, RMSC, other partners
Component 2: Governance and Regulatory Regimes	ALL	• Develop legislation to back new F&WP with particular aim to clarify carbon rights, carbon benefit sharing arrangements, tree tenure, and associated tax regulations, and ensure compatibility with realizing results from climate mitigation projects • Implement a policy pilot to test tenure and carbon rights for REDD+, including the introduction of strong incentive mechanisms for farmers to retain existing trees and plant new ones. • Build capacity and expand law enforcement units (LEUs) at the Forest Services Division (FSD) to work in collaboration with communities to prevent Illegal timber harvesting and chainsaw lumber production. • Test community-based forest monitoring (biomass, illegal activities) and enforcement of forest laws	• Farmers, Local communities, TA / Stools-Skins, MLNR, FC, FORIG, Lands Commission
Component 3:	High Forest	• Establish ecological networks to link fragmented forests. Corridor created	• MLNR, FC, Local

Ecological Networks and Biodiversity Conservation	Zone	through establishment of CREMAs or linking with existing CREMAs, with attention to places where REDD+ pilots are already being implemented as well as GSBAs so that appropriate synergies are leveraged.	Communities, TA / Stools-Skins, FORIG, MEST
Component 4: Management of Forest Resources	High Forest Zone	• Pilot Forest Reserve management for climate benefits, e.g. establish REDD+ Reserve(s). • Test options for co-management to minimize encroachment of Forest Reserves and minimize conflict over "admitted" farms and communities. • Support community networks for wildfire management.	• MLNR, FC, MEST, FORIG, Local Communities
PROJECT 2: ENHANCEMENT OF CARBON STOCKS			
Component 1: Rehabilitation of Degraded Natural Forests	High Forest Zone	• Create an enabling environment for enrichment planting in degraded compartments of forest reserves, in collaboration with communities and/or private sector to produce GHG benefits. • Create an enabling environmentfor enrichment planting in off-reserve areas, in collaboration with communities and/or private sector to rehabilitate forests and degraded lands to produce GHG benefits.	• FC, TA/Stools-Skins, Local Communities, Private Sector
Component 2: Plantation Development	High Forest and Transition Zone	• Create enabling environment for result based plantation development and management in off-reserve areas (private and public private partnership) to produce GHG benefits.	• Private Sector, FC, FORIG, MEST, TA/Stools-Skins, Local Communities
Component 3: Sustainable Woodfuel Production	Savanna and Transition Zone	• Support options for increased efficiency in charcoal production • Support sustainable fuelwood harvesting and fuelwood production systems to produce emissions reductions/removals and other benefits, (potentially including investment in woodlots, establishment/engagement with CREMAs, charcoaler "guilds" and community land use and natural resource planning). • Leverage co-financing and private sector investment inwoodfuel plantations.	• Private Sector, District Assemblies, TA/Stools-Skins, Local Communities, FC, MOFA Unified Extension System
PROJECT 3: CLIMATE SMART AGRICULTURE AND WATERSHED SERVICES			
Component 1: Promote	High Forest	• Support initiatives thatproduce GHG benefits by reducing conversion of natural	• FORIG, MEST, MOFA,

Climate Smart Cocoa Landscapes		forest to cocoa farms, reducing loss of trees in cocoa farm replanting/rehabilitation practices, and/or increasing tree cover into cocoa landscape. • Promote private sector involvement in climate-smart cocoa farming. • Facilitate and link increases in productivity to land use planning, limits on "expansion", and measurable climate impacts. • Support innovations in the sector that increase availability and accessibility of inputs and financial/risk reduction resources to farmers.	MLNR, FC, Private Sector, Civil Society, TA/Stools-Skins, Local Communities,Cocobod, CRIG
Component 2: Promote Climate-Smart Agriculture (food crops)	Forest and Savanna Zones	• Support integration of trees/agroforestry practices (NTFPs, nitrogen fixing) into agricultural landscapes that provide GHG benefits. • Support increasesin productivity from improved varieties, access to inputs, and information. • Support introduction of practices that cause measurable conservation/sequestration of soil carbon stocks. • Work with SADA and other partnersto promote trees in agricultural systems in the savannah zone for climate and socio-economic benefits. • Support community land use planning to reduce conversion of forest to agriculture.	• MOFA, FORIG, MEST, MLNR, SADA, WFP, FC, Private Sector, Civil Society
Component 3: Promote Watershed Services	Forest and Transition Zone	• Design and pilotan innovative system to incentivise communities to protect or rehabilitate watersheds to furnish a sustainable and clean supply of water in addition to other ecosystem services and climate benefits.	• MEST, EPA and FORIG, WRC, GWCL

6.3 TRANSFORMATIONAL CHANGES

The following transformational changes of the forestry sector are expected under the FIP:

82. **Prioritization given to understanding lessons learned from previous projects and programs and transparent measurement/monitoring of impacts:** The first component of Project 1 establishes a committee of experts with a mandate to conduct research, build capacity, and monitoring impacts, including GHG emissions removals and reductions; something that has been systematically absent during previous eras of forest sector and environmental reform.

83. **Reduction in illegal logging and chainsaw lumbering**: Illegal logging and chainsaw lumbering is estimated at 2.6 million m^3 or 64% of total timber removals. Actions required to bring transformational change are (i) reform of management structures and law enforcement to support effective log tracking and Legal Assurance Scheme (in conjunction with other programs) (ii) community base approaches in resource management and protection, (iii) private sector management of forest reserves, and (iv) implementation of REDD+ reserves.

84. **Reform of tenure and carbon rights:** Actions required to bring transformational change are (i) development of legislation to support implementation of the new FWP in line with REDD+, (ii) foster consensus with the major stakeholders (Traditional Authorities, Civil Society groups, local communities and Public sector institutions) on tree tenure and carbon rights, and (iii) test out policy and legislative reforms through policy pilots.

85. **Broadening of CREMA concept:** The transformational actions are two-fold, expansion of the use of CREMAs for biodiversity conservation, and it's adaptation to include REDD+ management goals that foster climate and other innovative PES benefits for communities, land users, and land use decision makers. Thus, enabling transformative co-management opportunities and scenarios that meet multiple objectives.

86. **Increasesin forest rehabilitation efforts and expansion of plantation areas:** Actions required to bring transformational change are (i) enabling environment for rehabilitation of degraded forest reserves in collaboration with communities or through public-private partnerships; (ii) enabling environment for private sector-led participation in commercial plantation development, (iii)increasing funding and opportunities forpublic-private-community partnerships in to enhance carbon stocks.

87. **Prioritization of sustainable woodfuel production(fire wood and charcoal):** Actions required to bring transformational change are (i) Cleaner and reduced emissions energy sources, (ii) formalization/community management of firewood extraction and charcoal production (iii) increased access to energy through woodfuel plantations.

88. **Introduction of climate smart agriculture and other PES mechanisms**: Actions required to foster transformational change are (i) fostering yield increasing, but linking these

increases in productivity to land use planning and community resource management mechanisms that produce measurable climate benefits, (ii) purposefully addressing the relationship between the cocoa/food crop expansion and deforestation and degradationthrough multi-agency dialogue and planning, (iii) introducing innovative incentive mechanisms to support management of forest landscapes for watershed services and associated climate and livelihood benefits.

6.4 ELEMENTSFOR ALL FIP PROJECTS

88. Based on the issues that underlie the decline of Ghana's forests it is appropriate that all supported projects involve some key elements or themes:

i) Governance: Because of inadequate governance arrangements and practices, decisions on forest allocation and use have favoured the few and left the many in neighbouring poverty. To address this, transparency has to be enhanced so that all stakeholders have access to appropriate information in a timely manner, whether at a national, regional, district or community level.Significant decisions, especially allocation of resources, must be advertised before becoming final, and officials must be accountable for final decisions. As one example, this is essential for any contracts issued under FIP supported projects.

ii) Political support: Of prime importance is the need to seek and obtain high level effective political support at both national, district and traditional levels for actions such as law enforcement and effective change.

iii) Community and stakeholder involvement: All relevant stakeholders must be included in planning and decision making. Field based pilot projects need grounding on real life experience in communities and districts. Community involvement has to be at the heart of any developments considered for FIP support.

iv) Benefit sharing: This has to be considered in all FIP supported projects so that meaningful incentives are provided to those who can control tree retention and use.

v) Rural poverty: Limited opportunities to enhance livelihoods also underpin the options people have over whether they take part in illegal forest activities, or not. Support for legal, adequate livelihood choices through finance, technical support, marketing, transport, or other logistical means needs to be considered.

vi) Capacity building; Capacity building should be embedded in all FIP projects. Community capacity building should aim at strengthening skills and abilities of fringe communities to overcome the cause of their exclusion from resource management. Institutional capacity should go beyond training and restructuring of FC 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.

89 Knowledge Management, Monitoring and Evaluation:Generally limited knowledge on the extent, impacts, costs of forest degradation and economic benefits of SFM limit comprehensive approach to the problem. REDD+ is a relatively new concept. Its implementation success would depend to a large extent on how relevant information and experiences are documented, managed and shared. Lessons from FIP implementation on a number of key elements of REDD+ such as cross sectoral coordination and stakeholder participation, how to manage incentive programs at national and local level, governance, carbon rights and benefit sharingare important information that could be helpful in REDD+ strategy development and implementation in Ghana.FIP willtherefore support investment in public access platform and tools for improved access to information/data. The learning from Ghana FIP of what works and what does not work could catalyse change in FIP pilot and non-pilot countries.

SECTION 7: IMPLEMENTATION POTENTIAL AND RISKS

7.1 IMPLEMENTATION POTENTIAL & CAPACITY

91 Ghana is implementing a number of initiatives linked to environmental governance of the natural resources sector. If coordination across the different initiatives fails, the value added from the FCPF and FIP may become limited. Hence, it is critical to have an effective coordinating body to oversee the different initiatives and maintain dialogue with international partners at all stages of the processes. It will be equally important that the on-going stakeholder consultation process is conducted in a coordinated manner using existing platforms.

92 The Environment and Natural Resources Advisory Council (ENRAC) has been 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 FIP TCC^{+}, which is an expanded NREG Technical Coordinating Committee, which is also responsible for the coordination of FCPF REDD+. EU-VPA/FLEGT and UNFF-NLBI. It is anticipated that specific technical working groups will be set up as the FIP program rolls out. The lead executing agencies for the prioritised projects will identify and invite collaborators for project formulation,planning and implementation. An M&E system will be rationalized to clarify design,track progress and take corrective measures as appropriate. Inception workshopsare planned for each of the investment projects to discuss the project's technical as well as managerial tasks and clarify the pathways of each project for all project personnel.

93 All of the projects described in this document, including sub-components, represent initiatives that have either started (very early stages) on small scales or are being planned. Therefore, whether within the Government itself, the private sector, or civil society organizations, much capacity (or emerging capacity) does exist. However, recognizing that some capacity gaps are likely, the project prepatory grants aim to identify critical gaps and outline potential pathways for filling these gaps.

94 More specifically, many of the projects rely upon cross-cutting capacity. For example, there is significant experience in implementing and working with CREMAs, and these will be cruical mechanisms for building biodiversity corridors, engaging communities on forest management issues, and ensuring economic returns (poverty reduction) to local people. There is a rich history of plantation development and engagement with communities, and more importantly key examples of successful efforts that demonstrate that capacity does exist. Climate smart agriculture and cocoa initiatives are being thoroughly discussed and moving towards pilots, highlight that while capacity transfer/expansion may be required, capacity does exist. Finally, REDD+ is a new concept in Ghana (although it should be noted that Ghana is advanced compared to many African countries) and therefore the REDD+ readiness process is structured to

build capacity and enable implementation. Thus, this capacity will also benefit the FIP's as it is aligned with the REDD+ strategy.

7.2 RISK ASSESSMENT

95 The underlying drivers of deforestation and forest degradation are well known, were thoroughly identified during the R-PP process, and have been present for many years. Projects providing financial resources and technical assistance alone are unlikely to have a transformational impact. The political will and support to transform land use by addressing some of these long standing issues needs to be both encouraged and supported.

96 The development of an oil industry in Ghana may provide a number of opportunities to address some of the risk posed by a FIP supported plan. The need for foreign currency derived from the export of forest products may be reduced; the development of cheap alternatives to charcoal use may be possible at least for some urban users.

97 The resistance to change on some issues, particularly within government, may be significant and the complexities of change may prove too difficult for large and small project alike. Gaps and weaknesses in policy and regulatory framework are being addressed through specific measures and legislation, but it is recognised that good policies and laws are not enough. They can be ignored, subverted, or avoided.

7.3 STRATEGIC ENVIRONMENTAL AND SOCIAL ASSESSMENT (SESA)

98 Section 2d of Ghana's R-PP describes the planned process to assess the likely impacts of Ghana's REDD+ activities. Over half the budget for this action ($177,000 over four years) is budgeted for against FCPF funding with 15% funded by Government of Ghana, leaving around one third to be funded elsewhere. As long as timing of funding availability is practical it is considered useful if assessment of potential environmental and social impacts for FIP supported activities is undertaken in full coordination with any similar activity funded by the FCPF for REDD+ readiness. It is assumed that Strategic Environment Assessment1 (SEA) procedures of Ghana's Environmental Protection Agency (EPA) as well as SESAs for the respective MDBs will also need to be complied during the design process for the individual projects.

99 All FIP projects will identify likely social and environmental impacts (negative and positive), assess additional benefits (biodiversity conservation, poverty reduction etc) to inform REDD+ implementation,and avoid or mitigate negative social and environmental impacts while encouraging positive ones. FIP projects will start with assessment of baseline/reference scenario, as supported by the Research, Capacity Building, and Monitoring Committee. A monitoring framework will be designed for carrying out monitoring and process system review and verification.

SECTION 8: FINANCING PLAN AND INSTRUMENTS

100 All tables and numbers in the Financing Plan and in Annex 1 are currently under discussion, pending further research and discussions within the Government of Ghana, the MDBs, and with other partners and stakeholders.

Table 7: Ghana FIP Financing in USD (million)

Projects	**FIP Finance**			**Co-Finance**					
	GR	**CF**	**CL**	**NREG**	**IFC/ Private Sector**	**GIZ**	**FCPF**	**FPP**	**TOTAL**
Securing the integrity of forest and woodland resources									
Component 1: Research, capacity building and monitoring	2.0			0.5		0.71		7.80	11.01
Component 2: Governance and regulatory reforms	2.5			5.0					7.5
Component 3: Ecological networks and biodiversity conservation	7.50			1.5					9.0
Component 4: Sustainable management of forest reserves	8.00			3.0					11.0
SUB-TOTAL	**20.00**			**10.00**		**0.71**		**7.8**	**38.51**
Enhancing Carbon Stocks									
Component 1: Rehabilitation of degraded forest reserves	6.00	2.5			TBD				8.5 (TBD)
Component 2: Plantation development off-reserve	2.0	3.0			TBD				5.0 (TBD)
Component 3: Sustainable woodfuel production	2.0								2.0

SUB-TOTAL	**10.00**	**5.5**			**10.0**				**25.5**
Climate Smart Agriculture and Watershed Services									
Component 1: Climate smart cocoa	5.0	2.0			TBD				7.0 (TBD)
Component 2: Climate smart agriculture	3.0	1.0			TBD				4.0 (TBD)
Component 3: Watershed services	3.5								3.5
SUB-TOTAL	**11.5**	**3.0**			**7.0**				**21.5**
PROGRAMME TOTAL	**41.5**	**8.5**		**10.0**	**17.0**	**0.71**		**7.8**	**85.51**

ANNEX 1- FIP PROJECTS

PROJECT 1: SECURING THE INTEGRITY OF NATURAL FORESTS AND WOODLAND RESOURCES

MDB and lead Government Agencies

The Ministry of Lands and Natural Resources (MLNR) will be the executing agency for this project. MLNR has responsibility for policy, legislation formulation, and monitoring and evaluation for the forestry and natural resources sectors. The Ministry has a core team of technical staff and is responsible for the implementation of the Forest Investment Programme (FIP). MLNR would be supported in the implementation of this project by (i) the Ministry of Environment, Science and Technology (MEST), which has the broad mandate for developing climate change mitigation and adaptation policy actions in the country; (ii) the Ministry of Finance and Economic Planning (MoFEP), which has the responsibility of coordination of donor support in the country; (iii) the Forestry Commission (FC), which is the implementation and executive arm of MLNR responsible for setting regulation, control and management of forest resources and home to Ghana's REDD+ Secretariat; and (iv) Forestry Research Institute of Ghana (FORIG), which is mandated to undertake forestry research and criteria setting and monitor plantation development on forest reserve lands.

It is significant and transformative that these Ministries, Departments and Agencies (MDAs) have come together and jointly set the agenda for the FIP. The harmonized MDAs have experience working together in the implementation of the on-going Multi-Donor Budgetary Supported (MDBS) Natural Resources and Environment Governance (NREG) Programme. Currently, the environmental and natural resources sectors in Ghana are supported by an Environment and Natural Resources Sector Group, led by the Netherlands Government and including the World Bank (WB), Africa Development Bank (AfDB), U.K Government, German Government and European Union. It is expected that for the implementation of the FIP the existing ENR Sector Group will be expanded to include new donors to the REDD+ R-PP, including Switzerland, Japan, United States of America and the International Finance Corporation (IFC).

The Forest Investment Project Unit (FIPU), the secretariat of the project, will be located at MLNR and the FIPU's head will be the Technical Director (TD) of MLNR. Overall, the FIP will receive support from the WB, AfDB and the IFC. This project (Project 1) will specifically receive support from the WB.

Problem statement

Ghana's total forest cover, which stood at 8.2 million hectares (i.e., 34% of the total land area) at the turn of the last century, is now less than 1.6 million hectares and has suffered from an estimated annual

deforestation rate of 2.0%. Some of the most important factors that have contributed to deforestation and forest degradation include: 1) weak institutional capacity of the FC to ensure sustainable management of the nation's forest, resulting in increased illegal logging (including chain sawing) and conversion to other land use; 2) weak inter-sectorial coordination in the planning of appropriate integrated land uses; 3) inequitable distribution of the revenue that accrue from the harvesting of the forests resources, leaving farmers, forest users, and Traditional Authorities (in many cases the *de facto* managers of the resource) few incentives to prioritize conservation or sustainable management objectives; 4) small and fragmented forest reserves; 5) infrastructure developments such as road construction within forest areas, which also contribute to deforestation by opening up the forest for further encroachments; 6) the spread of wildfires, many of which are set deliberately, causing an annual damage of 3% of GDP.

Due to such intense pressure and lack of management capacity, Ghana's forest resources are not in a good condition, particularly in terms of biodiversity, and are likely to come under even greater stress in the next fifty years from predicted changes to the West African climate. This could have severe social and development knock-on effects. However, speaking to the *actual* state of forests in the country is challenging as there is a paucity of current, scientifically sound information. With the exception of the Biomass Map of Ghana, available data is severely lacking on social, biophysical and ecological conditions and trends, and this may be one of the major bottlenecks impeding appropriate action.

One could also argue that Ghana's inability to address these drivers stems from a failure to promote a sector-wide learning process. Over the years, many projects and programs[1] have attempted to improve the condition of Ghana's forest resources and foster a more sustainable and equitable management system. Impacts have varied, but little effort has been placed on capturing lessons learned and applying them to the next phase of funding, planning and implementation. In addition, there is a paucity of data from which to inform decision making. As a result, planning is often driven by assumptions and simplifications, as opposed to more detailed understanding of the conditions and relationships.

Proposed transformational impact and co-benefits

For this project to be successful it must be transformational as all of the components represent major shifts in thinking and operation. From the beginning, the project focuses on collating lessons learned and putting in place a structure for research, monitoring and evaluation, and capacity building. It

[1]Forest Resource Management Project (FRMP), Natural Resource Management Project 1 (NRMP1), NRMP2, NREG, GEF projects, Flegt, VPA, NLBI, Modified Taungya System, Government Forestry Planation Development Project, Community Forestry Management Project, Participatory Forest Management Project, FORUM Project, Private Sector Plantation Development, Wildfire Management Project

squarely focuses on enabling a major policy shift in the governance and regulatory framework for forests and natural resource management, including policy pilots (an entirely new concept in Ghana) and significant changes (technical and human resource) in forest monitoring and law enforcement capacity. Ecological corridors in and of themselves could drastically transform the bio-social nature of landscapes, and enabling new management arrangements (public-private-community) and management goals (climate mitigation) constitute huge shifts away from the business as usual mode of operating.

If successful, co-benefits will be significant, particularly in terms of biodiversity outcomes (ecological networks and corridors), livelihood and development benefits to forest populations (testing out new policies, rights regimes, management responsibilities, and benefit sharing options), and provision of other ecosystem services.

Implementation readiness

Project 1 (Securing the Integrity of Natural Forests and Woodland Resources) will receive implementation support from the WB in the requested amount of US$ 20 million, with the potential for US$ 18.51 million (estimated) in co-financing from the government.

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.

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 who will be responsible for actual implementation and day to day functioning of project planning and implementation.

Rationale for FIP financing

Perhaps the most important component, out of all three projects, will be the effort to integrate research, monitoring and capacity building into the FIP. **Component 1**is therefore a cross-cutting component that will apply to all three projects and will focus on: 1) disseminating major lessons learned from previous projects and programmes so as to inform more detailed project planning and decision making; 2) ensuring that baseline information is brought together or developed for all three projects; 3) supporting the operationalization of an MRV/Forest Monitoring system in line with current REDD+ plans to enable development of a national emission reference scenario and carbon accounting; 4) setting up a committee and system for monitoring results and assessing impacts of interventions; and 5) disseminating information throughout the project life cycle to expand understanding and build capacity.

Component 2focuses on governance and regulatory regimes in support of REDD+ processes. Government aims under this component to secure existing forest and other natural resource endowments by focussing more directly on issues of governance - which critically determine how (and in whose interests) forests are managed and utilised. In order to achieve this policy objective, the Government will:1) develop legislation to back the new F&WP with the particular aim of clarifying carbon rights, carbon benefit sharing arrangements, and tree tenure; 2)implement policy pilot(s) 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; 3) build capacity and expand law enforcement units at the Forest Services Division to prevent illegal timber harvesting and chainsaw lumber production; 4) in tandem with the above expansion of FSD, the project will test community forest monitoring systems, based on an incentive mechanism, as a means to work more closely with local land owners and resource users to understand forest dynamics (biomass, forest condition, biodiversity) and to monitor and report on illegal activities.

Component 3 will hope to establish an ecological network to support biodiversity conservation within a fragmented forest landscape.This component will initiate a pilot program which hopes to rectify the current system of small fragmented forest reserves by creating corridors to link two or more forest reserves. It is assumed that a pilot ecological corridor can provide a network for maintaining long-term viable populations of key species that depends upon maintaining natural processes such as migration, species movements, and genetic exchanges. These networks will be established and managed using the Community Resources Management Area (CREMA) model in a way that ensures sustainable equitable benefit flow to key stakeholders.One of the major challenges of this component, which will require considerable study and meaningful engagement with communities, is how to manage land tenure, livelihood priorities, and the effects of large mammal migrations. It has been suggested that ecological networks would be piloted between a Bia – Ankasa – Nzulenzu corridor or betweenaKakum - Ankasa Corridor. Actual selection (location and scale) should result from a comprehensive assessment and

multi-stakeholder decision making process as these lands belong to the traditional authorities and land users have the right to manage non-reserved land for agricultural objectives or otherwise.

Component 4 will ensure sustainable management of forest reserves. Continuous dependence and over-exploitation of forests has contributed to resource depletion. The cost of environmental degradation to GDP represents one-third of Ghana's US$1.5 billion annual Overseas Development Assistance (ODA). The concern of many stakeholders is that the forest estate has dwindled over the years because Government is not well placed to manage natural resources, including forests, and that management aims almost solely focused on timber production. Thus the question has been raised whether the private sector or traditional authorities and communities, not public sector agencies, are better placed to manage forests and other natural resources. The role of public sector agencies could therefore be to create the conditions and policies necessary for others to manage forests, towards multiple objectives, in the national interest and regulate their actions. This component will benefit from a study (supported by a project preparation grant) of the feasibility of alternate management arrangements of forest reserves, including private sector management, public-private sector initiatives, and private sector-community collaborations and an assessment of the capacity and effectiveness of the current forest management system to furnish mitigation and adaptation benefits. Based on this information it will focus on; 1) piloting the management of forest reserves for climate and biodiversity goals (e.g. REDD+ Reserves); 2) testing options for co-management with communities (and private sector) to minimize encroachment and resolve conflicts over admitted farms (Krokrosua Hills, Sui, and TanoOffin represent possible reserves); 3) supporting community networks for wildfire management.

Safeguards

The REDD+ R-PP is subject to a Strategic Social and Environmental Assessment (SESA) using country systems. There is opportunity to use that same assessment as the framework for the FIP Investment Strategy. The R-PP SESA is presently at TOR stage and FIP will rely on the approach for strategic social and environmental assessments adopted for REDD+ as part of the FCPF process. The analytical work for assessment of potential social and environmental risks of the REDD+ strategy, and the Environmental and Social Management Framework (ESMF) that would be prepared by the Government to screen REDD+ projects and mitigate these risks are valuable frameworks for investment projects that may be supported by FIP.

The environmental and social safeguards will be monitored at all stages of the project cycle. The main objective is to ensure that activities funded are consistent with national policies and guidelines as well as with World Bank's environmental and social safeguard policies. The safeguard measures will be integrated from the project's design phase to prevent, reduce and mitigate the potential harm to environment and people.

Financing plan

Annex 1, Table 1: FIP Financing in USD (million) for Project 1

	FIP Finance Source: WB			Co-Finance					
COMPONENTS	**GR**	**CF**	**CL**	**NREG***	**IFC/PS***	**GIZ**	**FCPF**	**FPP**	**TOTAL**
Component 1: Research, capacity building and monitoring	2.0			0.5		0.71		7.8	**11.01**
Component 2: Governance and regulatory reforms	2.5			5.0					**7.5**
Component 3: Ecological networks and biodiversity conservation	7.5			1.5					**9.0**
Component 4: Sustainable management of forest reserves	8.0			3.0					**11.0**
TOTAL	**20.0**			**10.0**		**0.71**		**7.8**	**38.51**

*NREG amounts are provisional

Project preparation timetable

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

Annex 1, Table 2: Project 1 Preparation Timetable

MILESTONE	**TENTATIVE TIME FRAME**
Start of Project 1 preparation study (under requested preparation grant)	September 2012
Completion of Project 1 preparation study (under preparation grant)	August 2013
Begin concept development of Component 1- Research, Capacity Building and Monitoring (RCBM).	September 2013
Review of concept development of Component 1 (RCBM)	November 2013
Completion of final scope of work for Component 1 (RCBM) committee	December 2013
Launch Research, Capacity Building and Monitoring (Component 1) committee to support and inform project development for Components 2-4.	December 2013
With support of RCBM Committee, begin concept development of Components 2-Governance and Regulatory Regimes (GRR), Component 3-Ecological Networks and Biodiversity Conservation (ENBC) and Component 4- Management of Forest Resrouces (MFR), including site selection, stakeholder identification, implementation strategy, detailed budget, and monitoring and impact assessment plan.	January 2014
Review of Components 2 (GRR), 3 (ENBC), and 4 (MFR) concepts.	July 2014

Finalize implementation plans for Components 2 (GRR), 3 (ENBC), and 4 (MFR).	September 2014
Begin implementation of Components 2 (GRR), 3 (ENBC), and 4 (MFR).	November 2014

Request for project preparation grant

Annex 1, Table 3: Overview of Project 1 Preparation Grant

Grant Objective and Activities	
Ghana is requesting a preparation grant for Project 1 to finance a study to lay the groundwork for project planning and implementation of the various components. This study will focus on compiling lessons learned from previous forest sector initiatives, studying the existing policy and governance frameworks for their compatibility with REDD+, and assessing capacity, existing gaps, and means to fill them in order to implementing the project. More specifically the study will aim to: • Compile lessons learned from previous projects and programs within the forestry and environment sectors to inform FIP project planning. • Assess the compatibility of existing FWP laws and regulations for successful REDD+ implementation and identify critical actions or next steps, pinpoint linkages with other programs. • Weigh the effectiveness of the current forest management system for producing mitigation and adaptation benefits, including analysis of capacity, capacity gaps, and efficient modes to fill gaps. • Conduct a feasibility assessment (economic, technical capacity, socio-cultural, GHG benefits) of the co-management/public-private sector partnerships potential for managing forest reserves. • Identify 2-3 potential pilot sites for establishing Policy Pilots (Component 2), Ecological Networks/Corridors (Component 3) and Forest Reserves to be managed for REDD+ benefits (Component 4), from which a selection process can occur as part of project planning and implementation. Site selection should look at opportunities for site overlap so as to maximize resources.	
Outputs	
Deliverables	**Timeline (tentative)**
Detailed work plans	September 2012
Draft findings	April 2013
Validation of study results	May 2013
Final study	August 2013
Budget (indicative)	
Expenditures	**Amount (USD) - estimates**
Consultants	$150,000
Cost of field visits	$25,000
Workshops/Consultation/Disseminations	$50,000
Contingencies (max. 10%)	$22,500
Total Cost	**$247,500**

PROJECT 2: ENHANCEMENT OF CARBON STOCKS

MDB and lead Government Agencies

The Ministry of Lands and Natural Resources (MLNR) will be the executing agency for this project. MLNR has responsibility for policy, legislation formulation, and monitoring and evaluation for the forestry and natural resources sectors. The Ministry has a core team of technical staff and is responsible for the implementation of the Forest Investment Programme (FIP). MLNR would be supported in the implementation of this project by (i) the Ministry of Environment, Science and Technology (MEST), which has the broad mandate for developing climate change mitigation and adaptation policy actions in the country; (ii) the Ministry of Finance and Economic Planning (MoFEP), which has the responsibility of coordination of donor support in the country; (iii) the Forestry Commission (FC), which is the implementation and executive arm of MLNR responsible for setting regulation, control and management of forest resources and home to Ghana's REDD+ Secretariat; and (iv) Forestry Research Institute of Ghana (FORIG), which is mandated to undertake forestry research and criteria setting and monitor plantation development on forest reserve lands.

It is significant and transformative that these Ministries, Departments and Agencies (MDAs) have come together and jointly set the agenda for the FIP. The harmonized MDAs have experience working together in the implementation of the on-going Multi-Donor Budgetary Supported (MDBS) Natural Resources and Environment Governance (NREG) Programme. Currently, the environmental and natural resources sectors in Ghana are supported by an Environment and Natural Resources Sector Group, led by the Netherlands Government and including the World Bank (WB), Africa Development Bank (AfDB), U.K Government, German Government and European Union. It is expected that for the implementation of the FIP the existing ENR Sector Group will be expanded to include new donors to the REDD+ R-PP, including Switzerland, Japan, United States of America and the International Finance Corporation (IFC).

The Forest Investment Project Unit (FIPU), the secretariat of the project, will be located at MLNR and the FIPU's head will be the Technical Director (TD) of MLNR. Overall, the FIP will receive support from the WB, AfDB and the IFC. This project (Project 2) will specifically receive support from the WB and from the IFC.

Problem statement

At least 50% of the forest reserves and 70% of the forest outside the reserves are in a state of degradation based on sampling conducted over fifteen years ago. Forest Degradation is considered to

be a greater issue than deforestation in Ghana although the relative importance of the two will depend in part of their respective definitions, and it remains a significant challenge to efficiently and accurately monitorforest degradation, particularly at scales as different rates of degradation are likely to occur within the complex landscape mosaic of agricultural systems, fallow lands and forestlands. For example, the northern and coastal savannah areas showed the lowest biomass stocks and more fragile ecosystem, as compared to the tropical high forest zone.

Until the mid-1990s Ghana was considered to be a *net sink* for greenhouse gases, due to high levels of carbon sequestration in the Land-Use, Land-Use Change and Forestry (LULUCF) sector. Yet between 1990 and 2000, net greenhouse gas removals decreased by c.96% (from -26.1 Mt CO_2-eq to -1.04 Mt CO_2-eq). This may be due among other reasons to high timber exploitation rates, which exceeds the sustainable annual allowable cut by about four fold, population growth, high dependence on forest resources for livelihoods, perverse policy and market instruments, poor institutional capacities, poor governance, lack of transparency, tenure constraints and poor resource management. Furthermore, the level of benefits accruing to rural people from the exploitation and utilisation of lands and forestry resources is not adequate to guarantee the investment of their time and energy to conserve and manage the resource. Ghana needs to focus on enhancing carbon stocks and rehabilitating its degraded forest landscapes if it hopes to increase its emissions reduction potential from the LULUCF sector.

Government strategy therefore recognises that any interventions to enhance carbon stocks would necessarily have to focus on the involvement of rural communities, whose existence depends largely on access to, abundance and use of these resources, and the private sector, who have much to offer the sector in terms of being able to produce innovative and tangible results. Associated strategic interventions include the (i) rehabilitation of degraded forest reserves and off-reserve areas, (ii) promotion of private and public-private partnership plantation development schemes (iii) sustainable woodfuel production.

Proposed transformational impact and co-benefits

One of the major co-benefits of the project is the achievement of sustainability over the longer term and maximization of the social net benefits for the Ghanaian society. A key transformational impact will be the development of effective management capacity, stakeholder collaboration, equity, and sustainability. Another transformational impact will be institutional capacity building, including changes to negative stakeholder attitudes and practices which increase greenhouse gas emission. In particular, community efforts to mitigate climate change effects would be encouraged. The benefit sharing system will also be strengthened to ensure sustainability.

Current work by specialized forest institutions seem to focus on sharpening instruments for implementation of current regulations, overlooking the fact that existing regulations do not adequately reflect stated participatory management policies and benefit sharing arrangements and leave communities with very little control and negotiating power. Enhancing the rights of people to have

access to natural resources for maintaining a basic standard of living and their concomitant responsibility to ensure the sustainable use of such resources will thus be an important co-benefit of the project.

Implementation readiness

Project 2 (Enhancing Carbon Stocks) will receive implementation support from the WB (proposed US$ 10 million), the IFC (proposed loans of US$ 5.5 million), and co-financing from the IFC/Private Sector (proposed amount of US$ 10 million)to make atotal budgeted amount of US$ 25.5 million.

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.

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 who will be responsible for actual implementation and day to day functioning of project planning and implementation.

Rationale for FIP financing

The project has been conceived in the context of the strategic analyses of the forestry and natural resource sectors by the Government of Ghana, WB and AfDB. The actions are aimed at restoring/rehabilitating degraded forests, expanding forest carbon sinks through plantations,promoting

private sector, community-based, and/or public-private partnerships schemes, and sustainable woodfuel production.

This project will achieve its objectives through the implementation of four components. **Component 1** deals with the rehabilitation of degraded forest reserves (including GSBAs) and off-reserve forest lands to produce GHG benefits (though not excluding provision of other economic benefits and sources of revenue). Central to this project is the ability to create an enabling environment for enrichment planting in collaboration with communities and/or the private sector. Community rehabilitation schemes, including the Modified Taungya System (MTS) can be used. The involvement of local communities is important because in addition to providing climate benefits, this project can promote rural development and generate employment and additional income opportunities.

Component 2 on the other hand will focus on plantation development in off-reserve areas (private sector & communities) to achieve GHG benefits and production of timber stocks. The objective is to address the shortfall between timber demand and supply, and to enhance the country's carbon sequestration potential. This component hopes to contribute to poverty alleviation by offering diversification of farm income and wage employment. Women's groups, in particular, will be well placed to establish tree plantations.
Component 2 further hopes to promote private sector plantation development by addressing the following challenges: (i) the lack of access to large parcels of land; (ii) finance limitations; (iii) a shortage of improved seeds; (iv) weak technical advisory capacity; and (v) a lack of research to promote fast growing species for sustainable planting.

In developing an implementation mechanism to achieve the objectives of this project, Government recognises that there is a difference between Industrial Plantations which are designed to maximise profits and timber output and Non Industrial Plantations which have other functions such as the socio-economic benefits of the taungyasystem and provision of forest cover. The overall Government strategy for best practice Industrial Plantations is to create an enabling environment for investment to happen, and for GHG benefits to be produced. This applies equally to large and small-scale plantations and to both private and government plantations. This will ensure that timely and appropriate information on training, costs and returns, and technical data is obtained and made available for informed investment decision-making. The overall Government strategy for non-industrial plantations is to create an enabling environment for small growers to engage in taungya plantations both on and off-reserve; and to establish "forest cover" plantations on degraded forest reserves where industrial plantations are not viable options.

Component 3 will address issues of sustainable woodfuel production. This is important because it is estimated that 20 million m^3 of woodfuel (equivalent to 20.185 million tonnes of CO_2) are used annually in the country in the form of firewood and charcoal. Thus the project will support options to increase efficiency in charcoal production and enable sustainable harvesting and fuelwood production systems. This could potentially including woodlot establishment, engagement with CREMAs, community land use

and natural resource management planning, and establishment of charcoal guilds. In addition to producing GHG reductions and removals, these activities will enhance incomes in a region where there are few non-agriculture income opportunities. This component also aims to leverage co-financing and private sector investment in woodfuel plantations; such support could facilitate the establishment of 5,000 ha of woodfuel plantations annually over a 5-year period in both on-reserve and off-reserve areas.

Safeguards

The REDD+ R-PP is subject to a Strategic Social and Environmental Assessment (SESA) using country systems. There is opportunity to use that same assessment as the framework for the FIP Investment Strategy. The R-PP SESA is presently at TOR stage and FIP will rely on the approach for strategic social and environmental assessments adopted for REDD+ as part of the FCPF process. The analytical work for assessment of potential social and environmental risks of the REDD+ strategy, and the Environmental and Social Management Framework (ESMF) that would be prepared by the Government to screen REDD+ projects and mitigate these risks are valuable frameworks for investment projects that may be supported by FIP.

The environmental and social safeguards will be monitored at all stages of the project cycle. The main objective is to ensure that activities funded are consistent with national policies and guidelines as well as with World Bank's environmental and social safeguard policies. The safeguard measures will be integrated from the project's design phase to prevent, reduce and mitigate the potential harm to environment and people.

Financing plan

Annex 1, Table 4: FIP Financing in USD (million) for Project 2

	FIP Finance Source: WB and IFC			Co-Finance					
COMPONENTS	**GR**	**CF**	**CL**	**NREG***	**IFC/PS***	**GIZ**	**FCPF**	**FPP**	**TOTAL**
Component 1: Rehabilitation of degraded forest reserves	6.0	2.5			TBD				8.0 (TBD)
Component 2: Plantation development off-reserve	2.0	3.0			TBD				5.0 (TBD)
Component 3: Sustainable woodfuel production	2.0								2.0
TOTAL	**15.5**				**10.0**				**25.5**

*PS = Private Sector

Project preparation timetable

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

Table 5: Project 2 Preparation Timetable

MILESTONE	TENTATIVE TIME FRAME
Start of Project 2 preparation study (under preparation grant)	September 2012
Completion of Project 2 preparation study (under preparation grant)	August 2013
With support of RCBM Committee (Project 1), begin concept development of Project 2 Components 1- Rehabilitation of Degraded Natural Forests (RDNF), Component 2- Plantation Development (PD), and Component 3- Sustainable Fuelwood Production (SFP). Concept development to include site selection of priority forests, full implementation strategy (including dissemination of information to potential private sector entities and communities, sharing of baseline information and GHG emissions enhancement "calculators"), detailed budget, and monitoring and impact assessment plan.	January 2014
Review of Components 1 (RDNF), 2 (PD), and 3 (SFP) concepts.	July 2014
Finalize implementation plans for Components 1 (RDNF), 2 (PD), and 3 (SFP).	September 2014
Begin implementation of Components 1 (RDNF), 2 (PD), and 3 (SFP).	November 2014

Request for project preparation grant

Annex 1, Table 6: Overview of Project 2 Preparation Grant

Grant Objective and Activities
Ghana is requesting a preparation grant for Project 2 to finance a research and analytical work to lay the foundation for project planning and implementation of the three project components. Research and analysis will focus on setting eco-regional reference levels (as identified as priority work out for REDD+ readiness in MRV) for deforestation, degradation, and carbon stock enhancement (CSE) so as to enable quantification of GHG benefits, and it will support a study of fuelwood/charcoal production in dominant fuelwood producing areas so that baseline data is available for project development. Finally, it will assess existing capacity to implement Project 2, identify gaps and recommend methods for bridging these gaps. More specifically the work will aim to: • Assess land use and land use change in the High Forest and Transitional Zones over the past 10 years • Determine areas that qualify as "forest" and those that are "not forest" according to the REDD+ definition • Assess baseline carbon stocks and carbon sequestration rates from planting regimes • Assess deforestation/degradation rates (as point of comparison) • Set CSE Reference Level for High Forest Reference Area and Transitional Zone Reference Area to facilitate rehabilitation (Component 1) and plantation development (Component 2) for GHG benefits • Set deforestation and/or degradation Reference Levels for the Transitional Zone Reference Area to facilitate potential REDD+ plays in for sustainable fuelwood production • Determine the dominant fuelwood/charcoal production areas in the Transitional Zone

- Study charcoal production system to assess kiln efficiency and sustainability of harvesting in light of degradation/deforestation data.
- Make recommendations for potential successful sustainability strategy to render GHG benefits to communities and private sector.
- Outline existing capacity to implement, capacity gaps, and modes of bridging gaps.

Outputs	
Deliverables	**Timeline (tentative)**
Detailed work plan of Reference Level setting Detailed work plan of fuelwood study	September 2012
Preliminary assessment of Reference Levels Draft findings of fuelwood study	April 2013
Feedback and validation of Reference Level Validation of charcoal study results	May 2013
Reference Levels set Fuelwood study finalized	August 2013
Budget (indicative)	
Expenditures	**Amount (USD) - estimates**
Consultants	$165,000
Cost of field work	$30,000
Workshops/Consultation/Disseminations	$30,000
Contingencies (max. 10%)	$22,500
Total Cost	**$247,500**

PROJECT 3: CLIMATE SMART AGRICULTURE & WATERSHED SERVICES

MDB and lead Government Agencies

The Ministry of Lands and Natural Resources (MLNR) will be the executing agency for this project. MLNR has responsibility for policy, legislation formulation, and monitoring and evaluation for the forestry and natural resources sectors. The Ministry has a core team of technical staff and is responsible for the implementation of the Forest Investment Programme (FIP). MLNR would be supported in the implementation of this project by (i) the Ministry of Environment, Science and Technology (MEST), which has the broad mandate for developing climate change mitigation and adaptation policy actions in the country; (ii) the Ministry of Finance and Economic Planning (MoFEP), which has the responsibility of coordination of donor support in the country; (iii) the Forestry Commission (FC), which is the implementation and executive arm of MLNR responsible for setting regulation, control and management of forest resources and home to Ghana's REDD+ Secretariat; and (iv) Forestry Research Institute of Ghana (FORIG), which is mandated to undertake forestry research and criteria setting and monitor plantation development on forest reserve lands.

It is significant and transformative that these Ministries, Departments and Agencies (MDAs) have come together and jointly set the agenda for the FIP. The harmonized MDAs have experience working together in the implementation of the on-going Multi-Donor Budgetary Supported (MDBS) Natural Resources and Environment Governance (NREG) Programme. Currently, the environmental and natural resources sectors in Ghana are supported by an Environment and Natural Resources Sector Group, led by the Netherlands Government and including the World Bank (WB), Africa Development Bank (AfDB), U.K Government, German Government and European Union. It is expected that for the implementation of the FIP the existing ENR Sector Group will be expanded to include new donors to the REDD+ R-PP, including Switzerland, Japan, United States of America and the International Finance Corporation (IFC).

The Forest Investment Project Unit (FIPU), the secretariat of the project, will be located at MLNR and the FIPU's head will be the Technical Director (TD) of MLNR. Overall, the FIP will receive support from the WB, AfDB and the IFC. This project (Project 3) will specifically receive support from the IFC and from the AfDB.

Problem statement

Ghana's total forest cover, which stood at 8.2 million hectares (i.e., 34% of the total land area) at the turn of the last century, is now less than 1.6 million hectares and has suffered from an estimated annual deforestation rate of 2.0%. The factors that have contributed to deforestation and forest degradation

are numerous, but agriculture has been one of the most significant and consistent drivers over the years. 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 to other land uses, and the prioritization of agricultural intensification practices, in the absence of community-based or sector based land use planning often leads to further expansion of tree crops and food crops into forested land as profits are re-invested or farming practices copied in new plantings. Within the savanna and woodland areas of the country, food production and charcoal production have been identified as major threats to the woodland forest ecosystem, and the use of fire as a means of preparing land for agriculture has also contributed to forest loss.

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 and soil provides a pathway for significantly reducing business as usual emissions associated with the agricultural and tree crop sectors. As international discussions on REDD+ have expanded, climate smart agriculture has emerged as a critical factor in realizing emissions reductions and removals. In fact, many experts argue that across the tropics, and Ghana is a perfect example, there is no clear distinction between the forest-agriculture interface as the two are deeply intertwined due to livelihood strategies, cultural practices, and the nature of management policies and regimes.

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[2]. It is widely recognized that successful preparation and implementation of climate smart agricultural practices will depend on effective integration of agriculture into coordinated land use planning strategies, harmonization with development strategies, appropriate institutional structures, and adequate financial support.

In specific landscapes, working with communities and land users to protect or rehabilitate watershed services, including but not limited to water quality and water quantity, through incentive schemes and potential payment mechanisms can also lead to forest conservation (avoided emissions) and increased tree cover (emissions reductions) in agricultural landscapes that border important rivers and wetland systems. Significant co-benefits, like biodiversity and livelihoods can also ensue.

Proposed transformational impact and co-benefits

[2] As defined by the FAO, 2010.

This project represents a transformational initiative it will require 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, the Water Resources Commission (WRC) and the Ghana Water Company Ltd (GWCL). It will further require on-the-ground collaboration and streamlining of strategies and activities so as to facilitate measurable results, wherever possible, in achieving REDD+ goals. A second transformational aspect will be the work to design incentive or payment mechanisms (based on watershed services, and/or carbon transactions) that provide tangible incentives to rural land users to change their behaviours and adopt new practices. Finally, focusing on results that are measurable, reportable, and verifiable means that the business as usual attitude to government led projects will have to change or risk producing weak or unfounded results.

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

Project 3 (Climate Smart Agriculture and Watershed Services) will receive implementation support from the IFC (proposed grant of US$ 1.5 million and concessional loans US$ 3 million), the AfDB (proposed support of US$ 10 million), and the IFC/Private Sector (proposed loans of US$ 7 million). The total budgeted amount being US$ 21.5 million.

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.

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.

Rationale for FIP financing

Agriculture is one of the major drivers of deforestation and degradation in Ghana, and the IPCC LULUCF report (2000) states that agroforestry is the tropical land use with the greatest potential to sequester carbon. As such, it is imperative that efforts to reduce emissions associated with agricultural systems and sequester CO2 focus on fostering productive and sustainable agro-forestry landscapes that provide climate benefits, in addition to other ecosystem services.

In aiming to achieve this goal, the government recognizes that it will require collaboration and integration of strategies across sectors. While NREG provides a platform for high level planning of budgets and strategies, it is clear that some of the institutions whose mandates overlap on the ground have no meaningful track record of collaboration; one such example being between Ghana's Cocoa Board and the Forestry Commission. More broadly, however, the reality is that multiple institutions will have to be consulted, if not involved, in the detailed planning of the following three components, including (but not necessarily limited to): MLNR, MEST, MoFA, FC, Cocoa Board, GWCL, WRC,MLG, FORIG, CRIG, Traditional Authorities, Private Sector and Civil Society. Therefore, part of the rationale for this project is to foster communication and planning where it has been largely absent, but is clearly essential. If no action is taken or if collaborative efforts fail to implement a transformed landscape strategy, then it is very likely that business as usual conditions and practices will persist and agricultural drivers will continue to inhibit Ghana's ability to reduce emissions from deforestation and degradation, as well as provision of important co-benefits.

This project will realize its goal of promoting climate smart agriculture and watershed services through three sets of activities. **Component 1** will focus on promoting a sustainable (adaptation) cocoa landscape that is productive, climate smart (mitigation) and environmentally responsible. From the adaptation perspective, this is particularly important as it is likely that predicted increases in temperature and changes in rainfall patterns will significantly stress the cocoa system. With a successful and working model, climate smart cocoa significant potential for scaling up through similar initiatives and/or adoption of activities and practices by the private sector. A specific landscape has yet to be identified, but multiple REDD+ pilots (both national pilots and separate initiatives) are already moving forward in cocoa landscapes, therefore it would make sense to explore potential synergies so as to leverage expertise, funding, and local buy-in. Similarly, the cocoa sector companies are showing an increasing interest in adopting and facilitating climate smart cocoa production. Therefore, financial

incentives and technical support could be important in enabling wide scale engagement from the private sector. On the ground, stakeholders will have to include farmers, community leaders and Traditional Authorities, licensed buying companies, as well as financial and risk reduction institutions.

Successful implementation will require that in making the cocoa system climate smart, there are also significant yield increases for farmers. Given that the cocoa landscape is very heterogeneous in terms of forests (reserves and off-reserve patches), varied cocoa practices, varied levels of tree cover in cocoa farms, and biomass, there are three main options for engagement: 1) reducing emissions from encroachment into forest reserves and other protected areas; 2) reducing emissions from the conversion (replanting) of old, high shade cocoa farms to low shade cocoa farms; 3) enhancing carbon sequestration on-farm by increasing the density of shade trees (CRIG recommends at least 40% canopy cover which equates to approximately 18 mature (large) shade trees per hectare). In any one landscape a combination of, or all three options could be pursued. Other essential elements include localized land use planning to ensure that continued/increased expansion into forested areas is not permitted (the CREMA mechanisms can play an important role in this process) and the establishment of a sound project baseline and MRV plan in order to demonstrate impact.

Component 2 will promote climate smart agriculture in food production systems that could include cassava, plantain, maize, yam, ground-nuts, millet, or sorghum. Climate benefits would result from: 1) enhancement of above ground carbon stocks by planting agroforestry trees on-farm or within the farming landscape that also furnish NTFPs for subsistence and markets; 2) conservation or enhancement of soil carbon from the prudent use of fertilizers or planting of nitrogen fixing trees, use of no-burn farming practices, and/or adoption of low impact tilling; and 3) avoiding emissions from deforestation associated with clearing forest land for food crop production through community-based land use planning.

Other important elements will include providing farmers with improved seeds and crop varieties, access to reasonable loans and insurance mechanisms, and access to inputs and multipurpose tree species (fertilizer, fruit, fodder, medicinal, NTFPs with clear markets, fuelwood), all of which can help to meet livelihood co-benefit objectives, including food security, increased income, and attention to women's roles and economic opportunities. Linking the adoption of the above mentioned options/practices to climate mitigation benefits (quantifiable reductions or removals) will be crucial to demonstrating impact.

The Tano River Basin is one proposed landscape that could benefit from these activities. Working in collaboration with SADA to support climate smart agriculture in the northern savannah zone where crops are extremely vulnerable to climate change and the need for economic development is paramount presents a second opportunity.

Component 3 aims to promote watershed services. Ghana already struggles with the challenge of water quantity and quality in both rural and urban environments. As population growth and urbanization continue, and projected increases in temperate and rainfall patterns change the nature of the climate, it will be crucial to ensure that key watersheds are capable of furnishing watershed services, in addition to other ecosystem services. This component will therefore focus on the design of an innovative system to incentivize communities that live and farm within important watersheds to protect and rehabilitate the landscape so as to support a sustainable and clean water supply. It will then seek to pilot the model in at least one landscape of importance to urban water supply.

Broadly speaking, REDD+ activities are likely to fall within the scope of this project (avoiding deforestation and degradation, enhancement of carbon stocks) but the particular landscape will determine those activities that are appropriate and necessary (conservation of riparian zones, rehabilitation through agroforestry and tree planting, law enforcement and land use planning to reduce illegal mining, etc).

This component will enable the government to look at new incentive mechanisms to support ecosystem service options, including payment for watershed services (PWS) or REDD+ payment/benefit sharing mechanisms.

Safeguards

The REDD+ R-PP is subject to a Strategic Social and Environmental Assessment (SESA) using country systems. There is opportunity to use that same assessment as the framework for the FIP Investment Strategy. The R-PP SESA is presently at TOR stage and FIP will rely on the approach for strategic social and environmental assessments adopted for REDD+ as part of the FCPF process. The analytical work for assessment of potential social and environmental risks of the REDD+ strategy, and the Environmental and Social Management Framework (ESMF) that would be prepared by the Government to screen REDD+ projects and mitigate these risks are valuable frameworks for investment projects that may be supported by FIP.

The environmental and social safeguards will be monitored at all stages of the project cycle. The main objective is to ensure that activities funded are consistent with national policies and guidelines as well as with World Bank's environmental and social safeguard policies. The safeguard measures will be integrated from the project's design phase to prevent, reduce and mitigate the potential harm to environment and people.

Annex 1, Table 7: FIP Financing in USD (million) for Project 3

	FIP Finance Sources: IFC and AfDB	Co-Finance	

COMPONENTS	GR	CF	CL	NREG	IFC/PS*	GIZ	FCPF	FPP	TOTAL
Component 1: Climate smart cocoa	5.0	2.0			TBD				7.0 (TBD)
Component 2: Climate smart agriculture	3.0	1.0			TBD				4.0 (TBD)
Component 3: Watershed services	3.5								3.5
TOTAL	**14.5**				**7.0**				**21.5**

*PS = Private Sector

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

Annex 1, Table 8: Project 3 Preparation Timetable

MILESTONE	TENTATIVE TIMEFRAME
Start of Project 3 preparation study (under preparation grant)	September 2012
Completion of Project 3 preparation study (under preparation grant)	August 2013
With support of RCBM Committee (Project 1), begin concept development of Project 3 Component 1- Promote Climate Smart Cocoa Landscapes (CSCL), Component 2- Promote Climate Smart Agriculture (CSA), and Component 3- Promote Watershed Services (WS).	January 2014
Review of Components 1 (CSCL), 2 (CSA) , and 3 (WS) concepts.	July 2014
Finalize implementation plans for Components 1 (CSCL), 2 (CSA) , and 3 (WS).	September 2014
Begin implementation of Components 1 (CSCL), 2 (CSA) , and 3 (WS).	November 2014

Request for project preparation grant

Annex 1, Table 9: Overview of Project 3 Preparation Grant

Grant Objective and Activities
Ghana is requesting a preparation grant for Project 3 to support studies of the cocoa-agriculture policy environment in relations to GHG emissions, opportunities for land use planning, the extent of (area) and trends in cocoa farming nationally, opportunities and bottlenecks to private sector engagement in climate smart farming, and determination of average emissions reductions/removals associated with particular farming practices. Finally, this grant will support an analysis of capacity to implement Project 3 and options for bridging potential gaps.

More specifically, this entails:

- Review of the policy environment for cocoa and agriculture in relation to climate change and GHG emissions to identify opportunities for climate smart cocoa and climate smart agriculture.
- Review of the policy environment towards PES and PWS to identify key challenges, opportunities for engagement, and potential pilot opportunities.
- Map the area of cocoa farms in Ghana and assess the extent of encroachment into Forest Reserves and associated land use change trends.
- Study 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).
- Study data and existing literature to assess feasibility of private sector engagement in climate smart cocoa.
- Identify and recommend community land use planning methods and mechanisms that can foster successful land use planning efforts to provide climate benefits.
- Analysis of existing implementation capacity for the project and ways to bridge gaps efficiently and by building collaborations.

Outputs	
Deliverables	**Timeframe (Tentative)**
Detailed work plans	September 2012
Draft findings	April 2013
Validation of results from studies	May 2013
Final studies completed	August 2013
Budget (indicative)	
Expenditures	**Amount (USD) - estimates**
Consultants	$150,000
Cost of field visits	$25,000
Workshops/Consultation/Disseminations	$50,000
Contingencies (max. 10%)	$22,500
Total Cost	**$247,500**

Annex 1, Table 10: Ghana FIP Financing in USD (million)

Projects	FIP Finance			Co-Finance					
	GR	**CF**	**CL**	**NREG**	**IFC/ Private Sector**	**GIZ**	**FCPF**	**FPP**	**TOTAL**
Securing the integrity of forest and woodland resources									
Component 1: Research, capacity building and monitoring	2.0			0.5		0.71		7.80	11.01
Component 2: Governance and regulatory reforms	2.5			5.0					7.5
Component 3: Ecological networks and biodiversity conservation	7.50			1.5					9.0
Component 4: Sustainable management of forest reserves	8.00			3.0					11.0
SUB-TOTAL	**20.00**			**10.00**		**0.71**		**7.8**	**38.51**
Enhancing Carbon Stocks									
Component 1: Rehabilitation of degraded forest reserves	6.00	2.5			TBD				8.5 (TBD)
Component 2: Plantation development off-reserve	2.0	3.0			TBD				5.0 (TBD)
Component 3: Sustainable woodfuel production	2.0								2.0
SUB-TOTAL	**10.00**	**5.5**			**10.0**				**25.5**
Climate Smart Agriculture and Watershed Services									
Component 1: Climate smart cocoa	5.0	2.0			TBD				7.0 (TBD)
Component 2: Climate smart agriculture	3.0	1.0			TBD				4.0 (TBD)
Component 3: Watershed services	3.5								3.5
SUB-TOTAL	**11.5**				**7.0**				**21.5**

		3.0							
PROGRAMME TOTAL	**41.5**	**8.5**		**10.0**	**17.0**	**0.71**		**7.8**	**85.51**

* All tables and numbers in the Financing Planare currently under discussion, pending further research and discussions within the Government of Ghana, the MDBs, and with other partners and stakeholders.

ANNEX 2- STAKEHOLDER CONSULTATION & PARTICIPATION PLAN

Ghana's Investment Plan aims to contribute to various on-going efforts by the Government of Ghana to prepare for and implement a REDD+ strategy in the country, as well as REDD+ compatible initiatives like the VPA/FLEGT. As part of this process, the government has undertaken multiple stakeholder engagement activities and events in order to gain input from a wide variety of interests and stakeholders, and to expand understanding and support for the process.

The FIP consultation process benefitted immensely from the R-PP consultation platform and also the VPA process. Therefore, the Government considers that REDD+ stakeholder engagement began with the drafting of Ghana's R-PP, which was approved in March 2010, and underwent an extensive stakeholder consultation and engagement process. In addition, as REDD+ readiness has moved forward over the past two years into the early stages of implementation (Phase 2), Ghana has continued to gain insights and input from the participation of numerous stakeholders engaged in REDD+ and climate change mitigation and adaptation.

Specific to Ghana's FIP, multiple stakeholders have been participated in the development of the document by presenting project ideas and offering comments and input on drafts. The below table describes the consultation and participation activities specific to the development of the FIP since 30th May 2011. Throughout the consultation period a smaller core team held meetings to review feedback from the process for incorporation into the FIP document. In addition, in 2012, the government established an email address to which stakeholders could send comments or questions.

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**: AfDB, WB and 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**

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

Consultation meeting	Date of consultation	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 Commission &Gov Partners	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, and project selection	Each official made direct comments (track changes) into the draft document, and all comments were assessed and incorporated as possible.
Focus Group Consultation	7th March 2012	FC, Boardroom		Information about the FIP and a draft of the document were	Participants raised questions and concerns, including: 1) land and

Civil Society Organizations				shared with participants. Working Group sessions focused on providing technical input to strategy those projects selected.	tree tenure was not adequately addressed in the existing draft; 2) the FIP does not link with ongoing 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)	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 chainsawing; 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.

Future stakeholder engagement

For Ghana's 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 charged with disseminating information and findings to stakeholders.

Even before implementation stage, the participation of the private sector, civil society, and communities is anticipated. As part of the Preparation Planning Grants, workshops are envisioned in which data and information will be collected, and results and options shared for input. During the planning phase of each project component all of the above mentioned 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.

ANNEX 3- DGM & FIP in GHANA

It should be noted that DGM is not operational yet.

Preliminary work is being carried out, and global DGM meetings have been attended by Ghana's representative. A national DGM awareness raising event is currently in the process of being carried out with the support of World Bank Accra office.

DGM will have a National Steering Committee on which a government representative sits as an observer. Both FCPF and DGM are expected to align with the three FIP projects. Integration of the three programs (FCPF, FIP, DGM) has been stressed by both FIP and DGM focal persons.

DGM aims to 'facilitate involvement and full participation of communities in Ghana's National REDD Strategy, including FCPF and FIP'.

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 Ghanato 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.'

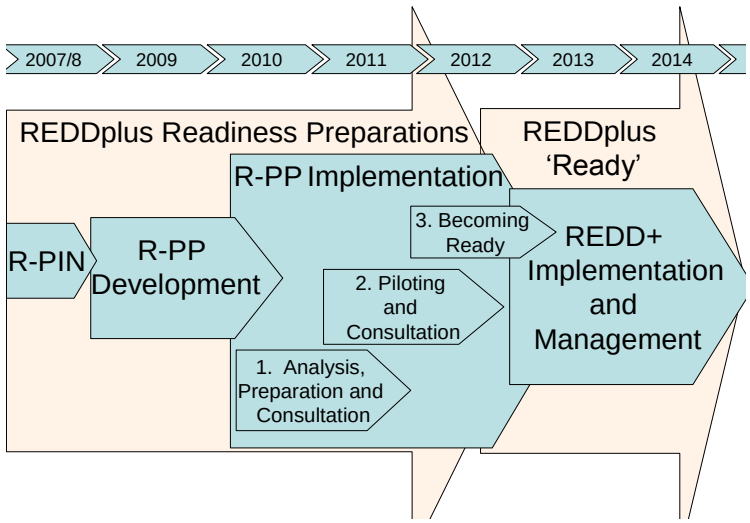
The Ghanaian Context

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).

Ghana and REDDplus

Stakeholders within and outside of the Government of Ghana have very different expectations with respect to the benefits and risks associated with REDDplus. This is partly due to mechanisms for REDDplus still awaiting definition by the UNFCCC and the funds currently available for REDDplus preparations remaining limited. As

Phasing of Ghana's Progress towards being 'Ready' for REDDplus



such Ghana seeks to explore REDDplus as a potential additional reward mechanism for sustainable forest protection and land-use, in support of existing policies including FLEGT and NREG.

Phasing of Ghana's Progress towards REDDplus Readiness

The progression between expressing an interest in and fully implementing REDDplus 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 REDDplus. National planning processes will incorporate existing activities being undertaken as well as those anticipated within the near future. As such REDDplus preparations will be part of, complement and add to the existing efforts towards environmentally sustainable development planning within Ghana.

Phase 1: REDDplus 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 REDDplus readiness preparations were put in place by the REDDplus 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 REDDplus. It presents a three-step approach to REDDplus strategy development and establishment of the technical, policy, legal, management and monitoring arrangements necessary to enable Ghana to fully participate in a mechanism for REDDplus. 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 REDDplus policy, legal and technical requirements
- Setting of the Reference Emissions Level (REL)
- Confirmation of institutional roles, responsibilities and oversight for REDDplus
- Establishment of the entity responsible for MRV
- Selection of potential pilots / demonstration activities
- Continued consultation, information sharing and awareness raising on REDDplus strategy, legislative and institutional proposals
- Finalisation of REDDplus strategy (to progress towards REDDplus 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 REDDplus policies, decisions and actions
- Training Needs Analysis for full REDDplus 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 REDDplus
- Operational plan to scale up REDDplus in Implementation Phase

The **Consultation and ParticipationComponent** 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 REDDplus 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 REDDplus readiness preparation to better fit the changing needs of stakeholders within the REDDplus process.

Potential **components of a REDDplus 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 **REDDplus Management Arrangements (2c)** outline the types of entities and institutions that will be needed policy definition, implementation, and management- ranging from civil society to proposed inter-ministerial boc A process is defined to identify the resources needed for implementation and to help bolster capacities. Next s 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 Implementat REDDplus readiness preparation to promote due diligence in the design of the national strategy (Component SESA will identify the likely social and environmental impacts (negative and positive) of proposed REDDplus str assess the potential additional benefits of REDDplus (especially biodiversity conservation and poverty alleviation) inform the design of the national REDDplus strategy so that it avoids or mitigates negative social/environmental and encourages positive ones. A strong SESA analysis (for which a Terms of Reference is provided) will take plac the upcoming R-PP implementation, and promote integration of social and environmental issues into the u policy-making process, thereby promoting more sustainable and equitable REDDplus 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 REDDplus readiness preparation and during future REDDplus 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.

The R-PP

The Readiness Preparation Proposal (R-PP) aims to assist Ghanato 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).

Ghana and REDDplus

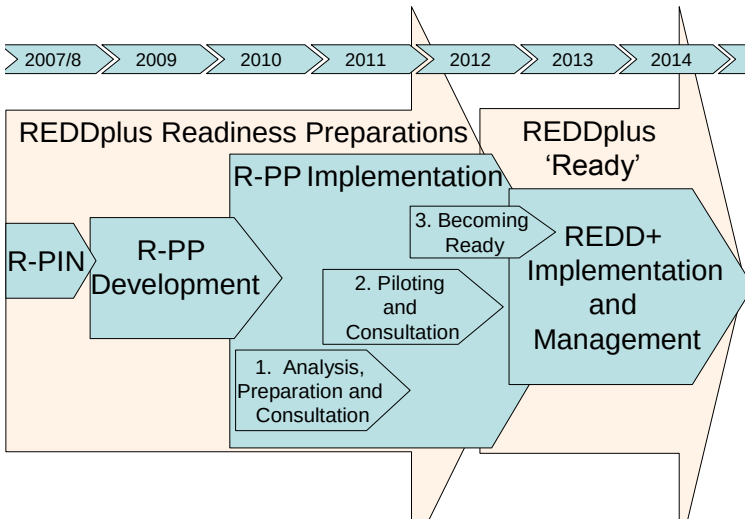
Stakeholders within and outside of the Government of Ghana have very different expectations with respect to the benefits and risks associated with REDDplus. This is partly due to mechanisms for REDDplus still awaiting definition by the UNFCCC and the funds currently available for REDDplus preparations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

Phasing of Ghana's Progress towards REDDplus Readiness

The progression between expressing an interest in and fully implementing REDDplus 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 REDDplus. National planning processes will incorporate existing activities being undertaken as well as those anticipated within the near future. As such REDDplus

Phasing of Ghana's Progress towards being 'Ready' for REDDplus



preparations will be part of, complement and add to the existing efforts towards environmentally sustainable development planning within Ghana.

Phase 1: REDDplus 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 REDDplus readiness preparations were put in place by the REDDplus 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 REDDplus. It presents a three-step approach to REDDplus strategy development and establishment of the technical, policy, legal, management and monitoring arrangements necessary to enable Ghana to fully participate in a mechanism for REDDplus. 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 REDDplus policy, legal and technical requirements

- Setting of the Reference Emissions Level (REL)
- Confirmation of institutional roles, responsibilities and oversight for REDDplus
- Establishment of the entity responsible for MRV
- Selection of potential pilots / demonstration activities
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Overall cost estimated for R-PP implementation (Component 5) are summarized in the table below.

Summary of REDDplus Readiness Preparation Budget

		Estimated Cost (in USD $ thousands)				
Component	**Sub-Component**	**2010**	**2011**	**2012**	**2013**	**Total**
1. Organise and Consult						
	1.a National Readiness	687	219	251	286	1443

Management Arrangements					
1.b Stakeholder Consultation and Participation	288	178	254	104	824
2. Prepare the REDDplus Strategy					
2.a Assessment of Landuse, 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	$	$	$	$	$

ANNEX 5 – EXPERT EXTERNAL REVIEW & FIP TEAM RESPONSES

Annex 5 presents all comments received from 2 expert external peer reviewers, as well as responses from the Ghana FIP team. Table 1 (Annex 5) lays out initial comments from the two peer reviewers to a draft of the document that was shared early 2012. It shows initial responses from the Ghana team to this draft and a sub-set of follow-up response in light of revisions.

Table 2 (Annex 5) presents final comments by the lead peer reviewer to a subsequent draft of the Ghana FIP (shared in April, 2012), with follow-on responses from the Ghana FIP team.

The initial comments outlined below (Annex 5, Table 1) caused Ghana to conduct a significant revision of its IP in an effort to more directly address perceived gaps, including (but not limited to): the lack of a clear connection between the FIP concept and Ghana's R-PP process and REDD+ strategy; weak articulation of transformation impacts; lack of clarity on capacity to implement, and an unspecific description of co-benefits.

Annex 5, Table 1: Initial comments received from peer reviewers and responses from the FIP team

Peer Reviewers' Comments	Reviewers	Responses from the Team (Date)	Further Responses to Reviewers Following Revisions March 30th, 2012
Part I General Criteria			
1. Plan complies with the principles, objectives and criteria of the relevant program as specified in the design documents and programming modalities			
1.1. Ghana's FIP plan does not meet the general specifications outlined in the design documents and programming modalities. The specific comments below will buttress this position.	John Mason	The team does not agree, however does recognize that there is room for improvement.	In redrafting, a specific effort was made to frame Ghana's FIP according to the goals and objectives of the Climate Investment Fund, specifically outlining the need to reduce emissions from deforestation and degradation.
1.2. The document stresses the strengthening of institutional capacity to manage forests, improve governance and regulatory mechanisms, streamline land, tree and carbon tenure, improve local livelihoods and enhance resilience to Climate Change. While much can still; be said about the adequacy of the document with regard to those intrinsic objectives, they are generally consistent with the broad objectives of the Climate Investment Funds and its subset, the Strategic Climate Fund which stresses the piloting of new development approaches, the scaling up of activities consistent with SFM, REDD+ and resilience to Climate Change. In addition, the document has also benefitted from the preparation of Ghanas RPP under the Forest Carbon Partnership Fund (FCPF) of the World Bank, which largely addressed REDD+ but within the context of Forest Sector Reforms.	Harrison OchiengKojwang	We agree with the reviewers comments that there is room for improvement. We will focus on addressing the suggested items.	
2. Plan takes into account the country capacity to implement the plan			
2.1. The plan does not take into account Ghana's capacity to implement the plan. In fact the plan suggests that there is a	John Mason	The comment is not very clear to the team. The team does not	

very low chance of successfully implementing the plan to success. This view is further expanded below.		understand the specific capacity the reviewer is referring to. The Team will address Ghana's capacity more specifically in the document.	
2.2. While the goals of the FIP have been stated clearly and a number of relevant activities have been identified and presented in tables 7, 8 and 9, there is no clear account on the critical capacity needed to deliver on the stated actions or what can be achieved with existing capacity. In this regard, the RPP for Ghana, is much clearer on capacity needs to achieve REDD+ objectives than the current version of the FIP.	H. Ochieng	The team agrees, and as stated above the Team will address the critical capacity needed, drawing on the RPP.	
2.3. Reading from the document one would expect a very clear commentary on the kind of capacity needed to meet the ambitious targets to restore degraded forest landscapes, achieve planting targets, support CREMAs, create ecological corridors, improve fire management and enforce harvesting laws, not to mention Agroforestry Schemes.	H. Ochieng	Agreed, document will be look at and be more specific on capacity.	
3. Plan has been developed on the basis of sound technical assessments			
3.1. The document has not been developed on the basis of sound technical assessments and logic. There are purely technical lapses (see 6.1 below) that can be addressed easily with corrections to the calculations. Other critical challenges include the lapses in logic and lack of connections between assessment proposed activities and impacts. These connections are not articulated and thus are simply missing in this document.	John Mason	Ok, point taken. Corrections in the calculations will be made, and lapses in logic will be addressed.	All discussions of carbon stocks and GHG emissions potential were revised to correct errors and reflect the most current data and understanding of emissions reductions potentials at multiple scales.
3.2. 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 very weak and frequently absent.	John Mason	The Team will look at RPP and strengthen linkages between FIP and RPP.	Significant effort was put into drawing direct connections between the R-PP and the FIP document, and aiming to frame the FIP in terms of the R-PP and the ongoing readiness process. The diagram showing the relationship between the two was

			revised. Reference to the R-PP forest definition was added. An entire section was added on the REDD+ Readiness process. While not there yet, the consultant is in the process of including a table with the current REDD+ pilots. In the description of the FIP pilots, reference will be made to potential overlaps with R-PP pilots (i.e. where synergies or unification of efforts are possible).
3.3. Ghana's FIP should be designed to 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.	John Mason	The Team argues that FIP is not necessarily there to address only governance issues under REDD+. There are other initiatives that are addressing some general forest sector governance issues that REDD+ will eventually benefit from. For example, FLEGT-VPA and NREG. FIP will investments will scale up pilots, these issues will be further clarified.	
3.4. Though not explicitly stated the ideas in the FIP seem to have emanated from earlier assessments done in other processes. These projects and processes are described in section 5 and summarized on table 6 of the FIP. Notable among them are; the Natural Resources and Environmental Governance (NREG) Project, Ghana RPP, Sustainable Land and Water Management and the Community Forestry Management Project.	H. Ochieng	Thank you. The Team will try to make it more explicit.	
4. Plan demonstrates how it will initiate transformative impact			
4.1. Yes, the document outlines a significant list of transformative impacts which the document suggests will result from the	John Mason	The Team will address the logic in the particular section.	Where data is available, estimated GHG emissions impacts were

successful implementation of Ghana's FIP. Unfortunately the logic is missing and the reader is in no way convinced that the proposed activities will deliver these transformative impacts.			described in light of examples of activities.
4.2. This is one of the most important sections in the FIP because it essentially articulates in what ways the forest sector in Ghana can be transformed to a new and hopefully permanent or sustainable state, whose performance would meet sector goals and objectives.	H. Ochieng	Ok	
4.3. In the current version of the FIP, the areas where transformative changes are desired and are potentially achievable have been correctly identified. However the structure of the section needs improvement so that emphasis is given to apply or improve Transformative Factors, that is, those factors that can bring about change. It is the definition of those factors that will guide deliberate action.*(SEE PARAGRAPH 84-87 IN IP PLAN!)*	H. Ochieng	Thank you. The structure of these sections will be reviewed and improved.	
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			
5.1. No, the document does not provide a robust prioritization of investments due to the absence of logic in their articulation. Further, lessons learnt are missing, no M&E plan is outlined and links to the results framework falls apart due to the lack of a logical framework.	John Mason	A results framework will be included in the document. M&E will be further be elaborated upon.	Project 1, Component 1 now specifically focuses on Research, Capacity Building, and Monitoring/Evaluation. This overarching component will apply to all three projects and ensure that adequate baseline information, dissemination of information, key principles, and understanding are built, and impacts and results are monitored and assessed. In addition, it will focus on identifying successful examples of each project component from civil society, private sector, and/or

			government (if possible) so as to enable the projects to benefit from critical lessons learned and other key principles for success. Lack of lessons learned acknowledged and reference to past efforts has been added. The consultant is still working on describing how/why this funding will lead to different (more successful) outcomes.
5.2. The FIP has done the bare minimum in terms of stakeholder consultation in country, yet claims to have stakeholder engagement due to the RPP stakeholder processes which was much more robust. Unfortunately the plan's failure to properly build on the foundation provided by the RPP means that they cannot claim that the RPP stakeholder engagement provides cover for FIP.	John Mason	Four additional stakeholder focus group consultations (Civil Society, Private Sector, Northern and Transitional Zone and a National Validation) have been planned for March 2012.	In drawing stronger links to the R-PP it cited the consultation process that occurred and how this input has in turn (directly and indirectly, through linking with R-PP) informed the FIP. Consultations have taken place since the reviewers read the document, but lack of funds has made it hard to do extensive consultation. The current draft is available on multiple government websites and an email address available for receiving comments.
5.3. The issue of prioritization of investments has been directly addressed in Table 6 and also in Section 6 in which Table 8 presents actions arranged b the degree of effort required to address them. In essence, the table combines cost considerations and the magnitude of challenge to classify FIP actions. However, what the table does not provide, is what is really a priority regardless of the cost or the magnitude of challenge that it potentially poses.	H. Ochieng	The Team will revisit Table 6, and prioritization will be clarified.	
6. Plan adequately addresses social and environmental issues, including gender			

6.1. Yes, the plan provides a clear pathway for social and environmental issues to be addressed. It is very weak and rather generic in its treatment of gender issues. Once again it seems to draw on the RPP credibility in this space rather than develop its own credibility. As mentioned above, such an argument is only viable if FIP is building on the RPP and Readiness process which it does not appear to be doing.	John Mason	The Team will strengthen gender issues in the document.	
6.2. While the environmental impacts of the FIP are clear, particularly its potential contributions in the context of REDD+ and its co-benefits, the social impacts and the considerations on gender roles could be more strongly articulated. So far, the issue of tenure rights to communities and the recognition of communities as forest resource managers is a socio-political issue the effects of which could have positive social impact, as is the development of community based plantations and woodlots.	H. Ochieng	Social impacts and gender role will be more strongly articulated.	This section is in the process of being re-written. A table was developed which articulates each project and the associated co-benefits described. Further work is required, and well as more general focus on the main co-benefits anticipated.
7. Plan supports new investments or funding is additional to on-going/planned MDB investments			
7.1. Yes, the plan definitely intends to support new investments but it is not clear that these are in-line with existing Government policy and positions. In some cases the plan proposes to support activities that are already expecting to receive certain levels of funding from other sources. It is not clear in such cases how FIP funding is going to leverage or top up existing investments and not duplicate. The document is silent on all such cases.	John Mason	The Team will aim to demonstrate more clearly that FIP is in line with Government Policies. Yes, the Team agrees that there is some funding from other sources. Table 10 clarifies the financing from other sources. Some of this financing is indicative, for example NREG.	
7.2. This aspect is covered reasonably well and the FIP itself seems to have benefited from the experiences of ongoing or past projects even if it is not explicit in the document. Table 6 illustrates this quite clearly.	H. Ochieng	Thank you. The Team will aim to make the document more explicit.	
8. Plan takes into account institutional arrangements and coordination			
8.1. The document seems to recognize the existing national institutions in the REDD+ and forestry space but at the same time it appears to distance itself from the same institutions and their established agendas. REDD+ National Working	John Mason	The Team does not agree with reviewer's comment. The Technical Coordinating Committee (TCC+) is indicated in	

Group should be the forum to promote FIP so as to ensure consistency at the cross-sectoral level and ensure coordination and synergy of efforts to reduce deforestation and degradation.		the RPP as being the overarching body. Cross sectoral coordination will be provided by ENRAC.	
8.2. The diagram outlining relationships between FIP and REDD+ and other groupings is not logical. In fact it demonstrates that basic relationships are not understood. The RPP cannot sit inside FIP but rather it should be the reverse. The RPP is larger and broader in conception than FIP. Furthermore FIP is a funding mechanism/programme in support of the RPP implementation.	John Mason	The diagram 6 and text will be harmonized to show relationships.	
8.3. The FIP has clarified a number of policy reform issues, which have to do with tenure, pricing, law enforcement and co-management arrangement. Sub-section 3.6 has actually stated weaknesses in existing policy and regulatory frameworks. In addition the FIP (Paragraph 98) will be coordinated nationally under the aegis of the Environmental and Natural Resources Advisory Council. It is proposed that under ENRAC will be a FIP Technical Coordinating Committee. This seems adequate though it would have been much better for the FIP to show functional linkages to the REDD+ program of the RPP and how the coordination structure will deal with policies from outside the forest sector (water, energy, agriculture, mining) which often have a bearing on the achievement or lack of it, of SFM objectives. Figure 6 should actually be a traditional organigram to show the linkages better.	H. Ochieng	The Team will re-harmonize the diagram.	
9. Plan promotes poverty reduction			
9.1. No, the document provides passing, superficial coverage to the poverty reduction aspects of the FIP implementation. Such a light touch approach is symptomatic of the failure to properly make the connections between context-activities-impacts.	John Mason	The Team acknowledges that the document needs strengthening with regard to the element of poverty reduction and should link it with the proposed projects' context and impacts.	
9.2. To FIP proposes to have plantations that will be owned by communities and individual farmers, in addition to public-private partnerships. There is also an indication that there	H. Ochieng		

will be tenure reforms that could possibly confer rights over carbon, to local communities who own or co-manage forests on reserves and those off-reserves. Considering the FIP is addressing poverty reduction.			
9.3. Though mentioned only within the context of improving wood milling recovery by investing in improved technology, the whole issue of value-added manufacturing linked to the forest sector and inclusive of non-timber products is weak in the document.	H. Ochieng	See comment under 9.1.	
10. Plan considers cost effectiveness of investments			
10.1. No, the plan does not demonstrate the cost effectiveness of investments. If the document was to properly connect with the RPP process that is currently on-going then it could demonstrate how FIP funds would support and leverage this process to provide incentives to achieve results-based REDD+ actions and related PES activities. This type of linkage would make it much easier to demonstrate cost effectiveness (see 6.3 below).	John Mason	Well noted. The document will strengthen the way cost effectiveness is being presented. However, the Team notes that some elements cannot be quantified. The Team recognizes that economic a	
10.2. The evidence of cost effectiveness of proposed solutions is not clear in the document and neither has the document done or applied any economic analyses on its proposed programmes. One can however argue that growing conditions of Ghana would make plantations and agroforestry projects viable, particularly in the high forest and transitions zones.	H. Ochieng	The Team agrees no economic analysis for each of the projects has been included so far. The document needs to include a financial plan.	
Part II compliance with the investment criteria of the FIP program			
11. <u>Climate change mitigation potential:</u> The investment plan should provide an estimate of the direct GHG savings.			
11.1. The plan does not make accurate or convincing estimation of direct GHG emissions reductions. The plan confuses biomass figures with carbon figures from various sources. Its estimate of above ground carbon in Ghana's high forest is overly optimistic and does not relate to sources quoted in the plan. It appears the authors have made errors in estimating carbon values.	John Mason	Well noted. It will be addressed.	
11.2. Also, some of the figures quoted from Ghana's National	John Mason	The Team will look into this issue.	

Communication to the UNFCCC do not seem to be sourced from the 2nd National Communication, but rather from the 1st National Communication.			
11.3. Considering the fact that Ghana has 264 protected areas, most of which are in various stages of degradation and if the plans to create plantations in degraded high forest areas and the savanna zones, the FIP has a reasonable potential to have Climate Change Mitigation Potential. This is because of the possibility of enhancing carbon stocks and even creating more through plantings in the savanna zones. In addition, the proposal in the FIP to promote the planting of Shade Tolerant Cocoa varieties will enable the increase of carbon sequestered on cocoa farms since shade trees will increase the carbon density of such cocoa farms. If the National Wildfire Policy is also pursued vigorously alongside plantings and other forms of enhancement of carbon stocks, it also has the potential to reduce emissions through unplanned and unwarranted fires. These arguments could be made more strongly as '*selling points*' in the document	H. Ochieng	The Team will strengthen this section in the IP.	
12. <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.			
12.1. The plan proposes certain demonstrations but all of these appear to be at odds with the national REDD+ pilots that have been identified by the RPP implementation process in country through a transparent and open process that exceeded 12 months. No mention is made in the FIP plan of the approved national pilots and no clear links have been made between FIP demonstrations and emissions reduction or REDD+. No analysis is presented of how the proposed FIP demonstrations and their geographic locations will address direct and underlying drivers of deforestation and degradation and their emission reduction potential. Aligning FIP activities with REDD+ Readiness activities under the FCPF	John Mason	At the time of writing the IP the Team did not have access to approved pilots under RPP. The Team will strengthen linkages between FCPF and FIP in the document, aligning activities better. The Team would like to note that the funding of pilots proposed under FCPF has not materialized up to date; it is therefore difficult to draw upon lessons learnt under the RPP.	

programme would address this challenge.			
12.2. The FIP has proposed to have an annual planting target of 20,000 ha and also to pursue carbon enhancement projects in the degraded forest reserves. In addition the ongoing fire management programmes and the attempt to influence the widespread promotion of the traditional shade tolerant cocoa and the development of co-management arrangements to secure the integrity of forest reserves, all offer opportunities for demonstration potential at scale.	H. Ochieng	Thanks.	
12.3. One approach that is largely missing from the narrative is the promotion and implementation of CDM projects which could provide investment opportunities, on off-reserve forest lands, provided that tenure rights are clarified and technical assistance is forthcoming.	H. Ochieng	Well noted. There are currently no forest sector CDM projects in Ghana. The document will touch upon which constraints hampered implementation of CDM projects. Bottlenecks will be addressed under FIP.	
13. <u>Cost-effectiveness:</u> 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.			
13.1. The plan outlines the many other sources of finance in the sector. Some of the initiatives identified have been completed or are nearing completion thus it is not clear how any leverage element is eligible from these sources and it is recommended that all such should be removed from the document. Also, if really there is so much funding available in Ghana, as outlined in the document, then one must question the relevance/necessity of FIP. In addition, several of the additional finance sources that were identified have little or no connection with FIP and have no history of collaborating in a significant manner with national level agendas. It is recommended that the leverage list of additional financing should be significantly revised.	John Mason	The list of sources will be revised, and a more detailed explanation of linkages will be provided.	

13.2. There is no attempt in the document to place a positive economic value on REDD+ activities for the country, the sector or communities/landowners. There is no attempt to assess the potential negative economic impact on the existing timber operations in the country from implementing greater REDD+ activities. Cost benefit analysis and lost economic opportunity cost analysis are missing from the document.	John Mason	At the time of writing this particular information was available. Information on economic impacts is now available under FCPF.	
13.3. There is also no mention of new private sector involvement in the sector, no details of any such involvement, and no specifics or analysis of new private sector engagement. While private sector engagement is a very interesting concept (for example future management of forest reserves), it is only floated as a possibility without any further articulation. As such it will be too easy to ignore once implementation begins.	John Mason	The information was not available at the time of writing.	The role of the private sector has been greatly expanded. In addition, IFC funding will specifically support private sector engagement through loans.
13.4. The cost effectiveness of the various proposed actions is still weak in the document and neither are proposed actions quantified in terms of expected gains to the forest sector and the general economy.	H. Ochieng	See points 13.1-13.3.	
14. <u>Co-benefits:</u> 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.			
14.1. The plan provides a long list of co-benefits but it is generic and not linked to the specifics of the proposed new demonstrations or the national REDD+ pilots. Much of what is written in the co-benefits section could be cut and paste into many other countries in the sub-region. As such it is highly unlikely that it will be possible to measure or gauge the country's success in delivering on co-benefits over time. Some significant co-benefits (particularly new economies from high value NTFPs) are not even identified.	John Mason	At the time of writing the pilots were not available, but information will now included. The comment will be reviewed and the Team will attempt to make this section more country specific. Economic information on NTPFs will be made available.	
14.2. Considering the proposal to create ecological corridors to	H. Ochieng	Thank you. Point well taken.	

improve connectivity among a number of Protected Areas, enhancement of carbon stocks in forests and farmed landscapes, the proposal has a decent chance to provide co-benefits of biological diversity, ecosystem services and non-timber forest products. This is so far highly satisfactory in the FIP.			
15. <u>Implementation potential</u>: The investment plan should have a high potential for success.			
15.1. The plan does not address implementation potential. In fact the plan rather repeats how ineffective the forestry and related sectors have been in recent decades. It claims numerous transformational aspects of the plan but is not convincing on why the investor should have confidence in Ghana's capacity to implement the plan successfully.	John Mason	Ok.	
15.2. In order to address this weakness, the plan needs to provide a comprehensive review of the long chain of interventions and measures in the sector over the recent decades. The document is silent on World Bank supported programmes in the sector including the FRMP, NRMP I, NRMP II and only refers to NREG without discussing its successes or failures. Such interventions, which the document acknowledges have largely failed to deliver the desired results, would provide a rich historical context and a long list of lessons learnt. This type of analysis would provide significant value to the document especially as there have been large investments in this sector over the past 3 decades and very limited success. One must ask the question: How is FIP going to be different? Certainly the reader is not left with any confidence that FIP will be more successful than its predecessor programmes.	John Mason	The Team will address the weaknesses in this section. The document will also address the positive impacts of the past programmes i.e. VPA and ENRAC as coordinating body. As well as the role of CSOs.	
15.3. Based on Ghana's climatic conditions, the implementation potential is high but this depends to a very large extent on policies and governance of the forest sector and strong mechanism for national and local level coordination structures. So far, the FIP has proposed that the program will be implemented by the Forestry Commission but coordinated nationally by a Technical Coordination Committee under the Environmental and Natural Resources	H. Ochieng	Ok, thank you.	

Advisory Council (ENRAC) which is an umbrella body.			
16. <u>Natural forests:</u> 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.			
16.1. Yes, the plan outlines a number of proposed measures to safeguard natural forests and reduce conversion but this is weak. 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 savanna woodland) and provide initial calculations and targets for such emissions reductions. Unless this is done in the plan then it is very difficult to imagine that this criterion will be met.	John Mason	The project concept notes (ANNEX 1) were not developed at the time of submitting the draft IP. As much as possible concept notes be developed.	
16.2. The FIP has proposed the enhancement of carbon stocks in natural forests by methods such as enrichment planting and presumably also by the protection of reserves to allow for natural recovery. However the document is not explicit on the choice of species that will be planted.	H. Ochieng		
PART III Recommendations			
17. This plan requires a serious re-think. In its current iteration, it fails to provide 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 should have been developed in lock step with the RPP and evolving REDD+ Readiness activities that are currently underway in-country. In many ways this document demonstrates that there is not a clear understanding of REDD+ and thus the inability to adequately link the FIP to the RPP process. In some ways this plan is at odds with the RPP	John Mason		

and its on-going work.			
18. The National REDD+ readiness activities are very relevant to FIP and this should be recognized in the FIP document and references to the R-PP made accordingly. FIP should 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. FIP should respond to the development of a long term National Strategy for REDD+ that will provide valuable input into FIP process over time.	John Mason		
19. FIP should support the RPP in building institutional capacities to assist in the design of a credible system for MRV, carbon accounting, REL/RL setting, systems for addressing social and environmental safeguards at both national and sub-national levels. As articulated the plan supports a separate/parallel system of MRV and accounting. This must not be supported by FIP.	John Mason		
20. The document should include a 2-3 page summary of the opportunities for return on investments, priority actions, potential for	H. Ochieng		
21. transformative changes in the forest sector and a budget. This will give the reader a good overview of what the document is all about.	H. Ochieng		
22. The FIP should present a clear statement on the existing and required capacity to implement it and in the FCPF REDD+ Program Document (RPP)	H. Ochieng		
23. To improve its national context, the document could be promoted as a mechanism to substantively implement Ghana's new Forest and Wildlife Policy and also the REDD+ Strategy, which adds an international or global dimension to the programs of Ghana's forest sector.	H. Ochieng		
24. The need for a rejuvenated and forward looking Forest Sector Investment Policy (laws, policies incentives (tax, subsidies, technology, value addition) that will facilitate transformation of the sector is eminent. The FIP would be well served to include such a plan.	H. Ochieng		
25. The involvement of communities in the management of	H. Ochieng		

reserves following the Community Resource Management Areas (CREMAs) model ought to be given more prominence in the document with clear proposals on what is required since it holds promise on securing the integrity and management effectives of the many reserves and also in the quest to increase carbon stocks in farmed landscapes.			
26. Value-added of timber and non-timber products should be better articulated in the document, in addition to the stated intension to improve timber milling recovery through improved technology.	H. Ochieng		
27. Based on the RPP and other processes, Ghana ought to be clear and put forward proposals on tenure arrangements. Unfortunately such a critical issue is still treated quite generally in the FIP instead of concrete proposals, and one does not get the current thinking that could lead to new developments	H. Ochieng		
28. Focus should be put on the generation and application of 'transformative factors' that the FIP must pursue to raise the sector to a new state of performance. The specifics in this regard have been stated.	H. Ochieng		
29. Given the fact that forests are often affected often by policies from outside the forest sector the document is not quite explicit on what mechanisms could deal comprehensively with the agriculture, energy and mining (including oil and gas) sectors	H. Ochieng		
30. To demonstrate the potential GHG savings of the FIP, Ghana could consult other programs, which have attempted to do so. The RPP from Liberia could be useful in this regard	H. Ochieng		

Annex 5, Table 2: Final Comments by Lead Peer Reviewer on Revised FIP Document

Lead Peer Reviewer Comments on Revised Ghana FIP **Harrison OchiengKojwang** **April 13, 2012**	**Responses from the Team as Appropriate** **April 18, 2012**
A. General Comments on the Revised Version	

1. The document is well written and the issues and ideas are easy to follow	
2. The potential for carbon abatement opportunities have now been more clearly stated and the emission reductions associated with some of the proposed actions have been provided	
3. Section 2, which has Boxes 1 – 3 has been significantly improved and the issue of involving communities in forest management has been clearly strengthened, as is the potential involvement of the private sector.	
4. Likewise section 6.1 and Table 5, providing the rationale for the 3 strategies have now been more clearly articulated and generally better justified.	
B. Areas for Improvement	
1. The fairly comprehensive statements made in section 2 on opportunities for GHG abatement require policy reforms in the forest and related sectors. Unfortunately the policy implications of what have been proposed appear only in section 3.6. To improve this, specific reference should be made to section *3.6, Paragraph 60*, where the policy implications of the FIP have been addressed. This would improve the clarity and power of the statements in section 2.	Thank you. Links and references included. Please note that sections and page numbers have since changed.
2. The document should also clearly state the strategies and if possible, the mechanisms it proposes to engage with other sectors, particularly Agriculture and Mining to support the achievement of the PIF's objectives. The document is still weak on mechanisms for cross-sector collaboration and coordination to help realize the objectives of the PIF. For example, there is no evidence in the document that Agriculture has been consulted on possible strategies on how to manage cocoa plantations in manners that enhance carbon stocks, since cocoa growing is a major factor in agricultural expansion.	Experts on these critical issues, including the interface between climate change, REDD+, and agriculture (including cocoa), were consulted in the re-drafting, and all of the Projects reflect early stage initiatives (albeit currently small scale) being led by civil society, government, and/or private sector. Therefore, experience and knowledge does exist. Where communication has not taken place (example MLNR/FC and Cocobod, the documents prioritizes such engagement and discussion) This is one example of how the FIP itself can be transformative. Further, the Research, Capacity Building and Monitoring Committee (Project 1) will provide an integrated platform to ensure appropriate oversight and expertise from multiple sectors.

3. The document is still silent on existing capacity and its additional capacity requirements to run the FIP Programme and particularly to facilitate community and private sector participation in SFM and the proposed plantation establishment programme.	Section 7.1 now contains a broad description of capacity to implement. Because a detailed analysis of capacity over these broad range of Projects and Components is not appropriate at this time, the Ghana FIP intends to integrate a capacity analysis into its 3 Project Preparation Grants, including analyses (per project) of existing capacity, capacity gaps, and efficient ways to fill these gaps. In addition, the above comments notes that each project reflects current efforts in the country on some scale- therefore capacity is not nonexistent, though perhaps not always situated directly within the government.
4. In section 2 and 3, more emphasis on value-added processing could be made. It seems Value added processing (sawn wood, treated poles, reconstituted wood products) and all manner of NFTPs, combined with community-private or public-private partnerships in plantation development, could help reduce poverty. Specific incentives should be proposed	The team feels that the document discusses the poverty reduction/livelihood benefit co-benefits of community-private sector partnerships in plantation development (and rehabilitation). Thank you for the idea on value added processing and NTFPs.
5. Section 6.3 on Transformation Factors has not been improved. The transformative factors that can bring about the desired changes on i) tenure and carbon rights ii) CREMAs off-reserve iii) annual planting targets of 20 000 ha and iv) over-dependence on wood fuels, should be more specifically identified. Specific incentives are also relevant here.	This portion of the document had yet to receive significant attention at the time of Reviewer's comments. Specific attention has been given to the issue of transformation.
6. The same comment applies to the explanations in Annex I, where for each component, transformation aspects are described.	See above.
7. All in all, the document has been improved but the above issues should be addressed	Thank you. Noted.

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