Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 05/31/2024 | Report No: ESRSA03466

I. BASIC INFORMATION

A. Basic Operation Data

Operation ID	Product	Operation Acronym	Approval Fiscal Year
P180864	Investment Project Financing (IPF)	Burundi Colline	2025

Operation Name	Burundi Colline Climate Resilience Project

Country/Region Code	Beneficiary country/countries (borrower, recipient)	Region	Practice Area (Lead)
Burundi	Burundi	EASTERN AND SOUTHERN AFRICA	Environment, Natural Resources & the Blue Economy

Borrower(s)	Implementing Agency(ies)	Estimated Appraisal Date	Estimated Board Date
Republic of Burindi	Ministry of Environment, Agriculture and Livestock of Burundi (MINEAGRIE)	23-Oct-2024	06-Dec-2024

Estimated Decision Review Date	Total Project Cost
10-Jun-2024	68,348,624.00

Proposed Development Objective

To increase land productivity and climate resilience of fragile communities in targeted collines.

B. Is the operation 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 Activities

The proposed investment project (US$70 million) seeks to strengthen the Government of Burundi's capacity to anticipate, prevent and mitigate impacts from climate change in Burundi's priority fragile colline hotspots identified as being at high-risk hotspots from combined effects of climate, land degradation, and socio-economic vulnerability. The proposed project will strengthen Burundi's capacity at national, watershed and colline scales to anticipate, monitor and act on intensifying climate and land-related risks. Focus will be placed on building local capacity in Burundi to co-design and co-implement a multi-sector and cross-sectoral process for achieving climate resilience while strengthening climate-resilient livelihoods to improve the economic prospects of households in targeted areas. Proposed project components

are as follows: • Component 1. Enabling environment for climate resilience • Component 2. Sustainable watershed management • Component 3. Community livelihood resilience • Component 4. Project Implementation Support • Component 5. Contingency Emergency Response Component (CERC) Component 1: Enabling environment for climate resilience 1. The activities of this component will improve policy, regulations, administrative procedures, and institutional capacity. It will enable a whole-of-society climate and land governance approach and cross-sector collaboration among key stakeholders: mandated national governments, local governments, civil society, academia, businesses, farmer cooperatives, schools, and households, including socially marginalized and disadvantaged groups. As such, this component will finance economy-wide and select sector-specific reforms: i) policy & regulatory framework to strengthen the policy and regulatory environment for key national stakeholders and businesses to facilitate more integrated and coordinated management, programmatic planning and investment for addressing climate change and land degradation risks in Burundi; and (ii) institutional capacity support to strengthen institutional, technical, and human capacity of line agencies and government sector departments for improved climate risk management. This approach will support vertical integration of political jurisdictions from local, national, regional, and international levels and a horizonal integration among multiple sectors. This component will finance goods, services, and possibly some works to provide technical assistance, policy, and planning support, as well as to cover recurrent expenditures, including operating costs. Expected outputs will be enhanced support to planning at national, sub-basin/watershed levels for effective climate risk management, sustainable landscape management, climate resilience and integrated water resources management, including within protected areas, as well as institutions equipped to address rising climate and land risks. Component 2: Sustainable landscape management 2. This component will finance the scale-up of sustainable landscape management (SLM) activities at watershed-level (terracing, reforestation, locally adapted farmer-led irrigation systems), including management of at-risk, vulnerable hillsides in protected areas. The sub-components will include activities to: (i) prepare integrated watershed management plans, and (ii) restore and bring landscapes under sustainable management. National-level leadership, technical guidance, and strategic policy planning will be tailored to each watershed's needs. Specific Watershed Sustainable Landscape Management (SLM) execution plans will be developed for each priority watershed targeted by the project and serve as the basis for identifying the package of land restoration activities needed on each watershed. Leveraging Nature-Based Solutions (NBSs), landscape restoration and integrated watershed management measures (such as micro catchment water harvesting, managed aquifer recharge) will alleviate landslide, erosion, and flood risks currently affecting people, food production, livelihoods, and infrastructure. Strong stakeholder engagement is key to ensure that proposed NBS activities will be appropriate for the local context and to build local ownership, so the interventions are likely to be sustained over the long term . The component will finance goods, services, and civil works, including High-Intensive Labor Works providing employment opportunities for local communities to conduct the tree replanting works, as well as recurrent expenditures, including operating costs. Component 3. Community livelihood resilience 3. This component will invest in activities to increase livelihood resilience of the project targeted communities. The subcomponents are likely to include investments to: (i) prepare and mainstream Climate Change Action Plans (CCAPs) into commune development plans; (ii) implement climate-resilient livelihood support; and (iii) improve land security through land certification at scale in each target colline. This component will mobilize commune and colline leaders and equip them to prepare climate action plans, strengthen local early warning – early action systems and contingency plans and zoning regulations. It will also finance direct climate-resilient investment packages to support vulnerable communities' livelihood resilience and income diversification. This component builds on the lessons and successes of the Burundi Landscape Restoration and Resilience Project (P160601) and continues investing in community land tenure security, as an enabling condition for climate-resilient livelihood enhancement. The component will finance goods, services, and civil works, as well as recurrent expenditures, including operating costs. 4. Across the components, the project will prioritize equity, inclusion,

and social cohesion – the essential ingredients for long-term resilience in the face of multi-risk fragility observed in Burundi's collines. The project will have a well-developed gender and social inclusion focus because the proportion of women in the collines is disproportionately larger than elsewhere in the country (men are more likely to migrate to cities for work). The project will thus prioritize the inclusion of marginalized groups, including women, youth, Internally Displaced Populations (IDPs, notably those driven out of their homes by climate-related disasters, or 89 percent of all IDPS as per latest IOM data), refugees, returnees, Batwa communities and other ethnic minorities, single mothers, and people with disabilities. Working closely with the ongoing social protection projects in the Burundi portfolio (see Annex 3), the project will build on ongoing efforts to prepare a national registry to identify the most vulnerable, as well as evidence from humanitarian operations to locate the most climate-afflicted and displaced. Other examples of project interventions to address social cohesion are upscaling colline-level land certification and registration activities to include recognition of land rights for the most vulnerable (widows, female-headed households, marginalized groups); digital cash-for-work transfers to local marginalized batwa communities for land restoration labor work; and providing space for community dialogue to addressing conflict-related trauma to further reduce social conflict risks and foster inclusion. These measures will help build shared prosperity and reduce multi-risk fragility in Burundi's colline landscapes.

D. Environmental and Social Overview

D.1 Overview of Environmental and Social Project Settings

The Project is nation wide and will target fragile Colline (or hillside) communities, landscapes, and institutions across Burundi. Hillside settings in Burundi are prone to soil erosion and, also identified as hotspots of climate change risks including floods and landslides. The country's 2,692 rural collines span mountainous areas as well as a central plateau and low plains in the east and south. 347 collines are very high-risk and hotspots of climate and environmental fragility and need to be prioritized for investment. The flood analysis found the western and eastern most parts of the country are at particularly high risk (IOM, 2022). Burundi also faces challenges related to water pollution due to inadequate agricultural and sanitation practices, which affects public health and aquatic life. In terms of sensitivity/protected areas, Burundi has 16 protected areas (National Parks, Nature reserves, Natural Monuments and Protected Landscapes, the Hot Springs of Muhweza) covering over 143,000 ha, which is 5.6% of the total national territory and almost 30% of the total available natural ecosystems. Burundi has a low Forest cover in the order of 11% of the total land area. It is not yet possible to assess the extent this can be affected by the project as the specific areas covered are still to be defined.

The rivers of Burundi belong to three main basins: the Tanganyika, Kagera, and Malagarasi River basins. At the same time, the Kagera River belongs to the Nile Basin, while the other two belong to the Congo Basin region. All the Burundian river basins are trans-boundary (Lopez et al. 2022). The current project will target 71 (covering a total of 65 collines that are hotspots of climate and environmental fragility) within seven provinces: Cibitoke, Gitega, Kirundo, Kayanza, Bujumbura, Muyinga and Burundi. The following criteria were used: watershed vulnerability; Colline vulnerability; parent landscape restoration sites; Protected Areas; social inclusion; Investments-at-risk approach and Accessibility. Major challenges face by these watersheds include poor land management; land degradation caused by landslides, the expansion, and new settlements in very fragile ecosystems (forests, wetlands, steep hills, riverbanks, shorelines, etc.); sedimentation, etc. Burundi's wetland network is estimated to occupy 120,000 ha. The extensive wetland areas in the basins of Ruvubu, Akanyaru and higher Akagera rivers are under intense population pressure for conversion into agricultural lands, grazing in the dry season, or extraction of materials for construction, with some of them being dominated by invasive species.

Burundi has three major categories of forests and woodlands – the Albertine Rift Montane Forest, the Central Zambezian Wet Miombo Woodlands, and the Victoria Basin Forest Savannah. Today, forests occupy less than 11% of

Burundi's total land area. According to FAO, in 2020, forests accounted for 10.9% of the total land area, or 2,800 km². Of which, an estimated 1,670 km² was primary forest and 1,130 km² was planted forests.
Burundi's forests provide significant ecosystem services and are culturally important to the country's local communities (USAID, 2021). According to the latest report published by ISTEEBU (Institut des Statistiques et d'Etudes Economiques du Burundi) In 2021, the use of firewood has increased from 6,086,610 tons in 2010 to 10,655,944 tons in 2017, an increase of 57.1%. Around one third of Burundi's land is considered as highly degraded or extremely degraded. The most degraded lands are in the centre, centre west, and along the western border of the country. Eight of the poorest regions of the country (Muyinga, Ruyigi, Gitega, Cankuzo, Kayanza, Kirundo, Karusi and Rutana), are also amongst the most degraded ones (Green Climate Fund, 2022). Agriculture is the source of livelihood for most of the population in Burundi, employing about 90% of the labor force and contributing around 30% of the country's GDP [IMF, 2022]. It is also largely practiced on a small scale and dependent on climatic conditions. Many of these collines are hubs of vulnerability, with 90% of colline inhabitants being women and youth who depend on rain-fed agriculture along increasingly degraded hill slopes .
The expected impacts of climate change pose a significant threat to agriculture production and investing in climate-smart agriculture is key.
In Burundi, climate change exacerbates the "fragility trap" as intensifying heavy rainfall events followed by steep landslides degrade scarce lands, and create community tensions over access to scarce lands, disrupting tenuous community social cohesion and reopening wounds in this post-conflict fragile country. Indeed, between 80-95% of court cases ongoing are related to land ownership disputes. Social and contextual complicating factors, such as a rapid urbanization, high population growth, conflict-induced traumas, high youth unemployment, and the increasing scarcity of land.
In Burundi there are high rates of GBV and intimate partner violence (IPV), prevalence of sexual violence, and a fragile country context where women experience high rates of poverty as well as increased vulnerability due to displacement. Nearly half (47%) of Burundian women report having experienced physical or sexual intimate partner violence, nearly a quarter of women (23%) report having experienced sexual violence in their lifetime, and 62% of women believe that a man is justified in beating his wife in at least one reason, all of which are higher than average for the Sub-Saharan Africa region. Women and girls face limited economic opportunities, and as such, may resort to transactional or coerced sex to meet their own survival needs or those of their families.[1] Burundi has a significant displaced population,[2] of which women and girls are among the most vulnerable, facing a number of challenges including extreme poverty, lack of access to basic infrastructure, services and livelihoods, as well as high rates of GBV.[3] In general, women's vulnerability to climate change is a result of social, economic and cultural factors, and women and girls in Burundi will be no exception in view of existing social and economic vulnerabilities and discriminatory gender norms.
The project will thus prioritize the inclusion of marginalized groups, including women, youth, Internally Displaced Populations (IDPs, notably those driven out of their homes by climate-related disasters, or 89 percent of all IDPS as per latest IOM data), refugees, returnees, Batwa communities and other ethnic minorities, single mothers, and people with disabilities.

[1] Victoria Rames, Clémence Bununagi, and Caritas Niyonzima (2017) USAID/Burundi Gender Analysis Report. Prepared by Banyan Global.
[2] UNOCHA (2019). Burundi : Burundi:Aperçu Humanitaire (novembre 2019).
[3] IASC (2015). Guidelines for integrating gender-based violence interventions in humanitarian action: reducing risk, promoting resilience and aiding recovery.

D.2 Overview of Borrower's Institutional Capacity for Managing Environmental and Social Risks and Impacts

The Project Implementation Unit (PIU) hosts by the Ministry of Environment, Agriculture and Livestock (MINEAGRIE) will be responsible for overseeing the planning and implementation of the project activities, including E&S risks management. The PIU has been established since 2018 for the management of the parent project (the Burundi Landscape Restoration and Resilience Project) and its GEF Additional Financing subsequently approved in 2020 (P160613 & P171745), and it is already implementing under the ESF the Project Preparation Advance (PPA) for this new Burundi Collines project of US$2.5 million approved in July 2023.

National PIUs: the recruitment of key PIU staff has already been finalized under the PPA, and the project team is already in place and includes one environment, one social specialists (E&S) and a gender and GBV specialist. ESF capacity building support has been provided to the PIU throughout project preparation. However, their experience related to ESF is limited and additional capacity building support will be provided through implementation.

Provincial branches: the PIU will have three provincial Branches (Muyinga; Isare and Gitega) staffed each with a community specialist. Their main tasks will be to ensure (i) engagement of the beneficiaries and supervision of the Stakeholder Engagement Plan's (SEP) implementation. Tailored ESF training with focus on ESS10, ESS2 and ESS6 will be provided to community specialists.

Field entities: the project will set up 71 Sub-Watershed Management Committees, 71 Commune / Colline Development Committees and competitively hire implementation partners (private firms, organizations and/or experienced NGOs). In addition, the PIU will cooperate with various municipalities during the implementation of the project. All these potential stakeholders may not be aware of ESF requirements and E&S capacity building support will be provided. Content of their training courses will be needs based and will be determined during project implementation. Relevant ESS requirements will be incorporated into their contracts. This will make implementation partners responsible to the PIU for managing E&S risks and delivering E&S outcomes.

Except OBPE (ESIA authorities) which has been implementing component 3 of "Burundi Landscape Restoration and Resilience Project (P160613) under the World Bank's safeguard policies, other government Implementing agencies (, Direction Générale du Patrimoine, key sectoral ministries, etc.), do not have experience to carry out project activities under ESF requirements. ESF training to focal point of these agencies will be conducted.

Additional capacity needs assessment of the above listed key stakeholders for managing E&S risks and impacts, including the risks related to SEA/SH, shall be conducted, and capacity building plans developed no later than 06 months after the Effective Date.

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

A. Environmental and Social Risk Classification (ESRC)	Substantial
A.1 Environmental Risk Rating	Substantial

The project risk is rated as Substantial at this stage. This rating is based on (i) the activities to be funded under component 2, 3 & 5 (physical investments in landscape restoration through integrated watershed management solutions, farmer-led irrigation, interventions in and around protected areas, climate-smart agriculture, community livelihood resilience support activities, and sustainable energy access solutions,...); (ii) a wide range of small-scale interventions in different settings and sectors (agroforestry, irrigation, energy access solutions, smart-agriculture, and value chain, vulnerable hillsides in protected areas, etc.); (iii) various technical assistance activities under comp. 1,2, 3 (legal/policy framework for climate and land governance, institutional capacity for climate resilience planning, National Climate Resilience Investment Program, integrated watershed management plans, mainstream Climate Change Action Plans into commune development plans, etc.), (iv) client's ESF capacity to identify and manage E&S risk as this is their first ESF project; and (v) key environmental risks and impacts related to the project activities. The project is expected to generate significant environmental benefits. Potential adverse environmental risks and impacts including road safety and occupational health and safety risks are expected under all project components. Proposed TA activities under components 1, 2 &3 will likely lead to potential downstream direct and indirect environmental implications if feasibility studies and plans for the development of 71 integrated sub-watershed led to future investments. In addition, legal/policy support will entail environmental implications. Activities under components 2, 3&5 will have some adverse environmental impacts during the construction phase including dust, noise, management and disposal of debris and other construction related waste. Agroforestry, distribution of cattle and pigs in the colline, biodiversity conservation, farmer-led irrigation, landscape restoration activities and climate-smart agriculture could lead to loss of biodiversity, local disturbances to biodiversity, habitats, and living natural resources, zoonosis, land and soil degradation, loss of water to rivers and wetlands, introduction of invasive species, potential water contamination due to the use of agrochemicals and pesticides, and hazardous waste. Landscape restoration and famer-led irrigation activities may also entail cumulative impacts on water quality and quantity, aquatic ecology and irrigated lands; risk of bush fire; OHS hazards for the workforce/labor work, soil erosion due to earthworks and runoff. Promotion of charcoal briquettes and improved cookstoves could entail explosion risk and other workplace safety risks. Since communities in Burundi is dependent on biodiversity for agricultural products, fisheries, forests, and medicinal plants, impacts on ecosystems and associated ecosystem services would present an environmental risk for communities as well. During operation, the project supported activities would generate agricultural waste, wastewater, air emission, noise etc. However, these environmental risks and impacts will be site specific, temporary, and reversible by applying good construction and agroforestry practices Lastly, the ability for the World Bank to supervise environmental and social risk management may be limited in some targeted areas, where security issues may arise. Some activities (livestock, seedlings for slopes stabilization, rehabilitation of existing access and local roads, micro-irrigation,...), if poorly planned and executed could exacerbate climate change concerns. In the project area of impacts, key impacts of climate change are already manifesting through an increase in landslides, flooding, extreme rainfall, pest and disease incidences, and weather variability with alternating floods and droughts. Targeted areas are hotspots of climate and environmental fragility.

Substantial

A.2 Social Risk Rating

The social risk has been determined to be substantial. Proposed activities might lead to potential adverse risks and impacts associated with the large scale of the activities (country-wide). The main social risks associated with the project are: (i) risk of intensification of local conflicts, particularly as a result of the systematic land certification activities, which can exacerbate existing or new competing claims over land tenure, as well as potential conflicts between conservation needs and agricultural development expectations; (ii) risk of exclusion from project benefits, facilitated by a lack of transparency and communication adapted to different Collines' and population's needs, and by

potential social biases that can lead to the exclusion of certain groups (e.g. women, farmers, children, disabled members, and marginalized ethnic groups such as the Batwa to participate as local agents of change and sustainability, as partners and beneficiaries), particularly during capacity training and in the design of the activities, along with potential elite capture of project benefits; (iii) risk of opposition and resistance to women taking part and benefiting from the land certification process, due to current sociocultural practices and norms, which could prevent their full participation in project benefits and lead to gender discrimination; (iv) labor risks, particularly in relation to the labor conditions of the high volume of community workers expected to be involved, and regarding the possibility that the community labor in Colline's restoration could be subject to pressures or coercion and end up not being fully voluntary, and risk of child labor, especially considering the likelihood of children participating in degrading work in the local value chains and during the land restoration activities, including tree replanting, enabled by the prevalent local practices; (v) community health and safety risks, especially related to the spread of communicable diseases, GBV/SEA/SH, and traffic safety; (vi) risks associated with physical and/or economic displacement due to land acquisition, as well as potential restrictions in access to natural resources within protected areas; and (vii) risks associated with the downstream impacts of the technical assistance activities, particularly policy reforms.

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

B.1 Relevance of Environmental and Social Standards

ESS1 - Assessment and Management of Environmental and Social Risks and Impacts — Relevant

ESS1 is relevant due to impacts and risks that may be caused by various project activities to be implemented within project areas. Components 1, 2, 3, 4 and 5, will lead to potential environmental and social risks and impacts , including SEA/SH, described under section II, A1 and A2. To manage the above described potential environmental and social risks, a project level ESMF is under preparation and will be disclosed prior to completing appraisal, in compliance with both domestic regulations and the World Bank’s ESF. The ESMF includes: (a) an overview of the baseline conditions, as well as an identification of the vulnerable groups, and a summary of key anticipated environmental and social impacts, including those related to SEA/SH ; (b) an analysis of potential impacts and risks that may occur and mitigation measures that might be expected to be used, including specifically those targeted to vulnerable groups, in accordance with the Bank's Directive "Addressing Risks and Impacts on Disadvantaged or Vulnerable Individuals or Groups"; (c) a gap analysis of relevant E&S regulatory framework and the ESSs in Burundi; (d) E&S management procedures for subproject screening, E&S audit, assessment, approval, implementation, supervision and M&E; (e) the E&S related eligibility criteria or exclusion list for subproject selection; (f) a review of existing institutional capacity on E&S management and arrangements for staffing, capacity building and budget; and a (g) guidance for the preparation of a sub-project level environmental and social impact assessments and preparation of sub-project specific Environmental and Social Management Plans (ESMPs), during the implementation phase. The ESMF also underscores climate change risks and its impacts. These include the loss of arable land, competing demands for existing land, and the need to shift from a reactive to an anticipative approach in managing climate-related disaster risks. It recommends that the anticipative approach in managing climate-related disaster risks includes adequate assessment of environmental and social implications and that the advice provided through the TA for addressing those implications is consistent with the ESF. In addition, the ESMF includes a biodiversity screening approach and generic mitigation measures that address any threats to biodiversity conservation including threats on critical habitats, endangered species (fauna and flora) including threats caused by invasive species, an integrated Pest

Management Plan (IPMP),and Animal/Livestock Health Care Waste Management Plan, including expired or defective pharmaceuticals. The following activities will be further assessed under an Environmental and Social Assessment (ESA): Construction of progressive terraces and augmentation of vegetation cover of degraded hillsides; enhancing sustainable management of protected areas, wildlife conservation, prevention of further deforestation of protected areas; cash-for-work payments and alternative income generation activities and community-based ecotourism; small-scale public infrastructure works; design and construction of micro-irrigation systems that promote farmer-led irrigation development, climate-resilient investment package, distribution of agricultural seeds and related inputs, such as pesticides, organic and chemical fertilizers, agricultural tools and equipment; distribution of cattle and pigs in the colline,etc. The ESIA /ESMP will be prepared in compliance with both domestic regulations and the World Bank's ESF, ESH Guidelines and Good International Industry Practice (GIIP). This ESIA will include: (a) national E&S regulatory framework and the Bank EHS Guidelines; (b) an analysis of potential risks and impacts from activities during the design, construction and operation phase respectively, and corresponding mitigation measures including the management of air emission, wastewater, noise, solid waste and OHS hazards in accordance with World Bank EHS guidelines and with reference to GIIP to address E&S risks; (c)a biodiversity assessment in compliance with requirements of ESS6 to mitigate the impacts on flora and fauna species;(d) an Integrated Pest Management Plan (IPMP). A gender sensitive social assessment undertaken as part of the ESMF will be prepared to help understand potential social risks and their magnitude. The result of the social assessment will also inform the preparation of subsequent site-specific Environmental and Social assessments. A GBV risk assessment will be undertaken for the Project, including analysis around SEA/SH risks under the project. Based on this assessment, the Project will produce a SEA/SH Prevention and Response Action Plan, as an annex to the ESMF, to ensure that risks emerging from project interventions,, especially in the context of labor use are adequately addressed. A code of conduct for all workers and project personnel, addressing SEA/SH and outlining applicable sanctions, is expected to be in place. Regarding climate and disaster related risks, activities would be equipped to mitigate risks posed by climate change and natural hazards. The TORs for any TA activities under the project (, produced by the client, will refer to relevant ESSs and incorporate relevant assessments to ensure that activities and outputs are consistent with ESF requirements. This entails capacity building in Type 3 TA as well as Type 1 TA (feasibility studies for the development of 71 integrated sub-watershed management plans) and Type 2 TA (development of policies and capacity at national and local levels for planning and implementing integrated watershed management and climate resilient practices; sub-watershed management plans; elaboration and implementation of the Colline-level Action Plans (or CCAPs); review and updating of national laws, policies, regulations, and by-laws that address gaps in climate action and integrated land and water resources management, etc. All requirements in the ESMF are reflected in the ESCP prepared and disclosed by the Recipient by Appraisal. It will also include monitoring and reporting activities and a requirement to strengthen the capacity of the project workers throughout project implementation.

ESS10 - Stakeholder Engagement and Information Disclosure Relevant

The Recipient has prepared and disclosed a Stakeholder Engagement Plan (SEP) prior to Appraisal, proportional to the nature and scale of the project and associated risks and impacts, to be implemented throughout the project cycle and updated as needed throughout the life of the project. The Project's stakeholder engagement activities will adopt the necessary measures to manage the risks of COVID-19, and other communicable diseases, as needed. The SEP has identified key stakeholders, which include those affected or likely to be affected by the Project's activities. Mapping also includes private and public sector stakeholders, whose input is necessary to finalize the text in sector reforms and ensure that activities undertaken under all components are transparent and inclusive. The Recipient will engage

in meaningful consultations with all stakeholders throughout the project life cycle paying particular attention to the inclusion of vulnerable and disadvantaged groups. These vulnerable groups and individuals may need additional attention to ensure that they participate in consultations and their specific concerns and needs are addressed and that supplemental measures are put into place to ensure they have full access to project benefits. Consultations with women will be held independently in safe and confidential spaces and will remain focused on understanding women's and girls' experiences as a whole, their wellbeing, health, and safety concerns; no inquiries regarding personal experiences of abuse and violence will be made. Consultations with women will also provide an opportunity to identify and confirm safe and accessible reporting channels for SEA/SH complaints. The Recipient will provide stakeholders with timely, relevant, understandable, and accessible information, and consult with them in a culturally appropriate manner, that is free of manipulation, interference, coercion, discrimination, and intimidation. Adequate measures will be in place to elicit the views of rural communities who may be illiterate. A feedback loop will ensure that stakeholders are informed about how their views have been integrated in project implementation. As part of the environmental and social assessment process, the Recipient 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 will be updated regularly by the PIU E&S staff. The SEP disclosed by Appraisal includes information about the stakeholder engagement activities carried out so far, particularly in April 2024, including meetings and focus group sessions with vulnerable and affected parties, including those with the Batwa, local authorities, among others. The main concerns of the stakeholders so far refer to … The SEP includes a Grievance Redress Mechanism (GRM) sensitive to SEA/SH to collect, address and solve issues faced by beneficiaries, stakeholders and other interested parties. The GRM focuses on the inclusion of vulnerable and marginalized individuals or groups, and it will include specific measures to ensure the ethical and safe intake and management of SEA/SH-related complaints, including response and information-sharing protocols for timely service referrals and reporting.

ESS2 - Labor and Working Conditions Relevant

The project will include roughly 61 direct workers composed of the Project Implementing Unit (PIU) staff, 1230 contracted workers employed by 230 contracted and 1000 employees of subcontracted companies, and 50000 community workers. The Project Coordination Unit will include cluster specialists who will oversee identifying the project activities, would be primarily comprised of contractual staff, that is, full-time consultants working for the government and a few seconded civil servants. All Cluster Specialists will be competitively selected. Confirmation with the Recipient can determine what category the Task Force civil servants fall into to accurately determine the risks. Most activities will be conducted by firms that hold service contracts with the Recipient; therefore, all applicable ESS2 requirements must be followed by the firms. This includes not only the firm with the service contracts but also the firms that they subcontract, which is where the most significant risks of non-compliance are generally observed. The scale of labor influx into project areas remains unclear at this stage but the project will aim at hiring local labor, except for skilled workers who cannot be found in project locations. The most significant risks are unfair treatment and discrimination in the hiring process, occupational health, and safety, working conditions, and grievance management for laborers. Key risks specific to community workers include (i) the risk of child labor and forced labor; (ii) health and safety risks; (iii) risks from labor influx; and (iv) risk of GBV/SEA/SH. Among the measures to be adopted to prevent and monitor these risks during implementation are: (i) setting out roles and responsibilities for monitoring community workers, and providing training tailored to their particular needs and potential risks; (ii) regular health and safety assessments, provision of adequate training on OHS and GBV/SEA/SH, and establishment of clear terms

and conditions for engaging community labor; (iii) establishment of workers' camps facilities, awareness-raising campaigns and enforcement of codes of conduct. The Recipient has developed a Labor Management Procedures (LMP) prior to Appraisal and shall implement throughout the project cycle (i) required lab our terms and conditions set in the LMP; (ii) a worker's Grievance Mechanism (GM) which could address all workers complaints, including the ethical and safe management of SEA/SH-related complaints; and (iii) sensitization related to the availability of worker's GM and to the respect of code of conduct to prevent and address potential harassment, child labor, gender discrimination or SEA/SH-related misconduct issues, intimidation and/or exploitation during the implementation of the activities financed under this project. Codes of conduct will specifically address SEA/SH, including violence against children and prohibition of any sexual contact with minors, and outline applicable sanctions, and workers and project personnel will receive trainings and awareness-raising on SEA/SH risks, including the codes of conduct. The LMP sets the assessment of Occupational Health and Safety (OHS) risks and impacts related to project activities as they are defined through preparation and proposed measures to manage those risks – in tandem with sub-project E&S instruments. To ensure health and safety of workers during the farming and civil work activities, the Recipient will need to follow Environment, Health and Safety (EHS) Guidelines. Specific OHS plans will include procedures on investigation and reporting of incidences and non-conformance, emergency preparedness and response procedures and continuous training and awareness to workers. The LMP will be implemented by the PIU with the support of the Bank's specialists. The ESMF includes sections on Environment Health and Safety (EHS) based on the World Bank Group EHS Guidelines and subsequent instruments (ESIA/ESMP) will (i) conduct a risk-based assessment of all civil works, briquette production, value chain activities, land restoration activities, farmer-led irrigation activities climate-smart agriculture investments, etc. and provide appropriate safety measures, (ii) develop and implement site specific Health, Safety and Environmental (HSE) plans and an OHS manual for charcoal briquette production in line with World Bank Group Environment, Health and Safety (EHS) Guidelines.

ESS3 - Resource Efficiency and Pollution Prevention and Management Relevant

ESS3 is relevant to project activities. The project will support physical investments in land restoration through integrated watershed management solutions on colline, farmer-led irrigation, climate-smart agriculture, and climate-Resilient livelihoods. Hazardous and nonhazardous wastes: these activities are likely to result in the generation of hazardous and non-hazardous waste. For ex. land restoration activities will entail debris materials, wastewater, the excavated material, topsoil, organic waste (removed invasive plants or plants infected by diseases or insect pests), etc. The waste management will be further assessed, and mitigation measures based on the environmental mitigation hierarchy will be proposed in ESIA-ESMP reports d. Water: It is expected to be used for famer-led irrigation activities, charcoal briquette production, agroforestry activities including the setup of nurseries, and for private-sector development of local value chains / social entrepreneurship incubation, etc. . Pesticides: The project will minimize the use of low toxicity pesticides for project activities and will promote the use of organic fertilizers to the extent possible. It will not involve use of chemical pesticides for agroforestry activities. However, community livelihood resilience activities may require animal health and disease management. The ESMF has assessed the project's potential use of pesticides and fertilizers during project preparation and include mitigation measures and good practices accordingly. Nonetheless, based on the available information up to date, sections on Integrated Pest Management Plan (IPMP) was developed and included as part of the ESMF and subsequent ESA instruments will assess and propose measures to mitigate any potential risks associated with the use of pesticides and fertilizers. In addition, regarding management of pesticides, preferring Integrated Pest Management (IPM) and integrated Vector Management (IVM), and where pesticides are necessary, minimizing risks to human health and the environment. Soil

erosion and runoff: agroforestry, famer-led irrigation and land restoration may entail soil erosion and sedimentation if good practices in landscape restoration and erosion control are not applied correctly under component 2. Indirect and cumulative risks and impacts are in the ESMF and subsequent ESIA/ESMP reports shall include increased rates of natural resources exploitation, increased of irrigated lands; changes in land use pattern; impacts on biodiversity because of the expansion of agroforestry activities, increased use of agrochemical in community agroforestry, etc. Raw materials and resource efficiency. Energy solutions may entail extraction of raw materials (sand, clay, etc.). All of these materials will be obtained from licensed, commercially operating quarries or borrow pits localized within the project areas, prioritizing the use of areas already under exploration over the opening of new ones. Risks and impacts associated with the ancillary works are addressed in the ESMF and will be further identified and addressed in any subsequent ESA instruments (ESIA, ESMP). Other environmental impacts associated to the small-scale infrastructure construction and operation such as dust emission, wastewater discharge, noise impacts during construction and operation are site specific, limited, and easy to be managed. These impacts will be assessed during the EA process and adequate mitigation measures and environment monitoring plans as part of the EA instruments will be also developed. At this stage, the project is not expected to result in significant GHG emissions and energy use, however these assumptions will be confirmed during implementation. During implementation, the project will assess the potential that cumulative use of water across all beneficiaries meets the ESS3 threshold for requiring a water balance assessment. The proposed project will promote improved water efficiency through rainwater harvesting facilities installed at farm level. Value chain activities shall promote energy and resources efficiency along the selected value chains, from production to domestic consumption and markets. GHG emissions climate-resilient livelihood support activities will depend on the species, products, and the productivity. All terms of reference and final deliverables, for any technical assistance and studies to be carried out under the Project shall be prepared, adopted, and completed in form and substance satisfactory with ESS3. ToRs of relevant studies should be submitted to the World Bank for clearance.

ESS4 - Community Health and Safety Relevant

ESS4 is relevant. The Project is required to include assessments of risks and impacts of project activities to health and safety in project affected communities in all phases of the project cycle. Community Health and Safety (CHS) risks and impacts relate to the design and safety of infrastructure, traffic and road safety, waterborne disease, or community exposure to nuisance and public/animal health issues, water pollution resulting from food crops/agroforestry and farmer-led irrigation activities and the development of associated markets and value chains, misuse and inappropriate storing and handling of pesticides and fertilizers, and inappropriate waste management practices are also a potentially serious risk to the safety. Burundi is dependent on biodiversity for agricultural products, fisheries, forests, and medicinal plants, impacts on ecosystems and associated ecosystem services would present an environmental risk for communities as well. Impacts on provisioning and regulating ecosystem services are then expected. In Burundi, rainfall tends to increase with altitude, and it typically amounts to around 1,200/1,400 millimeters per year on the plateau, while it drops below 1,000 mm in the west and east, which is the warmest and least rainy area of the country. In mountainous areas, rainfall reaches 1,700 mm per year. Rainfall associated surface water run-off landscape restoration activities and other small-scale civil works could mobilize and transport pollutants such as sediment, oils, chemicals, and other materials into the water environment or affecting community socioeconomic assets. The ESMF includes provisions to review bidding documents to ensure tendering companies include measures to manage risks in relation to community health and safety. The ESMF addresses potential traffic and road safety risks to workers including drivers, affected communities and road users throughout the project life

cycle, and where appropriate, will develop specific measures and plans. Subsequent instruments (ESIA and ESMPs) shall assess and include measures and actions to address road safety risks. The IPMP prepared as section parts of the ESMF identifies all the risks/impacts and establish standardized measures to mitigate risks associated with increased pesticide use and veterinary drugs. The ESMF and subsequent ESA instruments will scope and assess the risk of the project to ecosystem services and/or critical habitats, and measures incorporated into the project and subproject design. Due to a larger presence of stakeholders, increased job opportunities, the implementation of trainings, as well as of workers coming from outside of the community, SEA/SH risks will also need to be addressed in site-specific environmental and social assessments and action plans. Gender-based violence (GBV), SEA/SH, and the spread of sexually transmitted and communicable diseases, may occur especially as the communities are rural and remote A GBV risk assessment will be undertaken for the Project. Based on this assessment, the Project produced a SEA/SH Prevention and Response Action Plan (annexed to the ESMF) to ensure that SEA/SH risks emerging from project interventions, especially in the context of labor use as well as land rights and livelihoods activities, are adequately addressed. As part of the project's accountability and response framework, a code of conduct will be put into place, and the GM has been developed and designed to address SEA/SH complaints safely and confidentially. A community awareness-raising strategy will likewise be developed to inform the communities about identified risks and consequences, prohibited behaviors, and GM procedures to report SEA/SH incidents safely and confidentially, including locally available GBV service providers. In addition, the project will elaborate a referral pathway for SEA/SH survivors, which will include, at a minimum, quality medical services, psychosocial assistance, and legal support These mitigation measures to manage potential risks of GBV and SEA/SH linked with the project, and to avoid forced labor, are included as part of the ESMF, SEP and RPF and will be part of any subsequent ESMPs, as well as in the bidding documents and contracts for contractors. Contractors will likewise need to incorporate core SEA/SH risk mitigation measures , including SEA/SH training and SEA/SH provisions in the codes of conduct for workers. All terms of reference and final deliverables for any technical assistance and studies to be carried out under the Project shall be prepared, adopted, and completed in form and substance satisfactory with ESS4.

ESS5 - Land Acquisition, Restrictions on Land Use and Involuntary Resettlement Relevant

The Project will support land certification activities under component 3, which will target private farmer-owned lands. Landscape restoration, will also encroach on private farmlands, but following the example of the parent project, full farmer consent will be a pre-requisite for intervention (with full community mobilization upstream). While no large-scale resettlement is foreseen, impacts on livelihoods are expected. There is a risk of loss of crops or portions of land steaming from erosion control and micro-irrigation works that could take place at a time when there are standing crops. In such circumstances, some crops will certainly be destroyed or damaged. Also, rehabilitation work on certain degraded sites (ravines, river banks) could encroach on private land and/or crops. Some of the proposed project activities could also lead to restrictions of loss of access to natural resources, particularly as a result of measures to strengthen protected areas in areas traditionally used by local communities. To mitigate land acquisition as much as possible, the Recipient will opt for sites that are already owned by the government and where resettlement or land acquisition is not required. A Resettlement Policy Framework (RPF) has been prepared before Project Appraisal to set out the principles to ensure that the impacts of land acquisition and resettlement, as well as those related to access restrictions, are either avoided, minimized, or mitigated, allowing people affected by the project to improve or, at the very least recover their livelihoods and previous standards of living. Any land requirements and impacts on livelihoods will be addressed under Resettlement Action Plans (RAPs), Livelihood Restoration Plans (LRPs), or Process Frameworks (PF), as needed, which will be prepared for each intervention and will be aligned with the Project's RPF.

All ESS5 instruments need to be monitored throughout the project and adjustments will need to be made as necessary.

ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources Relevant

This ESS6 is relevant to this project. This is designed to generate positive environmental and social impacts restoring and sustainably managing the watersheds and investing in climate-resilient livelihoods. Elaboration and implementation of the Colline-level Action Plans (or CCAPs), introduction of innovations in climate-resilient agricultural; leveraging nature-based solutions, tree planting, biophysical and soil bioengineering in gully treatment to reduce soil degradation and hazards related to water erosion, etc. will contribute to reduce erosion and excessive load of sediments in water bodies, reduction of water pollution in rivers, biodiversity conservation and recovery of landscapes. In addition, it will contribute to enhance sustainbale management of protected areas and reserves. Vulnerable hillsides in protected areas will be targeted in (1) KIBIRA National Park, Congo Basin part; (2) RUVUBU National Park MUYINGA, KARUSI and RUYIGI bank-Ramsar Site no. 2148;(3) Protected aquatic landscapes of the North constituted by the Northern Lakes; (4) The Natural Forest Reserve of Bururi, and famer-led irrigation systems could affect farm land biodiversity and ecosystem services. In addition, construction materials will be required for sustainable energy solutions such as, improved cookstoves. According to a report from USAID (2021), the country is home to an estimated 597 bird species, 203 mammalian species, 89 species of reptile, 49 species of amphibians, and over 300 species of fish, including four species of lungfish. Burundi also has numerous endemic plant species, many of which are found in the Albertine Rift Montane Forests. In the country, there are 3 major categories of forests and woodlands – Albertine Rift Montane Forest, Central Zambezian Wet Miombo Woodlands, and Victoria Basin Forest Savannah. The Albertine Rift Montane Forest, with high levels of biodiversity and endemism, is largely a tropical and subtropical moist broadleaf forest, while the Miombo Woodlands and Victoria Basin Forest Savanna are a mix of tropical and subtropical grasslands, savannas, and shrublands. The Kibira National Park in Burundi represents one of the last remaining intact stretches of Afromontane forests in the region, providing an important habitat for many endemic species. It is also a water catchment area for the hydrological basins of the Congo River and the Nile River. Burundi also has a variety of aquatic ecosystems including marshes, lakes, ponds, and streams. The country contains over 1,180 km² of wetlands (5% of the country's land cover), which are concentrated around Lake Tanganyika and the Ruvubu River in the East and provide essential ecosystem services. The project will also support the effective and sustainable development of Burundi's protected area system to conserve biodiversity. The ESMF outlines the characteristics of these protected areas and includes relevant baseline information and an assessment of the quality of that information. The ESMF also includes an exclusion list of ineligible activities to be financed under the project, such as: (i) activities within natural protected areas that are not contemplated in their management plans; (ii) activities that promote land use changes from forestry to agriculture; (iii) conversion, deforestation, degradation, or any other alteration of natural habitats, among others. The ESMF also consider operational phase issues. Certain indirect impacts are likely to be caused by this support including promotion of community-based ecotourism in and around PAs. This may potentially change the land use patterns, and uncontrolled tourism activity may also pose negative impact on local environment, biodiversity. To address this, the project will support introduction of Code of Conduct in Protected Areas, as well as List of Do's and Don'ts in Protected Areas for workers and tourists. Improvement of employment and alternative livelihoods for communities living around PAs through the development of IGAs (through the labor-based approach), aims at reducing poverty and improving local livelihoods, and therefore, contributing later to the protection of biodiversity and natural habitats and living nature in project landscape areas.

Once the exact project activity and location are defined, a site specific- environmental and social impact assessment (ESIA), including cumulative impact assessment and biodiversity assessment, and environmental and social management plan (ESMP) will be developed and implemented appropriately by the client to ensure biodiversity and natural habitats are properly managed and no negative impacts are incurred as a result of the project supported activity. Where Biodiversity is going to be significantly affected by the project activities, a stand-alone Biodiversity Management Plan (BMP) will be developed and properly implemented. In addition, ESIA processes will ensure that the proposed specific activities in/around protected areas will be assessed in compliance with requirements of ESS6 to mitigate the impacts to flora and fauna species, particularly avoid impacting to native or endemic species, to avoid any further degradation or conversion of natural/critical habitats and to enhance the biodiversity protection. Moreover, careful attention will be paid to restoration activities to ensure that biodiversity is maintained, and that native species are not inadvertently replaced with invasive species or other species that would alter the current habitat. The ESIA processes will address the potential use of invasive species and will include mitigation activities accordingly. For project activities that may include agroforestry systems and promotion of non-timber forest products, subproject EISAs/ESMPs will need further assessment to determine how the requirements as set out in paragraph 35 (b) of ESS6 will be implemented and complied. All terms of reference and final deliverables, for any technical assistance and studies to be carried out under the Project shall be prepared, adopted, and completed in form and substance satisfactory with ESS6.

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

ESS7 is relevant to the project as activities shall target Batwa communities. Batwa communities have historically faced discrimination and marginalization. They are often denied access to education, healthcare, and other basic services, which has contributed to their poverty and social exclusion. Moreover, their land rights have not been recognized, and they have been displaced from their ancestral lands, leading to further marginalization and impoverishment. As the exact location of project activities has not yet been defined, an Indigenous Peoples Planning Framework (IPPF) has been prepared before Appraisal. Once the project area is defined, and if determined that Batwas are situated in the project area, an Indigenous Peoples Plan (IPP) will be prepared. According to the IPPF, 43% of the intervention zones (43 collines out of 100) are home to Batwa population, comprising in total 1899 households. Before 1991, the Batwa did not have the concept of land ownership, and they traditionally lived from hunting and gathering in a migratory forest-based economy. However, the reduction of forest cover has undermined their livelihood. This is further exacerbated by climate change. The Batwa face social exclusion, discrimination, and marginalization of society leading to limited access to education, employment, healthcare and access to land. Women and girls in Batwa communities face additional challenges and are particularly vulnerable to violence and exploitation. Gender-based violence is prevalent, and women and girls are often subjected to sexual violence and other forms of abuse. This is compounded by the fact that they have limited access to justice and support services due to their social status and economic situation. Within this context, some of the main risks related to project activities are (i) lack of access to full project benefits due to discrimination; (ii) increased SEA/SH risks; (ii) potential loss of access to natural resources and loss of land portions leading to adverse impacts on their livelihoods, as well as access restriction to houses or crops associated with the installation of project infrastructure; (iii) risk of school drop out due to the possibility of receiving a new source of income; and (iv) land certification activities may dispossess Batwa of land occupied without at land title, enabling others better positioned to take advantage of the system to take legal control over areas used or occupied by the Batwa. To manage these risks, the project will ensure that Batwa communities are appropriately

informed and can share in the benefits of the project in an inclusive and culturally appropriate manner with provisions included in the SEP, IPPF and subsequent IPPs. If needed, in accordance with the provisions of ESS7, the project will secure their Free, Prior and Informed Consent (FPIC). The project will respect the human rights, dignity, aspirations, identity, culture, and livelihoods of Batwas communities and avoid adverse impacts on them or, when avoidance is not possible, minimize, mitigate or compensate for such impacts. The project will ensure that Batwas women are independently consulted with female facilitators in safe and confidential conditions.

ESS8 - Cultural Heritage Relevant

ESS8 is currently considered relevant. Although the actual project sites are currently not known it is likely that some locations will be within, or adjacent to historical sites and important heritage sites, which also have inherent cultural value. In 2014, the ritual Burundian drum dance was placed on UNESCO's Intangible Cultural Heritage list. There is no UNESCO-recognized World Heritage Site in Burundi but there are 10 sites which are on UNESCO's tentative list. These 10 sites includes Gishora, Mugamba, Muramvya, Gasumo (the southernmost source of the Nile), Lake Rwihinda Natural Reserve, Lake Tanganyika, Rusizi National Park, Kibira National Park, Ruvubu National Park, the Kagera waterfalls and German Gorge - Faille des Allemands. In addition, local communities maintain shrines, sacred groves, forest reserves, etc., and have developed years of belief systems and customary practices around some of the sites, “collines”, and forests. In the intervention hills, the most well-known sites are cemeteries. There is virtually no risk that project activities will affect these sites, as they are well known, often well-delineated and undegraded. However, it is possible, during the rehabilitation of certain degraded landscapes, to come across previously unknown PCPs. In such cases, the ESMF requires that a procedure for fortuitous discovery to be adopted and applied. Further cultural heritage investigation and assessment will be conducted as part of the ESIAs processes. The project will avoid encroaching on historically or culturally meaningful sites with appropriate community engagement for full buy-in and appropriation of activity by recipients. The ESMF shall include a section on protection of Cultural Heritage and guidelines for chance find procedures (CFP) as well as for Cultural Heritage Management Plans (CHMPs). The SEP shall also incorporate specific considerations for engaging local communities and traditional authorities on the management of these issues associated with known cultural sites and artifacts in the project areas, covering both tangible and intangible heritage. All terms of reference and final deliverables, for any technical assistance and studies to be carried out under the Project shall be prepared, adopted, and completed in form and substance satisfactory with ESS8.

ESS9 - Financial Intermediaries Not Currently Relevant

ESS9 is not currently relevant

B.2 Legal Operational Policies that Apply

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

B.3 Other Salient Features

Use of Borrower Framework	No

This project will not use the Borrower's Environmental and Social Framework in the assessment, nor in the development and implementation of investments. However, it will comply with relevant national legal and regulatory requirements.

Use of Common Approach No

N/A

C. Overview of Required Environmental and Social Risk Management Activities

C.1 What Borrower environmental and social analyses, instruments, plans and/or frameworks are planned or required by implementation?

The borrower is expected during implementation to prepare the following instruments :
- Adopt the ESIA and/or ESMP prior to commencing the bidding processes for any works for which such instruments are required as set out in the ESMF;
-Adopt the ESMP prior to the carrying out of subproject that requires the adoption of such ESMP;
- Establish grievance mechanism prior engaging Project workers and thereafter maintain and operate it;
- Adopt and implement the respective RAP, LRP, or PF, as needed, including ensuring that before taking possession of the land and related assets;
-Adopt the IPP prior to the carrying out of any activity that requires the preparation of such IPP

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