



Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

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BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
Ghana	WESTERN AND CENTRAL AFRICA	P180060	
Project Name	Ghana Tree Crop Diversification Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Agriculture and Food	Investment Project Financing	5/1/2023	6/20/2023
Borrower(s)	Implementing Agency(ies)		
Ministry of Finance	The Tree Crop Development Authority (TCDA), The Ghana Cocoa Board (COCOBOD)		

Proposed Development Objective

The Project Development Objective (PDO) is to improve economic, climate, and social resilience in selected tree crop value chains.

Financing (in USD Million)	Amount
Total Project Cost	227.50

B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

Ghana has, since the 1990s, been among the most politically stable and fastest growing countries on the African continent. The country has experienced rapid demographic growth, its population having expanded by 65 percent (12 million people) or 3.3 percent per year on average since 2000. But economic opportunity has grown even faster, with high prices for cash crops, oil, and gold contributing to an average GDP growth rate of 5.8 percent per year over the same period. As a result, in the space of two decades, Ghana doubled its per capita income and went from over half



to less than a quarter of its population living with less than \$2.15 a day. This achievement made it the first country in Sub-Saharan Africa to meet the Millennium Development Goal (MDG) of halving extreme poverty by 2015. In 2017, Ghana was the second-fastest growing economy in Africa with a growth rate of 8.1 percent, driven by the mining and oil sectors.

To further mitigate poverty and inequality and accelerate progress toward the Sustainable Development Goals (SDGs), the country has launched ambitious plans to diversify and grow the economy by modernizing agriculture and accelerating industrialization. These are among the objectives of the Medium-Term Development Plan for 2018–2021 and the Government of Ghana’s (GoG’s) “Ghana Beyond Aid” reform agenda.

Ghana’s economy is urbanizing, yet agriculture has been, and remains, a pillar of the country’s economic progress accounting for one-fifth of Ghana’s GDP and employ one-fifth of its workforce. The tree crops sector has played a prominent role in driving economic growth and export earnings by both agricultural and national standards. For instance, Ghana is the second largest global producer of cocoa in the world, having generated 14 percent of the global supply in 2020. It is also a minor supplier of half a dozen of other tree crops including cashew nuts (2 percent of global supply in 2020), coconuts, oil palm fruit, natural rubber (each <1 percent but among the top-20), mangos (<1 percent, ranked 36th), and sheanuts (4.5%, ranked 5th). However, agriculture sector is predominantly informal and dominated by smallholder farmers and family farms, relying on traditional farming methods, which makes it a high-risk sector for child labor (ILO and CEIS, 2017). For example, most children involved in cocoa production work as unpaid family labor, which is a direct result of the smallholder production structure of the cocoa sector in Ghana (ILO and CEIS, 2017). Growth in the agriculture sector over the last decade has not been environmentally and socially sustainable. While there has been an increase in number of cocoa growing households as a proportion of all agricultural households, from 55% to 86% between 2008/09 and 2018/19, mirroring an increase in production, there was also a simultaneous increase in the prevalence rate of child labor (11% increase) and hazardous child labor (8% increase) in cocoa production (ILO and CEIS 2017). It is thought that most of the growth in child labor and hazardous child labor has taken place due to increase in production that led to expansion into new less saturated geographic areas and due to the increased use of agro-chemicals in cocoa production practices (NORC, 2020).

The proposed project will have 4 components as follows:

Component 1: Institutional strengthening and value chain governance (US\$ 25 million). This component will build capacity of Tree Crop Development Authority (TCDA) and Cocoa Board (COCOBOD), as well as the capacity to improve the business enabling environment for socially and environmentally sustainable farming and agribusinesses in the selected value chains (cocoa, cashew nuts and coconut). Investments under this component will support the design and implementation of policies and regulations that aim to strengthen effectiveness, social and environmental sustainability of the selected tree crops’ value chains, support research and development (R&D) to underpin climate resilient production, and digitize the value chains for traceability, and mainstream national capacity to monitor and prevent child labor. The component will have 3 subcomponents:

(a) Subcomponent 1.1. Institutional capacity, policies, and regulations will finance TCDA to build institutional capacity and improve service delivery vis-à-vis the private sector. This will include carrying out a needs assessment, offering training, developing administrative policies and manuals for internal operations (HR, IT, internal audit, finance, and procurement), personnel support, and creating an agribusiness promotion desk. It also includes strengthening the governance of the cashew council and coconut federation – TCDA’s service interlocutors – to facilitate and promote



effective private sector nurseries, input providers and other service delivery. The project will also support TCDA to implement a new 2022 tree crop regulations, and modifications to other existing policies and regulations, including mainstreaming climate change. Both COCOBOD and TCDA will do consultations and analysis to better understand the impacts of specific policies and regulations on farmers, processors, enterprise owners, and other value chain actors. Their findings will inform the design of new policies and regulations, as well as advocacy efforts relating to existing regulations. This subcomponent will also strengthen the institutional capacity of the stakeholders with legal mandate to coordinate action against child labor and respond to child labor cases, namely the Ministry of Employment and Labor Relations (MELR) and the Ministry of Gender, Children and Social Protection (MoGCSP). These ministries will be strengthened in their statutory oversight, coordination, planning, and monitoring role with respect to child labor, particularly to complement COCOBOD and TCDA's social risk management systems through leveraging ongoing prevention and remediation programs, professionals and services managed and overseen by these ministries. Particular attention will be given to strengthening child labor monitoring as a contribution to the management information systems that are being developed to ensure product traceability;

(b) Sub-component 1.2. Demand-driven research will finance COCOBOD and Cocoa Research Institute of Ghana (CRIG) to integrate cutting edge technology into research programs. relating to cocoa. Priority topics will include Cocoa Swollen Shoot Virus Disease (CSSVD), fungal diseases, and cocoa pests, as well as fertilizer-use efficiency, natural cocoa pollination, and the development of shade tree varieties. Among other things, the project will support the creation of a CSSVD lab. The project will also finance TCDA and the Center for Scientific and Industrial Research, Oil Palm Research Institute (CSIR-OPRI) and the CSIR Crop Research Institute (CSIR-CRI), responsible for coconut and cashew research respectively, to develop cutting edge research. The program will focus on developing and disseminating appropriate plant varieties with tolerance that is suitable for different geographical regions, including in highly disease prone areas. The project will also finance, TCDA to set up an in vitro lab for cashew and coconut, and breeding programs that develop these high-yielding, pest- and disease-resistant, and climate-resilient tree crop varieties. The project will also support the dissemination of research and technology on farms, as well as proven approaches like integrated soil fertility management (ISFM), integrated pest and disease management (IPDM)

(c) Sub-component 1.3. Value chain digitization for traceability and revenue mobilization. For cashew and coconut, the project will finance the TCDA in implementing an existing blueprint for digitizing the value chains it oversees. For cocoa, the sub-component will support COCOBOD's "last mile" roll-out of the Cocoa Management System (CMS) in project areas and train staff to monitor system. For both systems, interoperability with other databases will be supported in order to ensure that the digitized systems respond to international and regional quality standards.

Component 2. Improving productivity and climate resilience (US\$ 120 million). This component will support the productivity, profitability, and climate resilience of tree crop farms addressing a lack of availability and access to technologies. The Component has 1 subcomponent: (a) Sub-component 2.1. Rehabilitation and investments to increase on-farm productivity. For cocoa, investments will center on rehabilitating CSSVD-infested and moribund farms, including by planting high-yielding and disease resistant varieties. In the process, farms will be encouraged to plant shade trees and adopt climate smart growing practices to both mitigate climate change and increase or diversify sources of income. For cashew and coconut value chains, the project will finance an alliance model approach ("hub and spoke") involving providing a financing mechanism for private sector to deliver seeds, saplings, and other inputs to Farmer-based Organizations (FBOs) and individual farmers, together with Good Agricultural Practices (GAPs) leveraging on Ministry of Food and Agriculture's (MOFA's) extension system. In turn the FBO would work with farmers setting up demonstration farms and delivering the needed quantities of inputs. More specifically, the project will



support the establishment of nurseries which will be private sector-operated and offer high-volume, high-speed, and high-quality multiplication services.

For all tree crops the project will finance responsible FBO capacity building in areas such as (i) training in group dynamics promoting good governance of the FBOs growers' organization, group management, business development, M&E and functional literacy; (ii) support the registration of cocoa cooperatives and development of by-laws if needed, in order to facilitate their access to rural finance and the establishment of contracts with buyers etc.; (iii) development of an outreach communication strategy for FBO's; and (iv) provision of technical assistance, including logistics, short-term expertise, IT and audio equipment, etc.

Component 3. Support for Post-Harvest Management, Processing, Value Addition and Market Access (US\$ 45 million). This component will enhance the post-harvest management, processing, and marketing of cocoa, cashew, and coconut, with the intention of enhancing quality, value addition, and supply to new markets. The component will do this by providing technical assistance and finance to Small and Medium Enterprises (SMEs).

Component 4. Project Coordination, Management, Monitoring and Evaluation (US\$ 10 million)

This component will finance the establishment of a project coordination unit (PCU) at TCDA and a project implementation unit (PIU) at COCOBOD for effective coordination, management, and project monitoring and evaluation (M&E). Key activities will include: (i) establishing and maintaining financial management and procurement systems; (ii) reporting on program activities; (iii) ensuring the full implementation of environmental and social risks and impacts management measures; (iv) maintaining and ensuring the performance of the monitoring and evaluation system; and (v) developing and implementing a knowledge management and communication for development strategy.

D. Environmental and Social Overview

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

For cocoa, project activities will be implemented in the Western North Region (districts of Essam and Adabokrom) and Eastern Region (Asamankese district). For the other tree crops (cashew, coconut, and rubber), the following districts were prioritized: (a) Cashew in Bole and Sawla-Tuna-Kalba of the Savana region, Wenchi and Tain in Bono region, Techiman Municipal and Techiman North in Bono East region; (b) Coconut in Upper West Akim and Suhum of Eastern Region; and (c) Rubber in Upper West Akim. The Eastern and Western North Regions fall within the High Forest Zone (HFZ) of Ghana, which is characterized by rich biodiversity, high carbon stock and vegetation which influences the micro-climate. The Bono and Bono East Regions are within the semi-deciduous forest whilst the Savanna Region has savannah vegetation. The Integrated Biodiversity Assessment Tool (IBAT) indicates 8 Key Biodiversity Areas (KBAs), 8 critically endangered species (flora and fauna), 8 endangered and 25 vulnerable species within the Western North Region. The Eastern Region has 3 KBAs, 11 critically endangered, 20 endangered and 29 vulnerable species. The Bono and Bono East Regions have no KBAs but have 9 critically endangered, 9 endangered and 23 vulnerable species.

Cocoa production through area expansion is one of the drivers of deforestation and child labor, which continues to threaten the livelihoods of the poor, disrupt ecosystem services, and exacerbate vulnerability to climate change. Other drivers of deforestation include illegal logging, mining, and agricultural expansion for staple and tree crops production, including cashew, coconut and rubber. However, there is progress in Ghana with respect to reducing the



loss of primary forests. A recent publication by Global Forest Watch on Cocoa & Forests Initiative reported the reduction of deforestation in West Africa – Ghana and Côte d’Ivoire both reduced primary forest loss by over 50 percent in 2019 compared to the previous year.

Ghana is vulnerable to climate change and climate-related flooding is expected to damage crops and built environments while also exacerbating pest and disease pressures in both environments. Changes in temperature and rainfall patterns will also put downward pressure on agricultural productivity, and may, over time, alter the country’s agricultural geography as some areas become ill-suited to the crops they currently grow.

Gender inequality, mainly fostered by cultural norms and practices, is prevalent in the regions where the project will be located. Women generally lack access to land for agriculture and so largely work on their husband’s land as unpaid family labor. Detailed gender gap assessment in relation to the project and measures for bridging such gaps is ongoing.

According to the Ghana Statistical Service (2020) and Multiple Indicator Cluster Survey (MICS) 2017/2018, the overall child labor prevalence in Ghana is 27.9% which varies significantly between the regions where the TCDP will be implemented. The highest prevalence is in the regions and districts where the cashew component will be implemented with prevalence rate higher than the national average. In some of the cashew-focus districts (Bole and Sawla-Tuna-Kalba in Savannah Region) general child labor prevalence is as high as 49.4 percent. In the Bono and Bono East Region (implementation districts: Wenchi, Tain, Tecniman Municipal, Tenciman North), general child labor prevalence is 32.5 percent. In cocoa, rubber and coconut implementation districts, child labor prevalence is about the same as the national average. In Assamankese, Upper West Akim and Suhum, child labor prevalence is 27.7 percent and in Essam and Adabokrom 27.4 percent.

In cocoa however, child labor is mostly hazardous and is therefore categorized as one of the Worst Form of Child Labor (as per SDG target 8.7 to be eradicated by 2025).

Causes of child labor in cocoa and other tree crops are complex and are not just linked to awareness or poverty. UNICEF (2018) and several other studies have confirmed that child labor is linked to multiple deprivations and will require interventions that consider both the immediate, and root causes that make families and children vulnerable. This includes poverty and low living standards, but also access to health and nutrition, safe water, quality education and social services and the integration of support systems at local level to maximize impact for beneficiaries.

D. 2. Borrower’s Institutional Capacity

The project implementing agencies are TCDA and COBOD. A Project Coordination Unit (PCU) and a Project Implementation Unit (PIU) will be established in TCDA and COBOD, respectively, to implement the project interventions. Both TCDA and COBOD will establish a Child Labor Desk to coordinate the implementation of the Child Labor Subcomponent activities relating to its specific organizations. These desks should be established not later than three (3) months after project effectiveness. The Ministry of Food and Agriculture (MoFA) is the mother ministry of the TCDA and COBOD. The MoFA has experience in IDA funded projects including the Ghana Commercial Agriculture Project (GCAP, P114264) and West Africa Agricultural Productivity Program (WAAPP), which were both prepared and implemented under the Bank’s Operational Policies, with satisfactory safeguards performance. The GCAP was recently evaluated by the Bank’s Independent Evaluation Group (IEG) as satisfactory. The MoFA has



recently prepared the West Africa Food System Resilience Program 2 (FSRP 2; P178132) under the Bank's Environmental and Social Framework (ESF) which has been approved by the World Bank Board but is yet to be counter-signed by the Government of Ghana. For this project, the TCDA will implement activities on cashew, rubber and coconut while COCOBOD will implement interventions on cocoa. The sub-component on child labor will be implemented by TCDA and COCOBOD in collaboration with the following Ministries Departments and Agencies: MoGCSP, MELR, MoLGDRD and OHLGS as relevant to their mandate. The details of coordination that will ensure desired outcome of this sub-component is being developed by the client and will be assessed by the Bank during appraisal.

The PCU of TCDA will consist of an environmental specialist, a gender specialist and a social specialist (who may have expertise in child labor risk mitigation). One of the current staff of TCDA possesses necessary environmental qualifications and experience so he has been appointed as the Environmental Specialist on the project to oversee environmental risks and impacts management. The TCDA will hire a qualified and experienced Social Specialist no later than 30 days after the project Effective Date to oversee social risks and impacts management including issues of child labor if such combined expertise can be identified, otherwise a dedicated child right expert must be engaged to be part of the proposed child labor desk. The Environmental Specialist at the TCDA has previously been involved in the implementation of the IDA-funded GCAP (P114264) and other multi-lateral projects such as the Ghana Agricultural Sector Investment Project which was funded by the International Fund for Agricultural Development.

The COCOBOD has appointed qualified Environmental and Social Specialists in the PIU to oversee E&S risk and impact management for the interventions assigned to the institution. Furthermore, the implementation plan foreseen for the child labor sub-component will include the establishment of a child labor desk in COCOBOD that will include a child right expert to oversee the direct support to the district assemblies in integrating the sub-component activities as part of their annual plans thereby enshrining sustainability of the expected outcomes. COCOBOD is currently an implementing agency in the ongoing IDA-funded Forest Investment Program (FIP) – Enhancing Natural Forest and Agroforest Landscape – where it leads cocoa landscape restoration interventions. The COCOBOD's Research, Monitoring and Evaluation Directorate (RMED) has a Climate Change Desk which specifically deals with climate change issues in the cocoa sector including deforestation, forest degradation, climate-smart cocoa production etc. Both TCDA and COCOBOD will need capacity strengthening on the Bank's Environmental and Social Framework (ESF) since their experience have largely been on projects under the Operational Policies. The project should engage the expertise of a gender specialist, potentially from the gender desk of MoFA, to strengthen the cross-cutting gender aspects of the project implementation. The project's Environmental and Social Management Framework (ESMF) includes a capacity assessment and capacity strengthening program, which will be implemented throughout the project. The Bank will support client's capacity strengthening through trainings on ESF during project implementation.

Ghana has good legislative and policy frameworks which support environmental and social risk and impact management. For example, the Environmental Assessment Regulations, 1999 (LI 1652) prescribe processes to screen projects, prepare necessary E&S assessments and acquire EPA permits to prevent, reduce and/or mitigate potential E&S risks and impacts. The Constitution of Ghana, the Labor Act (Act 651), and the Children's Act (Act 560) prohibit employment of children in hazardous work. The Government of Ghana is currently implementing the National Plan of Action Phase II for the Elimination of the Worst Forms of Child Labor (NPA2) (2017–2020). Also, the Government has ratified the international conventions on child labor including ILO C 138 and 182 and UN CRC. However, COCOBOD's capacity to mitigate child labor risks through its social risk management system has been assessed as weak, and the institutional mandate for managing social risks including child labor risk is spread across different Ministries,



Departments and Agencies (MDAs) creating enforcement and coordination issues. The Tree Crop Development Authority (TCDA) is a nascent institution and has no systems nor capacity in place to mitigate child labor risk in the tree crop sector. TCDA’s E&S risk management will be strengthened through this project.

Collaboration amongst relevant MDAs such as the EPA; the Ministry of Science, Technology and Innovation; the Ministry of Gender, Children and Social Protection (MoGCSP); Child Labor Unit of the Ministry of Employment and Labor Relations (MELR); Ministry of Land and Natural Resources, Ministry of Local Government Decentralization and Rural Development (MOLGDRD) and Office of the Head of Local Government Service (OHLGS), etc., in the implementation of this project is expected to achieve positive synergies through better harmonization of responsibilities and policies which are currently segmented.

II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

High

Environmental Risk Rating

Substantial

The environmental risk is rated substantial considering the nature of proposed activities, the sensitivity of the recipient environment, the magnitude of the environmental risks and impacts and the capacity of the implementing agencies – TCDA and COCOBOD – to effectively manage the potential risks and impacts associated with the project. Component 1 will entail capacity strengthening of TCDA and COCOBOD, development of policies and regulations, and digitization of value chains for traceability and revenue mobilization. These activities will largely have low environmental risks and impacts. However, the computers, tablets and other IT equipment which are associated with the Cocoa Management System (CMS) and value chain digitization, even though low quantities are expected, could pose moderate environmental risks and impacts if they are not well managed. Activities under Component 2 are anticipated to present moderate and substantial environmental risks. These include the proposed expansion and refurbishment of laboratory space and upgrading of equipment; establishment and upgrading of in-vitro laboratories for cashew and coconut varietal improvement; rehabilitation of cocoa swollen shoot virus disease (CSSVD)-infested farms; and support for private sector nurseries development. For instance, civil works associated with the expansion and refurbishment of laboratory space/in-vitro laboratories could result in noise pollution, waste generation (solid and liquid waste), dust and fumes emissions, loss of vegetation, workers and community exposure to health and safety hazards such as vehicular movement, sharp objects, flying objects, etc. The rehabilitation of cocoa farms will cover about 25,000 ha of non-contiguous farms and will entail clearing of CSSVD-infested trees which may expose the land to erosion and pose some degree of disturbance to tree inhabiting organisms. It will also generate a huge volume of infested plant parts that require careful management. Workers may be exposed to some occupational health and safety hazards such as wild animals, hazardous agrochemicals like arboricides, sharp objects, stumps etc. The nurturing of newly planted seedlings through to maturity will require application of agrochemicals, e.g., fertilizers, fungicides, pesticides, etc., which may be hazardous to personnel and biodiversity and could cause surface and groundwater pollution. Likewise, indiscriminate littering of farm lands with empty agrochemical containers could pose environmental and safety risks. As part of support to TCDA, the project proposes to establish a matching grant to partially finance eligible investments. Such investments could include support for rehabilitation, expansion and/or construction of warehouses and other civil works, including possible connections to the grid and water pipelines. These could present some environmental risks and impacts including noise, waste generation, dust and fumes

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emissions, vegetation clearance and possible forest degradation, soil erosion, disturbances to habitats, depletion of biodiversity, workers' exposure to occupational health and safety hazards, e.g., vehicular movement, work at height, electricity, sharp blades, trips, slips, dust, etc. Depending on the location of such civil works, nearby communities may be exposed to traffic and vehicular risks. The risks and impacts will largely be moderate, localized and direct, but those associated with surface water contamination through misuse of agrochemicals and pesticides may traverse communities downstream. These impacts are predictable and can be managed through adequate mitigation measures. Despite these risks and impacts, the project is expected to contribute to reducing incentive for deforestation and will strengthen the resilience of cocoa production systems through intensification and improvement of existing cocoa farms. The project could generally contribute to a net gain in biodiversity through agroforestry practices.

Social Risk Rating

High

The social risk rating for the project is high. This classification is based on the potential social risks and impacts as well as the capacity of the implementing agencies to manage risks and impacts. The draft ESF instruments prepared by the client and under review by the Bank, especially the Stakeholder Engagement Plan (SEP) further highlights anticipated social risks and impacts associated with the TCDP to include: i) child labor risk due to high prevalence rates and weak enforcement of existing laws and measures for prevention and remediation, weak institutional collaboration and less clarity of roles and mandates due to the multiplicity of agencies responsible for managing child labor risk and social risk management in general; ii) localized social conflicts arising from a complex array of interests on land uses especially in the cocoa sector; iii) temporary loss of livelihood and economic displacement under Component 2 activities which includes rehabilitation of diseased cocoa trees; iv) envisaged challenges in ensuring meaningful consultation, citizens engagement, gender and social inclusion leading to potential exclusion from project benefits; (v) weak grievance management systems; vi) the use of migrant labor and incidence of Sexual Exploitation and Abuse and Sexual Harassment (SEAH) and other forms of gender-based violence (GBV), HIV/AIDS and sexually transmitted diseases/infections (STD/I); vii) likely security risks posed by activities of illegal small-scale miners especially in the cocoa producing regions; and viii) Community health risk due to potential use of agrochemicals under Component 2 activities. Finally, the expansion and refurbishment of CSSVD laboratory space under Component 2.1 can lead to land acquisition and involuntary resettlement. In addition, the proposed project activities under Component 2 can alter land tenure arrangement, with potential adverse risk on rights of tenant farmers causing economic displacement and loss of livelihood. The multiplicity of land rights and the frequent presence of many land users in a given parcel of land can pose risks to the project by: (a) presenting difficult to ascertain what the landowner characterizes as a voluntary land donation; (b) impeding the ability of farmers to gain access to land rights for expansion; and (c) increasing the vulnerability of existing land users to displacement, particularly settler farmers and women farmers. The risk of exclusion and elite capture from the project is very likely given the broad array of affected and interested stakeholders along the cash crops value-chains particularly farmers, women and local communities. Mitigating the risk of exclusion would require robust mechanisms for meaningful community and stakeholders' engagement and consultation, gender mainstreaming and social inclusion along the entire value-chains. Mitigation measures to the risk of community health due to fertilizer and other use of chemicals across the project activity will be outlined in the ESMF. The project under subcomponent 1.3, is incorporating a multisectoral, landscape strategy to manage the risk related to child labor. In preventing child labor with support for expanding the capacity to identify, monitor and remediate child labor cases.

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B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered



B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:

Under Component 2, the proposed expansion, refurbishment, upgrading and operation of laboratories could present environmental and social risks and impacts, including waste generation (e.g., construction waste at the construction phase and sharps, gloves, laboratory effluent etc., at the operation phase), noise pollution, dust, and exposure of workers to some degree of occupational health and safety hazards. Support for the establishment and operationalization of nursery facilities may entail the use of agrochemicals and pesticides. Poor handling of these agrochemicals could lead to water pollution, contamination of workers, poisoning and other ill-health conditions. The nurseries may require irrigation during the dry season which could lead to abstraction of water from the nearby rivers, lakes or groundwater. Where water abstraction is needed, the project will be required to conduct a water balance assessment prior to undertaking such activity and will extract sustainable yields utilizing efficient irrigation systems such as drip irrigation. The rehabilitation of CSSVD-infested cocoa farms will entail removal of trees and treatment with arboricides to destroy any inherent virus from re-infesting the field and new seedlings. These chemicals are dangerous to the workers, biodiversity and the environment and could contaminate surface water during run offs if they are poorly handled. While the cocoa productivity improvement will be carried out in the existing cocoa farms, the cashew, rubber and coconut productivity improvement may require clearing and planting of new fields, which could potentially cause deforestation and forest degradation if appropriate control measures are not in place. The project will, as much as possible, use marginal lands for new plantations.

To mitigate any potential deforestation and forest degradation, the project will improve the CMS at COCOBOD and set up digitized systems at TCDA to improve traceability of the selected commodities. The digitization will allow for superimposition of forest maps in real time to determine possible expansion of farms to forest areas. Additionally, the project will screen all sites before implementation of activities on the ground using the screening tool developed as part of the ESMF. This will enable the project to identify and avoid interventions in designated forest areas.

The post-harvest management and processing of the cash crops could produce solid waste and effluent, noise, and expose workers and communities to health and safety hazards. For example, the corrosive pulp from cashew processing could cause skin burns and other ill-health conditions in workers. The processing activities will use raw materials, water, and energy, which must be sustainably sourced and managed.

The project's matching grant could support rehabilitation, expansion and/or construction of value-chain facilities, such as storage and processing facilities as well as connection of these facilities to the grid and water pipelines. Potential environmental risks and impacts could include noise, waste generation, dust and fumes emissions, vegetation clearance and possible forest degradation (depending on the location of the facility), disturbances to habitats, worker's exposure to occupational health and safety hazards, e.g., vehicular movement, work at height, electricity, sharp blades, trips, slips, dust, etc. Depending on the location of such civil works, the fringe communities may be exposed to traffic and vehicular risks.

Given that the specific project intervention sites have not been clearly defined at this stage, the project has prepared an ESMF that clearly provides guidance and procedure to follow to identify, assess and manage potential E&S issues associated with the sub-projects or project activities. The ESMF includes a screening tool which will be applied when



sites and project activities are known to determine the necessary site-specific E&S instruments to be prepared e.g., ESIA and ESMP, etc., before the commencement of the sub-project activities. The ESMF contains an Exclusion List of activities that will not be supported by the project which include: (i) establishment of farms in legally protected areas, (ii) expansion of farms into protected forests, reserved forests and state forests and wildlife parks, (iii) substantial depletion of habitats and biodiversity, (iv) use of forced labor, (v) use of child labor, (vi) over-abstraction of water resources, and (vii) use of unregistered and unapproved agrochemicals/pesticides.

In addition, the project has prepared a Resettlement Policy Framework (RPF) which details the processes and procedures for developing a site-specific Resettlement Action Plan (RAP) for mitigating the potential risk of involuntary resettlement, economic impact, and loss of livelihood. The Project has also developed a Stakeholder Engagement Plan (SEP) including a framework for Grievance Mechanism (GM), Labor Management Procedures (LMP) with child labor mitigation action plan and GBV/SEAH action Plan. Moreover, the project has prepared an Integrated Pest Management Plan (IPMP) to provide guidance on integrated pest management techniques and it includes measures to avoid, reduce and/or mitigate potential risks and impacts of pesticide use and pest control. These instruments were prepared with active participation of the project affected people through public consultations. The E&S documents are currently in draft form and will be finalized and disclosed in country and on the World Bank external website prior to appraisal.

To address the potential risk of child labor, the project is incorporating an area based comprehensive child labor prevention, monitoring, identification and response system to address the multifaceted drivers and root causes of child labor as an integral project design (subcomponent 1.3); and by proposing to recruit a technical team as described in subcomponent 1.3 for the implementation of the child labor specific activities. The sub-component will support interventions at the district and municipality levels as well as strengthen institutional oversight capacity at the national level. The sub-component will complement initiatives implemented by the government and other donors and support scale-up of proven high-impact interventions in addressing child labor risk. The LMP also includes measures to address child-labor.

ESS10 Stakeholder Engagement and Information Disclosure

The entire cocoa value-chain—as well as the cashew, rubber and coconut value chains in Ghana—involves a complex network of actors with varying and sometimes opposing interests, which need to be efficiently managed. The diverse array of stakeholders includes Ministries, Departments and Agencies (MDAs) at the central state level as well as Metropolitan, Municipal and District Assemblies (MMDAs), traditional authorities, landowners, farmers including tenant farmers, Farmer-Based Organizations and Associations, Civil Society Organizations/Non-Governmental Organizations (CSOs/NGOs), Women’s Associations, Vulnerable Groups including women, youth, the aged and people with disabilities (PwDs). Designing and implementation of social risk management measures including child labor risk mitigation measures will require wide consultations with these stakeholders and the communities in the project areas. Stakeholders’ engagement is key in both the successful preparation and implementation of the proposed project and holds the potential for project acceptance, functionality, and sustainability.

The Borrower has prepared a Stakeholder Engagement Plan (SEP) proportional to the nature and scale of the project activities and associated risks and impacts. The SEP outlines the characteristics, interests and influences of the



relevant stakeholders, timing, methods and mechanisms of engagement, feedback loop, places and budget to support its implementation. Given that COVID-19 is not totally gone, the SEP incorporates measures to prevent its spread during stakeholder engagement activities. The SEP sets out how the Borrower will engage in meaningful consultations with all stakeholders throughout the project life cycle paying particular attention to the inclusion of vulnerable and disadvantaged groups such as women associations, the elderly, persons with disabilities, female headed households, tenant farmers, orphans, migrant-herders, and vulnerable children. The Borrower will provide stakeholders with timely, relevant, clear, and accessible information considering persons with speech and visually impaired, and consult with them in a culturally appropriate manner, which is free of manipulation, interference, coercion, discrimination and intimidation.

As part of the environmental and social assessments during project implementation, the implementing agencies will maintain and disclose a documented record of stakeholder engagement, including a description of the stakeholders consulted, a summary of the feedback received and a brief explanation of how the feedback was considered, or the reasons why it was not. The SEP also proposes a comprehensive Grievance Mechanism (GM) to provide a framework for project-affected persons (PAPs) and stakeholders to submit and receive resolutions to their grievances. Given that the project is labor intensive (hand pollination, pruning, nurseries, and spraying), special attention will need to be paid to grievances related to child labor and gender-based violence issues that may be precipitated by project activities.

The SEP is currently in a draft form and will be finalized and disclosed in country and on the World Bank external website prior to appraisal.

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

ESS2 is relevant because the project will involve direct workers, contracted workers and primary supply workers. Direct workers will be largely staff of the implementing agencies (TCDA and COCOBOD), and research institutions comprising Cocoa Research Institute of Ghana (CRIG); Oil Palm Research Institute of Council for Scientific and Industrial Research (CSIR-OPRI); and Crop Research Institute (CSIR-CRI). Contracted workers will largely be hired from the immediate project communities for the establishment of nurseries and also for the expansion and rehabilitation of laboratories. For the rehabilitation of cocoa farms, the project will contract private firms who will hire workers from the immediate project communities to undertake activities such as felling of CSSVD-infested cocoa trees, planting of improved varietal cocoa seedlings, planting of temporary and permanent shade trees (agroforestry) as climate change adaptation and mitigation measures etc.

The primary supply workers will involve individuals and firms who will regularly supply construction materials for the rehabilitation of the laboratories.

These workers will be exposed to occupational health and safety risks, including injuries from machinery, equipment, and tools; exposure to fumes and dust; snake bites and animal attacks; agrochemical contamination and poisoning; manual handling with its associated injuries; slips; trips; falls; stress; etc. Other labor risks include unfair treatment,



discrimination, unequal opportunities, lack of freedom of association, sexual exploitation and abuse/sexual harassment (SEA/SH) etc. Child labor remains a major risk in Ghana's agricultural sector. The incidence of child labor has risen in Ghana in the last few years and manifested highly in farming households in the agricultural sector, including cocoa, forest, and fisheries, due to reasons such as poverty and traditional farming system, which often demand more labor, including children.

The project will mitigate this risk through the implementation of the LMP, moreover, the project proposes to strengthen national capacity to address child labor in the tree crops sector under sub-component 1.3, to include awareness-raising about child labor and to support additional income generating opportunities and other measures to address the root causes of child labor. This subcomponent will also support the establishment of processes and certification of different standards including the Hazard Analysis and Critical Control Point (HACCP), International Standardization Organization (ISO) under component 3 to help provide verifiable indicators for the elimination of the worst forms of child labor. To further tackle the problem of child labor in the sub-sectors of agriculture covered by this project, especially in cocoa, the project will include activities such as monitoring and reporting of child labor issues, mapping of child labor interventions, strengthening child labor monitoring as a contribution to development of traceability systems that follow regional and international norms, and developing communication programs regarding child labor awareness and behavioral change. The government of Ghana is already piloting child labor free zones, and this project will establish linkages to benefit from lessons learnt as well as promote coordinated action against child labor.

Children's participation in non-hazardous farming activities in line with national regulations and ESS2 provisions can be positive, especially in family farming, as it contributes to the inter-generational transfer of skills and knowledge. With this strategy, the project has prepared an LMP which proposes engaging children between the minimum age of 14 and 18 in non-hazardous agricultural activities without interfering with their schooling and is in line with international definition of Light Work for children. The OHS risks and impacts have been assessed in the ESMF and subsequently in the LMP. The LMP includes a Grievance Mechanism (GM) for different categories of workers employed in the project and a draft Code of Conduct (CoC) to be adopted and signed by all workers.

ESS3 Resource Efficiency and Pollution Prevention and Management

This standard is relevant. The plantations of cash crops will largely be rainfed; however, at the nursery stage it may be necessary to irrigate the seedlings using water from nearby lakes, rivers and groundwater which could cause over abstraction. Also, the production of improved planting materials at the nursery and subsequent maintenance of established farms may involve the use of agrochemicals, e.g., fertilizers, fungicides, pesticides, etc., which may present some environmental and human health risks. The post-harvest processing activities may utilize water, raw materials and energy and are likely to emit fumes, greenhouse gases (GHG) and generate effluent. To address these impacts, the project will prioritize support for SME's proposals that incorporate technologies and innovations that efficiently use water, energy (e.g., renewable energy), and raw materials and have lower environmental and social footprints. For example, the project will promote fuel-efficient machinery for SMEs, integrating the pollution prevention measures in the SMEs' designs, climate-friendly refrigerants in cold-storage facilities, etc.



The project will not finance activities or subprojects which do not conform to ESS3, and this will be determined by assessing proposals submitted for project funding through the matching grant. Additionally, the project will use the screening tool developed as part of the ESMF to screen out such activities or subprojects. The project intends to use Integrated Pest Management (IPM) approaches to deal with potential issues of pests, diseases and associated pesticides. In line with this, the project has prepared an Integrated Pest Management Plan (IPMP), which provides guidance and recommendations on integrated pest management techniques and measures to avoid, reduce and mitigate risks and impacts of pesticide use. As part of the IPMP, pesticides will only be used as a last resort to control pests. The preparation of the IPMP benefitted from consultation with key stakeholders whose concerns and views were considered in the report.

Additionally, the ESMF prepared by the client has assessed the potential E&S risks and impacts from resource use and pollution and provided appropriate mitigations. These risks and impacts will be subsequently assessed and mitigated in the ESMP, which will be prepared for necessary subprojects. Both the IPMP and ESMF incorporate relevant sections of the WBG Environmental, Health and Safety (EHS) Guidelines to guide the client on issues of pests and diseases control, pesticides use, resource efficiency, pollution prevention and management.

The Bank has conducted greenhouse gases (GHG) emission estimation for the project and the results are very positive, with the total reduction in CO₂e emissions estimated at minus (-) 1.23 million tonnes over a 20-year period, -61,811 tCO₂e annually, due to replanting of cocoa, cashew and rubber trees as well as climate-smart agricultural practices in coconut.

ESS4 Community Health and Safety

This standard is relevant. The potential use of agrochemicals, such as pesticides, fungicides, fertilizers, etc., at the nursery and plantations may be carried through spray drifts as aerosols or through run-off to project communities. This may present some health and safety risks and impacts to the communities, especially if it contaminates water bodies or is inhaled by the residents. The proposed refurbishment of CSSVD labs, depending on the choice of construction method, may present some vehicular and traffic related risks even though the level of risk is expected to be low. The proposed expansion and rehabilitation of the laboratories, in-vitro laboratories and other physical infrastructures to be financed through the matching grant will need to consider and incorporate structural quality and safety standards relating to fire, universal access, climate change, etc., in their design. The rehabilitation of cocoa farms and establishment of cashew, rubber and coconut plantations may involve labor influx of migrant workers who may present some risk of communicable diseases such as HIV/AIDS and public health diseases such as COVID-19. Use of migrant workers and influx of workers in project communities may also create risk of Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) to the communities even though the SEA/SH risks for this project have been assessed using the World Bank tool and it is low at this stage.

The SEA/SH risks and impacts will be managed by: i) preparing a GBV/SEA/SH Action Plan; ii) conducting a GBV/SEA/SH service provider mapping and developing a clear referral pathway; iii) increasing awareness on SEA/SH issues; iv) developing and requiring the signing and adhering to Code of Conduct (CoC) as mandatory for implementation staffs and public authorities associated with the project; v) developing an accountability and response framework and regularly sensitizing, briefings/training/workshop to educate people about consequences



and disciplinary action for violating the CoC and committing GBV/SEA/SH. The project will be implemented at a time when COVID-19 is still expected to be prevalent, and this will require adherence to prudent measures such as social distancing, regular hand washing, sanitizing, use of nose covers where appropriate, etc., to avoid spread among workers and communities. These risks will be assessed in the site-specific E&S instruments that will be prepared during project implementation.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

The proposed project is unlikely to acquire a large tract of land for infrastructural development or cocoa, cashew, rubber and coconut farms. However, there is the potential for land acquisition for expanding a CSSVD and plant breeding and genetic laboratory. At this stage, the proposed expansion of warehouses or the construction of new ones are envisaged to take place on existing government lands belonging to the TCDA or the MoFA. The risk of loss of livelihood is possible if there are farming and other encroachments on the land. Other project activities, such as mitigation and adaptation measures, R&D, digitization systems for monitoring climate change and carbon on farms, the income generating opportunities, investment in climate resilient storage and drying infrastructure can alter the land tenure arrangement, with potential risk and adverse impacts on the rights of tenant farmers and their means of livelihoods including economic displacement and impacts.

Also, there is often a complex array of interests present on land which are often not documented and include (i) long-term customary rights derived from membership in the community; (ii) tenancies of varying durations, including migrants (or so-called “strangers”) from outside the community, some of whom may have been present for generations, others of whom may be of recent origin; (iii) sharecropping arrangements for cocoa; and (iv) pastoral and other rights over common property. The multiplicity of land rights and the frequent presence of many land users in a given parcel of land can pose risks to the project by: (a) presenting difficulty in ascertaining what the landowner characterizes as a voluntary land donation; (b) impeding the ability of farmers to gain access to land rights for expansion; and (c) increasing the vulnerability of existing land users to displacement, particularly settler farmers and women farmers.

Given that the specific locations of subprojects have not been yet determined, the Borrower has prepared a Resettlement Policy Framework (RPF) that outlines policies and procedures to adopt in mitigating these risks and impacts. The draft RPF is under review and will be disclosed by project appraisal. COCOBOD has a practice for treating diseased and old cocoa trees. In this practice, COCOBOD provides alternative livelihood support to farmers and landowners as social support for the seasonal loss of income until tree maturity. Farmers participation in this process is voluntary and does not induce involuntary resettlement. The relationship between tenant farmers and landowners is yet to be explored and clearly understood. In the context of the project, the procedure for the voluntary rehabilitation of the diseased trees and related agreements with farmers will be clearly elaborated in the Project Implementation Manual (PIM) which will be reviewed and cleared by the Bank.



ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

This standard is relevant as the project will involve primary production and harvesting of natural resources, such as perennial crop farming (cocoa, cashew, coconut and rubber) under Component 2. The inclusion of agroforestry practices among the selected cash crops, particularly in cocoa and cashew farms, will contribute to the continued long-term production of the resource from the same natural resource base. For instance, cocoa production under agroforestry is known to contribute to a longer life-cycle, greater climate resilience and a more stable and diversified income for farmers. Moreover, the agroforestry and poly-cropping systems will contribute to biodiversity enrichment.

The project intends to utilize cashew, rubber and coconut, depending on suitability, to revegetate lands where cocoa production is no longer tenable. This could help improve the vegetation cover and biodiversity. However, there is a tendency to degrade forests and/or cause deforestation for the establishment of new cashew, rubber and coconut plantations if proper controls are not in place and enforced. Also, the potential use of pesticides at nursery and plantation fields, as well as the use of arboricides to treat felled cocoa trees, could be deleterious to some biodiversity. These pesticides and arboricides could potentially be washed into water bodies through run-off and cause adverse impacts on aquatic life.

These risks have been assessed and adequately mitigated in the ESMF and IPMP which have been prepared and disclosed by the Borrower. The ESMF includes screening procedures to avoid any development in biologically sensitive areas. The potential risks and impacts on biodiversity and living natural resources will be subsequently assessed and mitigated in site-specific E&S instruments such as ESIA and ESMP, which will be prepared, when necessary, during project implementation.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

This standard is not relevant for the project as there are no Indigenous Peoples/sub-Saharan African Historically Underserved Traditional Local Communities in the project area.

ESS8 Cultural Heritage

This standard is relevant as the project will support the establishment of cashew, rubber and coconut plantations in new fields; some of them may potentially have sacred groves which must be protected. Also, the matching grant component could finance investments that involve excavations, demolition, movement of earth, etc., as may be the case of warehouse construction and/or rehabilitation.

The ESMF prepared by the Borrower includes Chance Find Procedures as a guide to deal with any surprises that may be encountered during project implementation. All confirmed sites during the project implementation will be screened using the screening tool incorporated in the ESMF before the commencement of activities on the ground. This will help identify and avoid areas within a legally protected area or a legally defined buffer zone; and locations within the vicinity of a recognized cultural heritage site.



ESS9 Financial Intermediaries

This standard is not relevant as the project will not involve financial intermediaries. The project, through a matching grant, will support SMEs to prepare bankable business plans which they could use to access loans from financial institutions. The financial institutions, referred to as Participating Financial Institutions (PFIs), will not be funded by the Bank nor the project and/or the Borrower.

All SMEs that leverage on the project’s matching grant to access PFI loans will have such interventions subjected to the projects E&S due diligence including screening of their proposals and interventions and ensuring that they have in place adequate E&S instruments, as necessary, to deal with any potential E&S risks and impacts. As part of capacity strengthening of the SMEs, the project may use part of the matching grant to develop necessary E&S instruments for the SMEs and strengthen their E&S capacity to enhance their attractiveness for investments.

B.3 Other Relevant Project Risks

The project will be implemented at a time when COVID-19 still exists. There is a need to follow necessary precautionary measures to avoid infection and aggravation.

C. Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways	Yes
OP 7.60 Projects in Disputed Areas	No

B.3. Reliance on Borrower’s policy, legal and institutional framework, relevant to the Project risks and impacts

Is this project being prepared for use of Borrower Framework? No

Areas where “Use of Borrower Framework” is being considered:
The borrower’s E&S framework shall NOT be used for this project.

IV. CONTACT POINTS

World Bank

Public Disclosure



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Implementing Agency(ies)

Implementing Agency: The Tree Crop Development Authority (TCDA)

Implementing Agency: The Ghana Cocoa Board (COCOBOD)

V. FOR MORE INFORMATION CONTACT

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VI. APPROVAL

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