



Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 12-Nov-2019 | Report No: PIDC28127

**BASIC INFORMATION****A. Basic Project Data**

Country Ghana	Project ID P171933	Parent Project ID (if any)	Project Name Landscape Restoration and Ecosystem Management for Sustainable Food Systems Project (P171933)
Region AFRICA	Estimated Appraisal Date Jun 05, 2020	Estimated Board Date Sep 30, 2020	Practice Area (Lead) Environment, Natural Resources & the Blue Economy
Financing Instrument Investment Project Financing	Borrower(s) The Republic of Ghana	Implementing Agency Ministry of Environment, Science, Technology and Innovation (MESTI)	GEF Focal Area Multi-focal area

Proposed Development Objective(s)

To promote land restoration for improved food production and ecosystem services in the targeted degraded savannah and cocoa forest landscapes.

PROJECT FINANCING DATA (US\$, Millions)**SUMMARY**

Total Project Cost	62.76
Total Financing	62.76
of which IBRD/IDA	50.00
Financing Gap	0.00

DETAILS**World Bank Group Financing**

International Development Association (IDA)	50.00
IDA Credit	50.00



Non-World Bank Group Financing

Trust Funds	12.76
Global Environment Facility (GEF)	12.76

Environmental and Social Risk Classification

Moderate

Concept Review Decision

Track II-The review did authorize the preparation to continue

B. Introduction and Context

Country Context

- Ghana is one of the few countries in Africa that have achieved successful democratic transitions over the past 30 years.** Ghana’s multi-party democratic system of governance is known in Africa for freedom of speech and the press. Two decades of growth and political stability have improved the economic situation and reduced poverty. The current government was elected in December 2016 and sworn in January 2017. The election conferred enough mandate to carry out the government’s agenda, which includes pledges to sustainable management of natural resources.
- Ghana has managed remarkable success in economic growth over the past two decades.** Since 1990, real GDP in Ghana has more than quadrupled, and in 2011 the country hit a significant milestone when it joined the ranks of the Lower Middle-Income Countries (LMICs)¹. Natural resources production has been a key driver of economic growth. Ghana’s export earnings are mainly from natural resource commodities. In 2015, export earnings of gold, cocoa and oil accounted for 80 percent of exports², with gold exports valued at US\$4.3 billion, cocoa beans at US\$2 billion, and crude oil at US\$1.7 billion. Though the economic structure is shifting to services, 35 to 45 percent of jobs are still based in renewable natural resource sectors, including agriculture, forestry, livestock, and fisheries³.
- However, poverty remains highest amongst populations dependent on natural resources and agriculture.** In addition, near-term challenges are substantial and downside risks are significant due to the country’s heavy reliance on export of primary commodities which are all prone to volatility. Unemployment of the youth continues to be a major challenge. Ghana’s unemployment rate at the end of 2018 was approximately 6.7 percent of the total labor force and estimated youth unemployment rate was 13.7 percent⁴. Skilled agricultural, forestry and fishery workers constitute the

¹ LMICs are defined as countries with a Gross National Income per capita between US\$996 and US\$3,895.

² MIT Observatory of Economic Complexity. (2018, August 15). Ghana. Retrieved from <https://atlas.media.mit.edu/en/profile/country/gha/>

³ GLSS6. (2014, August). Ghana Living Standards Survey Round 6: Main Report. Retrieved from <http://catalog.ihnsn.org/index.php/catalog/5350/download/65128>; and Ghana Statistical Service (2016). 2015 Labour Force Report. Retrieved from http://www.statsghana.gov.gh/docfiles/publications/Labour_Force/LFS%20REPORT_fianl_21-3-17.pdf

⁴ Ghana unemployment rate including youth unemployment in 2018: <https://www.statista.com/statistics/808481/unemployment-rate-in-ghana/>. The unemployment rate is the percentage of a country’s labor force that are without jobs but are available to work and actively seeking employment.



largest occupational group and form the main occupation for people in the rural localities⁵. Thus, there is a need to focus on reforms which promote labor-intensive sectors, such as agriculture and forestry which have the potential to be one of the leading sectors for a more diverse economy due to large multiplier effect for job creation. Nationally, the potential of the sector to contribute to the economy and job creation is challenged by severe land degradation and competing land use due to expansion of agricultural activities to forest landscapes.

Sectoral and Institutional Context

4. **Ghana's rural economy is highly dependent on the agriculture and forestry sectors**, thus making land resources, including agricultural lands, forests, natural habitats, and water bodies critical for growth. Forestry, and agriculture sectors including cocoa production account for more than 53 percent of land use and employ about 60 percent of the population, including 53 percent of women. Agroforestry, dominated by cocoa, has been the backbone of the economy for decades. An estimated 800,000 farmer households directly depend on cocoa production for their livelihoods. These smallholder farming systems are heavily reliant on the forest and agroforest ecosystem services, including rainfall, pollination, wind breaks, soil fertility, and socio-cultural resources.

5. **Despite the crucial value of land in providing support to forests and critical ecosystem services, it is facing serious degradation.** Natural habitats and biodiversity are being lost as part of the broader process of land degradation. Degradation severely compromises ecosystem services including nutrient cycling, regulation of hydrological flows, provision of natural resources, and amelioration of climatic extremes and floods. Forest and natural habitat areas are increasingly degraded by agricultural encroachment, commercial logging (legal and illegal), extraction of non-timber forest products, mining, hunting and grazing, and associated burning. Notably, illegal Artisanal and Small-Scale Mining (ASM) also removes topsoil and contributes to deforestation.

6. **According to the National Forest Reference Level⁶, since 2000, there has been a significant increase in deforestation and forest degradation, with significant forest losses occurring across the cocoa forest mosaic landscape, which covers Ghana's high forest zone.** Ghana's high forest zone is the main area for cocoa production in the country and includes over 1.2 million hectares (ha) of forest reserves and protected areas. In the high forest zone, low yielding and expansive agriculture, led by food crops and cocoa, are the primary drivers of emissions from deforestation. Given that food crops are typically planted as "initial shade" for cocoa seedlings, food crop establishment is the first step in cocoa expansion, arguably making cocoa the single most important commodity driving deforestation in the high forest zone. Although national cocoa production peaked at one million tons in 2011/2012, following a decade long campaign to boost production, no measures were introduced to curb expansion and critical agronomic support to farmers was not sustained. As a result, national production has declined, on-farm yields remain some of the lowest in the world at 400 kg/ha, and expansion into forests has continued.

⁵ GSS (2016) 2015 Labour Force Report, the Ghana Statistical Service (GSS) – December 2016. http://statsghana.gov.gh/gssmain/fileUpload/Demography/LFS%20REPORT_fianl_21-3-17.pdf

⁶ A national forest reference emission level is one of the elements to be developed by developing country Parties implementing REDD+ activities (according to paragraph 71 of decision 1/CP.16). Reference levels are expressed as tonnes of CO₂ equivalent per year for a reference period against which the emissions and removals from a results period will be compared. Thus, reference levels serve as benchmarks for assessing each country's performance in implementing REDD+ activities. Reference levels need to maintain consistency with the country's greenhouse gas inventory estimates. (Reference: <https://redd.unfccc.int/fact-sheets/forest-reference-emission-levels.html>).



7. **Unsustainable growth may indeed be imperiling Ghana's economic development as indicated through the country's national wealth accounts⁷.** Between 2000 and 2014, Ghana saw its total national wealth more than double. However, much of this wealth increase came with losses to renewable natural resources and overreliance on non-renewable assets. In Ghana's case, not only is renewable natural capital being eroded, but produced capital is as well. The cost of soil erosion is estimated at about US\$0.5 billion, or 1.1 percent of the country's GDP. If its current unsustainable natural resource management remains unchanged, Ghana will see its wealth destroyed over the long term with less opportunity to sustain growth and share prosperity.

8. **Climate change is also a significant threat for Ghana, as the country is susceptible to both Atlantic Ocean and Sahelian climate effects, though the issue does not feature prominently in the national agenda.** However, at the ministerial-level, there is widespread evidence and acknowledgement that Ghana is already experiencing increased temperatures, changes in rainfall patterns, unpredictable extreme weather events, a rise in sea level, and increasing greenhouse gas emissions and loss of carbon sinks. Though predictions vary, climate change threatens to adversely affect the health and well-being of people and communities, natural and agricultural resources, and infrastructure⁸, which could derail progress on economic and social development.

9. **The Government of Ghana (GoG) has given high priority to addressing land degradation through integrated landscape management in targeted watersheds and forest lands.** In the Northern Savannah region, the Government has been successfully implementing the GEF financed Sustainable Land and Water Management Project (SLWMP), where it has already benefitted some 27,000 farmers by bringing about 11,000 ha of land under sustainable management, reforestation of 1,000 ha, 72,000 ha under forest management plans and more than 600,000 ha of land under Community Resource Management Areas (CREMAs). In the cocoa producing high forest zone landscapes, the Government has been engaged in addressing deforestation and forest degradation through the Forest Investment Program (FIP), the REDD+ Program, the Voluntary Partnership Agreement (VPA), AFR100, the Forest Plantation Development Program, Multi-Sectoral Mining Integrated Project (MMIP) and policy reforms on Tree Tenure and Benefit Sharing Schemes.

10. **Significantly, collaborative efforts between the Forestry Commission and the Ghana Cocoa Board (COCOBOD) have led to plans and strategies at the national level being better coordinated.** This collaboration has also resulted in deforestation free cocoa commitments at high-levels and contributed to the dialogue process that established the Cocoa Forest Initiative (CFI), a government partnership with more than 34 leading cocoa and chocolate companies to end deforestation and forest degradation driven by cocoa production in Ghana.

11. The proposed Project is in line with several government policies, plans and strategies that focus on food security, halting deforestation caused by commodity export production, ecosystem restoration and economic development. These include: Low Carbon Development Strategy (2016); National CSA & Food Security Action Plan (2016-2020); Ghana Cocoa Forest REDD+ Program (GCFRP), Strategic Investment Framework (GSIF 2025) for SLM, the Revised Forest and Wildlife Policy (2012); National Riparian Buffer Zone Policy (2011, Ghana Forest Plantation Strategy (2016-2040). Cocoa and Forests Initiative-Plan (2018-2020); Voluntary Partnership Agreement, the Forest Plantation Development Program, National Environment Policy 2014; National Climate Change Policy (2012); National Land Policy (1999); National Biodiversity Policy

⁷ Draft Ghana CEA, 2019

⁸ Government of Ghana MESTI. (2012). National Climate Change Policy.



(2018), National Biodiversity Policy Action Plan (NBSAP, 2015), National Climate Change Policy Action Program for Implementation: (2015–2020) Medium-Term National Development Policy Framework: An Agenda for Jobs: Creating Prosperity and Equal Opportunity for all (2018-2021); Ghana Cocoa and Forests Initiative-National Implementation Plan (2018-2020); Ghana’s Nationally Determined Contribution 2020-2030; Land Degradation Neutrality (LDN) targets; the Food and Agriculture Sector Development Policy (FASDEP II, 2007); and the Tree Crops Policy (TCP) for the tree crops sub-sector.

12. Aligned with GoG’s high priority, the proposed Ghana Landscape Restoration Project will scale-up the rehabilitation of degraded landscapes, both in the Northern Savannah Region and the South-Central Region forest zones of cocoa landscapes.

Relationship to CPF

13. This proposed Project is fully consistent with the World Bank Group's (WBG) corporate goals – to end extreme poverty and to promote shared prosperity with environmental, social, and fiscal sustainability – and with the Country Partnership Strategy (CPS) for FY13-FY16⁹ and the Performance and Learning Review¹⁰ which extended the CPS to FY18. The CPS recognizes that Ghana's natural resource wealth is a platform for economic and social development but needs prudent and transparent management as well as strategic actions to prevent negative outcomes. The Project will focus on activities that would enhance the livelihoods of communities in the targeted landscapes (through improved cocoa yields, as well as from carbon and non-carbon benefits) and improve environmental services through enhanced forest cover. The proposed Project is also aligned with the 2018 Strategic Country Diagnostic (SCD)¹¹ which prioritizes the need for taking immediate measures, including implementing the ‘Cocoa Forest Mosaic Landscape’ to stop deforestation and degradation. A new Country Partnership Framework (CPF) is under preparation and is expected to be discussed by the end of 2019.

14. The Project directly contributes to the action areas “creating climate-resilient landscapes” and “promoting climate smart agriculture” as envisaged in the WBG’s Africa Climate Business Plan, and overall aligning with the WBG’s Climate Change Action Plan (2016) and the Gender Equality Strategy.

C. Proposed Development Objective(s)

15. To promote land restoration for improved food production and ecosystem services in the targeted degraded savannah and cocoa forest landscapes.

Key Results (From PCN)

16. The key results would be measured through the following proposed outcome indicators:

- Land area where sustainable land management practices have been adopted as a result of the project (ha)

⁹ The World Bank Group’s Country Partnership Strategy for the Republic of Ghana for the Period FY13-FY16 (Report #76369-GH) discussed by the Executive Directors on August 20, 2013.

¹⁰ Report No. 105606-GH, 2016

¹¹ Report No. 132010-GH

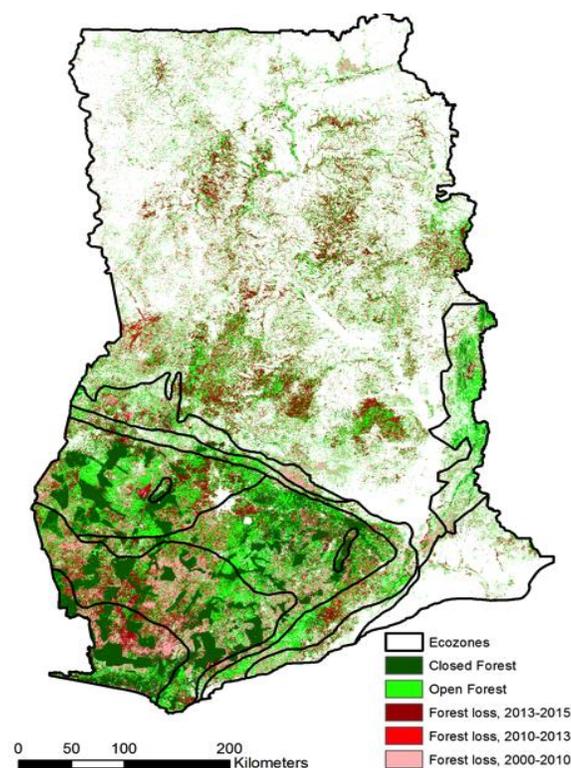


- Area of land restored for cocoa production (Ha)
- Area of reduced deforestation from cocoa expansion (Ha)
- Forest area brought under management plans (ha)
- Greenhouse Gas Emission (GHG) emissions avoided in targeted landscape (tCO₂e)

D. Concept Description

17. **Conversion of forests to agricultural land is the primary driver of deforestation** which in turn contributes to the loss of environmental services, soil erosion and loss, reduced agricultural productivity, declining crop yields, and economic losses to the country. Reduction in cocoa and food crop production because of continued land degradation is putting Ghana not only at a high risk of economic crisis and food insecurity but also loss of its biodiversity because of deforestation.

Figure 1.: Map of deforestation in open and closed forest across three time periods

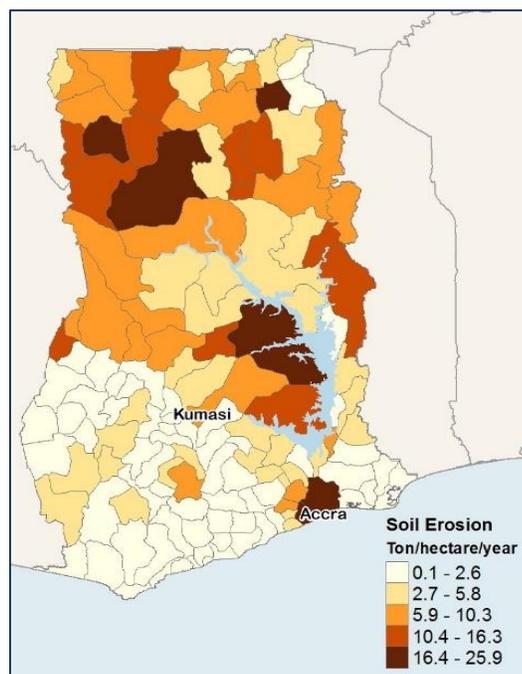


18. **Total deforestation from 2001 to 2015 surpassed 4.7 million ha**, which equates to an annual loss of more than 315,000 ha across the country and one of the highest rates of deforestation in Africa. Of even greater concern is that between 2012-2015, annual deforestation increased substantially to 529,476 ha/year, largely due to substantial losses across the Savanna Zone (MLNR, 2017a). Figure 1 shows increasing national deforestation over this period. From 2001 to 2012, the majority of deforestation occurred in the High Forest Zone and Transitional Zone, but from 2012-2015 there was a significant increase in forest loss across the Savannah Zone.

19. **Nearly 70 percent of Ghana is estimated to be subject to “severe to very severe” erosion.** Soil erosion by wind or water stems mainly from inappropriate use of soil by agriculture,

forestry, and infrastructure. Figure 2 illustrates soil erosion geographically across the country with darker areas suffering the worst

Figure 2: Soil erosion (RUSLE model) (World Bank Hidden Dimensions Dataset).

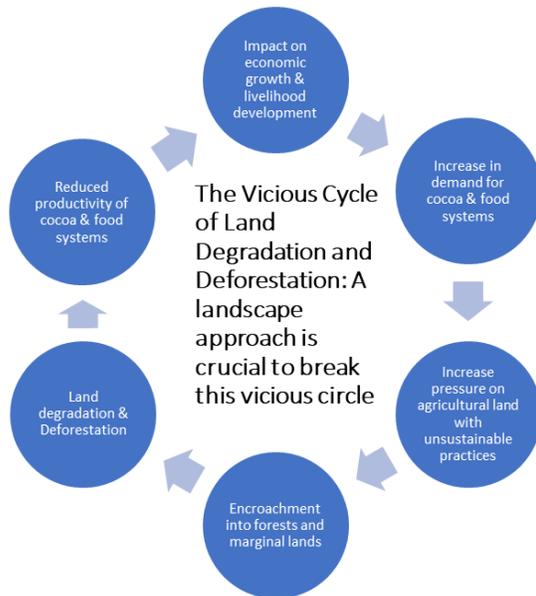




effects. Apart from the northern regions¹², there are significant levels of soil erosion in the Oti Region and Bono, Bono East and Ahafo regions, as well as in Greater Accra Region, where it resulted in the loss of large quantities of topsoil. EPA (2002) estimated that 35 percent of Ghana is prone to desertification, with the overwhelming area of vulnerability located in the Upper East Region and eastern part of the Northern Region.

20. **Severe land degradation can force rural populations to expand agricultural lands to other ecosystems.** Analysis shows that districts with high shares of agricultural labor have lower rainfall and vegetation productivity and suffer from more frequent floods and severe droughts as well as more intense soil erosion (World Bank, 2018a). If other parts of the economy are not able to siphon excess labor rural, populations will expand their agricultural search to marginal and fragile lands. Expanding crop cultivation to relatively low fertility soils on degraded lands may not lead to sustainable agricultural production — with households earning US\$950 (in 2011 PPP terms) less than those tilling more productive soils — and

Figure 3: The Vicious Cycle of Land Degradation and Deforestation



that loss of ecosystem functions through chronic degradation of land has long-lasting effects and is difficult to remediate (Haile et al., 2016). Such findings confirm the theory of link between land and a poverty trap. Thus, land degradation is part of a vicious cycle that feeds into both poverty and sustained environmental damage (Figure 3). Given the relationship between land degradation and food production and livelihood, it is imperative to scale-up investments for sustainable land and water management using a landscape approach in order to reduce poverty and build the resilience of communities and ecosystems.

21. **The Project will build on ongoing efforts, which involves the adoption of a landscape approach that, through**

appropriate management practices, enables land users to maximize the economic and social benefits from the land while maintaining or enhancing the ecological support functions of the land resources. It involves a holistic approach that integrates social, economic, physical and biological assets of all land uses within the landscape such as agricultural land, forest land, and protected areas. The Project would provide an opportunity to restore degraded lands, whilst promoting forest restoration and protection, and sustainable cocoa production in the targeted landscapes. Overall the Project will enhance resilient agricultural systems through crop diversification and food value chain upgrading to include post-harvest management activities and promoting sustainable cocoa production.

Project Location

22. The proposed Project will be implemented in the Northern Savannah Region and the South-Central Region. In the Northern Savannah Region, the Project will continue to build upon and scale-up activities from the SLWMP project. In the

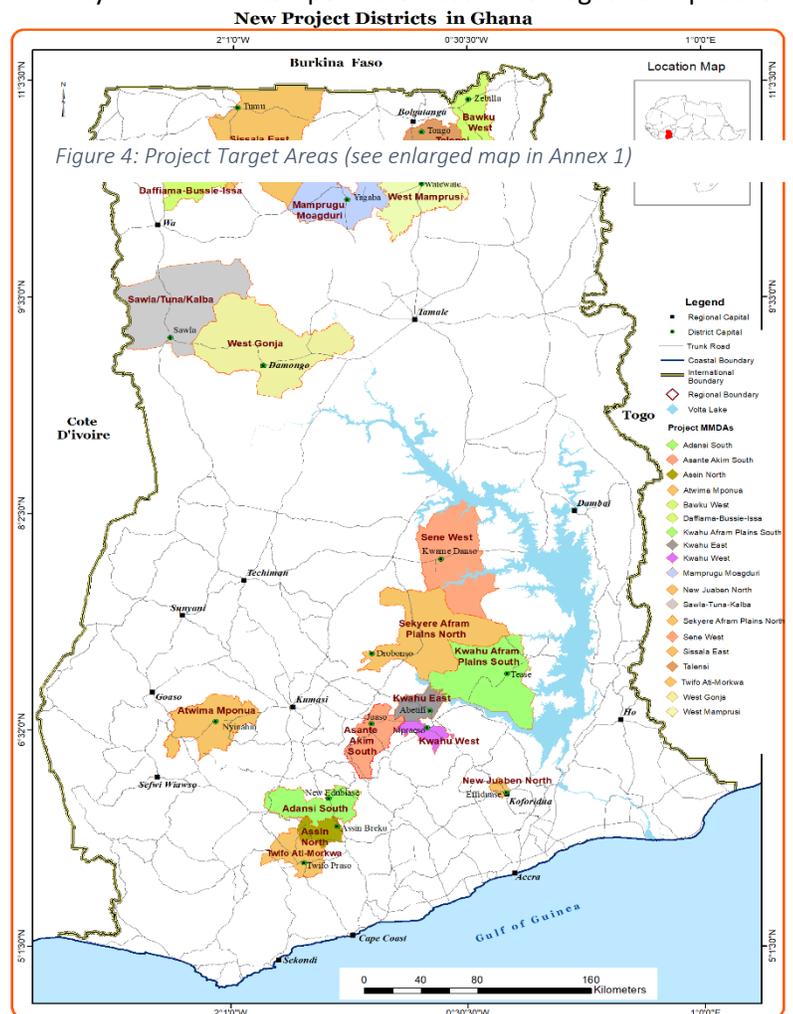
¹² Currently made of five (5) regions as follows: Northern Region, Savannah Region, North East Region, Upper East Region and Upper West Region.



South-Central Region, the Project will tailor SLWM and sustainable forest management practices to promote sustainable cocoa production in cocoa-forest landscapes, building on ongoing work in the forestry sector. See Figure 4 and Annex 1 (enlarged map) for maps of the proposed project target areas.

23. In the Northern Savannah Region, Project area will fall mainly within the Guinea Savannah Zone and a small area of Sudan Savannah. Project activities will focus on the sub-watersheds of two Volta River tributaries flowing into the country from Burkina-Faso in order to concentrate impacts and affect outcomes at the sub-watershed level. The Kulpawn-Sisilli and the Red Volta sub-watersheds have been prioritized due to SLWM needs, high poverty and presence of biodiversity corridors and newly established CREMAS. Project field activities will focus on an estimated 100 communities: roughly 80 for SLWM activities in agricultural land and 20 for CREMA activities across eight Districts included in these two sub-watersheds. In these areas, decreased and high variability rainfall and temperature rises have negative impacts on agricultural productivity (such as millet, maize, Yam, and cassava), increasing the incidence of droughts and floods, and exacerbating desertification. In part due to the greater aridity and environmental fragility of the north there are consequences in terms of increased migration from North (rural areas) to South (urban centers). Bridging the developmental gap between north and south has been a goal of most post-independence governments, but despite attempts to address the challenge, poverty reduction has not been evenly distributed, inequality gap keeps widening and the poor therefore continue to be concentrated in the Northern Savannah ecological zone.

24. In the South-Central Region, Project area will be located within the Pra River Basin, one of the most intensively used Basin in Ghana for settlement, agriculture, logging and mining. The total Basin area is approximately 23,200 km² and it extends through almost 55% of Ashanti, 23% of Eastern, 15% of Central and 7% Western Regions of Ghana. The Basin falls within the Upper Guinean rainforest, which has been recognized as a global biodiversity hotspot due to a high presence of endemic species¹³. Nationally, the Ashanti region, which covers more than half of the Basin, is the second largest producer of cocoa beans in Ghana¹⁴.



¹³ <https://eros.usgs.gov/westafrika/land-cover/deforestation-upper-guinean-forest>

¹⁴ https://cocobod.gh/weekly_purchase.php



25. The focus of the interventions will be in nineteen rural districts (Sene West in the Bono East Region; Kwahu East, Kwahu West and Kwahu South Afram Plains Districts in the Eastern Region; Sissala East and Daffiama-Bussie-Issa Districts in the Upper West Region; Talensi and Bawku West Districts in the Upper East Region; West Mamprusi and Mamprugu Moagduri Districts in the North East Region; Sawla-Tuna- Kalba and West Gonja Districts in the Savanna Region; Adansi South, Atwima Mponua, New Juaben North and Ashanti Akim South in the Ashanti Region and Assin North and Twifo Ati Morkwa in the Central Region) with an estimated 25 million people. The targeted geography has experienced expansion of cocoa farms into reserves and off-reserve forest areas. This is evidence of systematic environmental challenges caused by cocoa driven deforestation, declining soil fertility, increased pests and diseases, poor agricultural practices as well as evidence of strong impending climate change impacts on rural livelihoods that would amplify the pressure on existing forests.

Global Environment Facility (GEF) Incremental Reasoning

26. The IDA and GEF resources will complement each other to play a unique role in fostering an integrated sub-basin watershed management, as the baseline funding is largely sectoral and fragmented in nature. As a result, the proposed Project will place emphasis on the integration and coherence among these disparate efforts to bring visible transformations in Ghana's degraded landscapes. As a fully blended project, the IDA resources (US\$50 M) and GEF-7 STAR and IP incentive resources (US\$12.75M) will compliment and build upon a strong baseline of investments from the World Bank portfolio in Ghana¹⁵ [Forest Investment Program (FIP) (US\$10M), Dedicated Grant Mechanism (DGM) (US\$10M), and Emissions Reduction (ER) (US\$3M)]. Project design interventions are expected to support mobilization of the private sector, essentially cocoa and chocolate companies (members of the World Cocoa Foundation) who are by and large also signatories of the Cocoa & Forests Initiative (CFI), and some of them already engaging in the pilot ER program in the high forest zone. In addition, the Project will build upon the lessons and successes of the ongoing Sustainable Land and Water Management Project (SLWMP) (US\$30M).

27. Significantly, the GEF financing for the proposed project aligns with the GEF-7 focal area objectives and is programmed under the Food Land Use and Restoration (FOLUR)¹⁶ Impact Program (IP) led by the World Bank. It aims to advance the global environmental sustainability agenda by demonstrating new integrated models of sustainable commodity production, biodiversity conservation and landscape restoration. Within the proposed project area in South-Central Region under the FOLUR, there are existing initiatives targeting the cocoa landscapes, using Hotspot Intervention Areas¹⁷ whose aim is to promote climate-smart agriculture including intensifying cocoa production for increase yields and improving smallholder livelihoods, through strong participation of smallholder farmers¹⁸. Working directly with communities and the private sectors, these models can be adapted and replicated across cocoa landscapes in nearby West and Central Africa, as well as globally for cocoa and a range of other globally-relevant commodities. Overall the proposed interventions in the cocoa landscapes will be aligned with the FOLUR's theory of change that emphasizes support to sub-

¹⁵Only relevant costs contributing to the project have been considered for GEF incremental purposes.

¹⁶Food Land Use and Restoration (FOLUR) Impact Program (IP) seeks to transform food and land use systems and help countries reconcile competing social, economic, and environmental interests by moving away from unsustainable sectoral approaches. GEF support will help countries meet the growing demand for increased crop and livestock production while eliminating the risk of further expansion of farmland into natural high-biodiversity habitats and forests, erosion of genetic diversity, overexploitation of land and water resources, overuse of chemical fertilizers and pesticides, and inefficient practices that lead to greenhouse gas emissions. (Source: <https://www.thegef.org/blog/supporting-innovation-transformation-gef-s-new-impact-programs-tackle-drivers-environmental>)

¹⁷ https://www.idhsustainabletrade.com/uploaded/2018/08/Implementation_Plan_CFI_Ghana_070818_printversion_final2.pdf

¹⁸ <https://www.ghanaredddatahub.org/ecozone/details/1/>



basin development planning and landscape management approach which links food production, biodiversity conservation and restoration of degraded lands.

Project Components

28. The proposed Project will be structured around the following four components and focus upon innovative approaches and technologies to bring local transformations:

Component 1: Strengthening Integrated Landscape Management System and Governance (US\$5.5M IDA; US\$1.6M GEF)

29. This component will support the establishment of governance structures linking landscapes and sub-basin plans which will be prepared. Significantly, the sub-basin level participatory planning approach will help bring stakeholders and initiatives together to implement restoration in line with national and district targets, thus linking them to the Medium-Term Development Plans of the respective District Assemblies. A critical aspect will be to support engagement with the private sector on production and value chain aligned with components 2 and 3 of the Project.

30. The component will also provide integrated spatial planning tools (for mapping, analysis and evaluation) to strengthen the capacity of project implementing agencies to support restoration of degraded lands and sustainable cocoa production. The focus will be upon harnessing cutting-edge technology. With this regard there is a plan to collaborate with World Research Institute (WRI), to develop online platforms that provide geospatial data, analytics and employ decision-support tools¹⁹ for monitoring impacts on both agricultural and forested landscapes and assessing impacts in selected value chains on ecosystem services to inform evidence-based integrated sub-basin planning.

31. This component will also further strengthen the coordination and collaboration of key sector ministries, departments and agencies (MDAs). Key is the collaboration of the Ministry of Environment, Science, Technology and Innovation (MESTI), the Ministry of Food and Agriculture (MoFA), The Environment Protection Agency (EPA), The Forestry Commission (FC), and the Ghana Cocoa Board (COCOBOD). Collaboration of these institutions in the ongoing WBG-financed Sustainable Land and Water Management Project (SLWMP) and the Ghana Forest Investment Program (FIP) has been strong and will be further strengthened under the proposed Project.

32. In the context of gender integration, the Project will follow guiding principles to ensure gender equality and vulnerable group empowerment, given the role of women in the agriculture and forestry sector in Ghana. As part of project preparation, an assessment of social impacts and benefits will incorporate gender-sensitive aspects leading to the identification of specific actions to close identified gender gaps. This will ensure concrete steps emphasize inclusivity in project activities for both women and youth.

Component 2: Support Sustainable Food Production practices (US\$21.0M IDA; US\$4.3M GEF)

¹⁹ Examples include: Global Forest Watch suite of tools - an online platform that provides data and tools for monitoring forests and areas of cocoa production, as well as climate smart cocoa tools (e.g. manuals on CSA and land/tree tenure, Apps and calculation tools, digital finance tools) developed by WCF and partners and used by several companies.



33. This component will support site level mapping, promotion and adoption of technologies that increase land productivity and food production to improve the economic wellbeing of smallholder farmers.

34. In the Northern Savannah region, the Project will continue to scale up Sustainable Land and Water Management (SLWM) technologies²⁰ from the ongoing SLWMP project into new districts by establishing water harvesting structures, promoting natural resource-based alternative livelihoods and post-harvest management and marketing support. It will also promote community riparian vegetation restoration using bamboo and implement Payment for Environmental Services (PES) incentives. Extension officers will strengthen agroforestry technologies (trees on farms, woodlot establishment to meet energy needs of rural communities, fodder trees for livestock etc.) and assist with rangeland improvement as relevant.

35. In the South-Central Region, SLWM technologies will be integrated with climate smart agriculture technologies to build resilience of smallholder farmers within the cocoa landscapes targeted under the project. Extension officers will train individual farmers and farmer cooperatives on cocoa farms working together with private sector partners, on SLWM options including integrated soil fertility management and erosion control techniques, agroforestry, rangeland management, composting and integrated pest management techniques.

Component 3: Forest Landscape Restoration (US\$ 19M IDA; US\$4.6M GEF)

36. In the Northern Savannah Region, this component will scale up biodiversity management in production landscapes in the Western Wildlife Corridor²¹ by establishing new and supporting the implementation plan of existing Community Resource Management Areas (CREMAs)²² for a more effective community empowerment and participation in natural resource management and catchment protection. It will also provide support to the Gbele Resource Reserve (GRR), Digya National Park, and Mole National Park.

37. In the South-Central Region, this component will support the restoration of degraded forests within the cocoa landscapes through widespread enrichment planting in four forest reserves and off-reserve areas, establishing improved boundary demarcations (e.g. survey demarcation, forest reserve boundary planting, enrichment planting and establishment of green firebreaks).

38. In both regions, trainings and provisions of extension services related to forest management, corridor fire prevention and fire suppression strategies will be incorporated in the component design. By enhancing and diversifying

²⁰ Specific interventions will include a mix of improved climate-resilient seed varieties, improved water harvesting, agroforestry, silvo-pasture, contour bunding, organic composting, zai pits, riverbank restoration, farmer-managed natural regeneration, crop rotation and intercropping, slash and mulching, ridging, vegetative barrier planting, cover cropping, dry season gardening, sustainable fire management, among others.

²¹ The Western Wildlife Corridor covers the area of savannah woodland extending from Nazinga Game Ranch in Burkina Faso southwards to the Mole National Park in Ghana.

²² A CREMA is a geographically defined area that includes one or more communities that have agreed to manage natural resources in a sustainable manner. The CREMA mechanism is an innovative natural resource management and landscape-level planning tool for community initiatives. It was developed by Ghana's Wildlife Division, an arm of the Forestry Commission, together with its partners, to support community resource management in off-reserve (un-gazetted) lands.



alternative income generation through the introduction of alternative climate-resilient livelihoods, the Project will further reduce the vulnerability of beneficiary communities and enhance resilience to climate change.

Component 4: Knowledge, monitoring and Project Management (US\$4.5M IDA; US\$2.26M GEF)

39. This component will support project management and coordination activities, including budgeting and planning, procurement and financial management, the costs of annual audits, annual and quarterly progress reports, operational costs and equipment’s and overall project supervision. It would finance monitoring and reporting of project activities, data collection and documentation. The component will further support participation in global and regional events under the FOLUR IP global coordinating hub project, and knowledge generation and dissemination to support scaling up.

Project Cost

Project Components	IDA Financing (US\$)	GEF Financing (US\$)	Total Financing (US\$)
1. Strengthening Integrated Landscape Management System and Governance	5,500,000	1,600,000	7,100,000
2. Support Sustainable Food Production practices	21,000,000	4,300,000	25,300,000
3. Forest Landscape Restoration	19,000,000	4,600,000	23,600,000
4. Knowledge, monitoring and Project Management	4,500,000	2,256,881	6,756,881
Total	50,000,000	12,756,881	62,756,881

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

40. Project location: The proposed Project would be implemented in the Northern Savannah Regions and the South-Central Regions. In the Northern Savannah Regions, project activities will focus mainly within the Guinea Savannah Zone and a small area of Sudan Savannah. The Guinea Savanna covers almost the northern two-thirds of the country and the vegetation consists typically of a ground cover of grasses of varying heights interspersed with fire resistant, deciduous, broad-leaved trees at the forest margins. In the South-Central Regions, the Project area would be located within the Pra River Basin, one of the most intensively used Basin in Ghana for human settlement, agriculture, logging and mining. Overall, the project will have positive impacts as it will promote land restoration for improved food and ecosystem services



in the targeted Savannah, cocoa and degraded landscapes. It will also promote the sustainable management of natural resources and support the livelihoods of local communities depending on those natural resources through practices that integrate conservation needs and development priorities.

41. **Borrower's Institutional Capacity:** The Ministry of Environment, Science, Technology and Innovation (MESTI) is the lead implementing agency and will be responsible for preparing work plans and budgets for implementation. The Environmental Protection Agency (EPA), the Ministry of Food and Agriculture (MoFA); the Forest Services Division (FSD) and Wildlife Division (WD) of the Forestry Commission (FC) and the Ghana Cocoa Board (COCOBOD) will have leading roles in implementing different components of the project. The implementing agencies (IAs) have prior experience in implementing Bank funded projects with satisfactory performance in operationalizing the Bank's Safeguard Policies. Despite this experience, the expanded scope of the Environmental Social Framework (ESF) requires targeted training, monitoring and technical assistance to support the effective implementation of the project. In addition to the proposed technical assistance, the Ministry will be required to appoint two (2) dedicated environmental and social safeguard (E&S) officers to ensure adequate risks identification, management and reporting.

42. **Environment and Social Framework:** The project will be guided by the World Bank Environmental and Social Framework and will comply with all relevant legal requirements in Ghana.

43. **The Environmental Risk Rating is Moderate.** This classification is based on the potential environmental risks and impact as well as the capacity of the implementing agencies. Potential environmental risks and impacts of this project will be associated with activities such as agroforestry practices, rangeland management, cocoa intensification practices, woodlot establishment, enrichment planting in forest reserves and off-reserve, and alternative income generation initiatives. Some potential environmental risks may include deforestation, forest and land degradation, water pollution, erosion, soil contamination, threat to native biodiversity, as well as health and safety risks associated with the use of agricultural inputs such as pesticides and fertilizers and construction. These risks and impacts are largely predictable, low in magnitude and are expected to be temporary and reversible. The impacts can easily be prevented and/or mitigated in a predictable manner. The legal and institutional framework for managing environmental risks and impacts exist and are adequate and the IAs have adequate capacity to prevent and/or mitigate environmental impacts.

44. **The Social Risk Rating is Moderate.** This classification is based on the potential social risks and impacts as well as the capacity of the implementing agencies. The main social impact that may result from this project is related to the restrictions of access to land and forest resources for local populations who depend on these assets for domestic and commercial purposes. This impact is largely predictable, low in magnitude and expected to be temporary and reversible. At this concept stage, the risks for the project to generate or exacerbate GBV risks is considered low. As the project progresses, the Bank will review GBV risks assessment and consider material and proportionate measures to address such risks where relevant.

45. **Activities present key risks such as water, soil and air pollution, health and safety of farmers associated with the use of agricultural inputs such as pesticides and fertilizers.** Activities on agroforestry and forest landscape restoration can also threaten native biodiversity when invasive alien tree species are introduced. Woodlots establishment and restoration of degraded off-reserve areas can affect social relations and land ownership in rural areas. These activities may cause physical and economic displacement of farmers from arable lands. Activities on rangeland management can cause potential farmer-livestock and pastoral mobility conflicts. In addition, minor construction and rehabilitation activities may generate noise, dust and present moderate risks in terms of health and safety of workers and communities.



46. The scope and scale of the anticipated risks are expected to be site-specific, limited, localized, temporary and largely reversible. Prior to project appraisal, MESTI will prepare an Environmental and Social Management Framework (ESMF), a Process Framework, and a Resettlement Framework (RF) to provide guidance for assessing and managing notable E&S risks. The ESMF will provide a general impact identification framework to assist the IAs to screen project activities and institute measures to address adverse E&S impacts. Using the E&S screening tool the project will identify the potential risks of activities and determine relevant risks assessment and mitigation plans; i.e., Environmental and Social Impact Assessments (ESIAs), Environmental and Social Management Plans (ESMPs), Resettlement Action Plan (RAP), Abbreviated Resettlement Action Plan (ARAP) that may be required. In addition, and based on thorough consultation with local communities, the project will prepare a Process Framework to provide guidance for regulated access to forest reserves. Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) risks are expected to be low and will be assessed further prior to appraisal. Nonetheless, the ESMF will include measures for addressing GBV when necessary. MESTI will prepare a Pest Management Plan (PMP) that will assess the nature and degree of associated risks, taking into account the proposed use of pesticides and the intended users.

47. The Borrower will prepare an Environmental and Social Commitment Plan (ESCP) which will outline commitments to prepare and implement safeguard instruments throughout the lifecycle of the project. As part of the ESMF and SEP, the Borrower will maintain and disclose stakeholder engagement records, including a description of the stakeholders consulted, a summary of the feedback received and a brief explanation on how stakeholder concerns were considered in the risks assessment and planning. The challenges of sustainable forest and cocoa landscapes management in Ghana partly reflect a complex network of interests. Evidence suggests that activities in reserved and off- reserved forest areas are controlled by 'powerful' traditional authorities, individuals and interest groups. In some areas, access to forest resources are open to local communities who depend on these resources for their livelihood. In view of that, the project will need to ensure a wide coordination and engagement with various stakeholders including Ministries, Departments and Agencies (MDAs), Metropolitan, Municipal and District Assemblies (MMDAs), traditional authorities, landowners, Farmer-based Organizations (FBOs), Civil Society Organizations (CSOs) and NGOs, vulnerable groups including women, youth, and people with disabilities.

48. The Borrower will prepare and implement a Stakeholder Engagement Plan (SEP) proportional to the nature and scale of the project activities and associated risks and impacts. The SEP will outline the characteristics and interest of the relevant stakeholder groups and individuals, timing, methods of engagement, places and budget to support its implementation. A draft SEP will be completed and disclosed prior to appraisal. If major changes are made to the plan during project preparation, a revised SEP will be publicly disclosed.

49. As part of the SEP, the project will design a functional Grievance Redress Mechanism (GRM) which provides avenues for project-affected persons and stakeholders to raise concerns, questions, and complaints about the project for redress.



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APPROVAL

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